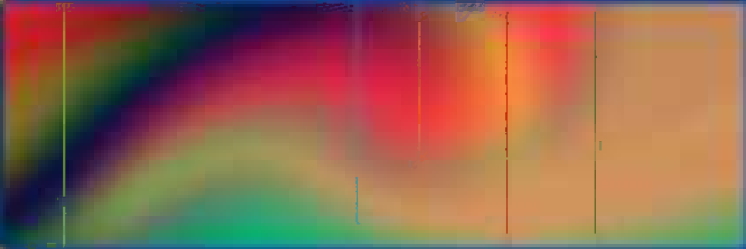


Scott M. Jackson · Lee T. Nesbitt



**Differential  
Diagnosis for the  
Dermatologist**  
Second Edition

 Springer®

Scott M. Jackson · Lee T. Nesbitt

**Differential Diagnosis for the Dermatologist**



Scott M. Jackson · Lee T. Nesbitt

# Differential Diagnosis for the Dermatologist

Second Edition

 Springer

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## Preface to the Second Edition

It is with great pleasure that I introduce the second edition of *Differential Diagnosis for the Dermatologist*. My goal with this book has been to create a quick and easily accessible source of information for practicing dermatologists. My dream is that this book will be placed in the work area and will be used “on the go” for a rapid source of information about the differential diagnosis of a given skin problem.

I had always wished for the text to have a section for treatment options but the task of compiling treatment options as well as compiling the differential diagnoses proved to be too daunting for me in the first edition. However, with this second edition, my efforts were focused in part to bring treatment options to the fingertips of the dermatologist. For all commonly treated skin diseases and skin lesions, the reader can find a list of the treatment options. While they are listed in no particular order, the first-line and most reliable treatments are underlined. Treatment options for genetic skin diseases and diseases that are treated by nondermatologists are not given.

The reader will also find several other changes in the second edition. There are 50 new photographs in the text, and there are 25 new diagnoses or entry headings. Many of the references have been updated to provide a more current supporting literature for the text. The last major change in the book involves the use of underlining to indicate to the reader the skin diseases that more closely simulate the heading diagnosis. In addition, the associations that are most commonly identified with a given diagnosis are underlined as well.

It is my sincere hope that dermatologists will find this information useful in their daily practice.

**Scott M. Jackson, M.D.**

## Preface I to the First Edition

This book originated as a small reference manual that I created to serve as an educational supplement for the dermatology residents at Louisiana State University Health Sciences Center. Deeming the compiled information to be useful for all dermatologists, I decided to expand the text and publish it. Every major category of the patient evaluation, from the chief complaint to the diagnosis, is addressed with regard to the dermatological differential diagnosis.

The establishment of a precise differential diagnosis for a given cutaneous problem is the fundamental challenge that the dermatologist faces with every patient. This unique exercise is very intellectual; in a short period of time, the clinician must select from a list of perhaps several hundred diseases a few possibilities that match the clinical presentation. This is performed while also negotiating the patient interaction, examining the patient, and beginning to formulate a plan of action. Proficiency in the formulation of a differential diagnosis that is brief and simultaneously thorough allows for consideration of all possibilities, proper evaluation, and, hopefully, rapid diagnosis. We hope to provide the target readers (dermatologists and dermatologists in training) with some assistance in carrying out this frequently complicated task. For the confrontation with an atypical presentation of a common disease or the classic presentation of an uncommon disease, the reader will hopefully find this book very useful.

The dermatologist may move toward the diagnosis of a particular cutaneous presentation with a morphology-driven approach and/or a diagnosis-driven approach. Classically, the dermatologist is trained to first recognize the morphology of the disease and then ponder all of the causes of that type of lesion. For example, if a patient presents with a papulosquamous eruption, then several diagnoses are suggested on the basis



of morphology alone. While morphology of lesions is essential, distribution, patient demographics, and associated features are left out in this approach. On the other hand, a diagnosis-driven approach is also advantageous and possibly more inclusive and yet still specific. With the exhaustive section organized by dermatologic diagnosis, we believe this text will help clinicians formulate a diagnosis-driven approach to the differential diagnosis. For example, if a patient presents with a rash that resembles a certain dermatosis (e.g., pityriasis rosea), the clinician now has quick access to the differential diagnosis of that dermatosis (and any subtypes or variants) so that all alternative diagnoses are considered, not just diagnoses that share morphology. While recognition and appreciation of morphology is still critical, a diagnosis-based approach to the differential diagnosis is sometimes also helpful when faced with a diagnostic dilemma. In addition, the book provides supporting information for each diagnosis, including recommended evaluative studies, diagnostic criteria, and a source article to reference.

Although inclusiveness was a primary goal of the project, we are aware of the limitations of this text. It was a difficult task to decide which of the many diagnoses in the dermatologic literature to include in the large chapter on diagnosis. There is a tremendous amount of controversy surrounding the existence of many diagnoses, and we were forced to take a position on the controversies when including or excluding certain diseases. An effort was made to exclude diseases that have not been described in over 20 years. We also wanted to include many of the more recently described diagnoses from the past 2 years. It was also difficult to generate the lists under each diagnosis with an acceptable level of sensitivity and specificity. We felt that erring on the side of too many diagnoses was more acceptable than missing a potential important diagnostic alternative. We welcome any criticisms or suggestions that would improve the sensitivity and specificity of the lists for future editions.

We sincerely hope that you find this text useful in your training or in your daily practice.

**Scott M. Jackson, M.D.**

## Preface II to the First Edition

*Ah, but a man's reach should exceed his grasp....*

ROBERT BROWNING

Probably, the most satisfying aspect of being a chairman or residency program director in academic medicine is to be associated with, and help, bright young people who are anxious to learn and contribute to our body of medical knowledge. In my 35 years in academic dermatology, Scott Jackson is one of the brightest people that I have had the opportunity to teach and from which to learn. He has been one of our most motivated residents in becoming the best he can be and in trying to learn almost every fact in dermatology that can possibly be learned. Scott has attempted a mastery of the specialty, a goal many of us have hoped to attain but have come to realize, with time, that we will always fall short. Nevertheless, it is a lofty ideal, as stated so well by the poet Robert Browning when he wrote the line “Ah, but a man's reach should exceed his grasp....”

In addition to trying to learn almost every fact he could in dermatology during 3 years of residency training, Scott attempted to teach and transmit that knowledge base to all other residents in the program. He even initiated a weekly game of dermatologic questions for all the residents, a game he called “Jeopardy,” complete with different weekly categories for everyone to study. Because of his thirst for knowledge, he made all residents in the program more knowledgeable.

In producing this text, which he worked on for long hours during his residency, and now as a junior faculty member, Scott Jackson has

succeeded in a giant undertaking. I applaud his success and know that with each grasp he takes up the ladder of dermatology, he will continue to extend his reach.

**Lee T. Nesbitt Jr., M.D.**



## Acknowledgements

I would like to thank my wife Angie for giving me the time, space, and support I needed to edit this text. I also thank Hannah and Mary for letting me work on this book when they would rather be playing with me. I also thank Dr. Lee Nesbitt for inspiring me to enter the field of clinical dermatology and assisting with the publication of this text. For the love and encouragement they have given me over the years, I thank my parents. Special thanks are given to Dr. Ashley Record, Dr. Steven Klinger, Dr. Kevin Guidry, Dr. Trent Massengale, Dr. Aimee Mistretta, Dr. Matthew Lambert, Dr. Erin Bardin, and Dr. Ann Zedlitz for the contribution of photographs. I also would like to thank those who supported the first edition as they made this second edition possible. Finally, I would like to thank my high school math teacher, Ms. Barbara Stott; for without her guidance, I would not be doing all that I am doing today.



## Introduction

The *Handbook of Differential Diagnosis for the Dermatologist* was written for the purpose of providing the reader with quick access to the differential diagnosis of a variety of common and uncommon chief complaints, physical exam findings, dermatopathologic features, diagnoses, and more. An understanding of how this text was organized is essential prior to its use in order to facilitate rapid access to essential information. Firstly, the authors created an exhaustive list of virtually every dermatologic problem, including all important dermatologic diagnoses. Then, these various problems were sorted into chapters based on the key components of the dermatologic workup. All specific diagnoses were placed in the diagnosis chapter. Entities such as pruritus or keratoderma, not being specific diagnoses, were placed in the chief complaint or physical exam chapters, respectively. Useful supporting information was supplied for every problem when appropriate. Finally, each entry is referenced with a recent source article that attempts to increase the reader's understanding of the differential diagnosis of that disease. A summary of the contents of each chapter follows.

### Chapter 1

“The Chief Complaint” focuses on complaints that patients make that cannot be more specifically sorted as a diagnosis or physical exam finding. Examples of items included in this brief chapter are pruritus, hyperhidrosis, and flushing.

## **Chapter 2**

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“The Past Medical History, Social History, and Review of Systems” highlights the major diagnostic considerations that arise in patients who present with an element of the past medical history, social history, or review of systems that may or may not be relevant to the encounter. In this chapter, one can find the dermatologic manifestations of internal diseases, skin findings in patients reporting certain social activities, and diagnostic considerations in patients revealing key components of the review of systems.

## **Chapter 3**

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“The Physical Exam” provides the reader with diagnostic considerations associated with a variety of regional and morphological physical exam findings. Entries included in this chapter are those findings which cannot better be sorted as specific diagnoses.

## **Chapter 4**

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“The Biopsy” presents the differential diagnosis of several major histologic reaction patterns or features.

## **Chapter 5**

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“The Laboratory Results” focuses on the most important or most common laboratory abnormalities that are encountered by dermatologists and the dermatologic diseases that should be considered in the evaluation of the patient.

## **Chapter 6**

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“The Diagnosis” contains an exhaustive alphabetical list of virtually every dermatologic diagnosis. An effort was made to include only the diagnoses that have been reported or discussed in the literature in the past two decades. Under each heading, the reader can find a list of subtypes (if any), the differential diagnosis of the disease and any subtypes, published diagnostic criteria, associations of the disease, associated medications (if any), and recommended initial evaluatory tests, and, new to the second edition, treatment options. When searching this text for the diagnosis in question, it is recommended that the reader search for the most unique term in the name and not descriptive adjectives, such as neutrophilic or superficial or common words such as dermatitis.

## **Chapter 7**

---

The “Glossary” provides the reader with brief definitions of the rare diagnoses that can be found in the lists of differential diagnoses. These diagnoses were not given special attention in Chap.6 because they are very rare or because they do not have a lengthy differential diagnosis.







## Contents

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## Abdominal Pain and Rash

---

- Acute graft-vs-host disease
- Acute porphyrias
- Carcinoid syndrome
- Black widow spider bite
- Degos disease
- Dengue fever
- Fabry's disease
- Familial Mediterranean fever
- Henoch–Schonlein purpura
- Inflammatory bowel disease
- Kawasaki disease
- Meningococemia
- Pancreatic panniculitis
- Parasitic infestation
- Polyarteritis nodosa
- Porphyrias
- Tumor necrosis factor receptor-associated periodic syndrome (TRAPS)
- Viral illness
- Zoster

### Further reading:

- Zulian F, Falcini F, Zancan L, Martini G, Secchieri S, Luzzatto C, Zacchello F (2003) Acute surgical abdomen as presenting manifestation of Kawasaki disease. *J Pediatr* 142(6):731–735

## **Anhidrosis/Hypohidrosis**

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### ***Differential Diagnosis (Generalized)***

- Acquired idiopathic anhidrosis
- Alcoholism
- Amyloidosis
- Anticholinergic therapy
- Bazex–Dupre–Christol syndrome
- Dehydration
- Diabetes mellitus
- CNS disease or tumor
- Congenital insensitivity to pain with anhidrosis
- Fabry's disease
- Horner's syndrome
- Ectodermal dysplasia, hypohidrotic
- Naegeli–Franceschetti–Jadassohn syndrome
- Pemphigus
- Peripheral nerve disorders (Guillain–Barre syndrome)
- Progressive autonomic failure
- Ross' syndrome
- Scleroderma
- Sjögren's syndrome
- Topiramate therapy
- Total skin electron beam therapy

### ***Differential Diagnosis (Localized)***

- Atopic dermatitis
- Burns
- Ectodermal dysplasia, hypohidrotic (carriers)
- Ichthyosis
- Idiopathic segmental anhidrosis
- Incontinentia pigmenti, stage IV

- Leprosy
- Lymphoma
- Postmiliaria
- Psoriasis
- Radiodermatitis
- Syringolymphoid hyperplasia
- Tumors

**Further reading:**

- Chemmanam T, Pandian JD, Kadyan RS, Bhatti SM (2007) Anhidrosis: a clue to an underlying autonomic disorder. *J Clin Neurosci* 14(1):94–96
- Haller A, Elzubi E, Petzelbauer P (2001) Localized syringolymphoid hyperplasia with alopecia and anhidrosis. *J Am Acad Dermatol* 45(1):127–130

**Anodynia**

---

- Anal fissure
- Chronic idiopathic anal pain
- Coccydynia
- External hemorrhoids
- Inflammatory bowel disease
- Levator ani syndrome
- Perirectal abscess
- Proctalgia fugax
- Proctitis

**Further reading:**

- Bharucha AE, Wald A, Enck P, Rao S (2006) Functional anorectal disorders. *Gastroenterology* 130(5):1510–1518

**Arthritis (Arthralgias) with Rash**

---

- Allergic hypersensitivity reaction
- Angioimmunoblastic lymphoma

- 
- Bacterial endocarditis
  - Behçet's syndrome
  - Blau syndrome
  - Bowel bypass dermatosis–arthritis syndrome
  - Cryoglobulinemia
  - Dermatomyositis
  - Disseminated gonococcal infection
  - Epstein–Barr virus
  - Erythema elevatum diutinum
  - Erythema multiforme
  - Familial Mediterranean fever
  - Gout
  - Henoch–Schonlein purpura
  - Hepatitis
  - Inflammatory bowel disease
  - Juvenile rheumatoid arthritis
  - Kawasaki disease
  - Lofgren's syndrome
  - Lyme disease
  - Mastocytosis
  - Meningococemia
  - Mononucleosis
  - Muckle–Wells syndrome
  - Multicentric reticulohistiocytosis
  - Pancreatic panniculitis
  - Parvovirus B19 infection
  - Psoriasis
  - Pyoderma gangrenosum
  - Rat-bite fever
  - Reactive arthritis with urethritis and conjunctivitis
  - Rheumatic fever, acute
  - Rheumatoid arthritis
  - Rocky Mountain spotted fever

- Rosai–Dorfman disease
- Sarcoidosis, acute
- Scleroderma
- Serum-sickness-like reaction
- Sjögren's syndrome
- Sweet's syndrome
- Systemic contact dermatitis (joint prosthesis)
- Systemic lupus erythematosus
- Systemic vasculitis syndromes
- TRAPS
- Viral infection

**Further reading:**

- Jacob SE, Cowen EW, Goldbach-Mansky R, Kastner D, Turner ML (2006) A recurrent rash with fever and arthropathy. *J Am Acad Dermatol* 54(2):318–321

**Bromhidrosis**

---

- Bromidrosiphobia (fear of body odor)
- Garlic, onion, or asparagus ingestion
- Foreign body in nasal passage
- Hepatic failure (fedor hepaticus)
- Hypermethionemia
- Isovaleric acidemia
- Maple syrup urine disease
- Normal apocrine gland sweat
- Oasthouse syndrome
- Olfactory hallucination
- Phenylketonuria
- Plantar hyperhidrosis
- Schizophrenia
- Trimethylaminuria (fish odor syndrome)
- Uremia



**Further reading:**

- Hasfa S, Schwartz RH (2007) Two 6-year-old twin girls with primary axillary bromhidrosis: discussion, differential diagnosis, and management options. *Clin Pediatr* 46(8):743–745

**Chromhidrosis**

---

- Bleeding disorder
- Clofazimine therapy
- Copper exposure
- *Corynebacterium* infection
- Dyes
- Hyperbilirubinemia
- Intrinsic (lipofuscin)
- Ochronosis
- Paint
- Piedra
- *Pseudomonas* infection
- *Serratia* infection

**Further reading:**

- Barankin B, Alanen K, Ting PT, Sapijaszko MJ (2004) Bilateral facial apocrine chromhidrosis. *J Drugs Dermatol* 3(2):184–186

**Diarrhea and Rash**

---

- Acute graft-vs-host disease
- Amebiasis
- Amyloidosis
- Bowel bypass dermatitis–arthritis syndrome
- Carcinoid syndrome
- Chemotherapy mucositis
- Crohn's disease
- Dermatitis herpetiformis

- Glucagonoma
- HIV infection
- IPEX syndrome
- Mastocytosis
- Pellagra
- Helminthic infestation
- Reactive arthritis
- Scleroderma
- Ulcerative colitis
- Viral gastroenteritis
- Whipple's disease

**Further reading:**

- Geusau A, Mooseder G (2002) A maculopapular rash in a patient with severe diarrhea. *Arch Dermatol* 138(1):117–122

**Fever and Rash**

---

- Acute retroviral syndrome
- Bacteremia
- Brucellosis
- Cat-scratch disease
- Deep fungal infection
- Dengue fever
- Dermatomyositis
- Drug hypersensitivity
- Ehrlichiosis
- Endocarditis
- Enterovirus infection
- Erythema migrans
- Erythema multiforme
- Familial Mediterranean fever
- Febrile ulceronecrotic Mucha–Habermann disease
- Gonococemia

- Hepatitis B virus infection
- Hyper-IgD syndrome
- Juvenile rheumatoid arthritis
- Kawasaki disease
- Kikuchi's disease
- Leptospirosis
- Lymphoma
- Measles
- Meningococemia
- Mononucleosis
- Muckle–Wells syndrome
- Parvovirus B19 infection
- Pustular psoriasis
- Rat-bite fever
- Reactive arthritis with urethritis and conjunctivitis
- Rickettsial diseases (especially Rocky Mountain spotted fever)
- Roseola infantum
- Rubella
- Sarcoidosis (acute)
- Scarlet fever
- Schnitzler syndrome
- Secondary syphilis
- Sepsis
- Serum-sickness-like reaction
- Smallpox
- Stevens–Johnson syndrome
- Sweet's syndrome
- Systemic lupus erythematosus
- Thrombotic thrombocytopenic purpura
- Toxic shock syndrome
- Toxoplasmosis
- Tularemia
- Typhoid fever
- Typhus

- Varicella
- Viral exanthem
- West Nile virus infection

**Further reading:**

- McKinnon HD Jr, Howard T (2000) Evaluating the febrile patient with a rash. *Am Fam Physician* 62(4):804–816

**Fever, Periodic**

---

- Borreliosis
- Brucellosis
- Cyclic neutropenia
- Familial cold autoinflammatory syndrome
- Familial Mediterranean fever
- Gonococemia
- Hyper-IgD syndrome
- Juvenile rheumatoid arthritis
- Lymphoma
- Malaria
- Muckle–Wells syndrome
- NOMID syndrome (CINCA syndrome)
- PFAPA syndrome
- Relapsing fever (tick borne/louse borne)
- Schnitzler's syndrome
- Trench fever
- Tuberculosis
- TRAPS
- Typhoid fever

**Further reading:**

- Kanazawa N, Furukawa F (2007) Autoinflammatory syndromes with a dermatological perspective. *J Dermatol* 34(9):601–618

## Flushing

---

- Alcohol ingestion
- Anaphylaxis
- Anxiety
- Autonomic hyperreflexia
- Brain tumors
- Caffeine withdrawal
- Carcinoid syndrome
- Cholinergic drugs
- Cholinergic erythema
- Ciguatera toxin ingestion
- Emotional flushing
- Fever
- Frey syndrome
- Heat-induced flushing
- Horner syndrome
- Mastocytosis
- Medullary thyroid carcinoma
- Menopause
- Migraine
- Monosodium glutamate
- Multiple sclerosis
- Nitrite/sulfite ingestion
- Opiates
- Parkinson's disease
- Pheochromocytoma
- Renal cell carcinoma
- Rifampin
- Rosacea
- Scombroid fish poisoning
- VIPoma

***Associated Medications***

- ACE inhibitors
- Beta-blockers
- Bromocriptine
- Calcium channel blockers
- Disulfiram (with alcohol)
- Griseofulvin (with alcohol)
- Ketoconazole (with alcohol)
- Metronidazole (with alcohol)
- Niacin
- Nicotinic acid
- Nitroglycerin
- Opioids
- Rifampin
- Sildenafil
- Tacrolimus, topical (with alcohol)
- Tamoxifen
- Vancomycin

***Evaluation***

- 24-h urine 5-HIAA
- 24-h urine epinephrine
- 24-h urine histamine
- 24-h urine metanephrines
- 24-h urine norepinephrine
- 24-h urine vanillylmandelic acid
- Food diary
- Medication review
- Serum calcitonin
- Serum LH/FSH

- Serum serotonin
- Serum tryptase
- Serum VIP level
- Urinalysis

**Further reading:**

- Izikson L, English JC III, Zirwas MJ (2006) The flushing patient: differential diagnosis, workup, and treatment. *J Am Acad Dermatol* 55(2):193–208

**Hirsutism**

---

- Adrenal tumor
- Carcinoid tumor
- Choriocarcinoma
- Congenital adrenal hyperplasia
- Cushing's syndrome
- Ectopic hormone production
- Excess ovarian androgen release syndrome
- Familial hirsutism
- Hepatic hirsutism
- Hormonal contraception
- Iatrogenic hirsutism
- Late-onset adrenal hyperplasia
- Metastatic lung carcinoma
- Ovarian hyperthecosis
- Ovarian tumors
- Peripheral failure in converting androgens into estrogens
- Persistent adrenarche syndrome
- Polycystic ovary disease
- Prolactinoma
- Psychogenic drugs
- SAHA syndrome

## ***Evaluation***

- 17-OH progesterone
- Cortisol
- Dehydroepiandrosterone sulfate
- Follicle stimulating hormone
- Free and total testosterone
- Luteinizing hormone
- Pelvic examination
- Prolactin
- Sex-hormone-binding globulin

### **Further reading:**

- Rosenfield RL (2005) Clinical practice. Hirsutism. *N Engl J Med* 15(24):2578–2588

## **Hyperhidrosis**

### ***Differential Diagnosis (Generalized and Localized)***

- Alcoholism
- Auriculotemporal syndrome (Frey syndrome)
- Carcinoid syndrome
- CNS tumor or disease
- Cold injury
- Congenital autonomic dysfunction with universal pain loss
- Cortical hyperhidrosis
- Diabetes mellitus
- Drug addiction
- Exercise
- Familial dysautonomia
- Febrile illness/infection
- Gopalan's syndrome



- Heart failure
- Hyperpituitarism
- Hyperthyroidism
- Hypoglycemia
- Lymphoma (especially Hodgkin's disease)
- Menopause
- Meperidine
- Neurologic
- Obesity
- Parkinson's disease
- Phenylketonuria
- Pheochromocytoma
- Physiologic gustatory sweating
- POEMS syndrome
- Porphyria
- Postencephalitis
- Postsympathectomy
- Pregnancy
- Propranolol
- Reflex sympathetic dystrophy
- Rheumatoid arthritis
- Shock
- Spinal injury
- Sympathetic injury
- Syringomyelia
- Tabes dorsalis
- Tricyclic antidepressants
- Tuberculosis

### ***Diagnostic Criteria (Primary Focal)***

- Focal, visible, excessive sweating of at least 6 months duration without apparent cause with at least two of the following characteristics:
  - Bilateral and relatively symmetric
  - Impairs daily activities

- Frequency of at least one episode per week
- Age of onset less than 25 years
- Positive family history
- Cessation of focal sweating during sleep

**Further reading:**

- Hornberger J, Grimes K, Naumann M et al (2004) Recognition, diagnosis, and treatment of primary focal hyperhidrosis. *J Am Acad Dermatol* 51(2):274–286
- Lear W, Kessler E, Solish N, Glaser DA (2007) An epidemiological study of hyperhidrosis. *Dermatol Surg* 33:S69–S75

**Pruritic Rash, Generalized**

---

- Allergic contact dermatitis
- Aquagenic pruritus
- Arthropod bites
- Asteatotic (xerotic) eczema
- Atopic dermatitis
- Autosensitization dermatitis
- Bullous pemphigoid
- Candidiasis
- Chronic actinic dermatitis
- Cutaneous T cell lymphoma
- Dermatographism
- Dermatitis herpetiformis
- Drug eruption
- Eosinophilic folliculitis of Ofuji
- Eosinophilic, polymorphic, and pruritic eruption associated with radiotherapy
- Fiberglass dermatitis
- Folliculitis
- Grover's disease
- Herpes simplex virus infection
- Itchy purpura
- Irritant contact dermatitis
- Lichen planus

- Lichen simplex chronicus
- Mastocytosis
- Nummular eczema
- Pediculosis
- Polymorphous light eruption
- Pityriasis rubra pilaris
- Prurigo nodularis
- Prurigo pigmentosum
- Pruritic urticarial papules and plaques of pregnancy
- Psoriasis
- Scabies
- Seabather's eruption
- Secondary syphilis
- Subacute prurigo
- Swimmer's itch
- Tinea corporis
- Urticaria
- Varicella
- Viral exanthem

**Further reading:**

- Yosipovitch G, Fleischer A (2003) Itch associated with skin disease: advances in pathophysiology and emerging therapies. *Am J Clin Dermatol* 4(9):617–622

**Pruritic Scalp**

---

- Acne necrotica
- Allergic contact dermatitis
- Dermatomyositis
- Folliculitis
- Lichen simplex chronicus
- Pediculosis
- Psoriasis
- Renal pruritus
- Scalp dysesthesia

- Seborrheic dermatitis
- Tinea capitis

**Further reading:**

- Hoss D, Segal S (1998) Scalp dysesthesia. *Arch Dermatol* 134(3):327–330

**Pruritus Ani**

---

- Allergic contact dermatitis
- Anal fissures
- Anal fistulas
- Anosacral amyloidosis
- Candidiasis
- Chronic antibiotic therapy
- Condyloma
- Contact dermatitis
- Excessive coffee intake
- Extramammary Paget's disease
- Fecal incontinence
- Gonococcal proctitis
- Hemorrhoids
- Herpes simplex virus infection
- Inflammatory bowel disease
- Lichen planus
- Lichen sclerosus
- Lichen simplex chronicus
- Lumbosacral radiculopathy
- Pinworm infestation
- Poor hygiene
- Psoriasis
- Radiation dermatitis
- Scabies
- Sexually transmitted diseases
- Spicy food intake
- Squamous cell carcinoma

- Sweating
- Syphilis
- Tinea cruris
- Urinary incontinence

**Further reading:**

- Zuccati G, Lotti T, Mastrolorenzo A et al (2005) Pruritus ani. *Dermatol Ther* 18(4):355–362

**Pruritus Scroti**

---

- Allergic contact dermatitis
- Candidiasis
- Dermatographism
- Extramammary Paget's disease
- Lichen simplex chronicus
- Lumbosacral radiculopathy
- Pediculosis
- Psoriasis
- Scabies
- Sexually transmitted diseases
- Urinary incontinence

**Further reading:**

- Cohen AD, Vander T, Medvendovsky E et al (2005) Neuropathic scrotal pruritus: anogenital pruritus is a symptom of lumbosacral radiculopathy. *J Am Acad Dermatol* 52(1):61–66

**Pruritus Without Skin Disease, Generalized**

---

- Carcinoid syndrome
- Cholestatic liver disease
- Chronic renal failure
- CNS tumor

- Cocaine/amphetamine abuse
- Dermatographism
- Dermatomyositis
- Diabetes mellitus
- Drug reaction
- Early bullous pemphigoid or dermatitis herpetiformis
- Hemochromatosis
- Hepatitis C infection
- HIV infection
- Hodgkin's disease
- Hypereosinophilic syndrome
- Hyperparathyroidism
- Hyperthyroidism
- Hypothyroidism
- Iron deficiency
- Lupus erythematosus
- Lymphoma/leukemia
- Mastocytosis
- Multiple endocrine neoplasia, type 2A
- Multiple sclerosis
- Mycosis fungoides (invisibile)
- Opioid medications
- Paraproteinemia
- Parasitic infestation
- Polycythemia vera
- Pregnancy
- Psychogenic pruritus
- Sarcoidosis
- Scabies
- Scleroderma
- Systemic lupus erythematosus
- Thrombocytosis
- Transient urticaria
- Xerosis
- Winter itch (Duhring pruritus)

## **Evaluation**

- Antimitochondrial antibodies
- Antinuclear antibodies
- Anti-smooth-muscle antibody
- Antitransglutaminase antibodies
- Bilirubin
- Calcium and phosphate levels
- Chest radiograph
- Complete blood count
- Fasting blood glucose
- Hepatitis panel
- HIV infection
- Iron, ferritin
- Liver function test
- Renal function test
- Sedimentation rate
- Serum histamine
- Serum IgE
- Serum protein electrophoresis
- Serum tryptase
- Stool for occult blood
- Stool for ova, cysts, and parasites
- Thyroid function test
- Urinary 5-HIAA

### **Further reading:**

- Pujol RM, Gallardo F, Llistosella E et al (2002) Invisible mycosis fungoides: a diagnostic challenge. *J Am Acad Dermatol* 47(2 Suppl):S168–S171
- Zirwas MJ, Seraly MP (2001) Pruritus of unknown origin: a retrospective study. *J Am Acad Dermatol* 45(6):892–896

## **Pruritus Vulvae**

---

- Acantholytic dyskeratosis of the vulva
- Allergic contact dermatitis

- Candidiasis
- Condyloma acuminatum
- Extramammary Paget's disease
- Herpes simplex virus infection
- Lichen planus
- Lichen sclerosus
- Lichen simplex chronicus
- Psoriasis
- Scabies
- Sexually transmitted diseases
- Squamous cell carcinoma
- Trichomoniasis
- Urinary incontinence

**Further reading:**

- Bohl TG (2005) Overview of vulvar pruritus through the life cycle. Clin Obstet Gynecol 48(4):786–807

**Xerostomia**

---

- Actinomycosis
- Amyloidosis
- Anticholinergics
- Cirrhosis
- Dermatomyositis
- Diabetes
- Diuretics
- Ectodermal dysplasia
- Graft-vs-host disease
- HIV infection
- Hypoplastic salivary glands
- Hypothyroidism
- Iron deficiency
- Lymphoma
- Mixed connective tissue disease



- Multiple sclerosis
- Mumps
- Nerve injury
- Pernicious anemia
- Radiation to head and neck
- Scleroderma
- Sialolithiasis
- Sjögren's syndrome
- Systemic lupus erythematosus
- Syphilis
- Tuberculosis
- Vitamin deficiency

**Further reading:**

- Taubert M, Davies EM, Back I (2007) Dry mouth. *Br Med J* 10(7592):534

### Acquired Immunodeficiency Syndrome (Potentially Cutaneous AIDS-Defining Illnesses)

---

- Coccidioidomycosis
- Cytomegalovirus infection
- Herpes simplex viral infection of 1-month duration
- Histoplasmosis
- Kaposi's sarcoma
- *Mycobacterium avium* complex infection
- *Mycobacterium kansasii* infection
- *Mycobacterium tuberculosis* infection

#### Further reading::

- Rosenberg JD, Scheinfeld NS (2003) Cutaneous histoplasmosis in patients with acquired immunodeficiency syndrome. *Cutis* 72(6):439–445

### Acromegaly

---

- Acanthosis nigricans
- Coarse facial features
- Cutis verticis gyrata
- Hyperhidrosis
- Fibromas
- Hyperpigmentation
- Hypertrichosis

- Macroglossia
- Thickened nails
- Thickened skin

**Further reading:**

- Ben-Shlomo A, Melmed S (2006) Skin manifestations in acromegaly. *Clin Dermatol* 24(4):256–259

**Addison's Disease**

---

- Alopecia areata
- Chronic mucocutaneous candidiasis
- Diffuse hyperpigmentation
- Lichen sclerosus
- Vitiligo

**Further reading:**

- Nieman LK, Chanco Turner ML (2006) Addison's disease. *Clin Dermatol* 24(4):276–280

**AL Amyloidosis**

---

- Alopecia
- Bullous lesions
- Cutis laxa
- Cutis verticis gyrata-like scalp changes
- Macroglossia
- Nail dystrophy
- Peripheral edema
- Pigmentary change
- Purpura (periorificial)
- Sclerodermoid changes
- Waxy papules and nodules

**Further reading:**

- Silverstein SR (2005) Primary, systemic amyloidosis and the dermatologist: where classic skin lesions may provide the clue for early diagnosis. *Dermatol Online J* 11(1):5

**Alcoholism**

---

- Acquired zinc deficiency
- Erythroderma
- Flushing
- Gout
- Leukoplakia
- Madelung's disease
- Palmar erythema
- Pancreatic panniculitis
- Pellagra
- Porphyria cutanea tarda
- Psoriasis
- Riboflavin deficiency
- Rosacea
- Scurvy
- Spider angiomas

**Further reading:**

- Kostovic K, Lipozencic J (2004) Skin diseases in alcoholics. *Acta Dermatovenerol Croat* 12(3):181–190

**Aquatic Activity, Recent**

---

- *Aeromonas* infection
- Coral dermatitis
- Erysipeloid
- Jellyfish sting
- *Mycobacterium marinum* infection

- Protothecosis
- *Pseudomonas* folliculitis
- Seabather's eruption
- Sea urchin dermatitis
- *Streptococcus iniae* infection
- Swimmer's itch
- *Vibrio vulnificus* infection

**Further reading:**

- Burroughs R, Kerr L, Zimmerman B, Elston DM (2005) Aquatic antagonists: sea urchin dermatitis. *Cutis* 76(1):18–20

**Athlete**

- Acne mechanica
- Calluses
- Chafing
- Erythrasma
- Exercise-induced anaphylaxis
- Folliculitis
- Friction blister
- Frostbite
- Furunculosis
- Herpes gladiatorum
- Impetigo
- Jogger's nipples
- Molluscum contagiosum
- Otitis externa
- Pitted keratolysis
- Subungual hematoma
- Sunburn
- Talon noir
- Tinea gladiatorum
- Tinea cruris
- Tinea pedis

**Further reading:**

- Mailler-Savage EA, Adams BB (2006) Skin manifestations of running. *J Am Acad Dermatol* 55(2):290–301

**Bone Pain**

---

- Langerhans cell histiocytosis
- Leukemia
- Lymphoma
- Mastocytosis
- Metastatic disease
- Muckle–Wells syndrome
- Myeloma
- Schnitzler syndrome
- Scurvy
- Sickle cell disease
- Syphilis
- Tuberculosis

**Further reading:**

- de Koning HD, Bodar EJ, van der Meer JW et al (2007) Schnitzler syndrome. Beyond the case reports: review and follow-up of 94 patients with an emphasis on prognosis and treatment. *Semin Arthritis Rheum* 37(3):137–148

**Cardiovascular Disease**

---

- Behçet's disease
- Carcinoid syndrome
- Cardiofaciocutaneous syndrome
- Carney's complex
- Carvajal syndrome
- Chagas disease
- Cutis laxa
- Dermatomyositis

- Diabetes mellitus
- Ehlers–Danlos syndrome
- Endocarditis
- Exfoliative erythroderma
- Fabry’s disease
- Hemochromatosis
- Homocystinuria
- Hyperlipidemia
- Kawasaki disease
- LEOPARD syndrome
- Lyme disease
- Marfan syndrome
- Multicentric reticulohistiocytosis
- Naxos syndrome
- Neonatal lupus erythematosus
- Neurofibromatosis 1
- Noonan’s syndrome
- Primary systemic amyloidosis
- Pseudoxanthoma elasticum
- Relapsing polychondritis
- Rheumatic fever
- Sarcoidosis
- Scleroderma
- Systemic lupus erythematosus
- Syphilis
- Takayasu’s arteritis
- Tuberous sclerosis
- Werner’s syndrome

**Further reading:**

- Abdelmalek NF, Gerber TL, Menter A (2002) Cardiocutaneous syndromes and associations. *J Am Acad Dermatol* 46(2):161–183

## Cataracts

---

- Atopic dermatitis (Andogsky syndrome)
- Behçet's disease
- Cockayne's syndrome
- Diabetes mellitus
- Down syndrome
- Dyskeratosis congenita
- Ectodermal dysplasias
- Epidermal nevus syndrome
- Fabry's disease
- Hallermann–Streiff syndrome
- Incontinentia pigmenti
- Neurofibromatosis, type II
- Neutral lipid storage disease
- Psoralen therapy
- Rheumatoid arthritis
- Refsum's disease
- Rothmund–Thomson syndrome
- Sarcoidosis
- Steroids
- Stickler syndrome
- Syphilis
- Vogt–Koyanagi–Harada syndrome
- Werner's disease
- Wilson's disease
- X-linked ichthyosis
- X-linked-dominant chondrodysplasia punctata

### Further reading:

- Freiman A, Ting PT, Barankin B, Stanciu M, Rudnisky C (2006) Ophthalmologic manifestations of cutaneous conditions. *Ophthalmologica* 220(5):281–240



## Chemotherapy

---

- Acneiform eruption
- Acral erythema
- Acral sclerosis
- Anagen effluvium
- Atrophic skin
- Atrophic nails
- Flag sign
- Folliculitis
- Inflamed seborrheic keratoses
- Inflamed actinic keratoses
- Injection site reactions
- Metastatic disease
- Neutrophilic eccrine hidradenitis
- Photosensitivity
- Pruritus
- Radiation enhancement
- Radiation recall
- Raynaud's phenomenon
- Hyperpigmentation
- Stomatitis
- Syringosquamous metaplasia
- Worsening of psoriasis

### Further reading:

- Lacouture M et al (2011) Adverse skin reactions to chemotherapeutic agents. *Dermatol Ther* 24(4):385–442

## Cirrhosis (Including Primary Biliary Cirrhosis)

---

- Caput medusa
- Cirroid aneurysms
- Gynecomastia
- Hyperpigmentation (PBC)

- Jaundice
- Muehrcke's lines
- Palmar erythema
- Pruritus
- Purpura and ecchymoses (Vitamin K deficiency)
- Scleroderma/morphea (PBC)
- Sparse hair
- Spider angiomas
- Terry's nails
- Xanthomas (PBC)

**Further reading:**

- Koulentaki M, Ioannidou D, Stefanidou M et al (2006) Dermatological manifestations in primary biliary cirrhosis (PBC) patients: a case control study. *Am J Gastroenterol* 101(3):541–546

**Cleft Lip and/or Palate**

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- 4p syndrome
- Hay–Wells syndrome
- Beare–Stevenson cutis gyrata syndrome
- Branchio-oculo-facial syndrome
- Cleft lip/palate – ectodermal dysplasia syndrome
- Dermal melanocytosis
- EEC syndrome
- Encephalocele
- Nasal glioma
- Nail–patella syndrome
- Nevoid basal cell carcinoma syndrome
- Oculocerebrocutaneous syndrome
- Oral–facial–digital syndrome
- Popliteal pterygium syndrome
- Rapp–Hodgkin syndrome
- Robert syndrome
- Van der Woude syndrome

- Waardenburg syndrome, type 1 or 3
- Wolf–Hirschhorn syndrome

**Further reading:**

- Steele JA, Hansen H, Arn P, Kwong PC (2005) Spectrum of phenotypic manifestations from a single point mutation of the p63 gene, including new cutaneous and immunologic findings. *Pediatr Dermatol* 22(5):415–419

**Cold Induced or Cold Exacerbated**

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- Acrocyanosis
- Asteatotic eczema
- Atopic dermatitis
- Chilblains lupus erythematosus
- Cold panniculitis
- Cold urticaria
- Cold-water foot immersion
- Cryofibrinogenemia
- Cryoglobulinemia
- Cutis marmorata
- Erythrokeratolysis hiemalis
- Familial cold autoinflammatory syndrome
- Frostbite
- Glomus tumor
- Leiomyoma
- Livedo reticularis
- Perniosis
- Raynaud's phenomenon
- Sclerema neonatorum
- Subcutaneous fat necrosis of the newborn

**Further reading:**

- Aksentijevich ID, Putnam C, Remmers EF et al (2007) The clinical continuum of cryopyrinopathies: novel CIAS1 mutations in North American patients and a new cryopyrin model. *Arthritis Rheum* 56(4):1273–1285

## Cushing's Disease

---

- Acne
- Candidiasis
- Dermatophytosis
- Facial fullness
- Hirsutism
- Lipoatrophy (arms and legs)
- Lipohypertrophy (especially upper back, abdomen)
- Poor wound healing
- Purpura
- Skin fragility
- Striae distensae
- Tinea versicolor

### Further reading:

- Jabbour SA (2003) Cutaneous manifestations of endocrine disorders: a guide for dermatologists. *Am J Clin Dermatol* 4(5):315–331

## Cystic Fibrosis

---

- Acrodermatitis enteropathica
- Aquagenic wrinkling of the palms and soles
- Clubbing
- Cutaneous vasculitis
- Essential fatty acid deficiency
- Kwashiorkor-like eruption
- Phrynoderma
- Xerosis

### Further reading:

- Katz KA, Yan AC, Turner ML (2005) Aquagenic wrinkling of the palms in patients with cystic fibrosis homozygous for the delta F508 CFTR mutation. *Arch Dermatol* 141(5):621–624

## Deafness

---

- Albinism
- Alezzandrini syndrome
- Alport's syndrome
- Alstrom syndrome
- Bart–Pumphrey syndrome
- Bjornstad's syndrome
- Branchio-oto-renal syndrome
- Cockayne's syndrome
- Congenital rubella
- Congenital syphilis
- Crandall's syndrome
- DOOR syndrome
- Ectodermal dysplasias
- Goldenhar syndrome
- HID syndrome
- Hypomelanosis of Ito
- Johansson–Blizzard
- Johnson–McMillan syndrome
- Keratosis follicularis spinulosa decalvans
- KID syndrome
- LEOPARD syndrome
- Muckle–Wells syndrome
- Neutral lipid storage disease
- NOMID syndrome
- Phylloid hypomelanosis
- Ramsay–Hunt syndrome
- Refsum's disease
- Relapsing polychondritis
- Tietz syndrome
- Townes–Brock syndrome
- Vohwinkel's syndrome
- Waardenburg's syndrome

- Xeroderma pigmentosum
- Zippkowsky–Margolis syndrome

**Further reading:**

- Richard G, Brown N, Ishida-Yamamoto A, Krol A (2004) Expanding the phenotypic spectrum of Cx26 disorders: Bart–Pumphrey syndrome is caused by a novel missense mutation in GJB2. *J Invest Dermatol* 123(5):856–863

**Diabetes Mellitus**

- Acanthosis nigricans (Fig. 2.1)
- Acral gangrene
- Acral erythema
- Bullosis diabeticorum
- Candidiasis
- Clear cell syringoma
- Dermatophytosis
- Diabetic bullae
- Diabetic dermopathy
- Granuloma annulare (especially disseminated type)
- Erythrasma



**Fig. 2.1** Acral acanthosis nigricans

- Injection lipoatrophy
- Mucormycosis
- Necrobiosis lipoidica
- Neuropathic ulcers
- Partial lipodystrophy
- Perforating disorders
- Pruritus
- Rubeosis
- Scleredema adutorum
- Xerosis

**Further reading:**

- Ahmed I, Goldstein B (2006) Diabetes mellitus. *Clin Dermatol* 24(4):237–246

**Digital Anomalies**

---

- Adams–Oliver syndrome
- Apert syndrome
- Cleft lip/palate–ectodermal dysplasia
- EEC syndrome
- Epidermal nevus syndrome
- Focal dermal hypoplasia
- Klippel–Trenaunay syndrome
- Limb–mammary syndrome
- Nevoid basal cell carcinoma syndrome
- Oculodentodigital syndrome
- Oral–facial–digital syndrome
- Popliteal pterygium syndrome
- Proteus syndrome
- Trichorhinophalangeal syndrome
- Waardenburg syndrome, type 3

**Further reading:**

- Kalla G, Garg A (2002) Ectrodactyly. *Indian J Dermatol Venereol Leprol* 68(3):152–153

## **Down Syndrome**

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- Alopecia areata
- Brachycephaly
- Brushfield spots
- Cheilitis
- Collagenomas
- Cutis marmorata
- Dermatophyte infections
- Elastosis perforans serpiginosa
- Folliculitis
- Ichthyosis
- Immunodeficiency
- Leukemia
- Lichen simplex chronicus
- Milia-like calcinosis cutis
- Neonatal transient myeloproliferative disorder
- Norwegian scabies
- Scrotal tongue
- Seborrheic dermatitis
- Single palmar crease
- Syringomas
- Vitiligo

### **Further reading:**

- Daneshpazhooh M, Nazemi TM, Bigdeloo L, Yoosefi M (2007) Mucocutaneous findings in 100 children with Down syndrome. *Pediatr Dermatol* 24(3):317–320

## **Dysphagia/Odynophagia**

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- Behçet's disease
- Candidiasis
- Darier's disease
- Dermatomyositis



- Erosive lichen planus
- Graft-vs-host disease
- Herpes simplex virus infection
- Howell–Evans syndrome
- Inflammatory bowel disease
- Iron deficiency (Plummer–Vinson syndrome)
- Oral–ocular–genital syndrome
- Pemphigus
- Scleroderma
- Stevens–Johnson syndrome
- Zoster

**Further reading:**

- Espana A, Fernandez S, del Olmo J et al (2007) Ear, nose, and throat manifestations in pemphigus vulgaris. *Br J Dermatol* 156(4):733–737

**Eating Disorder**

---

- Acne
- Acquired zinc deficiency
- Acral coldness
- Acrocyanosis
- Aphthous stomatitis
- Calluses on hands (Russell's sign)
- Carotenemia
- Cheilitis
- Dental caries
- Dermatomyositis-like syndrome (Ipecac)
- Dry hair
- Ecchymoses from vitamin K deficiency
- Edema
- Emesis-related purpura
- Enamel erosion
- Enlarged parotid glands

- Factitial dermatoses
- Finger clubbing
- Fixed drug eruption from phenolphthalein laxative
- Gum recession
- Interdigital intertrigo
- Lanugo-like hair
- Livedo reticularis
- Loss of subcutaneous fat
- Onychorrhexis
- Paronychia
- Pellagra
- Periungual erythema
- Perleche
- Perniosis
- Petechiae and purpura
- Pitting edema
- Poor wound healing
- Prurigo pigmentosa
- Pruritus
- Scurvy
- Seborrheic dermatitis
- Striae distensae
- Telogen effluvium
- Trichotillomania
- Xerosis

**Further reading:**

- Strumia R (2005) Dermatologic signs in patients with eating disorders. *Am J Clin Dermatol* 6(3):165–173

**Epilepsy**

---

- Anticonvulsant reaction
- Centrofacial lentiginosis

- CNS lupus
- Dupuytren's contracture
- Encephalocraniocutaneous lipomatosis
- Epidermal nevus syndrome
- Focal dermal hypoplasia
- Gingival fibromatosis
- Hypomelanosis of Ito
- Incontinentia pigmenti
- Lhermitte–Duclos disease
- Menkes' kinky-hair syndrome
- Phacomatosis pigmentovascularis
- Sjögren–Larsson syndrome
- Sturge–Weber syndrome
- Tuberous sclerosis
- Wolf–Hirschhorn syndrome
- Wyburn–Mason syndrome

**Further reading:**

- Hubert JN, Callen JP (2002) Incontinentia pigmenti presenting as seizures. *Pediatr Dermatol* 19(6):550–552

**Gastrointestinal Hemorrhage**

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- Blue rubber bleb nevus syndrome
- Chronic urticaria (*H. pylori* infection)
- Cowden's disease
- Crohn's disease
- Cronkhite–Canada syndrome
- Diffuse neonatal hemangiomatosis
- Ehlers–Danlos syndrome, type IV
- Gardner's syndrome
- Hemangiomatosis
- Henoch–Schönlein purpura

- Hereditary hemorrhagic telangiectasia
- Kaposi's sarcoma
- Kawasaki disease
- Maffucci's syndrome
- Malignant atrophic papulosis
- Muir–Torre syndrome
- Peutz–Jeghers syndrome
- Polyarteritis nodosa
- Pseudoxanthoma elasticum
- Scurvy
- Ulcerative colitis
- Vasculitis

**Further reading:**

- Braverman IM (2003) Skin signs of gastrointestinal disease. *Gastroenterology* 124(6):1595–1614

**Gastrointestinal Neoplasia**

---

- Acanthosis nigricans
- Arsenicism
- Carcinoid syndrome
- Cowden's disease
- Cronkhite–Canada syndrome
- Dermatitis herpetiformis
- Dermatomyositis
- Extramammary Paget's disease
- Gardner's syndrome
- Kaposi's sarcoma
- Leser–Trelat sign
- Muir–Torre syndrome
- Necrolytic migratory erythema
- Neurofibromatosis

- Peutz–Jeghers syndrome
- Sister Mary Joseph nodule
- Tylosis (Howell–Evans syndrome)

**Further reading:**

- Braverman IM (2003) Skin signs of gastrointestinal disease. *Gastroenterology* 124(6):1595–1614

## **Hemochromatosis**

---

- Alopecia
- Atrophy
- Generalized hyperpigmentation
- Ichthyosis
- Koilonychia
- Leukonychia
- Onychonychia
- Palmar erythema
- Porphyria cutanea tarda
- Spider telangiectasias
- *Vibrio vulnificus* infection

**Further reading:**

- Kostler E, Porst H, Wollina U (2005) Cutaneous manifestations of metabolic diseases: uncommon presentations. *Clin Dermatol* 23(5):457–464

## **Hemodialysis**

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- Acquired perforating disease
- Beta-2 microglobulin amyloidosis
- Calciphylaxis/calcinosis cutis
- Lindsay's nails (half-and-half nails)
- Muehrcke's lines

- Nephrogenic fibrosing dermopathy
- Pallor
- Pruritus
- Pseudoporphyria
- Uremic frost
- Xerosis or ichthyosis

**Further reading:**

- Udayakumar P, Balasubramanian S, Ramalingam KS et al (2006) Cutaneous manifestations in patients with chronic renal failure on hemodialysis. *Indian J Dermatol Venereol Leprol* 72(2):119–125

**Hepatitis B or Hepatitis C Infection**

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- Cutaneous small vessel vasculitis
- Disseminated superficial porokeratosis (C)
- Erythema multiforme
- Erythema nodosum
- Gianotti–Crosti syndrome (B)
- Lichen planus (C)
- Mixed essential cryoglobulinemia (C > B)
- Necrolytic acral erythema (C)
- Pigmented purpuric dermatosis (C)
- Polyarteritis nodosa (B > C)
- Porphyria cutanea tarda (C)
- Pruritus
- Urticaria
- Urticarial vasculitis
- Xerostomia

**Further reading:**

- Bonkovsky HL, Mehta S (2001) Hepatitis C: a review and update. *J Am Acad Dermatol* 44(2):159–182

## Hodgkin's Disease

---

- Cutaneous involvement (rare)
- Eczema
- Erythroderma
- Hyperpigmentation
- Ichthyosis
- Lymphadenopathy
- Mycosis fungoides
- Opportunistic infections
- Pruritus

### Further reading:

- Rubenstein M, Duvic M (2006) Cutaneous manifestations of Hodgkin's disease. *Int J Dermatol* 45(3):251–256

## Human Immunodeficiency Virus Infection

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- Acanthamebiasis
- Acne vulgaris
- Acquired ichthyosis
- Acute HIV exanthem
- Adrenal insufficiency
- Aphthous ulcer
- Atopic dermatitis
- Atypical mycobacterial infection
- Bacillary angiomatosis
- Bacterial folliculitis
- Basal cell carcinoma
- Botryomycosis
- Bowenoid papulosis
- Bullous impetigo
- Chronic actinic dermatitis
- Condyloma accuminata

- Crusted scabies
- Cryptococcosis
- Cutaneous lymphoma
- Cutaneous pneumocystosis
- Cytomegalovirus
- Demodicidosis
- Dermatophytosis
- Deep fungal infection
- Drug eruption
- Ecthyma
- Ecthyma gangrenosum
- Eosinophilic folliculitis
- Epidermodysplasia verruciformis
- Erythema multiforme
- Erythroderma
- Factitious
- Fungal folliculitis
- Generalized pruritus
- Granuloma annulare
- Herpes simplex infection
- Herpes zoster
- Histoplasmosis
- HTLV-1 leukemia/lymphoma
- Hyperpigmentation
- Insect-bite reaction
- Kaposi's sarcoma
- Kwashiorkor
- Leishmaniasis
- Lymphoma
- Molluscum contagiosum
- Necrotizing fasciitis
- Non-Hodgkin's lymphoma
- Papular eruption of AIDS
- Papular mucinosis



- Papular urticaria
- Penicilliosis
- Perioral dermatitis
- Photosensitive drug eruption
- Pityriasis rubra pilaris (type VI)
- Porphyria cutanea tarda
- Post-inflammatory hyperpigmentation
- Psoriasis (more severe)
- Reactive arthritis with urethritis
- RED syndrome (see toxic shock syndrome)
- Rosacea
- Scabies
- Seborrheic dermatitis
- Smooth muscle tumors (angioleiomyoma)
- Squamous cell carcinoma
- Stevens–Johnson syndrome
- Toxic epidermal necrolysis
- Verruca vulgaris
- Verrucous carcinoma
- Viral exanthem
- Xerosis

**Further reading:**

- Zancanaro PC, McGirt LY, Mamelak AJ et al (2006) Cutaneous manifestations of HIV in the era of highly active antiretroviral therapy: an institutional urban clinic experience. *J Am Acad Dermatol* 54(4):581–588

**Hyperthyroidism**

---

- Alopecia areata
- Hyperpigmentation
- Koilonychia
- Onycholysis
- Pemphigoid gestationis
- Pretibial myxedema

- Pruritus
- Thyroid acropachy
- Urticaria
- Vitiligo

**Further reading:**

- Jabbour SA (2003) Cutaneous manifestations of endocrine disorders: a guide for dermatologists. *Am J Clin Dermatol* 4(5):315–331

**Hypothyroidism**

---

- Ascher syndrome
- Carotenoderma
- Chronic urticaria
- Brittle hair
- Easy bruising
- Eruptive and tuberous xanthomas
- Hypohidrosis
- Ichthyosis
- Madarosis
- Myxedema
- Onycholysis
- Palmoplantar keratoderma
- Vitiligo

**Further reading:**

- Jabbour SA (2003) Cutaneous manifestations of endocrine disorders: a guide for dermatologists. *Am J Clin Dermatol* 4(5):315–331

**Immunosuppressed/Transplant Recipient**

---

- Actinic keratosis
- Basal cell carcinoma
- Candidiasis
- Cryptococcosis

- Cytomegalovirus infection
- Dermatophytosis
- Disseminated aspergillosis
- Disseminated *Fusarium* infection (Fig. 2.2)
- Disseminated zoster
- Ecthyma gangrenosum
- Graft-vs-host disease
- Herpes simplex virus
- Histoplasmosis
- Kaposi's sarcoma
- Malakoplakia
- Melanoma
- Merkel cell carcinoma
- Pneumocystosis
- Post-transplant lymphoproliferative disorder
- Sebaceous hyperplasia (cyclosporine)
- Squamous cell carcinoma
- Tinea versicolor
- Trichodysplasia spinulosa
- Viral warts



**Fig. 2.2** Disseminated *Fusarium* infection (Courtesy of K. Guidry)

**Further reading:**

- Hassan G, Khalaf H, Mourad W (2007) Dermatologic complications after liver transplantation: a single-center experience. *Transplant Proc* 39(4):1190–1194

**Inflammatory Bowel Disease**

---

- Acne fulminans
- Acrodermatitis enteropathica-like lesions
- Angular cheilitis
- Annular erythema
- Aphthosis
- Bowel-associated dermatosis–arthritis syndrome
- Clubbing
- Cutaneous polyarteritis nodosa
- Epidermolysis bullosa acquisita
- Erythema elevatum diutinum
- Erythema nodosum
- Granulomatous infiltrates
- Hidradenitis suppurativa
- Lichen planus
- Lichen nitidus
- Malnutrition
- Metastatic Crohn's disease
- Ostomy dermatitis
- Psoriasis
- Pustular vasculitis
- Pyoderma gangrenosum
- Pyostomatitis vegetans
- Small vessel vasculitis
- Urticaria
- Vitiligo

**Further reading:**

- Ruocco E, Cuomo A, Salerno R et al (2007) Crohn's disease and its mucocutaneous involvement. *Skinmed* 6(4):179–185

## Klinefelter Syndrome

---

- Gynecomastia
- Leg ulcers
- Tall stature
- Testosterone-induced acne
- Varicose veins

### Further reading:

- De Morentin HM, Dodiuk-Gad RP, Brenner S (2004) Klinefelter's syndrome presenting with leg ulcers. *Skinmed* 3(5):274–278

## Leukemia

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- Acral ischemia
- Cheilitis
- Chloroma (granulocytic sarcoma)
- Erythema elevatum diutinum
- Erythema multiforme
- Erythema nodosum
- Erythroderma
- Exaggerated arthropod-bite reactions
- Fingertip hypertrophy
- Gingival infiltration
- Grover's disease-like eruption
- Leonine facies
- Neutrophilic dermatosis of the dorsal hands
- Neutrophilic eccrine hidradenitis
- Oral ulcers
- Panniculitis
- Paraneoplastic pemphigus
- Polyarteritis nodosa
- Purpura
- Pyoderma gangrenosum

- Recalcitrant eczema
- Subungual nodule
- Sweet's syndrome (especially bullous)
- Urticaria
- Vasculitis

**Further reading:**

- Agnew KL, Ruchlemer R, Catovsky D et al (2004) Cutaneous findings in chronic lymphocytic leukaemia. *Br J Dermatol* 150(6):1129–1135

**Lupus Erythematosus, Systemic**

- Antiphospholipid antibody syndrome
- Basaloid follicular hamartoma
- Benign hypergammaglobulinemic purpura
- Bullous lesions
- Butterfly (malar) rash
- Calcinosis cutis
- Chilblains-like lesions
- Cryoglobulinemia
- Dermatofibromas (>15)
- Digital infarctions
- Discoid lesions (Fig. 2.3)
- Erythema multiforme-like lesions
- Fractured hairs
- Leg ulcers
- Lichen planus–lupus erythematosus overlap
- Livedo reticularis
- Livedoid vasculopathy
- Lupus panniculitis
- Malignant atrophic papulosis
- Mucinous lesions
- Oral painless ulcers
- Palmar erythema



**Fig. 2.3** Discoid lupus erythematosus

- Periorbital edema
- Periungual telangiectasias
- Photosensitivity
- Poikilodermatous skin changes
- Purpura
- Raynaud's phenomenon
- Red lunula
- Rheumatoid nodules
- Scarring alopecia
- Sweet's syndrome
- Telogen effluvium
- Toxic epidermal necrolysis-like presentation
- Urticarial vasculitis

**Further reading:**

- Rothfield N, Sontheimer RD, Bernstein M (2006) Lupus erythematosus: systemic and cutaneous manifestations. *Clin Dermatol* 24(5):348–362

**Malignancy, Internal**

---

- Acanthosis nigricans
- Acquired ichthyosis

- Bazex's syndrome
- Carcinoid syndrome
- Cushing's syndrome
- Cutaneous small vessel vasculitis
- Dermatitis herpetiformis
- Dermatomyositis
- Erythema annulare centrifugum
- Erythema gyratum repens
- Exfoliative erythroderma
- Extramammary Paget's disease
- Hypertrichosis lanuginosa (malignant down)
- Multicentric reticulohistiocytosis
- Mycosis fungoides
- Necrobiotic xanthogranuloma
- Necrolytic migratory erythema
- Paget's disease of the breast
- Paraneoplastic pemphigus
- Porphyria cutanea tarda
- Pyoderma gangrenosum
- Sign of Leser-Trélat
- Sweet's syndrome
- Tripe palms
- Urticaria
- Urticarial vasculitis

**Further reading:**

- Chung VQ, Moschella SL, Zembowicz A, Liu V (2006) Clinical and pathologic findings of paraneoplastic dermatoses. *J Am Acad Dermatol* 54(5):745–762

**Monoclonal Gammopathy/Multiple Myeloma**

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- Acquired angioedema
- Acquired cutis laxa
- Amyloidosis
- Atypical scleroderma



- Bullous amyloidosis
- Digital cutis laxa-like changes
- Epidermolysis bullosa acquisita
- Erythema elevatum diutinum
- Extramedullary cutaneous plasmacytomas (Fig. 2.4)
- Follicular hyperkeratosis (spines)
- Hair casts
- IgA pemphigus
- IgM storage papules (cutaneous macroglobulinosis)
- Leukocytoclastic vasculitis
- Necrobiotic xanthogranuloma
- Paraneoplastic pemphigus
- Plane xanthomas
- POEMS syndrome
- Pyoderma gangrenosum
- Schnitzler syndrome
- Scleredema



**Fig. 2.4** Plasmacytomas (Courtesy of K. Guidry)

- Scleromyxedema
- Subcorneal pustular dermatosis
- Subepidermal bullous dermatosis
- Sweet's syndrome
- Xanthoma disseminatum

**Further reading:**

- Satta R, Casu G, Dore F, Longinotti M, Cottoni F (2003) Follicular spicules and multiple ulcers: cutaneous manifestations of multiple myeloma. *J Am Acad Dermatol* 49(4):736–740

**Multiple Endocrine Neoplasia, Type I**

---

- Adrenocortical tumors
- Angiofibromas
- Cafe-au-lait macules
- Collagenomas
- Confetti-like hypopigmentation
- Gastrointestinal tumors
- Gingival papules
- Leiomyomas
- Lipomas
- Melanoma
- Parathyroid adenoma
- Pituitary adenoma

**Further reading:**

- Jabbour SA, Davidovici BB, Wolf R (2006) Rare syndromes. *Clin Dermatol* 24(4):299–316

**Multiple Endocrine Neoplasia, Type IIA**

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- Lichen amyloidosis
- Medullary thyroid carcinoma

- Parathyroid hyperplasia
- Pheochromocytoma
- Pruritus

**Further reading:**

- Jabbour SA, Davidovici BB, Wolf R (2006) Rare syndromes. *Clin Dermatol* 24(4):299–316

**Multiple Endocrine Neoplasia, Type IIB**

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- Cafe-au-lait macules
- Elongated facies
- Marfanoid habitus
- Medullary thyroid carcinoma
- Mucosal neuromas
- Pheochromocytoma

**Further reading:**

- Jabbour SA, Davidovici BB, Wolf R (2006) Rare syndromes. *Clin Dermatol* 24(4):299–316

**Obesity**

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- Acanthosis nigricans
- Acrochordons
- Adiposis dolorosa
- Bacterial infections
- Candidiasis
- Dermatophytosis
- Frictional hyperpigmentation
- Gout

- Hidradenitis
- Hyperhidrosis
- Intertrigo
- Keratosis pilaris
- Lipodermatosclerosis
- Plantar hyperkeratosis
- Pseudoacanthosis nigricans
- Psoriasis
- Stasis dermatitis
- Striae distensae
- Venous insufficiency ulcers

**Further reading:**

- Yosipovitch G, DeVore A, Dawn A (2007) Obesity and the skin: skin physiology and skin manifestations of obesity. *J Am Acad Dermatol* 56(6):901–916

**Pancreatic Disease**

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- Cullen's sign
- Familial melanoma
- Glucagonoma syndrome
- Jaundice
- Livedo reticularis
- Metastatic disease
- Migratory thrombophlebitis (Trousseau's syndrome)
- Multiple endocrine neoplasia
- Panniculitis
- Systemic lupus erythematosus
- Turner's sign
- Xanthomas (hypertriglyceridemia)

**Further reading:**

- Kobayashi S, Yoshida M, Kitahara T et al (2007) Autoimmune pancreatitis as the initial presentation of systemic lupus erythematosus. *Lupus* 16(2):133–136

## POEMS Syndrome (Crow–Fukase Syndrome)

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- Alopecia
- Cherry angiomas
- Clubbing
- Flushing
- Glomeruloid hemangiomas
- Hyperpigmentation
- Hypertrichosis
- Lymphadenopathy
- Ichthyosis
- Microvenular hemangiomas
- Raynaud's phenomenon
- Sclerodermoid changes

### Further reading:

- Phillips JA, Dixon JE, Richardson JB et al (2006) Glomeruloid hemangioma leading to a diagnosis of POEMS syndrome. *J Am Acad Dermatol* 55(1):149–152

## Polyyps, Intestinal

---

- Bannayan–Riley–Ruvalcaba
- Birt–Hogg–Dube syndrome
- Cronkhite–Canada syndrome
- Familial polyposis
- Gardner's syndrome
- Muir–Torre syndrome
- Neurofibromatosis
- Peutz–Jeghers syndrome

### Further reading:

- Braverman IM (2003) Skin signs of gastrointestinal disease. *Gastroenterology* 124(6):1595–1614

## Pregnant

---

- Acne vulgaris
- Atopic dermatitis of pregnancy
- Cholestasis of pregnancy
- Darkening of nevi
- Diffuse hyperpigmentation
- Erythema nodosum
- Folliculitis
- Impetigo herpetiformis
- Melasma
- Palmar erythema
- Pemphigoid gestationis
- Prurigo of pregnancy
- Pruritic urticarial papules and plaques of pregnancy
- Pyogenic granuloma
- Spider telangiectasias
- Striae gravidarum
- Urticaria
- Varicosities

### Further reading:

- Ambros-Rudolph CM (2006) Dermatoses of pregnancy. *J Dtsch Dermatol Ges* 4(9):748–759

## Pulmonary Disease

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- Antitrypsin deficiency panniculitis
- Arsenicism
- Aspergillosis
- Atopic dermatitis
- Birt–Hogg–Dube syndrome
- Blastomycosis

- Chronic granulomatous disease
- Churg–Strauss syndrome
- Coccidioidomycosis
- CREST syndrome
- Cystic fibrosis
- Dermatomyositis
- Hereditary hemorrhagic telangiectasia
- Histoplasmosis
- Langerhans cell histiocytosis
- Lymphomatoid granulomatosis
- Mycoplasma infection
- Nocardiosis
- Sarcoidosis
- Scleroderma
- Sweet's syndrome
- Tuberculosis
- Wegener's granulomatosis
- Viral infection
- Tuberous sclerosis

**Further reading:**

- Astudillo L, Sailer L, Launay F et al (2006) Pulmonary involvement in Sweet's syndrome: a case report and review of the literature. *Int J Dermatol* 45(6):677–680

**Renal Disease**

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- Alport's syndrome
- Birt–Hogg–Dube syndrome
- Cholesterol emboli syndrome
- Fabry's disease
- Goodpasture's syndrome
- Henoch–Schönlein purpura
- Hereditary leiomyomatosis
- Myeloma

- Nail–patella syndrome
- Neurofibromatosis
- Oxalosis
- Polyarteritis nodosa
- Primary systemic amyloidosis
- Pseudoporphyria
- Pseudoxanthoma elasticum
- Renal cell carcinoma
- Sarcoidosis
- Scleroderma
- Small vessel vasculitis
- Systemic lupus erythematosus
- Tuberous sclerosis
- Wegener’s granulomatosis

**Further reading:**

- Abdelbaqi-Salhab M, Shalhub S et al (2003) A current review of the cutaneous manifestations of renal disease. *J Cutan Pathol* 30(9):527–538

**Rheumatoid Arthritis**

---

- Accelerated rheumatoid nodulosis
- Alopecia areata
- Bullous pemphigoid
- Bywaters lesions
- Cicatricial pemphigoid
- Clubbing
- Dermatitis herpetiformis
- Digital pulp nodules
- Epidermolysis bullosa acquisita
- Erythema elevatum diutinum
- Erythema multiforme
- Erythema nodosum
- Erythromelalgia



- Felty's syndrome
- Hyperpigmentation
- Interstitial granulomatous dermatitis with arthritis
- Linear necrobiotic subcutaneous bands
- Localized hyperhidrosis
- Mondor's disease
- Nail-fold telangiectasia
- Onychorrhexis
- Palisaded neutrophilic and granulomatous dermatitis
- Palmar erythema
- Pemphigus
- Pyoderma gangrenosum
- Reactive angioendotheliomatosis
- Rheumatoid neutrophilic dermatitis
- Rheumatoid nodules
- Rheumatoid vasculitis
- Small vessel vasculitis
- Splinter hemorrhages
- Subcorneal pustular dermatosis
- Sweet's syndrome
- Transient macular erythema
- Urticaria
- Vasculitis
- Vitiligo
- Yellow nail syndrome

**Further reading:**

- Sayah A, English JC III (2005) Rheumatoid arthritis: a review of the cutaneous manifestations. *J Am Acad Dermatol* 53(2):191–209

**Sexually Promiscuous**

---

- Amebiasis
- Candidiasis

- Chancroid
- *Chlamydia*
- Cytomegalovirus
- Giardiasis
- Gonorrhea
- Granuloma inguinale
- Hepatitis A virus
- Hepatitis B virus
- Hepatitis C virus
- Herpes simplex virus
- Human herpes virus, type 8
- Human immunodeficiency virus
- Human papillomavirus virus
- Human T cell lymphotropic virus
- Lymphogranuloma venereum
- Mobiluncus infection
- Molluscum contagiosum
- Nongococcal urethritis
- Pediculosis pubis
- Scabies
- Syphilis
- Trichomoniasis

**Further reading:**

- Wang QQ, Mabey D, Peeling RW et al (2002) Validation of syndromic algorithm for the management of genital ulcer diseases in China. *Int J STD AIDS* 13(7):469–474

**Sjögren Syndrome**

---

- Amyloidosis
- Annular erythema
- Benign hypergammaglobulinemic purpura of Waldenstrom
- Erythema multiforme-like lesions
- Erythema nodosum

- Photosensitivity
- Pyoderma gangrenosum
- Sweet's syndrome
- Urticarial vasculitis
- Vaginal dryness
- Vasculitis
- Xerophthalmia
- Xerosis
- Xerostomia

**Further reading:**

- Soy M, Piskin S (2007) Cutaneous findings in patients with primary Sjogren's syndrome. *Clin Rheumatol* 26(8):1350–1352

**Smoker**

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- Chronic cutaneous lupus erythematosus
- Favre–Racouchot syndrome
- Hidradenitis suppurativa
- Keratoacanthoma
- Mid dermal elastolysis
- Metastatic lung cancer
- Oral leukoplakia
- Nicotine patch allergy
- Nicotine stomatitis
- Palmoplantar pustulosis
- Psoriasis
- Squamous cell carcinoma
- Thromboangiitis obliterans
- Trench mouth

**Further reading:**

- Freiman A, Bird G, Metelitsa AI, Barankin B, Lauzon GJ (2004) Cutaneous effects of smoking. *J Cutan Med Surg* 8(6):415–423

## Spinal Dysraphism

---

- Acrochordons
- Aplasia cutis congenita
- Capillary malformations
- Cobb syndrome
- Congenital melanocytic nevi
- Dermal sinuses
- Dimples
- Ependymomas
- Hemangiomas
- Hyperpigmentation
- Hypertrichosis (faun tail)
- Hypopigmentation
- Lipomas
- Lipomyelomeningoceles
- Meningoceles
- Plexiform neurofibromas
- Pseudotails
- Telangiectasias
- Teratomas
- True tails

### Further reading:

- Guggisberg D, Hadj-Rabia S, Viney C et al (2004) Skin markers of occult spinal dysraphism in children: a review of 54 cases. *Arch Dermatol* 140(9):1109–1115

## Stroke

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- Antiphospholipid antibody syndrome
- Atrial myxoma
- Behçet's disease
- Cholesterol emboli

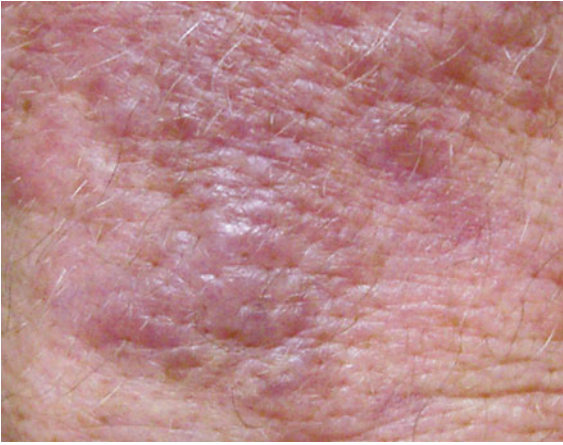
- Cryoglobulinemia
- Disseminated intravascular coagulation
- Endocarditis
- Fabry's disease
- Hereditary hypercoagulability
- Intravascular lymphoma
- Malignant atrophic papulosis
- Neurosyphilis
- Septic emboli
- Sneddon syndrome
- Systemic lupus erythematosus
- Thrombotic thrombocytopenic purpura

**Further reading:**

- Al Aboud D, Broshtilova V, Al Aboud K (2005) Dermatological aspects of cerebrovascular diseases. *Acta Dermatovenerol Alp Panonica Adriat* 14(1):9–14

**Sun Exposure, Chronic**

- Actinic granuloma
- Actinic keratosis
- Atypical fibroxanthoma
- Basal cell carcinoma
- Bateman's purpura
- Bullous lesions
- Colloid milium (Fig. 2.5)
- Cutis rhomboidalis nuchae
- Elastotic nodules of the ear
- Favre–Racouchot syndrome
- Fibroelastolytic papulosis
- Keratoacanthoma
- Marginal keratoderma
- Melanoma
- Merkel cell carcinoma
- Poikiloderma of Civatte



**Fig. 2.5** Colloid milium (Courtesy of W. T. Massengale)

- Solar lentigines
- Squamous cell carcinoma
- Stellate pseudoscars
- Telangiectasia
- Weathering nodules
- Venous lake

**Further reading:**

- Heras JA, Jimenez F, Soguero ML et al (2007) Bullous solar elastosis. *Clin Exp Dermatol* 32(3):272–274

**Tick Bite**

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- Babesiosis
- Boutonneuse fever
- Colorado tick fever
- Human granulocytic anaplasmosis
- Human monocytic ehrlichiosis
- Lyme disease
- Q fever

- Rocky Mountain spotted fever
- Southern tick-associated rash illness
- Tick-borne relapsing fever
- Tularemia

**Further reading:**

- McGinley-Smith DE, Tsao SS (2003) Dermatoses from ticks. *J Am Acad Dermatol* 49(3):363–392

**Turner Syndrome**

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- Alopecia areata
- Cardiovascular defects
- Cystic hygroma
- Gonadal dysgenesis
- Halo nevus
- Keloids
- Lymphedema
- Multiple melanocytic nevi
- Renal malformations
- Short stature
- Thyroid disease
- Webbed neck
- Widely spaced nipples

**Further reading:**

- Lowenstein EJ, Kim KH, Glick SA (2004) Turner's syndrome in dermatology. *J Am Acad Dermatol* 50(5):767–776

**Virilization**

---

- Abnormal menstrual cycle
- Acne
- Androgenic alopecia
- Clitoral hypertrophy

- Decreased breast size
- Deep voice
- Hirsutism

**Further reading:**

- Lee AT, Zane LT (2007) Dermatologic manifestations of polycystic ovary syndrome. *Am J Clin Dermatol* 8(4):201–219

**X-Linked Dominant Inheritance Pattern**

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- Albright hereditary osteodystrophy
- Bazex's syndrome
- CHILD syndrome
- Congenital generalized hypertrichosis
- Conradi–Hunermann syndrome
- Goltz syndrome
- Incontinentia pigmenti
- Oral–facial–digital syndrome

**X-Linked Recessive Inheritance Pattern**

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- Anhidrotic ectodermal dysplasia
- Bruton's agammaglobulinemia
- Chronic granulomatous disease
- Crandall's syndrome
- Duncan's syndrome
- Dyskeratosis congenita
- Fabry's disease
- Hunter syndrome
- Keratosis follicularis spinulosa decalvans
- Lesch–Nyhan disease
- Menkes kinky-hair disease
- Severe combined immunodeficiency
- Wiskott–Aldrich syndrome
- X-linked ichthyosis



## Abdomen

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- Accessory nipple
- Bowen's disease
- Cherry angioma
- Cutaneous endometriosis
- Desmoid tumor
- Dysplastic nevi
- Fistula
- Hernia
- Larva currens
- Lipoma
- Melanocytic nevus
- Metastatic disease
- Nickel contact dermatitis
- Omphalomesenteric duct remnant
- Pemphigoid gestationis
- Pruritic urticarial papules and plaques of pregnancy
- Scabies
- Seborrheic keratosis
- Striae atrophicans
  - Strongyloidiasis
- Zoster

### **Acral Necrosis/Purpura (Fig. 3.1)**

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- Achenbach syndrome
- Acrokeratosis paraneoplastica of Bazex
- Antiphospholipid antibody syndrome
- Arteriosclerosis
- Calciphylaxis
- Carcinoma
- Cholesterol emboli
- Coumadin blue-toe syndrome
- CREST syndrome
- Cryoglobulinemia
- Endocarditis
- Erythema multiforme
- Gonococemia
- Hepatitis C virus infection
- Hyperglobulinemic purpura
- Left atrial myxoma
- Leukocytoclastic vasculitis
- Lupus erythematosus
- Metastatic disease
- Mixed connective-tissue disease
- Myeloma



**Fig. 3.1** Acral purpura

- Paraneoplastic acral vascular syndrome
- Parvovirus B19 infection
- Perniosis
- Polyarteritis nodosa
- Polycythemia
- Raynaud's phenomenon
- Rocky Mountain spotted fever
- Scleroderma
- Sepsis
- Septic emboli
- Sjögren's syndrome
- Sneddon syndrome
- Wegener's granulomatosis

**Further reading:**

- Poszepczynska-Guigne E, Viguier M, Chosidow O et al (2002) Paraneoplastic acral vascular syndrome: epidemiologic features, clinical manifestations, and disease sequelae. *J Am Acad Dermatol* 47(1):47–52

**Agminated**

- Acquired melanocytic nevi
- Atypical nevi
- Blue nevi
- Collagenomas
- Dermatofibroma
- Dermatofibrosarcoma protuberans
- Elastomas
- Leiomyomata
- Lentigines
- Melanoma metastasis
- Nevus lipomatosus
- Nevus spilus
- Neurilemmomas
- Pyogenic granulomas

- Segmental angiofibromas
- Segmental neurofibromatosis
- Spitz nevi
- Trichoepitheliomas
- Xanthogranuloma

**Further reading:**

- Torreló A, Baselga E, Nagore E et al (2005) Delineation of the various shapes and patterns of nevi. *Eur J Dermatol* 15(6):439–450

**Alopecia, Acquired Nonscarring**

- Alopecia areata
- Androgenetic alopecia
- Drug-induced alopecia
- Hair-shaft disorders
- Iron deficiency
- Lipedematous alopecia
- Loose anagen hair
- Lupus hair
- Psoriasis
- Seborrheic dermatitis
- Secondary syphilis
- Telogen effluvium
- Temporal arteritis
- Thyroid disease
- Traction alopecia
- Trichorrhhexis nodosa
- Trichotillomania

**Evaluation**

- Antinuclear antibodies
- Complete blood count

- DHEA-S
- Ferritin
- Fungal culture
- Hair mount
- Syphilis serologic test
- Testosterone
- Thyroid function test

**Further reading:**

- Wiedemeyer K, Schill WB, Loser C (2004) Diseases on hair follicles leading to hair loss part I: nonscarring alopecias. *Skinmed* 3(4):209–214

**Alopecia, Acquired Scarring**

---

- Actinic keratosis
- Alopecia neoplastica
- Aplasia cutis
- Bacterial infection
- Basal cell carcinoma
- Burns
- Central centrifugal cicatricial alopecia
- Cicatricial pemphigoid
- Discoid lupus erythematosus
- Epidermolysis bullosa
- Erosive pustular dermatosis
- Favus
- Folliculitis decalvans
- Frontal fibrosing alopecia
- Keratosis follicularis spinulosa decalvans
- Kerion
- Lichen planopilaris
- Lymphoma
- Metastasis
- Morphea

- Necrobiosis lipoidica
- Nevus sebaceous
- Porphyria cutanea tarda
- Radiation
- Sarcoidosis
- Squamous cell carcinoma
- Scleroderma
- Tinea capitis
- Trauma
- Zoster

### ***Evaluation***

- Antinuclear antibodies
- Bacterial culture
- Biopsy with elastic tissue, PAS, and mucin stains
- Direct immunofluorescence
- Fungal culture

### **Further reading:**

- Ross EK, Tan E, Shapiro J (2005) Update on primary cicatricial alopecias. *J Am Acad Dermatol* 53(1):1–37

## **Alopecia/Hypotrichosis, Congenital**

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### ***Localized***

- Aplasia cutis congenita
- Dermoid cyst
- Encephalocele
- Epidermal nevus
- Hair follicle hamartoma
- Hallermann–Streiff syndrome (sutural)
- Incontinentia pigmenti (vertex)
- Meningocele

- Nevus sebaceous
- Temporal triangular alopecia

### ***Diffuse***

- Acrodermatitis enteropathica
- Atrichia with papular lesions
- Bazex–Dupre–Christol syndrome
- Cartilage–hair hypoplasia
- Citrullinemia
- Coffin–Siris syndrome
- Congenital hypothyroidism
- Conradi–Hunermann syndrome
- Ectodermal dysplasias
- IFAP syndrome
- KID syndrome
- Marie Unna hypotrichosis
- Marinesco–Sjögren syndrome
- Menkes kinky-hair disease
- Monilethrix
- Neonatal telogen effluvium
- Netherton's syndrome
- Nutritional deficiency
- Pili torti
- Progeria
- Roberts syndrome
- Schopf–Schulz–Passarge syndrome
- Trichorhinophalangeal syndrome
- Trichorrhexis invaginata
- Trichorrhexis nodosa
- Trichothiodystrophy

### **Further reading:**

- Lenane P, Pope E, Krafchik B (2005) Congenital alopecia areata. *J Am Acad Dermatol* 52(2 Suppl 1):8–11

## Anesthetic

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- Congenital sensory neuropathy
- Leprosy
- Necrotizing fasciitis
- Neuropathic ulcer
- Syringomyelia
- Tabes dorsalis
- Trigeminal trophic syndrome

### Further reading:

- Wang YS, Wong CH, Tay YK (2007) Staging of necrotizing fasciitis based on the evolving cutaneous features. *Int J Dermatol* 46(10):1036–1041

## Angioid Streaks

---

- Acromegaly
- Cowden syndrome
- Ehlers–Danlos syndrome
- Iron deficiency
- Lead poisoning
- Paget's disease of bone
- Pseudoxanthoma elasticum
- Sickle cell disease
- Trauma
- Tuberous sclerosis

### Further reading:

- Agarwal A, Patel P, Adkins T et al (2005) Spectrum of pattern dystrophy in pseudoxanthoma elasticum. *Arch Ophthalmol* 123(7):923–928

## Annular

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- Actinic granuloma
- Alopecia mucinosa



- Annular erythema of infancy
- Annular lichenoid dermatitis of youth
- Arthropod bite reaction
- Creeping eruption
- Cutaneous T cell lymphoma
- Dermatomyofibroma
- Discoid lupus erythematosus
- Erythema annulare centrifugum (Fig. 3.2)
- Erythema multiforme
- Elastosis perforans serpiginosa
- Erythema marginatum
- Fixed drug eruption
- Granuloma annulare
- Granuloma multiforme
- Ichthyosis linearis circumflexa
- Impetigo
- Jessner's lymphocytic infiltrate
- Leishmaniasis
- Leprosy
- Leukemia and lymphoma cutis



**Fig. 3.2** Erythema annulare centrifugum

- Lichen planus
- Linear IgA bullous dermatosis
- Lupus vulgaris
- Lyme disease
- Majocchi's pigmented purpuric dermatosis
- Miescher's granuloma
- Meyerson nevus
- Morphea
- Necrobiosis lipoidica
- Neonatal lupus erythematosus
- Parapsoriasis
- Polymorphous light eruption
- Porokeratosis
- Pityriasis rosea
- Psoriasis
- Sarcoidosis
- Subacute cutaneous lupus erythematosus
- Seborrheic dermatitis
- Secondary and tertiary syphilis
- Systemic lupus erythematosus
- Subcorneal pustular dermatosis
- Sweet's syndrome
- Tertiary yaws
- Tinea corporis
- Tumid lupus
- Urticaria
- Urticarial dermatitis
- Urticarial vasculitis
- Wells syndrome

**Further reading:**

- Hsu S, Le EH, Khoshevis MR (2001) Differential diagnosis of annular lesions. *Am Fam Physician* 64(2):289–296

## Atrophy

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- Acrodermatitis chronica atrophicans
- Anetoderma
- Aplasia cutis congenita
- Atrophoderma of Pasini and Pierini
- Cutaneous T cell lymphoma
- Cutis laxa
- Degos disease
- Dermatomyositis
- Ehlers–Danlos syndrome
- Erosive pustular dermatosis
- Goltz syndrome
- Hallermann–Streiff syndrome
- Kindler syndrome
- Lichen planus
- Lichen sclerosus et atrophicus
- Linear atrophoderma
- Lupus erythematosus
- Medallion-like dermal dendrocyte hamartoma
- Photoaging
- Pityriasis versicolor atrophicans
- Progeria
- Pseudoxanthoma elasticum
- Radiation dermatitis
- Sarcoidosis
- Striae atrophicans
- Steroid atrophy
- Xeroderma pigmentosum

### Further reading:

- Aksoy B, Ustün H, Gülbahçe R et al (2009) Confetti-like macular atrophy: a new entity? *J Dermatol* 36(11):592–597

## Axilla

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- Acanthosis nigricans
- Apocrine gland neoplasm
- Asymmetric periflexural exanthem
- Axillary granular parakeratosis
- Contact dermatitis
- Crowe's sign of neurofibromatosis
- Cutis laxa
- Dowling–Degos disease
- Drug eruption
- Erythrasma
- Extramammary Paget's disease
- Fox–Fordyce disease
- Granulomatous slack skin
- Hailey–Hailey disease (Fig. 3.3)
- Hidradenitis suppurativa
- Inverse pityriasis rosea
- Inverse psoriasis
- Lymphangiectasias
- Pemphigus
- Plane xanthoma
- Pseudoxanthoma elasticum
- Seborrheic dermatitis
- Tinea versicolor
- Trichomycosis axillaris

### Further reading:

- Chagpar AB, Heim K, Carron KR et al (2007) Extramammary Paget's disease of the axilla: an unusual case. *Breast J* 13(3):291–293

## Back, Christmas Tree Pattern

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- Erythema dyschromicum perstans
- Lichenoid drug eruption



**Fig. 3.3** Hailey–Hailey disease (Courtesy of A. Record)

- Kaposi's sarcoma (HIV-associated)
- Pityriasis lichenoides
- Pityriasis rosea
- Sign of Leser–Trelat

**Further reading:**

- Chuh AA (2002) Rash orientation in pityriasis rosea: a qualitative study. *Eur J Dermatol* 12(3):253–256

## Balanoposthitis

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- Allergic contact dermatitis
- Amebiasis
- Candidiasis
- Chlamydia
- Chronic inflammation
- Circinate balanitis of reactive arthritis (Fig. 3.4)
- Condom allergy
- Erythema multiforme
- Extramammary Paget's disease
- Fixed drug eruption
- Foscarnet ulceration
- Herpes simplex virus infection
- Imiquimod
- Inflammatory bowel disease
- Lichen nitidus
- Lichen planus
- Lichen sclerosus



**Fig. 3.4** Circinate balanitis  
(Courtesy of K. Guidry)

- Morphea
- Pilonidal sinus
- Plasma cell balanitis
- Psoriasis
- Scabies
- Seborrheic dermatitis
- Squamous dysplasias
- Streptococcal infection
- Syphilis
- Trauma
- Trichomoniasis

**Further reading:**

- Banerjee R, Banerjee K, Datta A (2006) Condom leukoderma. *Indian J Dermatol Venereol Leprol* 72(6):452–453
- Sakuma S, Komiya H (2005) Balanitis caused by *Streptococcus pyogenes*: a report of two cases. *Int J STD AIDS* 16(9):644–645

**Bathing Trunk Distribution**

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- Angiokeratoma corporis diffusum
- Bathing suit lamellar ichthyosis
- Giant congenital nevus
- Large plaque parapsoriasis
- *Pseudomonas* folliculitis
- Mycosis fungoides
- Seabather's eruption
- Viral exanthem

**Further reading:**

- Huerta-Brogeras M, Aviles Izquierdo JA, Hernanz Hermosa JM et al (2005) Petechial exanthem in “bathing trunk” distribution caused by parvovirus B19 infection. *Pediatr Dermatol* 22(5):430–433
- Jacyk WK (2005) Bathing-suit ichthyosis. A peculiar phenotype of lamellar ichthyosis in South African blacks. *Eur J Dermatol* 15(6):433–436

## Beau's Lines/Onychomadesis

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- Acrodermatitis enteropathica
- Antibiotic usage
- Chemotherapy
- Coxsackievirus infection
- Cutaneous T cell lymphoma
- Drug reaction
- Epidermolysis bullosa
- Erythroderma
- Febrile illness
- Hypoparathyroidism
- Kawasaki disease
- Paronychia
- Pemphigus
- Radiation
- Retinoid therapy
- Stevens–Johnson syndrome
- Syphilis
- Trauma

### Further reading:

- Chen W (2007) Nail changes associated with chemotherapy in children. *J Eur Acad Dermatol Venereol* 21(2):186–190

## Blepharitis

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- Cicatricial pemphigoid
- Contact dermatitis
- Demodicosis
- Discoid lupus erythematosus
- Drug eruption
- Herpes simplex virus infection



- Molluscum contagiosum
- Pediculosis
- Rosacea
- Seborrheic dermatitis
- Sjögren's syndrome
- Staphylococcal blepharitis

**Further reading:**

- Stone DU, Chodosh J (2004) Ocular rosacea: an update on pathogenesis and therapy. *Curr Opin Ophthalmol* 15(6):499–502

**Blue Lesions**

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- Acrocyanosis
- Amiodarone pigmentation
- Antimalarial pigmentation
- Argyria
- Blue nevus
- Blue tattoo
- Chlorpromazine pigmentation
- Dermal melanocytosis
- Erythema dyschromicum perstans
- Hidrocystoma
- Hyaluronic acid nodule
- Maculae cerulae
- Melanoma
- Minocycline pigmentation
- Ochronosis
- Purpura

**Further reading:**

- Fernandez-Flores A, Montero MG (2006) Ashy dermatosis, or “Tyndall-effect” dermatosis. *Dermatol Online J* 12(4):14

## Breast

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- Acanthosis nigricans
- Bacterial mastitis
- Basal cell carcinoma
- Bowen's disease
- Breast cancer, inflammatory
- Candidiasis
- Contact dermatitis, irritant, or allergic
- Darier's disease
- Factitial
- Hidradenitis suppurativa
- Jogger's nipple
- Leiomyomas
- Lichen simplex chronicus
- Lupus mastitis
- Lupus panniculitis
- Montgomery's tubercles
- Morphea
- Mycosis fungoides
- Neurofibroma
- Nevoid hyperkeratosis
- Nipple eczema (atopic dermatitis)
- Paget's disease
- Papillary adenoma
- Psoriasis
- Radiation dermatitis
- Seborrheic dermatitis
- Seborrheic keratosis
- Tuberculous mastitis
- Warfarin necrosis

### Further reading:

- Whitaker-Worth DL, Carlone V, Susser WS et al (2000) Dermatologic diseases of the breast and nipple. *J Am Acad Dermatol* 43(5 Pt 1):733–751

## **Bullous Drug Eruption**

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- Bullous acral erythema
- Bullous leukocytoclastic vasculitis
- Bullous Sweet's syndrome
- Drug-induced linear IgA bullous dermatosis
- Drug-induced pemphigoid
- Drug-induced pemphigus
- Eczematous drug eruptions
- Erythema multiforme
- Fixed drug eruption
- Halogenoderma
- Pseudoporphyria
- Stevens–Johnson syndrome
- Toxic epidermal necrolysis

### **Further reading:**

- Rai R, Jain R, Kaur I, Kumar B (2002) Multifocal bullous fixed drug eruption mimicking Stevens–Johnson syndrome. *Indian J Dermatol Venereol Leprol* 68(3):175–176

## **Canities, Premature**

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- Ataxia–telangiectasia
- Book syndrome
- Hereditary premature canities
- Myotonic dystrophy
- Oasthouse syndrome
- Piebaldism
- Progeria
- Prolidase deficiency
- Rothmund–Thomson syndrome
- Seckel syndrome
- Sudden whitening of hair (alopecia areata)

- Vitiligo
- Waardenburg syndrome
- Werner syndrome

**Further reading:**

- Tobin DJ, Paus R (2001) Graying: gerontobiology of the hair follicle pigmentary unit. *Exp Gerontol* 36(1):29–54

**Cheilitis**

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- Acrodermatitis enteropathica
- Actinic cheilitis
- Actinic prurigo cheilitis
- Angular cheilitis
- Atopic dermatitis
- Candidiasis
- Cheilitis exfoliativa
- Cheilitis glandularis
- Cheilitis granulomatosis
- Dental care products
- Cosmetics
- Erythema multiforme
- Herpes simplex virus infection
- Lip licking
- Lipstick allergy
- Photosensitive cheilitis
- Plasma cell cheilitis
- Retinoid cheilitis
- Sarcoidosis
- Stevens–Johnson syndrome
- Sunscreen allergy
- Syphilis
- Toothpaste allergy
- Vitamin deficiency

**Further reading:**

- Due E, Wulf HC (2006) Cheilitis: the only presentation of photosensitivity. *J Eur Acad Dermatol Venereol* 20(6):766–767

**Clubbing**

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- Acromegaly
- Aortic aneurysm
- Bacterial endocarditis
- Bronchiectasis
- Bronchogenic carcinoma
- CINCA syndrome (NOMID syndrome)
- Congestive heart failure
- Cyanotic congenital heart disease
- Cystic fibrosis
- HIV infection
- Hyperthyroidism
- Hypertrophic osteoarthropathy (thyroid acropachy)
- Inflammatory bowel disease
- Liver disorders
- Lung abscess
- Lymphoma
- Mesothelioma
- Pachydermoperiostosis
- Parasitic infestations
- POEMS syndrome
- Pulmonary fibrosis
- Sarcoidosis
- Tuberculosis

**Further reading:**

- Spicknall KE, Zirwas MJ, English JC III (2005) Clubbing: an update on diagnosis, differential diagnosis, pathophysiology, and clinical relevance. *J Am Acad Dermatol* 52(6):1020–1028

## **Collarette, Peripheral**

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- Acquired digital fibrokeratoma
- Clear cell acanthoma
- Pityriasis lichenoides chronica
- Pityriasis rosea
- Pyogenic granuloma
- Secondary syphilis
- Staphylococcal furunculosis
- Subacute cutaneous lupus erythematosus
- Transient neonatal pustular melanosis

### **Further reading:**

- Levy AL, Simpson G, Skinner RB Jr (2006) Medical pearl: circle of desquamation: a clue to the diagnosis of folliculitis and furunculosis caused by *Staphylococcus aureus*. J Am Acad Dermatol 55(6):1079–1080

## **Collodion Baby**

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- Conradi–Hünemann–Happle syndrome
- Ectodermal dysplasias
- Hay–Wells syndrome
- Infantile Gaucher disease
- Lamellar ichthyosis
- Netherton syndrome
- Neutral lipid storage disease
- Nonbullous congenital ichthyosiform erythroderma
- Self-healing collodion baby
- Sjögren–Larsson syndrome
- Trichothiodystrophy (IBIDS)

### **Further reading:**

- Van Gysel D, Lijnen RL, Moekti SS et al (2002) Collodion baby: a follow-up study of 17 cases. J Eur Acad Dermatol Venereol 16(5):472–475

## Crepitus

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- Anaerobic cellulitis
- Clostridial cellulitis
- Clostridial myonecrosis
- Iatrogenic subcutaneous emphysema
- Necrotizing fasciitis
- Streptococcal myositis
- Synergistic necrotizing gangrene
- Traumatic subcutaneous emphysema
- Vascular gangrene

### Further reading:

- Fox A, Sheick H, Ekwobi C, Ho-Asjoe M (2007) Benign surgical emphysema of the hand and upper limb: gas is not always gangrene – a report of two cases. *Emerg Med J* 24(11):798–799

## Cutaneous Horn

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- Actinic keratosis
- Angiokeratoma
- Angioma
- Arsenical keratosis
- Basal cell carcinoma
- Benign lichenoid keratosis
- Bowen's disease
- Cutaneous leishmaniasis
- Dermatofibroma
- Discoid lupus erythematosus
- Epidermal inclusion cyst
- Epidermal nevus
- Granular cell tumor
- Inverted follicular keratosis
- Kaposi's sarcoma

- Keratoacanthoma
- Melanoma
- Nevus sebaceous
- Paget's disease
- Pilomatrixoma
- Prurigo nodularis
- Pyogenic granuloma
- Renal cell carcinoma
- Sebaceous adenoma
- Sebaceous carcinoma
- Seborrheic keratosis
- Squamous cell carcinoma (Fig. 3.5)
- Trichilemmoma
- Verruca vulgaris

**Further reading:**

- Cristobal MC, Urbina F, Espinoza A (2007) Cutaneous horn malignant melanoma. *Dermatol Surg* 33(8):997–999
- Mencia-Gutierrez E, Gutierrez-Diaz E, Redondo-Marcos I et al (2004) Cutaneous horns of the eyelid: a clinicopathological study of 48 cases. *J Cutan Pathol* 31(8):539–543



**Fig. 3.5** Cutaneous horn



## Cyst

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- Branchial cleft cyst
- Bronchogenic cyst
- Cutaneous ciliated cyst
- Cutaneous metaplastic synovial cyst
- Cystic basal cell carcinoma
- Dermoid cyst
- Digital mucous cyst
- Ear pit cyst
- Epidermoid cyst
- Ganglion cyst
- Hidrocystoma
- Median raphe cyst
- Milium
- Mucocele
- Omphalomesenteric duct cyst
- Phaeohyphomycotic cyst
- Pigmented follicular cyst
- Pilonidal cyst
- Proliferating epidermoid cyst
- Proliferating trichilemmal cyst
- Pseudocyst of the auricle
- Steatocystoma
- Thyroglossal duct cyst
- Trichilemmal cyst
- Vellus hair cyst
- Verrucous cyst

### Further reading:

- Golden BA, Zide MF (2005) Cutaneous cysts of the head and neck. *J Oral Maxillofac Surg* 63(11):1613–1619

## Deck-Chair Sign

- Adult T cell leukemia/lymphoma
- Angioimmunoblastic T cell lymphoma
- Drug-induced erythroderma
- Mycosis fungoides
- Papuloerythroderma of Ofuji
- Waldenstrom's macroglobulinemia

### **Further reading:**

- Ferran M, Gallardo F, Baena V et al (2006) The “deck chair sign” in specific cutaneous involvement by angioimmunoblastic T-cell lymphoma. *Dermatology* 213(1):50–52

## Dermatoglyphics, Absent

- Basan syndrome
- Dermatopathia pigmentosa reticularis
- Naegeli–Franceschetti–Jadassohn syndrome
- Rapp–Hodgkin syndrome
- X-linked hypohidrotic ectodermal dysplasia

### **Further reading:**

- Lugassy J, Itin P, Ishida-Yamamoto A et al (2006) Naegeli–Franceschetti–Jadassohn syndrome and dermatopathia pigmentosa reticularis: two allelic ectodermal dysplasias caused by dominant mutations in KRT14. *Am J Hum Genet* 79(4):724–730

## Diaper Dermatitis

- Acrodermatitis enteropathica
- Allergic contact dermatitis
- Biotin deficiency
- Bullous mastocytosis
- Candidiasis
- Chafing dermatitis
- Child abuse

- Congenital syphilis
- Cystic fibrosis
- Eczema herpeticum
- Epidermolysis bullosa simplex
- Essential fatty acid deficiency
- Granuloma gluteale infantum
- Impetigo
- Irritant contact dermatitis
- Jacquet's erosive diaper dermatitis
- Langerhans cell histiocytosis
- Linear IgA bullous dermatosis
- Miliaria
- Perianal strep infection
- Psoriasis
- Scabies
- Seborrheic dermatitis
- Staphylococcal scalded-skin syndrome

**Further reading:**

- Scheinfeld N (2005) Diaper dermatitis: a review and brief survey of eruptions of the diaper area. *Am J Clin Dermatol* 6(5):273–281

**Draining/Sinus Tracts**

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- Actinomycosis
- Amebiasis
- Antitrypsin deficiency panniculitis
- Botryomycosis
- Bronchogenic cyst
- Chromoblastomycosis
- Cutaneous Crohn's disease
- Cutaneous myiasis
- Dental sinus
- Elephantiasis verrucosa
- Enterocutaneous fistula

- Hidradenitis suppurativa
- Hodgkin's disease
- Lymphogranuloma venereum
- Malakoplakia
- Melioidosis
- Mycetoma
- *Mycobacterium fortuitum*, *M. chelonae*, or *M. abscessus* infection
- Nocardiosis
- Nodular vasculitis
- Osteomyelitis
- Pancreatic panniculitis
- Pilonidal sinus
- Preauricular sinus
- Protothecosis
- Pyoderma faciale
- Scrofuloderma

**Further reading:**

- Erkilic S, Erbagci Z, Kocer NE et al (2004) Cutaneous involvement in Hodgkin's lymphoma: report of two cases. *J Dermatol* 31(4):330–334

**Dyschromia**

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- Arsenical pigmentary alteration
- Dyschromatosis symmetrica hereditaria
- Dyschromatosis universalis hereditaria
- Dyschromic amyloidosis cutis
- Epidermolysis bullosa simplex with mottled pigmentation
- Kwashiorkor
- Monobenzyl ether of hydroquinone
- Syphilitic leukoderma
- Tinea versicolor
- Xeroderma pigmentosum
- Zippkowsky–Margolis syndrome

**Further reading:**

- Ohtoshi E, Matsumura Y, Nishigori C et al (2001) Useful applications of DNA repair tests for differential diagnosis of atypical dyschromatosis symmetrica hereditaria from xeroderma pigmentosum. *Br J Dermatol* 144(1):162–168

**Ear**

- Actinic keratosis
- Allergic contact dermatitis
- Amyloidosis
- Angiolymphoid hyperplasia with eosinophilia
- *Aspergillus otomycosis*
- Atypical fibroxanthoma
- Auricular pseudocyst
- Basal cell carcinoma
- Borrelial lymphocytoma
- Calcinosis cutis
- Candidiasis
- Ceruminous gland tumor
- Chondrodermatitis nodularis helices
- Cocaine-induced vasculopathy (Fig. 3.6)



**Fig. 3.6** Cocaine-related vasculitis

- Discoid lupus erythematosus
- Eczema
- Elastotic nodule
- Extramammary Paget's disease
- Foreign body
- Gout
- Herpes zoster (Ramsay–Hunt syndrome)
- Infectious eczematoid dermatitis
- Infectious perichondritis
- Juvenile spring eruption
- Keloid
- Langerhans cell histiocytosis
- Leishmaniasis (chiclero ulcer)
- Leprosy
- Lobomycosis
- Lupus pernio
- Milia en plaque
- Multicentric reticulohistiocytosis
- Nickel dermatitis
- Ochronosis
- Otitis externa
- Otomycosis
- Papular mucinosis
- Perniosis
- Pneumocystosis
- Pseudomonas infection
- Psoriasis
- Relapsing polychondritis
- Sarcoidosis
- Seborrheic dermatitis
- Seborrheic keratosis
- Squamous cell carcinoma
- Syphilis
- Traumatic auricular hematoma
- Tuberculosis

- Venous lake
- Weathering nodule

**Further reading:**

- Mahalingam M, Palko M, Steinberg-Benjes L et al (2002) Amyloidosis of the auricular concha: an uncommon variant of localized cutaneous amyloidosis. *Am J Dermatopathol* 24(5):447–448

**Elbows and Knees**

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- Calcinosis cutis
- Dermatitis herpetiformis
- Dermatomyositis (Gottron's sign)
- Epidermolysis bullosa
- Erythema elevatum diutinum
- Erythema multiforme
- Eruptive xanthoma
- Frictional lichenoid dermatosis
- Granuloma annulare
- Gonococemia
- Gout
- Juvenile pityriasis rubra pilaris
- Keratosis circumscripta
- Lichen simplex chronicus
- Lipoid proteinosis
- Papillon–Lefèvre syndrome
- Progressive symmetric erythrokeratoderma
- Protothecosis
- Psoriasis
- Rheumatoid nodule
- Scabies
- Tuberous xanthoma

**Further reading:**

- Brumwell EP, Murphy SJ (2007) Keratosis circumscripta revisited: a case report and review of the literature. *Cutis* 79(5):363–366

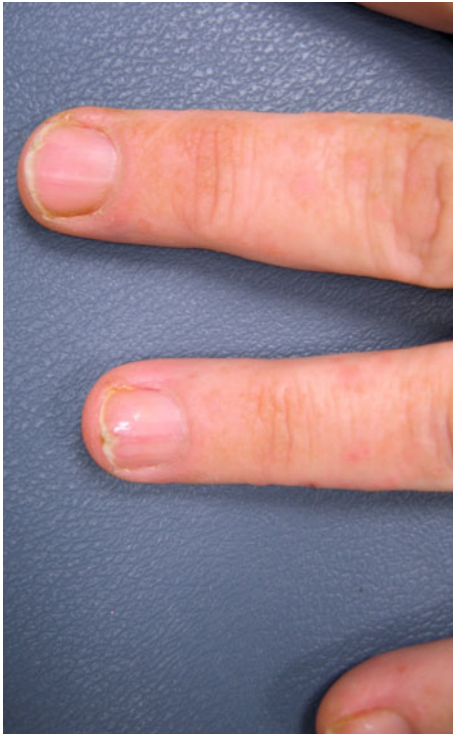
## Erythronychia, Longitudinal

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- Amyloidosis
- Darier's disease (Fig. 3.7)
- Glomus tumor
- Lichen planus
- Onychopapilloma
- Squamous cell carcinoma
- Warty dyskeratoma

### Further reading:

- de Berker DA, Perrin C, Baran R (2004) Localized longitudinal erythronychia: diagnostic significance and physical explanation. *Arch Dermatol* 140(10):1253–1257



**Fig. 3.7** Darier's disease



## Esthiomene (Genital Elephantiasis)

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- Granuloma inguinale
- Lymphatic filariasis
- Lymphogranuloma venereum
- Lymphoma
- Syphilis
- Tuberculosis

### Further reading:

- Sarkar R, Kaur C, Thami GP, Kanwar AJ (2002) Genital elephantiasis. *Int J STD AIDS* 13(6):427–429

## Exanthem

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- Acute HIV infection
- Chicken pox
- DRESS syndrome
- Enterovirus infection
- Erythema infectiosum
- Gianotti–Crosti syndrome
- Helminth infestation
- Measles
- Morbilliform drug eruption
- Picornavirus infection
- Pityriasis rosea
- Roseola
- Rubella
- Scarlet fever
- Secondary syphilis
- Toxic shock syndrome
- Toxoplasmosis

### Further reading:

- Drago F, Rampini E, Rebora A (2002) Atypical exanthems: morphology and laboratory investigations may lead to an aetiological diagnosis in about 70% of cases. *Br J Dermatol* 147(2):255–260

## Excoriations

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- Acne excoriée
- Amphetamine therapy
- Cocaine abuse
- Dermatitis herpetiformis
- Diabetes
- Drug reactions
- Dry skin
- Hyperthyroidism
- Hypothyroidism
- Internal malignancy
- Liver disease
- Lymphoma
- Myeloma
- Neurotic excoriations
- Opiate abuse
- Parasitic infestation
- Polycythemia vera
- Pregnancy
- Renal disease
- Scabies
- Trigeminal trophic syndrome
- Urticaria

### Further reading:

- Fried RG, Fried S (2003) Picking apart the picker: a clinician's guide for management of the patient presenting with excoriations. *Cutis* 71(4):291–298

## Erythroderma, Adult

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- Atopic dermatitis
- Autosensitization dermatitis

- Bullous pemphigoid
- Chronic actinic dermatitis
- Congenital ichthyosis
- Darier's disease
- Dermatomyositis
- Dermatophyte infection
- Diffuse cutaneous mastocytosis
- Drug reaction
- Erythrodermic mycosis fungoides
- Graft-vs-host disease
- Hypereosinophilic syndrome
- Id reaction
- Idiopathic
- Lichen planus
- Norwegian crusted scabies
- Onchocerciasis
- Papuloerythroderma of Ofuji
- Paraneoplastic erythroderma
- Paraneoplastic pemphigus
- Pemphigus foliaceus
- Pityriasis rubra pilaris
- Psoriasis
- Reiter's syndrome
- Sarcoidosis
- Seborrheic dermatitis
- Sezary syndrome
- Staphylococcal scalded-skin syndrome
- Stasis dermatitis
- Subacute cutaneous lupus erythematosus
- Systemic contact dermatitis
- Tinea corporis
- Viral eruption
- Zinc deficiency

***Associated Medications***

- Allopurinol
- Amiodarone
- Amitriptyline
- Amoxicillin
- Ampicillin
- Barbiturates
- Beta-blockers
- Bumetanide
- Bupropion
- Carbamazepine
- Chlorpromazine
- Cimetidine
- Ciprofloxacin
- Clofazimine
- Cytarabine
- Dapsone
- Diazepam
- Diclofenac
- Diltiazem
- Doxorubicin
- Doxycycline
- Etodolac
- Fluconazole
- Furosemide
- Gemfibrozil
- Gold
- Griseofulvin
- Hydroxychloroquine
- Indomethacin
- Iodine
- Isoniazid
- Ketoconazole
- Lithium
- Minocycline

- Naproxen
- Nifedipine
- Nitrofurantoin
- Nitroglycerin
- Omeprazole
- Penicillamine
- Penicillin
- Pentobarbital
- Phenobarbital
- Phenytoin
- Piroxicam
- Propranolol
- Rifampin
- Sulfadoxine
- Sulfamethoxazole
- Sulfasalazine
- Sulfonamides
- Sulfonylurea
- Tetracycline
- Tobramycin
- Trazodone
- Vancomycin
- Verapamil

### ***Evaluation***

- Antinuclear antibodies
- Appropriate cancer screening
- Chest radiograph
- Complete blood count
- Liver function test
- Lymph node exam and biopsy
- Nutritional evaluation
- Patch testing
- Potassium hydroxide examination of scale
- Sedimentation rate

- Serum chemistry
- Sezary cell preparation
- Stool for occult blood
- T cell gene rearrangement
- Urinalysis

**Further reading:**

- Akhyani M, Ghodsi ZS, Toosi S et al (2005) Erythroderma: a clinical study of 97 cases. *BMC Dermatol* 5:5

**Erythroderma, Neonatal/Infantile/Childhood**

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- Atopic dermatitis
- Bullous congenital ichthyosiform erythroderma
- Diffuse cutaneous mastocytosis
- Drug reaction
- Graft-vs-host disease
- KID syndrome
- Netherton syndrome
- Nonbullous congenital ichthyosiform erythroderma
- Omenn syndrome
- Pityriasis rubra pilaris
- Psoriasis
- Refsum disease
- Scarlet fever
- Seborrheic dermatitis
- Severe combined immunodeficiency
- Sjögren–Larsson disease
- Staphylococcal scalded-skin syndrome
- Wiskott–Aldrich syndrome

**Further reading:**

- Al-Dhalimi MA (2007) Neonatal and infantile erythroderma: a clinical and follow-up study of 42 cases. *J Dermatol* 34(5):302–307
- Sehgal VN, Srivastava G (2006) Erythroderma/generalized exfoliative dermatitis in pediatric practice: an overview. *Int J Dermatol* 45(7):831–839

## **Eyelid/Periorbital**

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- Amyloidosis
- Angioedema
- Anthrax
- Ascher syndrome
- Atopic dermatitis
- Basal cell carcinoma
- Bites
- Cat-scratch disease (oculoglandular syndrome)
- Cellulitis
- Chagas disease
- Chalazion
- Contact dermatitis
- Cutaneous T cell lymphoma
- Demodicosis
- Dermatomyositis
- Dermatositis papulosa nigra
- Erysipelas
- Extramammary Paget's disease
- Filariasis
- Herpes simplex virus infection
- Hidrocystoma
- Hyperthyroidism
- Hypothyroidism
- Leishmaniasis
- Leukemia cutis
- Lipoid proteinosis
- Lupus erythematosus
- Lupus miliaris disseminata faciei
- Lupus vulgaris
- Microcystic adnexal carcinoma
- Milia
- Mucinous eccrine carcinoma
- Necrobiotic xanthogranuloma

- Ocular rosacea
- Onchocerciasis
- Ophthalmic zoster
- Orbital cellulitis
- Periorbital cellulitis
- Sarcoidosis
- Sebaceous carcinoma
- Seborrheic dermatitis
- Seborrheic keratosis
- Squamous cell carcinoma
- Sty
- Syringomas
- Trauma
- Trichinosis
- Xanthelasma

**Further reading:**

- Amin KA, Belsito DV (2006) The aetiology of eyelid dermatitis: a 10-year retrospective analysis. *Contact Dermatitis* 55(5):280–285

**Facial Sparring**

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- Lichen planus
- Mastocytosis
- Parapsoriasis
- Pityriasis rosea
- Psoriasis
- Scabies

**Flagellate**

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- Bleomycin hyperpigmentation
- Dermatographism



- Dermatomyositis
- Excoriation
- Jellyfish sting
- Mushroom ingestion
- Phytophotodermatitis
- Poison ivy dermatitis

**Further reading:**

- Yamamoto T, Nishioka K (2006) Flagellate erythema. *Int J Dermatol* 45(5):627–631

**Follicular Hyperkeratosis**

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- Acquired perforating dermatosis
- Atrophoderma vermiculatum
- Ichthyosis follicularis alopecia and photophobia
- Dermatomyositis pityriasis rubra pilaris-like eruption (Wong type)
- Disseminate and recurrent infundibulofolliculitis
- Keratosis pilaris
- Keratosis pilaris atrophicans
- Keratosis follicularis spinulosa decalvans
- Keratotic spicules of myeloma
- Lichen planopilaris
- Lichen scrofulosorum
- Lichen spinulosa
- Phrynoderma
- Pityriasis rubra pilaris
- Scurvy
- Trichostasis spinulosa

**Further reading:**

- Lupton JR, Figueroa P, Berberian BJ, Sulica VI (2000) An unusual presentation of dermatomyositis: the type Wong variant revisited. *J Am Acad Dermatol* 43(5 Pt 2):908–912

## Gangrenous

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- Antiphospholipid antibody syndrome
- Arteriosclerosis
- Buerger's disease
- Calciphylaxis
- Cholesterol emboli syndrome
- Clostridial myonecrosis
- Cryoglobulinemia
- Disseminated aspergillosis
- Ecthyma gangrenosum
- Fournier's gangrene
- Necrotizing fasciitis
- Necrotizing mucormycosis
- Oxalosis
- Paraneoplastic acral vascular syndrome
- Polyarteritis nodosa
- Progressive synergistic gangrene
- *Pseudomonas* cellulitis
- Pyoderma gangrenosum
- Warfarin necrosis
- Vasculitis

### Further reading:

- Caputo R, Marzano AV, Benedetto A di et al (2006) Juvenile gangrenous vasculitis of the scrotum: is it a variant of pyoderma gangrenosum? *J Am Acad Dermatol* 55(2 Suppl):S50–S53

## Genital Erosions and Ulcers

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- Amebiasis
- Behçet's disease
- Bullous pemphigoid
- Candidiasis
- Chancriform pyoderma
- Chancroid

- Cicatricial pemphigoid
- Crohn's disease
- Epidermolysis bullosa acquisita
- Erosive lichen planus
- Erythema multiforme
- Extramammary Paget's disease
- Factitial disease
- Fixed drug eruption (Fig. 3.8)
- Granuloma inguinale
- Hailey–Hailey disease
- Herpes simplex virus infection
- Histoplasmosis
- Impetigo
- Intraepithelial neoplasia
- Jacquet's erosive diaper dermatitis
- Leishmaniasis
- Lichen sclerosus
- Linear IgA bullous dermatosis
- Lipschutz ulcer
- Lymphogranuloma venereum
- Necrolytic migratory erythema
- Pemphigus vulgaris
- Pyoderma gangrenosum



**Fig. 3.8** Fixed drug eruption (Courtesy of K. Guidry)

- Squamous cell carcinoma
- Syphilis
- Traumatic ulcer
- Zoon's plasma cell balanitis/vulvitis

**Further reading:**

- Barnes CJ, Alio AB, Cunningham BB, Friedlander SF (2007) Epstein-Barr virus-associated genital ulcers: an under-recognized disorder. *Pediatr Dermatol* 24(2):130–134

**Gingiva**

- Acromegaly
- Addison's disease
- Amalgam tattoo
- Ameloblastoma
- Amyloidosis
- Chronic gingivitis
- Cowden syndrome
- Crohn's disease
- Cross syndrome
- Fibroma
- Giant cell fibroma
- Gingival cyst
- Juvenile hyaline fibromatosis
- Kaposi's sarcoma
- Leukemic infiltration
- Lichen planus
- Lipoid proteinosis
- Lymphoma
- Melanoma
- Metastatic tumors
- Mucosal neuroma
- Mucosal pemphigoid
- Odontogenic cyst

- Papillon–Lefèvre syndrome
- Paraneoplastic pemphigus
- Parulis
- Peripheral ossifying fibroma
- Proliferative verrucous leukoplakia
- Pyogenic granuloma
- Racial pigmentation
- Sarcoidosis
- Scurvy
- Tuberous sclerosis
- Wegener’s granulomatosis

### ***Associated Medications (Gingival Hyperplasia)***

- Cyclosporine
- Diltiazem
- Nefidipine
- Phenytoin
- Valproate
- Verapamil

### **Further reading:**

- Khera P (2005) Diffuse gingival enlargement. *J Am Acad Dermatol* 52:491–499

### **Gingivitis, Desquamative**

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- Cicatricial pemphigoid
- Epidermolysis bullosa acquisita
- Lichen planus
- Linear IgA disease
- Pemphigus vulgaris

### **Further reading:**

- Castellano Suarez JL (2002) Gingival disorders of immune origin. *Med Oral* 7(4):271–283

## Hair Collar Sign

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- Aplasia cutis congenita
- Encephalocele
- Heterotopic brain tissue
- Meningocele
- Rudimentary meningocele

### Further reading:

- Harrington BC (2007) The hair collar sign as a marker for neural tube defects. *Pediatr Dermatol* 24(2):138–140

## Hair, Hypomelanotic

---

- Albinism
- Book syndrome
- Chediak–Higashi syndrome
- Copper deficiency
- Cross syndrome
- Down syndrome
- Elejalde syndrome
- Fanconi syndrome
- Griscelli syndrome
- Hallermann–Streiff syndrome
- Hyperthyroidism
- Menkes kinky-hair syndrome
- Phenylketonuria
- Prolidase deficiency
- Rothmund–Thomson syndrome
- Vitamin B12 deficiency
- Waardenburg's syndrome

- Woolf's syndrome
- Zippkowsky–Margolis syndrome

**Further reading:**

- Malhotra AK, Bhaskar G, Nanda M et al (2006) Griscelli syndrome. *J Am Acad Dermatol* 55(2):337–340

## Hair-Shaft Tapering

---

- Alopecia areata
- Anagen effluvium
- Syphilis
- Thallium toxicity
- Tinea capitis

**Further reading:**

- Bleiker TO, Nicolaou N, Traulsen J, Hutchinson PE (2005) “Atrophic telogen effluvium” from cytotoxic drugs. *Br J Dermatol* 153(1):103–112

## Halo

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- Lymphomatoid papulosis
- Melanoma
- Neurofibromas
- Nevus
- Psoriasis
- Sarcoidosis (Fig. 3.9)

**Further reading:**

- Oguz O, Engin B (2005) Skin lesions of lymphomatoid papulosis with a white halo. *J Eur Acad Dermatol Venereol* 19(4):517–518



**Fig. 3.9** Sarcoidosis

## **Hand Eczema**

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- Allergic contact dermatitis
- Chronic contact urticaria
- Dyshidrotic eczema
- Hyperkeratotic hand eczema
- Id reaction
- Irritant contact dermatitis
- Mechanic's hands
- Mycosis fungoides palmaris et plantaris
- Palmoplantar pustulosis
- Porphyria cutanea tarda
- Psoriasis
- Tinea manuum

### **Further reading:**

- Diepgen TL, Agner T, Aberer W et al (2007) Management of chronic hand eczema. *Contact Dermatitis* 57(4):203–210



## Herpetiform

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- Aphthous stomatitis, herpetiform subtype
- Bullous impetigo
- Dermatitis herpetiformis
- Epidermolysis bullosa simplex, Dowling–Meara type
- Herpes simplex virus infection
- Impetigo herpetiformis
- Linear IgA disease
- Lymphangioma circumscriptum
- Metastatic lesions
- Pemphigus herpetiformis
- Pustular psoriasis
- Varicella
- Zoster

### Further reading:

- Somani BK, Prita D, Grant S et al (2006) Herpetiform cutaneous metastases from transitional cell carcinoma of the urinary bladder: immunohistochemical analysis. *J Clin Pathol* 59(12):1331–1333

## Hyperpigmentation Along Blaschko's Lines

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- Café-au-lait macules in McCune–Albright syndrome
- Early epidermal nevus
- Focal dermal hypoplasia
- Incontinentia pigmenti, stage III
- Linear and whorled nevoid hypermelanosis
- Linear atrophoderma of Moulin
- Linear biphasic cutaneous amyloidosis
- Linear fixed drug eruption
- Linear lichen planus
- Progressive cribriform and zosteriform hyperpigmentation
- X-linked chondrodysplasia punctata
- X-linked reticulate pigmentary disorder

**Further reading:**

- Choi JC, Yang JH, Lee UH et al (2005) Progressive cribriform and zosteriform hyperpigmentation: the late onset linear and whorled nevoid hypermelanosis. *J Eur Acad Dermatol Venereol* 19(5):638–639

**Hyperpigmentation, Diffuse**

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- Addison's disease
- Adrenoleukodystrophy
- AIDS
- B12 deficiency
- Carbon baby syndrome
- Carcinoid syndrome
- Congenital adrenal hyperplasia
- Cronkhite–Canada syndrome
- Ectopic ACTH-secreting tumor
- Eosinophilia–myalgia syndrome
- Familial diffuse hypermelanosis
- Gaucher's disease
- Hemochromatosis
- Hyperthyroidism
- Malabsorption
- Malaria
- Medications
- Metastatic melanoma
- Nelson's syndrome
- Niemann–Pick disease
- Pellagra
- Pheochromocytoma
- POEMS syndrome
- Porphyria cutanea tarda
- Pregnancy
- Primary biliary cirrhosis
- Progressive systemic sclerosis

- Protein deficiency
- Renal disease
- Still's disease
- Toxic oil syndrome
- Visceral leishmaniasis
- Whipple's disease
- Wilson's disease

### ***Associated Medications***

- 5-fluorouracil
- Amiodarone
- Antimalarials
- Arsenic
- AZT
- BCNU
- Bismuth
- Bleomycin
- Busulfan
- Chlorpromazine
- Cyclophosphamide
- Dactimycin
- Desipramine
- Diltiazem
- Dioxins
- Doxorubicin
- Gold
- Hydroquinone
- Hydroxyurea
- Imipramine
- Iron
- Lead
- Mercury
- Methotrexate



**Fig. 3.10** Minocycline hyperpigmentation

- Minocycline (Fig. 3.10)
- Nitrogen mustard
- Oral contraception
- Phenothiazine
- Psoralens
- Silver

**Further reading:**

- Dereure O (2001) Drug-induced skin pigmentation. Epidemiology, diagnosis and treatment. *Am J Clin Dermatol* 2(4):253–262
- Filho T, Neto PB, Reis JC et al (2007) Diffuse cutaneous melanosis in malignant melanoma. *Dermatol Online J* 13(2):9

**Hyperpigmentation, Oral**

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- Addison's disease
- Argyria
- Amalgam tattoo
- Drug-induced pigmentation
- Hemochromatosis
- Laugier–Hunziker syndrome
- Melanocytic nevus
- Melanoma
- Oral melanotic macule
- Peutz–Jeghers syndrome
- Racial pigmentation
- Smoker's melanosis

**Further reading:**

- Gaeta GM, Satriano RA, Baroni A (2002) Oral pigmented lesions. *Clin Dermatol* 20(3):286–288

**Hyperpigmentation, Reticulated**

---

- Acropigmentation of Dohi
- Congenital diffuse mottling of the skin
- Dermatopathia pigmentosa reticularis
- Dowling–Degos disease
- Dyskeratosis congenita
- Erythema ab igne
- Galli–Galli disease
- Hereditary universal dyschromatosis

- Macular amyloidosis
- Naegeli–Franceschetti–Jadassohn syndrome
- Prurigo pigmentosa
- Reticulate acropigmentation of Kitamura
- Scleroderma
- X-linked reticulate pigmentary disorder

**Further reading:**

- Ee HL, Tan SH (2005) Reticulate hyperpigmented scleroderma: a new pigmentary manifestation. *Clin Exp Dermatol* 30(2):131–133

**Hypertrichosis, Generalized**

---

- Ambras syndrome
- Anorexia nervosa
- Barber–Say syndrome
- Cantu syndrome
- Coffin–Siris syndrome
- Congenital generalized hypertrichosis (XLD, AD, XLR)
- Cornelia de Lange syndrome
- Craniofacial dysostosis
- Dermatomyositis (especially juvenile)
- Donahue syndrome
- Drug-induced hypertrichosis
- Distichiasis–lymphedema syndrome
- Dystrophic epidermolysis bullosa
- Fetal alcohol syndrome
- Fetal hydantoin syndrome
- Gingival fibromatosis and hypertrichosis
- Globoid leukodystrophy
- Gorlin’s syndrome
- Hypothyroidism
- Lawrence syndrome
- Malnutrition
- Mucopolysaccharidoses

- Osteochondrodysplasia
- POEMS syndrome
- Porphyrias
- Rubinstein–Taybi syndrome
- Waardenburg syndrome
- Winchester syndrome

### ***Associated Medications***

- Acetazolamide
- Anabolic steroids
- Benoxaprofen
- Cyclosporine
- Danazol
- Diazoxide
- Glucocorticosteroids
- Hexachlorobenzene
- Minoxidil
- Penicillamine
- Phenytoin
- Psoralens
- Streptomycin

### **Further reading:**

- Wendelin DS, Pope DN, Mallory SB (2003) Hypertrichosis. *J Am Acad Dermatol* 48(2):161–179

### **Hypertrichosis, Localized**

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- Anterior cervical hypertrichosis
- Auricular hypertrichosis
- Becker's nevus
- Chicken pox
- Chronic irritation
- Congenital melanocytic nevi

- Dermatofibroma
- Hairy polythelia
- Hypertrichosis cubiti
- Immunization site
- Lymphedema
- Nevoid hypertrichosis
- Paradoxical hypertrichosis (laser hair removal)
- Plexiform neurofibroma
- Pretibial myxedema
- Reflex sympathetic dystrophy
- Spinal dysraphism-associated hypertrichosis
- Topical steroid induced

**Further reading:**

- Wendelin DS, Pope DN, Mallory SB (2003) Hypertrichosis. *J Am Acad Dermatol* 48(2):161–179

**Hypopigmentation/Depigmentation, Generalized**

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- Albinism
- Alezzandrini syndrome
- Arsenical hypomelanosis
- Ataxia–telangiectasia
- Chediak–Higashi syndrome
- Chemical leukoderma
- Cross syndrome
- Darier’s disease leukoderma
- Elejalde syndrome
- Griscelli syndrome
- Halo nevus
- Hermansky–Pudlak syndrome
- Hypomelanosis of Ito
- Idiopathic guttate hypomelanosis
- Leprosy



- Melanoma-associated leukoderma
- Menkes' kinky hair disease
- Mycosis fungoides (hypopigmented type)
- Onchocerciasis
- Phenylketonuria
- Piebaldism
- Pinta
- Pityriasis alba
- Pityriasis lichenoides chronica
- Postinflammatory hypopigmentation
- Progressive macular hypomelanosis
- Sarcoidosis
- Scleroderma (Fig. 3.11)
- Steroid-induced hypopigmentation
- Syphilis
- Tinea versicolor
- Tuberous sclerosis
- Vitiligo
- Vogt–Koyanagi–Harada syndrome
- Waardenburg's syndrome



**Fig. 3.11** Scleroderma

- Woolf's syndrome
- Yaws
- Ziprkowski–Margolis syndrome

**Further reading:**

- Mollet I, Ongaena K, Naeyaert JM (2007) Origin, clinical presentation, and diagnosis of hypomelanotic skin disorders. *Dermatol Clin* 25(3):363–371

**Hypopigmentation, Localized**

- Annular lichenoid dermatitis of youth
- Chemical leukoderma
- Darier's disease leukoderma
- Discoid lupus erythematosus
- Halo nevus
- Idiopathic guttate hypomelanosis
- Imiquimod hypopigmentation
- Incontinentia pigmenti achromians
- Intralesional steroid hypopigmentation (Fig. 3.12)
- Leprosy (especially tuberculoid)
- Lichen sclerosus
- Morphea
- Mycosis fungoides (hypopigmented type)
- Nevus anemicus
- Nevus depigmentosus
- Onchocerciasis
- Piebaldism
- Pinta
- Postinflammatory hypopigmentation
- Sarcoidosis
- Syphilis
- Tinea versicolor
- Tuberous sclerosis
- Vitiligo



**Fig. 3.12** Cortisone injection-induced hypopigmentation

**Further reading:**

- Mollet I, Ongenae K, Naeyaert JM (2007) Origin, clinical presentation, and diagnosis of hypomelanotic skin disorders. *Dermatol Clin* 25(3):363–371

### **Hypomelanosis, Diffuse Neonatal**

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- Chediak–Higashi syndrome
- Copper deficiency
- Cross syndrome
- EEC syndrome
- Elejalde syndrome
- Griscelli syndrome
- Histidinemia
- Homocystinuria
- Menkes' syndrome

- Oculocutaneous albinism
- Phenylketonuria
- Selenium deficiency
- Sialic acid storage disease
- Waardenburg's syndrome

**Further reading:**

- Ruiz-Maldonado R (2007) Hypomelanotic conditions of the newborn and infant. *Dermatol Clin* 25(3):373–382

**Ichthyosis, Acquired**

- Chronic renal failure
- Graft-vs-host disease
- HIV infection
- HTLV-1 infection
- Hyperparathyroidism
- Hypothyroidism
- Leprosy
- Malnutrition
- Medications
- Mycosis fungoides
- Onchocerciasis
- Sarcoidosis (Fig. 3.13)
- Systemic lupus erythematosus
- Systemic lymphomas
- Tuberculosis

***Associated Medications***

- Cimetidine
- Clofazimine
- Hydroxyurea



**Fig. 3.13** Ichthyosiform sarcoidosis

- Isoniazid
- Nicotinic acid
- Retinoids
- Statins

**Further reading:**

- Patel N, Spencer LA, English JC III et al (2006) Acquired ichthyosis. *J Am Acad Dermatol* 55(4):647–656

## Ichthyosis, Hereditary

---

- Cardiofaciocutaneous syndrome
- CHIME syndrome
- Chondrodysplasia punctata
- IBIDS syndrome (Tay syndrome)
- Ichthyosis bullosa of Siemens
- Ichthyosis vulgaris
- Lamellar ichthyosis
- Netherton's syndrome
- Neutral lipid storage disease
- NISCH syndrome
- Nonbullous congenital ichthyosiform erythroderma
- Refsum disease
- Sjögren–Larsson syndrome
- Vohwinkel's with ichthyosis
- X-linked ichthyosis

### Further reading:

- DiGiovanna JJ, Robinson-Bostom L (2003) Ichthyosis: etiology, diagnosis, and management. *Am J Clin Dermatol* 4(2):81–95

## Inframammary

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- Candidiasis
- Darier's disease
- Hailey–Hailey disease
- Inflammatory breast cancer
- Intertrigo
- Inverse psoriasis
- Paget's disease
- Seborrheic dermatitis
- Tinea corporis

**Further reading:**

- Cohen PR (2003) Darier disease: sustained improvement following reduction mammoplasty. *Cutis* 72(2):124–126

**Interdigital Web Spaces**

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- Dermatophytosis
- Erosio interdigitalis blastomycetica
- Erythrasma
- Gram-negative infection
- Interdigital hair sinuses
- Intertrigo
- Scabies
- Soft corn
- Xanthoma

**Further reading:**

- Schroder CM, Merk HF, Frank J (2006) Barber's hair sinus in a female hairdresser: uncommon manifestation of an occupational dermatosis. *J Eur Acad Dermatol Venereol* 20(2):209–211

**Jarisch–Herxheimer Reaction**

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- Bacillary angiomatosis
- Leptospirosis
- Lyme disease
- Q fever
- Relapsing fever
- Secondary syphilis
- Trypanosomiasis

**Further reading:**

- See S, Scott EK, Levin MW (2005) Penicillin-induced Jarisch–Herxheimer reaction. *Ann Pharmacother* 39(12):2128–2130

## Jaundice

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- Acute hepatic injury (including drug-induced)
- Cirrhosis
- Crigler–Najjar syndrome
- Drug-induced cholestasis
- Dubin–Johnson syndrome
- Extrahepatic cholestasis
- Familial hyperbilirubinemia
- Gilbert syndrome
- Hemolysis
- Leptospirosis
- Intrahepatic cholestasis
- Physiologic jaundice of the newborn
- Primary biliary cirrhosis
- Rotor’s syndrome
- Viral hepatitis

## Evaluation

- Abdominal CT scan
- Complete blood count
- Direct and indirect bilirubin
- Endoscopic retrograde cholangiopancreatography
- Hepatitis screening
- Liver function tests
- Liver ultrasound
- Reticulocyte count
- Urine bilirubin
- Urine urobilinogen

## Further reading:

- Lewis JH, Ahmed M, Shobassy A, Palese C (2006) Drug-induced liver disease. *Curr Opin Gastroenterol* 22(3):223–233



## Koebner Phenomenon

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- Darier's disease
- Dermatographism
- Erythema multiforme
- Lichen nitidus
- Lichen planus
- Lichen sclerosus
- Perforating disorders
- Pityriasis lichenoides et varioliformis acuta
- Prokeratosis of Mibelli
- Psoriasis
- Reactive perforating collagenosis
- Sarcoid
- Sweet syndrome
- Vitiligo

### Further reading:

- Thappa DM (2004) The isomorphic phenomenon of Koebner. *Indian J Dermatol Venereol Leprol* 70(3):187–189

## Koilonychia (Fig. 3.14)

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- Alopecia areata
- Acanthosis nigricans
- Acrylic nail polishes
- Benign childhood koilonychia
- Coronary artery disease
- Familial koilonychia
- High altitude
- Iron deficiency
- Lichen planus
- Mal de Meleda
- Monilethrix

**Fig. 3.14** Koilonychia

- Occupational
- Plummer–Vinson syndrome
- Polycythemia vera
- Psoriasis
- Raynaud’s phenomenon
- Steatocystoma multiplex
- Syphilis
- Trauma

**Further reading:**

- Fawcett RS, Linford S, Stulberg DL (2004) Nail abnormalities: clues to systemic disease. *Am Fam Physician* 69(6):1417–1424

**Leonine Facies**

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- Acromegaly
- Amyloidosis
- Carcinoid
- Cutaneous lymphoid hyperplasia
- Cutaneous T cell lymphoma
- Cutis verticis gyrata

- Follicular mucinosis
- Leishmaniasis
- Leukemia cutis
- Leprosy
- Lipoid proteinosis
- Mastocytosis
- Multicentric reticulohistiocytosis
- Multiple keratoacanthomas
- Multiple trichoepitheliomas
- Pachydermoperiostosis
- Phymatous rosacea
- Progressive nodular histiocytoma
- Sarcoidosis
- Scleromyxedema
- Setleis syndrome

**Further reading:**

- Kendrick CG, Brown RA, Reina R et al (2004) Cutaneous sarcoidosis presenting as leonine facies. *Cutis* 73(1):57–62

**Leukonychia, Apparent**

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- Half-and-half nails
- Muehrcke's nails
- Terry's nails

**Further reading:**

- Weiser JA, Rogers HD, Scher RK et al (2007) Signs of a “broken heart”: suspected Muehrcke lines after cardiac surgery. *Arch Dermatol* 143(6):815–816

**Leukonychia Partialis**

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- Chilblains
- Hodgkin's disease
- Idiopathic

- Leprosy
- Metastatic carcinoma
- Nephritis
- Tuberculosis

**Further reading:**

- Assadi F (2005) Leukonychia associated with increased blood strontium level. *Clin Pediatr* 44(6):531–533

**Leukonychia Totalis**

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- Bart–Pumphrey syndrome
- Cirrhosis
- Deafness
- Duodenal ulcer
- Hereditary leukonychia totalis
- LEOPARD syndrome
- Leprosy
- Multiple sebaceous cysts and renal calculi
- Nail biting
- Selenium deficiency
- Trichinosis
- Typhoid fever
- Ulcerative colitis

**Further reading:**

- Antonarakis ES (2006) Images in clinical medicine. Acquired leukonychia totalis. *N Engl J Med* 355(2):e2
- De D, Handa S (2007) Hereditary leukonychia totalis. *Indian J Dermatol Venereol Leprol* 73(5):355–357

**Leukonychia, Transverse True**

---

- Acrodermatitis enteropathica
- Chemotherapy
- Febrile illness

- Mees lines
- Stevens–Johnson syndrome
- Trauma

**Further reading:**

- Fujita Y, Sato-Matsumura KC, Doi I et al (2007) Transverse leukonychia (Mees' lines) associated with pleural empyema. *Clin Exp Dermatol* 32(1):127–128

**Leukoplakia**

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- Bite keratosis
- Candidiasis
- Darier's disease
- Dyskeratosis congenita
- Frictional keratosis
- Leukoedema
- Lichen planus
- Lichen sclerosus
- Oral florid papillomatosis
- Oral hairy leukoplakia
- Pachyonychia congenita
- Premalignant leukoplakia
- Proliferative verrucous neoplasia
- Squamous cell carcinoma
- Syphilis
- White sponge nevus

**Further reading:**

- Warnakulasuriya S, Johnson NW, van der Waal I (2007) Nomenclature and classification of potentially malignant disorders of the oral mucosa. *J Oral Pathol Med* 36(10):575–580

**Lichenoid Papules**

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- Frictional lichenoid dermatosis
- Gianotti–Crosti syndrome

- Keratosis lichenoides chronica
- Lichen amyloidosis
- Lichen aureus
- Lichen myxedematosus
- Lichen nitidus
- Lichen planus
- Lichen scrofulosorum
- Lichen spinulosus
- Lichen striatus
- Lichenoid contact dermatitis
- Lichenoid drug eruption
- Lichenoid graft-vs-host disease
- Lichenoid keratosis
- Lichenoid pigmented purpuric dermatosis
- Lichenoid sarcoidosis
- Lichenoid secondary syphilis

**Further reading:**

- Tang MB, Yosipovitch G, Tan SH (2004) Secondary syphilis presenting as a lichen planus-like rash. *J Eur Acad Dermatol Venereol* 18(2):185–187

**Linear Hypopigmentation**

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- Epidermal nevus
- Focal dermal hypoplasia (Goltz syndrome)
- Hypomelanosis of Ito
- Incontinentia pigmenti (stage IV)
- Intralesional steroids
- Lichen striatus
- Menkes' kinky-hair disease (female carrier)
- Morphea
- Nevus depigmentosus
- Postinflammatory hypopigmentation
- Segmental ash-leaf macule
- Segmental vitiligo

**Further reading:**

- Nanda V, Parwaz MA, Handa S (2006) Linear hypopigmentation after triamcinolone injection: a rare complication of a common procedure. *Aesthetic Plast Surg* 30(1):118–119

**Linear**

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- Basal cell carcinoma
- Basaloid follicular hamartoma
- Bites and stings (especially jellyfish)
- Blaschkitis
- Bullous ichthyosiform erythroderma
- Chronic graft-vs-host disease
- Connective tissue nevus
- Darier's disease
- Eccrine spiradenomas
- Epidermal nevi
- Factitial disease
- Fibromatosis
- Fixed-drug eruption
- Futcher's lines
- Goltz syndrome
- Hailey–Hailey disease
- Hypomelanosis of Ito
- Incontinentia pigmenti
- Inflammatory linear verrucous epidermal nevus
- Lichen nitidus
- Lichen planus
- Lichen striatus
- Linea alba
- Linea nigra
- Linear Cowden's nevus
- Linear and whorled nevoid hypermelanosis
- Linear atrophoderma of Moulin
- Linear focal elastosis



**Fig. 3.15** Linear porokeratosis  
(Courtesy of A. Mistretta)

- Lupus erythematosus
- Lymphangiitis
- Molluscum contagiosum
- Morphea
- Nevoid telangiectasia
- Nevus comedonicus
- Nevus corniculatus
- Nevus depigmentosus
- Nevus lipomatosus superficialis
- Nevus sebaceous
- Palmoplantar verrucous nevus
- Pemphigus
- Phytophotodermatitis
- Plant contact dermatitis
- Porokeratosis (Fig. 3.15)
- Porokeratotic eccrine ostial and dermal duct nevus
- Psoriasis
- Rope sign of interstitial granulomatous dermatitis
- Segmental angiofibromas
- Segmental leiomyomas



- Segmental neurofibromas
- Segmental vitiligo
- Sporotrichoid lesions
- Striae atrophicans
- Syringomas
- Thrombophlebitis
- Trichoepitheliomas
- Unilateral nevoid telangiectasia
- Verruca
- Zosteriform lentiginous nevus

**Further reading:**

- Grosshans EM (1999) Acquired blaschkolinear dermatoses. *Am J Med Genet* 85(4):334–372
- Happle R (2007) Linear Cowden nevus: a new distinct epidermal nevus. *Eur J Dermatol* 17(2):133–136

## Lip Pits

- Branchio-oculo-facial syndrome
- Branchio-oto-renal syndrome
- Oral–facial–digital syndrome, type I
- Popliteal pterygium syndrome
- Van der Woude’s syndrome

**Further reading:**

- Dissemond J, Haberer D, Franckson T et al (2004) The Van der Woude syndrome: a case report and review of the literature. *J Eur Acad Dermatol Venereol* 18(5):611–613

## Lip Swelling

- Amyloidosis
- Angioedema
- Ascher syndrome
- Cheilitis glandularis



**Fig. 3.16** Pleomorphic adenoma

- Cheilitis granulomatosis
- Crohn's disease
- Hemangioma
- Herpes simplex virus infection
- Lupus erythematosus
- Leishmaniasis
- Leprosy
- Lymphangioma
- Lymphatic obstruction
- Melkersson–Rosenthal syndrome
- Microcystic adnexal carcinoma
- Mucosal neuroma
- Neurofibroma
- Normal variant
- Paraffinoma
- Rhinoscleroma
- Salivary gland neoplasm (Fig. 3.16)

- Sarcoidosis
- Squamous cell carcinoma
- Syphilis
- Trauma
- Tuberculosis

**Further reading:**

- Kauzman A, Quesnel-Mercier A, Lalonde B (2006) Orofacial granulomatosis: 2 case reports and literature review. *J Can Dent Assoc* 72(4):325–329

**Lymphadenitis, Suppurative**

- Acne conglobata
- Actinomycosis
- Atypical mycobacterial infection
- Cat-scratch disease
- Chancroid
- Coccidioidomycosis
- Granuloma inguinale
- Hidradenitis suppurativa
- Histoplasmosis
- Lymphogranuloma venereum
- Melioidosis
- Nocardiosis
- Paracoccidioidomycosis
- Plague
- Rat bite fever
- Scrofuloderma
- Syphilis
- Tularemia

**Further reading:**

- Chlebicki MP, Tan BH (2006) Six cases of suppurative lymphadenitis caused by *Burkholderia pseudomallei* infection. *Trans R Soc Trop Med Hyg* 100(8):798–801

## Lymphadenopathy

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- African trypanosomiasis
- Angioimmunoblastic lymphadenopathy
- Brucellosis
- Bubonic plague
- Castleman's disease
- Chronic lymphocytic leukemia
- CMV infection
- Dermatopathic lymphadenitis
- Drug reaction
- EBV infection
- HIV infection
- Hodgkin's disease
- Kawasaki disease
- Kikuchi's disease
- Kimura's disease
- Langerhans cell histiocytosis
- Leishmaniasis
- Lymphogranuloma venereum
- Lymphoma
- Metastatic disease
- Mononucleosis
- Mycobacterial infection
- Mycosis fungoides
- Nocardiosis
- Non-Hodgkin's lymphoma
- Nonspecific bacterial lymphadenitis
- Salivary gland tumor
- Sarcoidosis
- Scrofuloderma
- Sinus histiocytosis with massive lymphadenopathy
- Streptococcal pharyngitis
- Syphilis
- Systemic mycoses
- Tinea capitis

- Toxoplasmosis
- Tularemia

**Further reading:**

- Kumar SS, Kuruvilla M, Pai GS et al (2003) Cutaneous manifestations of non-Hodgkin's lymphoma. *Indian J Dermatol Venereol Leprol* 69(1):12–15

**Lymphedema, Primary (Hereditary)**

- Aagenaes syndrome
- Distichiasis–lymphedema syndrome
- Hennekam syndrome
- Klippel–Trenaunay syndrome
- Lymphedema ptosis syndrome
- Meige lymphedema (lymphedema praecox or tarda)
- Milroy disease (congenital lymphedema)
- Njolstad syndrome
- Noonan syndrome
- Phakomatosis pigmentovascularis
- Turner syndrome
- Yellow nail syndrome

**Further reading:**

- Shinawi M (2007) Lymphedema of the lower extremity: is it genetic or nongenetic? *Clin Pediatr* 46(9):835–841

**Lymphedema, Secondary**

- Acne vulgaris (midface)
- Factitial disease (Secretan's syndrome)
- Granulomatous infection (especially chromoblastomycosis)
- Lymph node dissection
- Malignant obstruction
- Obesity
- Parasitic infections/filariasis
- Primary amyloidosis

- Radiation injury
- Recurrent lymphangitis and cellulitis
- Rosacea lymphedema
- Surgical excision

**Further reading:**

- Tiwari A, Cheng KS, Button M et al (2003) Differential diagnosis, investigation, and current treatment of lower limb lymphedema. *Arch Surg* 138(2):152–161

**Macroglossia**

---

- Acromegaly
- Actinomycosis
- Amyloidosis
- Angioedema
- Beckwith–Wiedemann syndrome
- Carcinoma of tongue
- Congenital hypothyroidism
- Down syndrome
- Granular cell tumor
- Hemangioma
- Hunter's syndrome
- Hurler's syndrome
- Hypothyroidism
- Leprosy
- Lipoid proteinosis
- Lymphatic malformation
- Melkersson–Rosenthal syndrome
- Mucosal neuroma syndrome
- Neurofibroma
- Neurofibromatosis
- Sarcoidosis
- Superior vena cava syndrome
- Venous malformation

**Further reading:**

- van der Waal RI, van de Scheur MR, Huijgens PC et al (2002) Amyloidosis of the tongue as a paraneoplastic marker of plasma cell dyscrasia. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 94(4):444–447

**Madarosis**

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- Alopecia areata
- Alopecia mucinosa
- Amyloidosis
- Atopic dermatitis (Hertoghe's sign)
- Cutaneous T cell lymphoma
- Discoid lupus erythematosus
- Ectodermal dysplasia
- Erythroderma
- Familial eyebrow hypoplasia
- Hyperthyroidism
- Hypothyroidism (Queen Anne's sign)
- Infiltrating tumor
- Lamellar ichthyosis
- Leprosy
- Monilethrix
- Pili torti
- Sarcoidosis
- Scleroderma/"en coup de sabre"
- Scleromyxedema
- Syphilis
- Trichotillomania
- Ulerythema ophryogenes
- Vogt-Koyanagi-Harada syndrome

**Further reading:**

- Khong JJ, Casson RJ, Huilgol SC, Selva D (2006) Madarosis. *Surv Ophthalmol* 51(6):550–560

## Malar Rash

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- Actinic prurigo
- Bloom's syndrome
- Carcinoid syndrome flushing
- Cockayne's syndrome
- Contact dermatitis
- Demodicosis
- Dermatomyositis
- Erythema infectiosum
- Granuloma faciale
- Jessner's lymphocytic infiltrate
- Lupus erythematosus
- Lupus pernio
- Lupus vulgaris
- Pemphigus erythematosus
- Perioral dermatitis
- Phototoxicity
- Polymorphous light eruption
- Rosacea
- Rothmund–Thomson syndrome
- Seborrheic dermatitis
- Telangiectasia macularis eruptiva perstans

### Further reading:

- Black AA, McCauliffe DP, Sontheimer RD (1992) Prevalence of acne rosacea in a rheumatic skin disease subspecialty clinic. *Lupus* 1(4):229–237

## Marfanoid Body Habitus

---

- Congenital contractural arachnodactyly
- Ehlers–Danlos syndrome type VI
- Ehlers–Danlos syndrome type VIII
- Gorlin syndrome
- Homocystinuria



- Marfan syndrome
- Multiple endocrine neoplasia, type IIB
- Stickler syndrome

**Further reading:**

- Svensson LG, Blackstone EH, Feng J et al (2007) Are Marfan syndrome and marfanoid patients distinguishable on long-term follow-up? *Ann Thorac Surg* 83(3):1067–1074

**Melanonychia, Longitudinal**

---

- Addison's disease
- Antimalarials
- Basal cell carcinoma
- Bowen's disease
- Cancer chemotherapeutic agents
- Chronic radiodermatitis
- Fluconazole
- Friction
- HIV infection
- Hydroxyurea
- Laugier–Hunziker syndrome
- Lichen planus
- Manicures
- Melanocyte hyperplasia
- Myxoid cyst
- Nail matrix melanoma
- Nail matrix nevus
- Onychomycosis
- Onychotillomania
- Peutz–Jeghers syndrome
- Postinflammatory
- Pregnancy
- Psoralens
- Pustular psoriasis

- Racial melanonychia
- *Scytalidium* infection
- Subungual keratosis
- Verrucae
- Zidovudine

**Further reading:**

- Andre J, Lateur N (2006) Pigmented nail disorders. *Dermatol Clin* 24(3):329–339

## **Michelin Tire Baby Appearance**

---

- Congenital cutis laxa
- Diffuse nevus lipomatosus
- Smooth muscle hamartoma

**Further reading:**

- Palit A, Inamadar AC (2007) Circumferential skin folds in a child: a case of Michelin tire baby syndrome. *Indian J Dermatol Venereol Leprol* 73(1):49–51

## **Migratory**

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- Creeping eruption
- Erythema annulare centrifugum (Fig. 3.17)
- Erythema gyratum repens
- Erythema marginatum
- Erythema migrans
- Erythrokeratoderma variabilis
- Juvenile rheumatoid arthritis
- Necrolytic migratory erythema
- Urticaria

## **Creeping Eruption**

- Cutaneous larva migrans
- Dirofilariasis



**Fig. 3.17** Erythema annulare centrifugum (Courtesy of K. Guidry)

- Fascioliasis
- Gnathostomiasis
- Hookworm infestation
- Loaiasis
- Paragonimiasis
- Scabies
- Sparganosis
- Strongyloidiasis

**Further reading:**

- Goldsmith LA (2003) Migrating skin lesions: a genetic clue. *J Invest Dermatol* 121(3):vii–viii

## Morbilliform

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- Acute graft-vs-host disease
- Acute hepatitis
- Acute HIV infection
- Angioimmunoblastic lymphadenopathy
- Asymmetric periflexural exanthem
- Dengue fever
- Drug eruption
- Ehrlichiosis
- Erythema marginatum
- Guttate psoriasis
- Infectious mononucleosis
- Kawasaki disease
- Kikuchi's disease
- Measles
- Meningococemia
- Papular pityriasis rosea
- Parvovirus infection
- Pityriasis rosea
- Relapsing fever
- Rocky Mountain spotted fever
- Roseola
- Rubella
- Scabies
- Scarlet fever
- Secondary syphilis
- Serum sickness-like reaction
- Toxic-shock syndrome
- Toxoplasmosis
- Typhus
- Urticaria
- Vaccination reaction
- Viral exanthem

**Further reading:**

- Furness C, Sharma R, Harnden A (2004) Morbilliform rash. *Br Med J* 329(7468):719

**Nails, Absent/Atrophic (Acquired)**

---

- Epidermolysis bullosa acquisita
- Erythroderma
- Lesch–Nyhan syndrome
- Lichen planus
- Onychotillomania
- Pemphigus
- Scleroderma
- Severe paronychia
- Stevens–Johnson syndrome
- Toxic epidermal necrolysis

**Further reading:**

- Pall A, Gupta RR, Gulati B et al (2004) Twenty nail anonychia due to lichen planus. *J Dermatol* 31(2):146–147

**Nails, Absent/Atrophic (Congenital)**

---

- Acrodermatitis enteropathica
- Amniotic bands
- Anonychia with ectrodactyly
- Apert syndrome
- Cartilage–hair hypoplasia
- Coffin–Siris syndrome
- Congenital onychodysplasia of the index fingers
- Cook's syndrome
- DOOR syndrome
- Dyskeratosis congenita
- Ectodermal dysplasias
- Ellis–van Creveld syndrome

- Epidermolysis bullosa
- Fetal alcohol syndrome
- Fetal dilantin syndrome
- Fetal warfarin syndrome
- Glossopalantine syndrome
- Goltz syndrome
- Hidrotic ectodermal dysplasia
- Hypohidrotic ectodermal dysplasia
- Incontinentia pigmenti
- KID syndrome
- Lamellar ichthyosis
- Nail–patella syndrome
- Noonan syndrome
- Popliteal web syndrome
- Progeria
- Rothmund–Thomson syndrome
- Trisomy 8
- Turner syndrome

**Further reading:**

- Rigopoulos D, Petropoulou H, Nikolopoulou M et al (2006) Total congenital anonychia in two children of the same family. *J Eur Acad Dermatol Venereol* 20(7):894–896

**Nails, Brittle (Onychorrhexis)**

---

- Alopecia areata
- Arsenic poisoning
- Biotin deficiency
- Chemicals
- Hand dermatitis
- Iron deficiency
- Lichen planus

- Psoriasis
- Severe chronic illness
- Thyroid disease
- Trauma
- Vitamin deficiency
- Wet work

**Further reading:**

- van de Kerkhof PC, Pasch MC, Scher RK et al (2005) Brittle nail syndrome: a pathogenesis-based approach with a proposed grading system. *J Am Acad Dermatol* 53(4):644–651

**Nail Pigmentation**

---

- Busulfan
- Cyclophosphamide
- Dermatophytes
- Hair dyes in hairdressers
- Hydroxyurea
- Iron or gold
- Melanocytic hyperplasia
- Melanoma
- Minocycline
- Nevus
- *Proteus* infection
- *Pseudomonas* colonization
- Smokers
- Subungual hematoma
- Zidovudine

**Further reading:**

- Andre J, Lateur N (2006) Pigmented nail disorders. *Dermatol Clin* 24(3):329–339

## Nail Pitting

---

- Alopecia areata
- Dermatitis of proximal nail fold
- Eczema
- Lichen planus
- Pityriasis rosea
- Psoriasis
- Reactive arthritis
- Rheumatoid arthritis
- Sarcoidosis
- Syphilis

### Further reading:

- Jiaravuthisan MM, Sasseville D, Vender RB et al (2007) Psoriasis of the nail: anatomy, pathology, clinical presentation, and a review of the literature on therapy. *J Am Acad Dermatol* 57(1):1–27

## Nails with Blue Lunula

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- Alkaptonuria
- Argyria
- Chemotherapy
- Hemochromatosis
- Minocycline
- Osler–Weber–Rendu disease
- Quinacrine
- Wilson's disease
- Zidovudine

### Further reading:

- Cohen PR (1996) The lunula. *J Am Acad Dermatol* 34(6):943–953



## **Nails with Red Lunula**

---

- Alopecia areata
- Cardiovascular disease
- Congestive heart failure
- Carbon monoxide poisoning
- Chronic obstructive pulmonary disease
- Glomus tumor
- Lymphogranuloma venereum
- Lichen planus
- Lichen sclerosus
- Psoriasis
- Rheumatoid arthritis

### **Further reading:**

- Cohen PR (1996) The lunula. *J Am Acad Dermatol* 34(6):943–953

## **Necrotic**

---

- Amebiasis
- Anthrax
- Arteriosclerosis obliterans
- Aspergillosis
- Basal cell carcinoma
- Blastomycosis
- Calciphylaxis
- Cholesterol emboli
- Chromoblastomycosis
- Coumadin necrosis
- Dermatomyositis
- Disseminated intravascular coagulation
- Ecthyma

- Ecthyma gangrenosum
- Febrile ulceronecrotic Mucha–Habermann disease
- Fusariosis
- Gas gangrene
- Heparin necrosis
- Intravascular lymphoma
- Leishmaniasis
- Livedo vasculitis
- Meningococemia
- Metastatic lesion
- Necrotic arachnidism
- Necrotizing fasciitis
- Nicolau syndrome
- Panniculitis
- Polyarteritis nodosa
- Pressure ulcer
- Pyoderma gangrenosum
- Sarcoma
- Severe cellulitis
- Squamous cell carcinoma
- Sweet's syndrome
- Vasculitis
- *Vibrio vulnificus* infection
- Zygomycosis

**Further reading:**

- Luton K, Garcia C, Poletti E, Koester G (2006) Nicolau syndrome: three cases and review. *Int J Dermatol* 45(11):1326–1328

**Neoplasm, Axilla**

---

- Acrochordon
- Apocrine gland carcinoma
- Extramammary Paget's disease
- Fibrous hamartoma

- Lymphangioma circumscriptum
- Macrocystic lymphatic malformation
- Metastatic breast cancer

### **Neoplasm, Back**

---

- Basal cell carcinoma
- Cellular blue nevus
- Chordoma
- Congenital melanocytic nevus
- Congenital smooth muscle hamartoma
- Cutaneous lymphoid hyperplasia
- Dilated pore
- Elastofibroma dorsi
- Encephalocele/meningocele
- Epidermal inclusion cyst
- Familial cutaneous collagenoma
- Fibroepithelioma of Pinkus
- Hibernoma
- Leiomyoma
- Lipoma
- Lymphoma
- Melanoma
- Meningioma
- Pilonidal sinus
- Pleomorphic lipoma
- Seborrheic keratosis
- Shagreen patch
- Spindle cell lipoma

### **Neoplasm, Buttock**

---

- Cellular blue nevus
- Dermatofibrosarcoma protuberans

- Malignant fibrous histiocytoma
- Mycosis fungoides
- Nevus lipomatosus superficialis
- Trichoadenoma

### **Neoplasm, Chest**

---

- Actinic keratosis
- Basal cell carcinoma
- Becker's nevus
- Benign lichenoid keratosis
- Eruptive vellus hair cysts
- Leiomyoma
- Medallion-like dermal dendrocyte hamartoma
- Seborrheic keratosis
- Solar lentigo
- Squamous cell carcinoma
- Steatocystoma

### **Neoplasm, Digital**

---

- Acquired digital fibrokeratoma
- Acrolentiginous melanoma
- Aggressive digital papillary adenocarcinoma
- Digital mucous cyst
- Enchondroma
- Epidermal inclusion cyst
- Fibroma of the tendon sheath
- Ganglion cyst
- Giant cell tumor of the tendon sheath
- Glomus tumor
- Gouty tophus

- Metastatic lesion
- Multicentric reticulohistiocytosis
- Neurilemmoma
- Neuroma
- Perineuroma
- Poroma
- Pyogenic granuloma
- Sclerotic fibroma
- Squamous cell carcinoma
- Subungual exostosis
- Verruca
- Xanthoma

### **Neoplasm, Ear**

---

- Acanthoma fissuratum
- Actinic keratosis
- Angiolymphoid hyperplasia with eosinophilia
- Apocrine hidrocystoma
- Atypical fibroxanthoma
- Basal cell carcinoma
- Ceruminoma
- Chondrodermatitis nodular helicis
- Cutaneous lymphoid hyperplasia
- Elastotic nodule
- Keloid
- Kimura's disease
- Lymphoma
- Milia en plaque
- Pseudocyst of the auricle
- Squamous cell carcinoma
- Venous lake

## Neoplasm, Extremity (Upper or Lower)

---

- Angiolipoma
- Angiosarcoma
- Aponeurotic fibroma
- AV fistula
- Benign lichenoid keratosis
- Bowen's disease
- Common blue nevus
- Dermatofibroma
- Eccrine syringofibroadenoma
- Epithelioid hemangioendothelioma
- Epithelioid sarcoma
- Ganglion cyst
- Giant cell tumor of tendon sheath
- Glomeruloid hemangioma
- Hyperkeratosis lenticularis perstans
- Juvenile hyaline fibromatosis
- Lipoblastomatosis
- Melanocytic nevus
- Myxoma
- Neurilemmoma
- Porocarcinoma
- Primary marginal zone lymphoma
- Retiform hemangioendothelioma
- Seborrhic keratosis
- Spindle cell hemangioendothelioma
- Targetoid hemosiderotic hemangioma

## Neoplasm, Extremity (Lower)

---

- Acroangiokeratosis (pseudo-Kaposi's sarcoma)
- Angioma serpiginosum
- Clear cell acanthoma
- Cutaneous ciliated cyst

- Diffuse large B cell lymphoma of the leg
- Fascial hernia
- Inflammatory linear verrucous epidermal nevus
- Liposarcoma
- Kaposi's sarcoma
- Pigmented spindle cell nevus of Reed
- Reactive angioendotheliomatosis
- Solitary angiokeratoma
- Subcutaneous panniculitis-like T cell lymphoma
- Verrucous vascular malformation

### **Neoplasm, Extremity (Upper)**

---

- Actinic keratosis
- Arteriovenous fistula
- Blue rubber bleb nevus
- Intravascular papillary endothelial hyperplasia
- Juvenile xanthogranuloma
- Keratoacanthoma
- Leiomyoma
- Lipoma
- Maffucci's syndrome
- Microvenular hemangioma
- Neurilemmoma
- Neurothekeoma
- Nodular fasciitis
- Pilomatrixoma
- Solar lentigo

### **Neoplasm, Face**

---

- Acrochordon
- Angiofibroma
- Angiosarcoma

- Apocrine hidrocystoma
- Basal cell carcinoma
- B cell lymphoma
- Chondroid syringoma
- Cirroid aneurysm
- Cutaneous lymphoid hyperplasia
- Cylindroma
- Dermatitis papulosa nigra
- Dermoid cyst
- Desmoplastic melanoma
- Dilated pore
- Eccrine hidrocystoma
- Epidermal inclusion cyst
- Inverted follicular keratosis
- Juvenile hyaline fibromatosis
- Keratoacanthoma
- Lipoma
- Melanocytic nevus
- Meningioma
- Microcystic adnexal carcinoma
- Milia
- Myxoma
- Nevus sebaceous
- Palisaded encapsulated neuroma
- Perifollicular fibroma
- Pilomatrixoma
- Sebaceous carcinoma
- Sebaceous hyperplasia
- Seborrheic keratosis
- Solar lentigo
- Spider angioma
- Spitz nevus
- Squamous cell carcinoma
- Steatocystoma
- Subepidermal calcified nodule



- Syringocystadenoma papilliferum
- Syringoma
- Trichilemmoma
- Trichoadenoma
- Trichoblastoma
- Trichodiscoma
- Trichoepithelioma
- Trichofolliculoma
- Warty dyskeratoma

### **Neoplasm, Genital/Groin**

---

- Angiofibroma of the vulva
- Angiokeratoma of Fordyce
- Bowenoid papulosis
- Bowen's disease
- Ciliated cyst
- Condyloma acuminatum
- Epidermoid cyst
- Extramammary Paget's disease
- Fox–Fordyce disease
- Granular cell tumor
- Hidradenoma papilliferum
- Idiopathic calcinosis of the scrotum
- Leiomyoma
- Lymphangioma
- Median raphe cyst
- Melanoma
- Pearly penile papules
- Sebaceous carcinoma
- Seborrheic keratosis
- Syringomas
- Verrucous carcinoma
- Vestibular papillomatosis



**Fig. 3.18** Acquired fibrokeratoma

### Neoplasm, Hands and Feet (Including Dorsal Hands, Digits; Excluding Periungual)

---

- Acquired digital fibrokeratoma (Fig. 3.18)
- Acral lentiginous melanoma
- Actinic keratosis
- Aggressive digital papillary adenocarcinoma
- Angiokeratoma of Mibelli
- APACHE syndrome
- Arsenical keratosis
- Arteriovenous fistula
- Calcifying aponeurotic fibroma
- Common blue nevus
- Connective tissue nevus of Proteus syndrome
- Digital mucous cyst
- Dupuytren's contracture
- Eccrine angiomatous hamartoma
- Eccrine syringofibroadenoma
- Epidermal inclusion cyst
- Epithelioid sarcoma
- Ganglion cyst
- Giant cell tumor of the tendon sheath

- Glomus tumor
- Infantile digital fibromatosis
- Knuckle pads
- Ledderhose's disease
- Lipoma
- Lymphatic malformation
- Mastocytoma
- Melanocytic nevus
- Neurofibroma
- Piezogenic pedal papules
- Poroma
- Pyogenic granuloma
- Schwannoma
- Squamous cell carcinoma
- Stucco keratoses
- Supernumerary digit
- Traumatic neuroma
- Venous malformation
- Verrucous carcinoma
- Verruca

### **Neoplasm, Head and Neck (Any Location)**

---

- Actinic keratosis
- Angiolymphoid hyperplasia with eosinophilia
- Angiosarcoma
- Atypical fibroxanthoma
- Clear cell/nodular hidradenoma
- Cutaneous lymphoid hyperplasia
- Granular cell tumor
- Infantile hemangioma
- Intravascular papillary endothelial hyperplasia
- Juvenile xanthogranuloma
- Lentigo maligna melanoma

- Melanoacanthoma
- Merkel cell carcinoma
- Neurothekeoma
- Nodular melanoma
- Palisaded encapsulated neuroma
- Sebaceous adenoma
- Sebaceous carcinoma
- Trichodiscoma
- Trichofolliculoma
- Tumor of the follicular infundibulum
- Venous malformation

### **Neoplasm, Neck**

---

- Acrochordon
- Atypical fibroxanthoma
- Basal cell carcinoma
- Brachial cleft cyst
- Bronchogenic cyst
- Dilated pore
- Epidermal inclusion cyst
- Fibromatosis colli
- Keloid
- Lipoma
- Macrocystic lymphatic malformation
- Melanocytic nevus
- Nevus sebaceous
- Pigmented follicular cyst
- Pilomatrixoma
- Pleomorphic lipoma
- Spindle cell lipoma
- Squamous cell carcinoma
- Thyroglossal cyst
- Tufted angioma

## Neoplasm, Nose

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- Acanthoma fissuratum
- Actinic keratosis
- Basal cell carcinoma
- Basaloid follicular hamartoma
- Chondroid syringoma
- Cutaneous lymphoid hyperplasia
- Dermoid cyst
- Encephalocele
- Fibrous papule
- Hidradenoma
- Melanocytic nevus
- Nasal glioma
- Sebaceous hyperplasia
- Solar lentigo
- Squamous cell carcinoma
- Trichilemmoma
- Trichoepithelioma
- Trichofolliculoma

## Neoplasm, Oral Cavity

---

- Benign salivary gland tumor
- Dermoid cyst
- Fibroma (Fig. 3.19)
- Fibrosarcoma
- Fibrous epulis
- Granular cell tumor
- Juvenile hyaline fibromatosis
- Kaposi's sarcoma
- Leukoplakia
- Macrocystic lymphatic malformation
- Malignant fibrous histiocytoma



**Fig. 3.19** Fibroma  
(Courtesy of  
K. Guidry)

- Malignant melanoma
- Malignant salivary gland tumor
- Melanoacanthoma
- Mucosal melanoma
- Odontogenic cyst or tumor
- Oral florid papillomatosis
- Osteomyelitis
- Peripheral giant cell granuloma
- Primary intraosseous carcinoma
- Pyogenic granuloma
- Squamous cell carcinoma
- Submucous fibrosis
- Verrucous carcinoma
- Warty dyskeratoma
- White sponge nevus

### **Neoplasm, Periocular**

---

- Acrochordon
- Apocrine hidrocystoma

- Eccrine hidrocystoma
- Hidradenoma papilliferum
- Milia
- Mucinous eccrine carcinoma
- Sebaceous carcinoma
- Seborrheic keratosis
- Syringoma

### **Neoplasm, Perioral**

---

- Basal cell carcinoma
- Epidermization of lip
- Microcystic adnexal carcinoma
- Pilar sheath acanthoma
- Salivary gland tumor
- Squamous cell carcinoma
- Venous lake

### **Neoplasm, Periungual**

---

- Acral lentiginous melanoma
- Angiokeratoma
- Bowen's disease
- Glomus tumor
- Kaposi's sarcoma
- Keratoacanthoma
- Koenen tumor
- Lentigo
- Melanocytic nevi
- Metastatic disease
- Myxoid cysts
- Neurofibroma
- Onychomatricoma



**Fig. 3.20** Periungual fibroma

- Periungual fibroma (Fig. 3.20)
- Pyogenic granuloma
- Squamous cell carcinoma
- Subungual exostosis
- Subungual osteochondroma
- Verruca vulgaris
- Verrucous carcinoma

### **Neoplasm, Scalp**

---

- Angiolymphoid hyperplasia with eosinophilia
- Angiosarcoma
- Atypical fibroxanthoma
- Basal cell carcinoma
- Cirroid aneurysm
- Cranial fasciitis
- Cylindroma
- Encephalocele/meningocele
- Hibernoma
- Inverted follicular keratosis
- Juvenile hyaline fibromatosis





**Fig. 3.21** Metastatic breast cancer

- Melanocytic nevus
- Meningioma
- Metastasis (Fig. 3.21)
- Nevus sebaceous
- Pilar cyst
- Proliferating pilar tumor
- Sebaceous carcinoma
- Seborrheic keratosis
- Solar lentigo
- Squamous cell carcinoma
- Syringocystadenoma papilliferum
- Trichoblastoma
- Trichofolliculoma
- Warty dyskeratoma

## Neoplasm, Thigh

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- Lipoma
- Liposarcoma
- Malignant fibrous histiocytoma
- Nevus lipomatosus superficialis

## Neoplasm, Trunk

---

- B cell lymphoid hyperplasia
- Becker's nevus
- Blue rubber bleb nevus
- Bowen's disease
- Cherry angioma
- Congenital melanocytic nevus
- Dermatofibrosarcoma protuberans
- Dermatofibrosis lenticularis disseminata
- Desmoid tumor
- Dysplastic melanocytic nevus
- Epidermal inclusion cyst
- Fibrous hamartoma
- Glomeruloid hemangioma
- Kaposi's sarcoma
- Keloid
- Lipoma
- Melanocytic nevus
- Metastasis
- Myxoma
- Primary follicular center cell lymphoma
- Primary marginal zone lymphoma
- Sinusoidal hemangioma
- Supernumerary nipple
- Syringocystadenoma papilliferum
- Targetoid hemosiderotic hemangioma
- Tufted angioma

## **Nodule, Rapidly Growing**

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- Atypical fibroxanthoma
- Chondrodermatitis nodularis helioides
- Chondroid syringoma
- Hemangioma
- Kaposi's sarcoma
- Keratoacanthoma
- Malignant granular cell tumor
- Merkel cell tumor
- Metastasis
- Nodular fasciitis
- Nodular melanoma
- Pilomatrixoma
- Poroma
- Proliferating pilar tumor
- Pyogenic granuloma

### **Further reading:**

- Liu W, Dowling JP, Murray WK et al (2006) Rate of growth in melanomas: characteristics and associations of rapidly growing melanomas. *Arch Dermatol* 142(12):1551–1558

## **Nodule, Red**

---

- Amelanotic melanoma
- Angioma
- Angiolymphoid hyperplasia
- Clear cell acanthoma
- Cutaneous lymphoid hyperplasia
- Eccrine poroma
- Glomus tumor
- Kaposi's sarcoma
- Leukemia cutis
- Lymphoma
- Merkel cell tumor

- Metastasis
- Pyogenic granuloma
- Spitz nevus

**Further reading:**

- Yazdi AS, Sander CA, Ghoreschi K (2006) Small red nodule of the nose as presenting manifestation of CLL. *Eur J Dermatol* 16(5):580–581

**Nose, Destructive Lesion**

---

- Basal cell carcinoma
- Blastomycosis
- Bejel
- Cocaine abuse
- Leishmaniasis
- Leprosy
- Lupus vulgaris
- NK cell lymphoma
- Mucormycosis
- Noma
- Paracoccidioidomycosis
- Rhabdomyosarcoma
- Rhinoentomophthoromycosis
- Rhinoscleroma
- Rhinosporidiosis
- Sarcoidosis
- Squamous cell carcinoma
- Syphilis
- Trigeminal trophic syndrome
- Wegener's granulomatosis
- Yaws (gangosa)
- Zygomycosis

**Further reading:**

- Parker NP, Pearlman AN, Conley DB et al (2010) The dilemma of midline destructive lesions: a case series and diagnostic review. *Am J Otolaryngol* 31(2):104–109

## **Nose, Midline Mass**

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- Cephaloceles
- Dermal sinuses
- Dermoid cysts
- Epidermoid cyst
- Hemangioma
- Heterotopic brain tissue (nasal gliomas)
- Leukemia cutis
- Lymphoma
- Rhabdomyosarcoma
- Venous malformation

### **Further reading:**

- Hedlund G (2006) Congenital frontonasal masses: developmental anatomy, malformations, and MR imaging. *Pediatr Radiol* 36(7):647–662

## **Onychauxis (Thickening of Nail Plate)**

---

- Acromegaly
- Aging
- Chronic vascular disease
- Darier's disease
- Eczema
- Onychomycosis
- Pachyonychia congenita
- Pityriasis rubra pilaris
- Psoriasis
- Trauma
- Yellow nail syndrome

### **Further reading:**

- Singh G, Haneef NS, Uday A (2005) Nail changes and disorders among the elderly. *Indian J Dermatol Venereol Leprol* 71(6):386–392

## Onycholysis

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- Amyloidosis
- Blistering diseases
- Bronchiectasis
- *Candida* infection
- Chemotherapy
- Cyanoacrylates
- Darier's disease
- Diabetes mellitus
- Ectodermal dysplasia
- Eczema
- Erythropoietic porphyria
- Erythropoietic protoporphyria
- Excessive manicuring
- Exposure to irritants or water
- False nails
- Fibroma
- Formaldehyde
- Herpes simplex infection
- Hyperthyroidism
- Hypothyroidism
- Iron deficiency
- Ischemia
- Keratosis lichenoides chronica
- Langerhans cell histiocytosis
- Leprosy
- Lichen planus
- Lichen striatus
- Long nails
- Lupus erythematosus
- Melanoma
- Methyl methacrylate
- Neuritis
- Onychomycosis

- Pachyonychia congenita
- Paclitaxel
- Pellagra
- Pemphigus vulgaris
- Phototoxicity
- Pleural effusion
- Porphyria cutanea tarda
- Pregnancy
- Pseudomonal infection
- Psoriasis
- Psoriatic arthritis
- Reiter's syndrome
- Retinoids
- Sarcoidosis
- Scabies
- Scleroderma
- Squamous cell carcinoma
- Subungual exostosis
- Syphilis
- Trauma
- Verruca
- Yellow nail syndrome

### ***Associated Medications (Photoonycholysis)***

- 6-mercaptopurine
- Chloramphenicol
- Fluoroquinolones
- Psoralen
- Tetracyclines

### **Further reading:**

- Daniel CR III, Tosti A, Iorizzo M, Piraccini BM (2005) The disappearing nail bed: a possible outcome of onycholysis. *Cutis* 76(5):325–327

- Kechijian P (1985) Onycholysis of the fingernails: evaluation and management. *J Am Acad Dermatol* 12(3):552–560
- Piraccini BM, Iorizzo M, Starace M, Tosti A (2006) Drug-induced nail diseases. *Dermatol Clin* 24(3):387–391

## Oral Cobblestone Appearance

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- Cowden syndrome
- Crohn's disease
- Darier's disease
- Heck's disease
- Lipoid proteinosis
- Malignant acanthosis nigricans
- Mucosal neuroma syndrome
- Nicotine stomatitis
- Pseudoxanthoma elasticum

### Further reading:

- William T, Marsch WC, Schmidt F et al (2007) Early oral presentation of Crohn's disease. *J Dtsch Dermatol Ges* 5(8):678–679

## Oral Erosions

---

- Allergic contact stomatitis
- Aphthous stomatitis
- Behçet's disease
- Candidiasis
- Chemotherapy stomatitis
- Cicatricial pemphigoid
- Crohn's disease
- Epidermolysis bullosa acquisita





**Fig. 3.22** Erosive lichen planus

- Erythema multiforme
- Fixed drug eruption
- Herpes simplex virus infection
- Linear IgA bullous dermatosis
- Lupus erythematosus
- Oral erosive lichen planus (Fig. 3.22)
- Paraneoplastic pemphigus
- Pemphigus vulgaris
- Pyostomatitis vegetans
- Stevens–Johnson syndrome (Fig. 3.23)

**Further reading:**

- Ayangco L, Rogers RS III (2003) Oral manifestations of erythema multiforme. *Dermatol Clin* 21(1):195–205



**Fig. 3.23** Stevens–Johnson syndrome (Courtesy of A. Record)

### Painful and Acral

- Abscess
- Achenbach syndrome
- Acral erythema
- Arthropod bite
- Behçet's disease
- Chilblains
- Chilblains lupus
- Coumadin blue-toe syndrome
- Erythema multiforme
- Erythromelalgia
- Fabry's disease
- Granuloma annulare, acute-onset painful type
- Metastatic lesions
- Neutrophilic eccrine hidradenitis
- Osler's nodes

- Palmar granuloma annulare
- Papular purpuric gloves and socks syndrome
- Piezogenic pedal papules
- Plantar eccrine hidradenitis
- Plantar erythema nodosum
- Pressure urticaria
- *Pseudomonas* hot-foot syndrome
- Raynaud's phenomenon
- Sarcoidosis
- Scleroderma
- Sweet's syndrome
- Traumatic neuroma
- Vasculitis

**Further reading:**

- Brey NV, Malone J, Callen JP (2006) Acute-onset, painful acral granuloma annulare: a report of 4 cases and a discussion of the clinical and histologic spectrum of the disease. *Arch Dermatol* 142(1):49–54

**Painful Nodule**

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- Angioleiomyoma
- Angiolipoma
- Blue rubber bleb nevus
- Calciphylaxis
- Chondrodermatitis nodularis helices
- Dercum's disease
- Eccrine spiradenoma
- Endometriosis
- Erythema nodosum
- Erythema nodosum leprosum
- Furunculosis/abscess
- Glomus tumor
- Granular cell tumor
- Leiomyoma

- Metastatic lesion
- Neurilemmoma
- Osler's nodes
- Piezogenic pedal papules
- Schwannoma
- Sweet's syndrome

**Further reading:**

- Rothman A, Glenn G, Choyke L et al (2006) Multiple painful cutaneous nodules and renal mass. *J Am Acad Dermatol* 55(4):683–686

**Palmar Erythema**

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- Acute graft-vs-host disease
- Chemotherapy-induced acral erythema
- Cirrhosis
- CNS tumor
- Dermatomyositis
- Endocarditis
- Erythromelalgia
- Granuloma annulare
- Hyperthyroidism
- Leukemia
- Papular and purpuric gloves and stockings syndrome
- Pregnancy
- Rheumatoid arthritis
- Rocky Mountain spotted fever
- Systemic lupus erythematosus
- Trichinosis
- Topiramate

**Further reading:**

- Noble JP, Boisnic S, Branchet-Gumila MC et al (2002) Palmar erythema: cutaneous marker of neoplasms. *Dermatology* 204(3):209–213
- Scheinfeld N, Spahn C (2004) Palmar erythema due to topiramate. *J Drugs Dermatol* 3(3):321–322

## Palmar Pitting/Keratoses

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- Arsenical keratoses
- Basal cell nevus syndrome
- Basaloid follicular hamartoma syndrome
- Chronic renal failure
- Cowden syndrome
- Darier's disease
- Pitted keratolysis
- Paraneoplastic filiform hyperkeratosis
- Porokeratosis punctata palmaris et plantaris
- Porokeratotic eccrine ostial and dermal duct nevus
- Punctate keratoderma
- Punctate keratoses of the palmar creases
- Reticulate acropigmentation of Kitamura
- Sarcoidosis
- Spiny "music box" keratoses
- Warts

### Further reading:

- Fox GN (2005) Puzzling palmar papules and pits. *J Fam Pract* 54(3):227–230
- Mehta RK, Mallett RB, Green C, Rytina E (2002) Palmar filiform hyperkeratosis (FH) associated with underlying pathology? *Clin Exp Dermatol* 27(3):216–219

## Palmoplantar Keratoderma, Acquired

---

- Acral mycosis fungoides
- Acrokeratosis paraneoplastica
- Aquagenic keratoderma
- Arsenical keratoses
- Calluses/corns
- Confluent HPV infection
- Dyshidrotic eczema
- Eczema
- HIV related

- Howell–Evans syndrome
- Hypothyroidism-related keratoderma
- Keratoderma blenorrhagicum
- Keratoderma climactericum (Haxthausen syndrome)
- Leprosy
- Lichen planus
- Norwegian scabies
- Obesity associated
- Paraneoplastic keratoderma
- Pityriasis rubra pilaris
- Psoriasis
- Secondary syphilis
- Sezary syndrome
- Systemic lupus erythematosus
- Tinea manuum/pedis
- Tripe palms
- Tuberculosis verrucosa cutis

**Further reading:**

- Patel S, Zirwas M, English JC III (2007) Acquired palmoplantar keratoderma. *Am J Clin Dermatol* 8(1):1–11

## **Palmoplantar Keratoderma, Inherited**

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### ***Diffuse***

- Bart–Pumphrey syndrome
- Erythrokeratoderma variabilis
- Hidrotic ectodermal dysplasia (Clouston)
- Huriez syndrome with scleroatrophy
- Mal de Meleda
- Naxos disease
- Olmsted syndrome
- Papillon–Lefèvre syndrome
- Palmoplantar keratoderma with sensorineural deafness



**Fig. 3.24** Striate palmoplantar keratoderma

- Sybert type (Greither's type)
- Unna–Thost nonepidermolytic type
- Vohwinkel's syndrome
- Vörner's epidermolytic type

### ***Focal***

- Carvajal syndrome
- Hereditary painful callosities
- Howel–Evans syndrome
- Nummular epidermolytic type
- Pachyonychia congenita, type I
- Pachyonychia congenita, type II
- Richner–Hanhart syndrome (tyrosinemia, type II)
- Striate type (Braunauer–Fohs–Siemens; Fig. 3.24)

### ***Punctate***

- Acrokeratoelastoidosis
- Focal acral hyperkeratosis
- Punctate keratoses of the palmar creases
- Punctate palmoplantar keratoderma

## *Transgrediens*

- Hidrotic ectodermal dysplasia
- Erythrokeratoderma variabilis
- Sybert (Greither's) type
- Mal de Meleda
- Olmsted syndrome
- Papillon–Lefèvre syndrome
- Vohwinkel syndrome

### **Further reading:**

- Itin PH, Fistarol SK (2005) Palmoplantar keratodermas. *Clin Dermatol* 23(1):15–22
- Kimyai-Asadi A, Kotcher LB, Jih MH (2002) The molecular basis of hereditary palmoplantar keratodermas. *J Am Acad Dermatol* 47(3):327–343
- Ratnavel RC, Griffiths WA (1997) The inherited palmoplantar keratodermas. *Br J Dermatol* 137(4):485–490

## **Panniculitis**

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- Antitrypsin deficiency panniculitis
- Behçet's disease
- Calciphylaxis
- Cellulitis
- Cold panniculitis
- Cytophagic histiocytic panniculitis
- Deep granuloma annulare
- Equestrian panniculitis
- Erythema nodosum
- Erythema nodosum leprosum
- Factitial injury
- Infectious panniculitis
- Lipodermatosclerosis
- Lupus panniculitis
- Lymphoma
- Morphea profunda



- Neutrophilic panniculitis of rheumatoid arthritis
- Nicolau syndrome
- Nodular vasculitis
- Oxalosis
- Panniculitis of dermatomyositis
- Polyarteritis nodosa
- Scleroderma
- Subcutaneous fat necrosis
- Subcutaneous T cell lymphoma
- Thrombophlebitis

### ***Evaluation***

- ACE level
- Antineutrophil cytoplasmic antibodies
- Antinuclear antibodies
- Antistreptolysin O titer
- Antitrypsin level
- Calcium
- Chest radiograph
- Colonoscopy
- CT scan of chest, abdomen, and pelvis
- Fasting glucose
- Immunohistochemistry stains for lymphoma/leukemia
- Lower extremity Doppler ultrasound
- Pancreatic enzymes
- Parathyroid hormone
- Phosphate
- Polarizing microscopy
- Rheumatoid factor level
- Serum protein electrophoresis
- Tissue culture for bacteria, mycobacteria, and fungus
- Tuberculin skin test
- Uric acid

**Further reading:**

- Requena L, Yus ES (2001) Panniculitis. Part I. Mostly septal panniculitis. *J Am Acad Dermatol* 45(2):163–183
- Requena L, Sanchez Yus E (2001) Panniculitis. Part II. Mostly lobular panniculitis. *J Am Acad Dermatol* 45(3):325–361

**Papules, Acneiform**

- Acne aestivalis
- Acne conglobata
- Acne cosmetica
- Acne excoriee
- Acne fulminans
- Acne mechanica
- Acne miliaris necrotica
- Acne necrotica
- Acne vulgaris
- Acneiform follicular mucinosis
- Angiofibromas (Fig. 3.25)
- Behçet's disease
- Chloracne
- Cryptococcosis
- Cutaneous Rosai–Dorfman disease
- Disseminate and recurrent infundibulofolliculitis
- Drug reaction
- Drug-induced acne
- Eosinophilic folliculitis
- Eruptive milia
- Eruptive syringomas
- Eruptive vellus hair cysts
- Folliculitis
- Histoplasmosis
- Hormonal acne
- Infantile acne
- Milia



**Fig. 3.25** Angiofibromas (Courtesy of K. Guidry)

- Neonatal acne
- Occupational acne
- Papular eruption of HIV
- Papular xanthoma
- Periorificial dermatitis
- Pityrosporum folliculitis
- Pseudofolliculitis barbae
- Radiation acne
- Rosacea
- Secondary syphilis
- Steroid acne
- Trichoepithelioma
- Tropical acne

#### ***Associated Medications***

- Bromides
- Coal tar

- Cyclosporine
- Dactinomycin
- Daunorubicin
- EGF receptor inhibitors
- Isoniazid
- Iodides
- Lithium
- Methotrexate
- Oral contraceptives
- Phenytoin
- Progesterone-based oral contraception
- Rifampin
- Systemic corticosteroids
- Testosterone
- Topical steroids
- 5-FU

**Further reading:**

- Passaro EM, Silveira MT, Valente NY (2004) Acneiform follicular mucinosis. *Clin Exp Dermatol* 29(4):396–398
- Plewig G, Jansen T (1998) Acneiform dermatoses. *Dermatology* 196(1):102–107

**Papules, Flesh Colored**

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- Acrochordon
- Colloid milium
- Connective tissue nevus
- Eruptive vellus hair cyst
- Follicular mucinosis
- Granuloma annulare
- Granulomatous periorificial dermatitis
- Intra-dermal nevus
- Leiomyoma
- Lichen nitidus
- Molluscum

- Neurofibroma
- Palisaded encapsulated neuroma
- Papular mucinosis
- Piezogenic pedal papules
- Subcutaneous lesion
- Syringoma
- Trichoepithelioma
- Verruca plana

**Further reading:**

- Kineston DP, Willard RJ, Krivda SJ (2004) Flesh-colored papules on the wrists of a 61-year-old man. *Arch Dermatol* 140(1):121–126

**Papules, Umbilicated**

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- Basal cell carcinoma
- Coccidioidomycosis
- Cryptococcosis
- Eczema herpeticum
- Eruptive xanthomas
- Granuloma annulare
- Histoplasmosis
- Keratoacanthoma
- Lichen planus
- Molluscum contagiosum
- Palisaded neutrophilic and granulomatous dermatitis
- Perforating disorders
- Prurigo nodularis
- Sebaceous hyperplasia
- Smallpox

**Further reading:**

- Karakatsanis G, Patsatsi A, Kastoridou C et al (2007) Palmoplantar lichen planus with umbilicated papules: an atypical case with rapid therapeutic response to cyclosporin. *J Eur Acad Dermatol Venereol* 21(7):1006–1007

## Papules, Vascular

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- Acquired elastotic hemangioma
- Acroangiodermatitis
- Atypical fibroxanthoma
- Amelanotic melanoma
- Angina bullosa hemorrhagica
- Angiokeratoma
- Angiolymphoid hyperplasia with eosinophilia
- Angioma serpiginosum
- Angiosarcoma
- APACHE syndrome
- Bacillary angiomatosis
- Blue rubber bleb nevus
- Congenital hemangioma
- Eruptive pseudoangiomatosis
- Eruptive pyogenic granuloma
- Glomus tumor
- Infantile hemangioma
- Intravascular lymphoma
- Kaposi's sarcoma
- Merkel cell carcinoma
- Metastatic renal cell carcinoma
- Multinucleate cell angiohistiocytoma
- Poorly differentiated squamous cell carcinoma
- Pyogenic granuloma (Fig. 3.26)
- Reactive angioendotheliomatosis
- Targetoid hemosiderotic hemangioma
- Telangiectatic metastatic breast cancer
- Venous lake

### Further reading:

- Patrizi A, Neri I, D'Acunzio C et al (2003) Asymptomatic, smooth, violaceous papules of the thighs. *Arch Dermatol* 139(7):933–938



**Fig. 3.26** Eruptive pyogenic granulomas

### Papules, Verrucous

- Acrokeratosis verruciformis
- Angiokeratoma circumscriptum
- Blastomycosis-like pyoderma
- Bowenoid papulosis
- Condyloma acuminatum
- Condyloma lata
- Confluent and reticulated papillomatosis
- Costello syndrome
- Cowden syndrome
- Darier's disease
- Deep fungal infection
- Eccrine syringofibroadenoma
- Elephantiasis verrucosa nostra
- Epidermal nevus

- Epidermodysplasia verruciformis
- Granular cell tumor
- Halogenoderma
- Hypertrophic lichen planus
- Hypertrophic lupus erythematosus
- Incontinentia pigmenti, second stage
- Keratosis lichenoides chronica
- Lichen amyloidosis
- Lichen striatus
- Lipoid proteinosis
- Lymphangioma circumscriptum
- Nevus sebaceous
- Norwegian scabies
- Porocarcinoma
- Porokeratosis
- Prurigo nodularis
- Sebaceous adenoma
- Seborrheic keratosis
- Syringocystadenoma papilliferum
- Trichilemmoma
- Tuberculosis verrucosa cutis
- Verruca
- Verruciform xanthoma
- Verrucous carcinoma
- Verrucous hemangioma
- Verrucous psoriasis
- Verrucous syphilis
- Warty dyskeratoma

**Further reading:**

- Gonzalez ME, Blanco FP, Garzon MC (2007) Verrucous papules and plaques in a pediatric patient: cutaneous papillomas associated with Costello syndrome. Arch Dermatol 143(9):1201–1206



## Pathergy

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- Behçet's disease
- Bowel bypass syndrome
- Eosinophilic pustular folliculitis
- Pyoderma gangrenosum
- Sweet's syndrome
- Wegener's granulomatosis

### Further reading:

- Hsu PJ, Huang CJ, Wu MT (2005) Pathergy in atypical eosinophilic pustular folliculitis. *Int J Dermatol* 44(3):203–205

## Peau d'Orange Appearance

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- Breast cancer
- Calciphylaxis
- Chronic lymphedema
- Eosinophilic fasciitis
- Eosinophilia–myalgia syndrome
- Granuloma faciale
- Mastocytoma
- Nephrogenic fibrosing dermopathy
- Pretibial myxedema
- Sarcoidosis
- Scleredema

### Further reading:

- Nahm WK, Badiavas E, Touma DJ et al (2002) Calciphylaxis with peau d'orange induration and absence of classical features of purpura, livedo reticularis and ulcers. *J Dermatol* 29(4):209–213
- Solomon GJ, Wu E, Rosen PP (2007) Nephrogenic systemic fibrosis mimicking inflammatory breast carcinoma. *Arch Pathol Lab Med* 131(1):145–148

## Penile Rash

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- Behçet's disease
- Circinate balanitis
- Contact dermatitis
- Crohn's disease
- Fixed drug eruption
- Lichen nitidus
- Lichen planus
- Lichen sclerosus
- Necrobiosis lipoidica
- Pediculosis pubis
- Pityriasis rosea
- Plasma cell balanitis
- Pseudoepitheliomatous, keratotic, and micaceous balanitis
- Psoriasis
- Sarcoidosis
- Scabies
- Sexually transmitted disease

### Further reading:

- Buechner SA (2002) Common skin disorders of the penis. *BJU Int* 90(5):498–506

## Penile and Scrotal Edema

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- Allergic contact dermatitis
- Angioedema
- Bladder cancer
- Colon cancer
- Crohn's disease
- Filariasis
- Hematocele
- Hypoproteinemia
- Incarcerated hernia
- Kawasaki disease

- Pancreatitis
- Parenteral fluid overload
- Paraffinoma
- Penile tourniquet syndrome
- Peritonitis
- Postoperative
- Postradiation
- Priapism
- Prostatic cancer
- Smooth muscle hamartoma of scrotum
- Torsion
- Varicocele
- Venereal disease

**Further reading:**

- Weinberger LN, Zirwas MJ, English JC III (2007) A diagnostic algorithm for male genital oedema. *J Eur Acad Dermatol Venereol* 21(2):156–162

**Perforating**

- Acquired perforating dermatosis
- Calcinosis cutis
- Elastosis perforans serpiginosa
- Perforating calcific elastosis
- Perforating folliculitis
- Perforating granuloma annulare
- Perforating necrobiosis lipoidica
- Perforating periumbilical calcific elastosis
- Pilomatrixoma
- Reactive perforating collagenosis

**Further reading:**

- Ohnishi T, Nakamura Y, Watanabe S (2003) Perforating pilomatrixoma in a process of total elimination. *J Am Acad Dermatol* 49(2 Suppl Case Reports):S146–S148
- Vanhooteghem O, Andre J, Brassinne M de la (2005) Epidermoid carcinoma and perforating necrobiosis lipoidica: a rare association. *J Eur Acad Dermatol Venereol* 19(6):756–758

## Perianal

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- Acrodermatitis enteropathica
- Anal fissures
- Anosacral amyloidosis
- Baboon syndrome
- Candidiasis
- Contact dermatitis
- Crohn's disease
- Dermatophyte infection
- Early decubitus ulcer
- Extramammary Paget's disease
- Fixed drug eruption
- Fournier's gangrene
- Herpes simplex virus infection
- Intertrigo
- Kawasaki disease
- Necrolytic migratory erythema
- Perianal pyramidal protrusion
- Pilonidal cyst
- Pinworm infestation
- Pruritus ani
- Psoriasis
- Streptococcal perianal eruption
- Syphilis

### Further reading:

- Bauer A, Geier J, Elsner P (2000) Allergic contact dermatitis in patients with anogenital complaints. *J Reprod Med* 45(8):649–654

## Periodontitis

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- Chediak–Higashi syndrome
- Congenital neutropenias

- Ehlers–Danlos, types IV and VIII
- Haim–Munk syndrome
- Juvenile colloid milium
- Kindler syndrome
- Langerhans cell histiocytosis
- Leukocyte adhesion deficiency
- Papillon–Lefèvre syndrome
- Scurvy

**Further reading:**

- Hart TC, Atkinson JC (2007) Mendelian forms of periodontitis. *Periodontology* 45:95–112

**Periorbital Edema**

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- Acute sinusitis
- Amyloidosis
- Angioedema
- Cellulitis
- Contact dermatitis
- Dermatomyositis
- EBV infection
- Imatinib therapy
- Leukemia
- Lupus erythematosus
- Lymphatic malformation
- Melkersson–Rosenthal syndrome
- Mucormycosis
- Sarcoidosis
- Scleredema
- Seasonal allergies
- Superior vena cava syndrome
- Tumor necrosis factor receptor-associated periodic syndrome
- Trichinosis

**Further reading:**

- Ioannidou DI, Krasagakis K, Stefanidou MP et al (2005) Scleredema adutorum of Buschke presenting as periorbital edema: a diagnostic challenge. *J Am Acad Dermatol* 52(2 Suppl 1):41–44
- Rafailidis PI, Falagas ME (2007) Fever and periorbital edema: a review. *Surv Ophthalmol* 52(4):422–433

**Petechiae**

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- Acquired platelet function defects
- Aspirin therapy
- Bone marrow failure
- Congenital platelet function defects
- Dengue hemorrhagic fever
- Disseminated intravascular coagulation
- Drug-induced (see purpura)
- Essential thrombocytosis
- Hypergammaglobulinemic purpura
- Immune thrombocytopenic purpura
- Langerhans cell histiocytosis
- Monoclonal gammopathy
- Parvovirus infection
- Pigmented purpuric dermatoses
- Renal insufficiency
- Rocky Mountain spotted fever
- Scurvy
- Stasis-related
- Thrombocytopenia
- Thrombotic thrombocytopenic purpura
- Trauma
- Valsalva-related
- Wiskott–Aldrich syndrome

**Further reading:**

- McNeely M, Friedman J, Pope E (2005) Generalized petechial eruption induced by parvovirus B19 infection. *J Am Acad Dermatol* 52(5 Suppl 1):S109–S113

## Phimosiis

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- Chancroid
- Chronic inflammation/infection
- Histoplasmosis
- Lichen sclerosus
- Squamous cell carcinoma
- Syphilis
- Verrucous carcinoma
- Trauma

### Further reading:

- Ariyanayagam-Baksh SM, Baksh FK, Cartun RW et al (2007) Histoplasma phimosiis: an uncommon presentation of a not uncommon pathogen. *Am J Dermatopathol* 29(3):300–302
- Fueston JC, Adams BB, Mutasim DF (2002) Cicatricial pemphigoid-induced phimosiis. *J Am Acad Dermatol* 46(5 Suppl):S128–S129

## Photoaggravated

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- Acne vulgaris
- Atopic dermatitis
- Bullous pemphigoid
- Carcinoid syndrome
- Contact dermatitis
- Cutaneous T cell lymphoma
- Darier's disease
- Dermatomyositis
- Disseminated superficial actinic porokeratosis
- Erythema multiforme
- Grover's disease
- Hailey–Hailey disease
- Hartnup syndrome
- Herpes simplex virus infection
- Lichen planus

- Lupus erythematosus
- Pellagra
- Pemphigus erythematosus
- Pityriasis rubra pilaris
- Psoriasis
- Reticular erythematous mucinosis
- Rosacea
- Seborrheic dermatitis
- Sweet's syndrome
- Viral exanthem

**Further reading:**

- Murphy GM (2001) Diseases associated with photosensitivity. *J Photochem Photobiol B* 64(2–3):93–98

**Poikiloderma**

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- Bloom syndrome
- Cockayne syndrome
- Dermatomyositis
- Dyskeratosis congenita
- Erythema ab igne
- Goltz syndrome
- Lupus erythematosus
- Macular amyloidosis
- Poikiloderma of Civatte
- Poikiloderma atrophicans vasculare
- Poikilodermatous mycosis fungoides
- Radiation dermatitis
- Rothmund–Thomson syndrome
- Topical steroid-induced
- Weary–Kindler syndrome
- Xeroderma pigmentosum

**Further reading:**

- Lipsker D (2003) What is poikiloderma? *Dermatology* 207(3):243–245



## Poliosis

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- Alezzandrini syndrome
- Alopecia areata (regrowth phase)
- Associated with nevus comedonicus
- Halo nevus
- Idiopathic poliosis
- Isolated white forelock
- Marfan syndrome
- Neurofibromatosis
- Nevus depigmentosus
- Piebaldism
- Postinflammatory poliosis
- Posttraumatic poliosis
- Rubinstein–Taybi syndrome
- Tuberous sclerosis
- Vitiligo
- Vogt–Koyanagi–Harada syndrome
- Waardenburg syndrome

### Further reading:

- Wu JJ, Huang DB, Tying SK (2006) Postherpetic poliosis. *Arch Dermatol* 142(2):250–251

## Pseudoainhum

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- Actinic reticuloid
- Burn
- Cutaneous T cell lymphoma
- Ehlers–Danlos syndrome
- Erythropoietic protoporphyria
- Factitial disease
- Frostbite
- Hair or thread tourniquet
- Leishmaniasis

- Leprosy
- Mal de Meleda
- Olmstead syndrome
- Pachyonychia congenita
- Parasitic disease
- Porokeratosis of Mibelli
- Pityriasis rubra pilaris
- Psoriasis
- Scleroderma
- Severe palmoplantar keratoderma
- Syphilis
- Syringomyelia
- Vohwinkel syndrome

**Further reading:**

- Rashid RM, Cowan E, Abbasi SA et al (2007) Destructive deformation of the digits with auto-amputation: a review of pseudo-ainhum. *J Eur Acad Dermatol Venereol* 21(6):732–737

**Pseudo-Hutchinson Sign**

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- Amlodipine therapy
- Bowen's disease
- Congenital nevus
- Ethnic pigmentation
- Hematoma
- Laugier–Hunziker disease
- Melanocytic nevus
- Minocycline pigmentation
- Nevoid melanosis
- Peutz–Jeghers syndrome
- Radiation
- Zidovudine therapy

**Further reading:**

- Baran R, Kechijian P (1996) Hutchinson's sign: a reappraisal. *J Am Acad Dermatol* 34(1):87–90
- Sladden MJ, Mortimer NJ, Osborne JE (2005) Longitudinal melanonychia and pseudo-Hutchinson sign associated with amlodipine. *Br J Dermatol* 153(1):219–220

**Pterygium** (Fig. 3.27)***Dorsal***

- Atherosclerosis
- Burns
- Cicatricial pemphigoid
- Congenital
- Diabetic vasculopathy
- Dyskeratosis congenita
- Graft-vs-host disease
- Idiopathic
- *Candida* paronychia

**Fig. 3.27** Pterygium

- Lichen planus
- Onychotillomania
- Pemphigus foliaceus
- Radiodermatitis
- Raynaud's phenomenon
- Sarcoidosis
- Systemic lupus erythematosus
- Toxic epidermal necrolysis
- Trauma
- Type II lepra reaction

### ***Ventral***

- Congenital
- Formaldehyde-containing hardeners
- Leprosy
- Neurofibromatosis
- Subungual exostosis
- Systemic lupus erythematosus
- Systemic sclerosis

### **Further reading:**

- Richert BJ, Patki A, Baran RL (2000) Pterygium of the nail. *Cutis* 66(5):343–346

## **Purpura and Ecchymoses**

### ***Flat and Nonbranching***

- Anticoagulant use
- Bateman's purpura
- Cullen and Turner signs
- Disseminated intravascular coagulation (Fig. 3.28)
- Ehlers–Danlos syndrome
- Gardner–Diamond syndrome



**Fig. 3.28** Disseminated intravascular coagulation (Courtesy of H. Gilchrist)

- Hepatic failure
- Hypergammaglobulinemic purpura
- Scurvy
- Steroid purpura
- Systemic AL amyloidosis
- Vitamin K deficiency
- Traumatic

### ***Palpable***

- Churg–Strauss syndrome
- Cutaneous small vessel vasculitis
- Henoch–Schonlein purpura
- Livedoid vasculopathy
- Microscopic polyangiitis
- Mixed cryoglobulinemia
- Pustular vasculitis
- Rheumatic vasculitis
- Septic emboli
- Urticarial vasculitis
- Wegener’s granulomatosis

**Retiform**

- Antiphospholipid antibody syndrome
- Aspergillosis
- Atrial myxoma
- Calciphylaxis
- Cholesterol emboli
- Churg–Strauss syndrome
- Cold agglutinins
- Coumadin necrosis
- Cryofibrinogenemia
- Cutaneous polyarteritis nodosa
- Ecthyma gangrenosum
- Endocarditis
- Heparin necrosis
- Livedoid vasculopathy
- Microscopic polyangiitis
- Monoclonal cryoglobulinemia
- Oxalosis
- Paroxysmal nocturnal hemoglobinuria
- Protein-C or protein-S deficiency
- Purpura fulminans
- Rheumatic vasculitis
- Sepsis
- Septic emboli
- Sickle cell disease
- Wegener's granulomatosis

**Neonatal**

- Alloimmune neonatal thrombocytopenia
- Alport syndrome variants
- Congenital (TORCH) infections
- Drug-related immune thrombocytopenia
- Extramedullary erythropoiesis

- Fanconi anemia
- Giant platelet syndromes (Bernard–Soulier, May–Hegglin)
- Glanzmann thrombasthenia
- Hemorrhagic disease of the newborn
- Hereditary clotting factor deficiencies
- Hermansky–Pudlak syndrome
- HIV infection
- Kasabach–Merritt syndrome
- Maternal autoimmune thrombocytopenia (ITP, lupus)
- Neonatal lupus erythematosus
- Protein-C and protein-S deficiency (neonatal purpura fulminans)
- Sepsis
- Thrombocytopenia with absent radii syndrome
- Trauma
- Trisomy 13 or 18
- Wiskott–Aldrich syndrome
- X-linked recessive thrombocytopenia

### ***Purpura Fulminans***

- Acetaminophen overdose
- *Capnocytophaga canimorsus* infection
- Catastrophic antiphospholipid antibody syndrome
- Churg–Strauss syndrome
- Factor-V Leiden mutation
- Gram-negative sepsis (various organisms)
- Idiopathic
- Meningococcemia
- Pneumococcal sepsis
- Protein-C and protein-S deficiency
- Scarlet fever
- Streptococcal infection
- Varicella
- *Vibrio vulnificus* infection

### ***Associated Medications***

- Allopurinol
- Aspirin
- Bactrim
- Barbiturates
- Chlorpromazine
- Diltiazem
- Furosemide
- Gold
- Hydantoins
- Isoniazid
- NSAIDs
- Penicillin
- Streptokinase
- Sulfonylureas
- Thiazides
- Thiouracils

### ***Evaluation***

- Antinuclear antibodies
- Antiphospholipid antibodies
- Bleeding time
- Blood cultures
- Complete blood count with smear
- Cryoglobulins
- Gamma globulin level
- Liver function test
- Partial thromboplastin time
- Protein-C and protein-S level
- Prothrombin time
- Rheumatoid factor level



- Serum protein electrophoresis
- Urinalysis

**Further reading:**

- Betrosian AP, Berlet T, Agarwal B (2006) Purpura fulminans in sepsis. *Am J Med Sci* 332(6):339–345
- Carlson JA, Chen KR (2007) Cutaneous pseudovasculitis. *Am J Dermatopathol* 29(1):44–55
- Carlson JA, Chen KR (2006) Cutaneous vasculitis update: small vessel neutrophilic vasculitis syndromes. *Am J Dermatopathol* 28(6):486–506
- Jones A, Walling H (2007) Retiform purpura in plaques: a morphological approach to diagnosis. *Clin Exp Dermatol* 32(5):596–602

**Pustules, Diffuse**

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- Acute generalized exanthematous pustulosis
- Amicrobial pustulosis
- Disseminated zoster
- Folliculitis
- Generalized pustular psoriasis
- Halogenoderma
- IgA pemphigus
- Infantile acropustulosis
- Monkeypox
- Occupational acne
- Pemphigus foliaceus
- Pustulosis acuta generalisata
- Smallpox
- Subcorneal pustular dermatosis
- Varicella
- Viral exanthem (Fig. 3.29)

**Further reading:**

- Patrizi A, Savoia F, Giacomini F et al (2007) Diffuse acute pustular eruption after streptococcal infection: a new instance of pustulosis acuta generalisata. *Pediatr Dermatol* 24(3):272–276



**Fig. 3.29** Viral exanthem

## **Red Man Syndrome, Postinfusion**

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### ***Associated Medications***

- Amphotericin B
- Ciprofloxacin
- Infliximab
- Rifampin
- Teicoplanin
- Vancomycin

### **Further reading:**

- Sivagnanam S, Deleu D (2003) Red man syndrome. *Crit Care* 7(2):119–120

## **Reticulated**

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- Atopic dirty neck
- Cantu syndrome

- Confluent and reticulated papillomatosis
- Cutis marmorata
- Dermatopathia pigmentosa reticularis
- Dowling–Degos disease
- Dyskeratosis congenita
- Eccrine hidradenitis
- Epidermolysis bullosa herpetiformis
- Erythema ab igne
- Erythema infectiosum
- Fanconi’s anemia
- Galli–Galli disease
- Keratosis lichenoides chronica
- Livedo reticularis
- Mycosis fungoides
- Naegeli–Franceschetti–Jadassohn syndrome
- Pigmentatio reticularis faciei et colli
- Prurigo pigmentosa
- Reticular erythematous mucinosis
- Reticulate acropigmentation of Kitamura
- Retiform parapsoriasis
- Rothmund–Thomson syndrome
- X-linked reticulate pigmentary disorder
- Tinea versicolor
- Weary–Kindler syndrome

**Further reading:**

- Martin JM, Jorda E, Monteagudo C et al (2007) Occlusive eccrine hidradenitis presented as a reticulated eruption on the buttocks. *Pediatr Dermatol* 24(5):561–563

**Retroauricular**

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- Acanthoma fissuratum
- Allergic contact dermatitis
- Basal cell carcinoma
- Chloracne



**Fig. 3.30** Darier's disease (Courtesy of A. Record)

- Darier's disease (Fig. 3.30)
- Hyperimmunoglobulin E syndrome
- Infectious eczematoid dermatitis
- Infective dermatitis
- Langerhans cell histiocytosis
- Merkel cell carcinoma
- Milia en plaque
- Norwegian scabies
- Psoriasis
- Seborrheic dermatitis
- Squamous cell carcinoma

**Further reading:**

- Mahe A, Meertens L, Ly F et al (2004) Human T-cell leukaemia/lymphoma virus type I-associated infective dermatitis in Africa: a report of five cases from Senegal. *Br J Dermatol* 150(5):958–965

**Saddle-Nose Deformity**

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- Anhidrotic ectodermal dysplasia
- Congenital rubella
- Congenital syphilis
- Crohn's disease
- Hurler syndrome
- Leishmaniasis
- Lepromatous leprosy
- Pyoderma gangrenosum
- Relapsing polychondritis
- Trauma
- Wegener's granulomatosis

**Further reading:**

- Daniel RK, Brenner KA (2006) Saddle nose deformity: a new classification and treatment. *Facial Plast Surg Clin North Am* 14(4):301–312

**Scalp**

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- Acne necrotica
- Actinic keratosis
- Alopecia areata
- Alopecia neoplastica
- Angiosarcoma
- Atypical fibroxanthoma
- Aplasia cutis congenita
- Basal cell carcinoma
- Brunsting–Perry cicatricial pemphigoid

- Central centrifugal cicatricial alopecia
- Cirroid aneurysm
- Contact dermatitis
- Cranial fasciitis
- Cutis verticis gyrata
- Cylindroma
- Darier's disease
- Dermatitis herpetiformis
- Discoid lupus erythematosus
- Dissecting cellulitis
- Erosive pustular dermatosis
- Folliculitis
- Kerion
- Langerhans cell histiocytosis
- Leprosy
- Lichen planopilaris
- Lichen simplex chronicus
- Melanoma
- Meningioma
- Merkel cell carcinoma
- Metastatic lesions
- Myiasis
- Nevus sebaceous
- Pediculosis capitis
- Pemphigus foliaceus
- Pilar cyst
- Pityriasis amiantacea
- Proliferating pilar tumor
- Psoriasis
- Pyogenic granuloma
- Sarcoidosis
- Scalp dysesthesia
- Seborrheic dermatitis
- Seborrheic keratosis

- Squamous cell carcinoma
- Syphilis
- Syringocystadenoma papilliferum
- Temporal arteritis
- Tinea capitis
- Tuberculosis
- Warty dyskeratoma
- Zoster

**Further reading:**

- Hillen U, Grabbe S, Uter W (2007) Patch test results in patients with scalp dermatitis. *Contact Dermatitis* 56(2):87–93

**Scalp Nodule, Child**

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- Aplasia cutis congenita
- Arteriovenous fistula
- Cephalocele
- Cephalohematoma
- Cranial fasciitis
- Dermoid cyst
- Foreign body granuloma
- Furuncular myiasis
- Hemangioma
- Heterotopic brain tissue
- Langerhans cell histiocytosis
- Lipoma
- Lymphangioma
- Meningioma
- Metastatic disease
- Osteoma
- Pilomatrixoma
- Sarcoidosis
- Schwannoma

- Sinus pericranii
- Subcutaneous granuloma annulare

**Further reading:**

- Yébenes M, Gilaberte M, Román J et al (2007) Cranial fasciitis in an 8-year-old boy: clinical and histopathologic features. *Pediatr Dermatol* 24(4):E26–E30

**Scalp, Scaly**

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- Actinic keratoses
- Atopic dermatitis
- Crusted scabies
- Dermatomyositis
- Discoid lupus erythematosus
- Erosive pustular dermatosis
- Favus
- Infective dermatitis
- Keratosis follicularis spinulosa decalvans
- Langerhans cell histiocytosis
- Pityriasis amiantacea
- Pityriasis rubra pilaris
- Psoriasis
- Seborrheic dermatitis
- Secondary syphilis
- Tinea capitis

**Further reading:**

- Kasteler JS, Callen JP (1994) Scalp involvement in dermatomyositis. Often overlooked or misdiagnosed. *JAMA* 272(24):1939–1941

**Scars, Occurs in**

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- Amyloidosis
- Basal cell carcinoma
- Endometriosis



- Lichen nitidus
- Lichen planus
- Lichen sclerosus
- Metaplastic synovial cyst
- Metastatic Crohn's disease
- Metastatic disease
- Milia
- Necrobiosis lipoidica
- Pityriasis rubra pilaris
- Psoriasis
- Recurrent lesion
- Sarcoidosis
- Squamous cell carcinoma
- Suture granuloma
- Xanthoma

**Further reading:**

- Rubin AI, Stiller MJ (2002) A listing of skin conditions exhibiting the Koebner and pseudo-Koebner phenomena with eliciting stimuli. *J Cutan Med Surg* 6(1):29–34

**Sclera, Blue**

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- Argyria
- Ehlers–Danlos syndrome
- Goltz syndrome
- Incontinentia pigmenti
- Marfan syndrome
- Minocycline therapy
- Nevus of Ota
- Ochronosis
- Osteogenesis imperfecta
- Pseudoxanthoma elasticum

**Further reading:**

- McAllum P, Slomovic A (2007) Scleral and conjunctival pigmentation following minocycline therapy. *Can J Ophthalmol* 42(4):626–627

## Scrotum

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- Addicted scrotum (steroids)
- Allergic contact dermatitis
- Angiokeratoma of Fordyce
- Behçet's disease
- Bowenoid papulosis
- Candidiasis
- Condyloma acuminatum
- Condyloma lata
- Crohn's disease
- Extramammary Paget's disease
- Fixed drug eruption
- Fournier's gangrene
- Hailey–Hailey disease
- Idiopathic scrotal calcinosis
- Irritant contact dermatitis
- Leiomyoma
- Lichen nitidus
- Lichen planus
- Lichen sclerosus
- Lichen simplex chronicus
- Metastatic lesions
- Necrolytic migratory erythema
- Porokeratosis of Mibelli
- Pruritus scroti
- Psoriasis
- Riboflavin deficiency
- Seborrheic dermatitis
- Zinc deficiency

### Further reading:

- Im M, Kye KC, Kim JM et al (2007) Extramammary Paget's disease of the scrotum with adenocarcinoma of the stomach. *J Am Acad Dermatol* 57(2 Suppl):S43–S45

## Seborrheic Distribution

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- Confluent and reticulated papillomatosis
- Darier's disease
- Fogo selvagem
- Grover's disease
- Langerhans cell histiocytosis
- Pemphigus foliaceus
- Pityrosporum folliculitis
- Seborrheic dermatitis
- Tinea versicolor

### Further reading:

- Gupta AK, Batra R, Bluhm R et al (2004) Skin diseases associated with *Malassezia* species. *J Am Acad Dermatol* 51(5):785–798

## Serpiginous

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- Epidermal nevus
- Elastosis perforans serpiginosa
- Erythema annulare centrifugum
- Erythema gyratum repens
- Erythrokeratoderma variabilis
- Granuloma annulare
- Hypomelanosis of Ito
- Ichthyosis hystrix
- Incontinentia pigmenti, third stage
- Jellyfish sting
- Larval migrans
- Lichen striatus
- Linear IgA bullous dermatosis
- Porokeratosis
- Subacute cutaneous lupus erythematosus
- Subcorneal pustular dermatosis

- Tertiary syphilis
- Tinea corporis
- Urticaria

**Further reading:**

- Kaminska-Winciorek G, Pierzchala E et al (2007) Cutaneous larva migrans syndrome: clinical and ultrasonographic picture of the skin lesions. *Eur J Dermatol* 17(3):246–247

## **Splinter Hemorrhages**

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- Antiphospholipid antibody syndrome
- Endocarditis
- High-altitude living
- HIV infection
- Lupus erythematosus
- Meningococemia
- Onychomycosis
- Psoriasis
- Sarcoidosis
- Septic emboli
- Thyroid disease
- Trauma
- Trichinosis
- Vasculitis

**Further reading:**

- Saladi RN, Persaud AN, Rudikoff D et al (2004) Idiopathic splinter hemorrhages. *J Am Acad Dermatol* 50(2):289–292

## **Sporotrichoid**

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- Anthrax
- Atypical mycobacteria

- Cat-scratch disease
- Chromoblastomycosis
- Dimorphic fungi
- Leishmaniasis
- Mycetoma
- Nocardiosis
- Pyogenic lesions
- Streptococcal pyoderma
- Sporotrichosis
- Syphilis
- Tuberculosis
- Tularemia

**Further reading:**

- Madan V, Lear JT (2007) Sporotrichoid streptococcal pyoderma. *J Eur Acad Dermatol Venereol* 21(4):572–573

**Targetoid**

- Acute hemorrhagic edema of infancy
- Bullous pemphigoid
- Dermatophytosis
- Erythema multiforme-like contact dermatitis
- Erythema multiforme-like ID reaction
- Erythema migrans
- Erythema multiforme
- Fixed drug eruption
- Granuloma annulare
- Halo nevus
- Lepromatous leprosy
- Linear IgA bullous dermatosis
- Lupus erythematosus tumidus
- Metastatic lesions
- Nevus en cocarde



**Fig. 3.31** Stevens–Johnson syndrome (Courtesy of A. Record)

- Pigmented purpuric dermatosis
- Pityriasis rosea
- Rowell's syndrome
- Secondary syphilis
- Serum-sickness like drug eruption
- Stevens–Johnson syndrome (Fig. 3.31)
- Subacute cutaneous lupus erythematosus
- Targetoid hemosiderotic hemangioma
- Toxic epidermal necrolysis
- Urticarial vasculitis
- Vasculitis

**Further reading:**

- Atzori L, Pau M, Aste M (2003) Erythema multiforme ID reaction in atypical dermatophytosis: a case report. *J Eur Acad Dermatol Venereol* 17(6):699–701
- Dereure O, Guilhou JJ, Guillot B (2003) An unusual clinical pattern of cutaneous metastasis: target-like lesions. *Br J Dermatol* 148(2):361

## Telangiectasias

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- Angioma serpiginosum
- Ataxia–telangiectasia
- Bloom syndrome
- Carcinoid syndrome
- Carcinoma telangiectaticum
- Corticosteroids
- CREST syndrome
- Cutis marmorata telangiectatica congenita
- Dermatomyositis
- Dyskeratosis congenita
- Essential telangiectasia
- Goltz syndrome
- Hereditary benign telangiectasia
- HIV infection
- Klippel–Trenaunay syndrome
- Liver disease
- Lupus erythematosus
- Lupus pernio
- Medication-induced telangiectasia
- Mycosis fungoides
- Nevus araneus
- Osler–Weber–Rendu disease
- Photodamage
- Pregnancy
- Radiodermatitis
- Rosacea
- Rothmund–Thomson syndrome
- Scleroderma
- Telangiectasia macularis eruptiva perstans
- Telangiectatic hemangioma
- Trauma

- Unilateral nevoid telangiectasia
- Venous hypertension
- Xeroderma pigmentosum

### ***Associated Medications***

- Calcium channel blockers
- Cefotaxime
- Corticosteroids
- Interferons
- Isotretinoin
- Lithium
- Methotrexate
- Oral contraception
- Thiothixene

### **Further reading:**

- MacFarlane DF, Gregory N (1994) Telangiectases in human immunodeficiency virus-positive patients. *Cutis* 53(2):79–80
- Silvestre JF, Albares MP, Carnero L et al (2001) Photodistributed felodipine-induced facial telangiectasia. *J Am Acad Dermatol* 45(2):323–324

## **Tongue**

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- Amyloidosis
- Angioedema
- Aphthous ulcers
- Atrophic glossitis (Hunter glossitis)
- Beefy red tongue
- Behçet's disease
- Benign papillomas
- Black hairy tongue
- Blue rubber bleb nevus
- Bowen's disease



- Burning-mouth syndrome
- *Candida* infection
- Cowden disease
- Crohn's disease
- Darier's disease
- Eosinophilic ulcer
- Eruptive lingual papillitis
- Fibroma
- Fixed drug eruption
- Geographic tongue
- Granular cell tumor
- Hemangioma
- Herpes simplex
- Heterotopic lingual tonsil
- Histoplasmosis
- Leukoplakia
- Lichen planus
- Lingual thyroid nodule
- Lipoid proteinosis
- Lymphangioma
- Lymphoma
- Macroglossia
- Median rhomboid glossitis
- Metastatic carcinoma
- Multiple mucosal neuromas
- Oral hairy leukoplakia
- Polyarteritis nodosa
- Psoriasis
- Pyogenic granuloma
- Scrotal tongue
- Secondary syphilis
- Squamous cell carcinoma
- Traumatic lesions
- Tuberculosis

- Varicosities
- Venous malformation
- Verruca
- Verruciform xanthoma
- White sponge nevus

**Further reading:**

- Dalmau J, Alegre M, Sambeat MA et al (2006) Syphilitic nodules on the tongue. *J Am Acad Dermatol* 54(2 Suppl):S59–S60

**Tongue, Atrophic (Glossitis)**

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- Atrophic candidiasis
- Vitamin B12 deficiency (Hunter glossitis)
- Iron deficiency
- Lichen planus
- Lichen sclerosus
- Malabsorption
- Median rhomboid glossitis
- Pellagra
- Squamous cell carcinoma
- Systemic lupus erythematosus
- Tertiary syphilis

**Further reading:**

- Terai H, Shimahara M (2007) Partial atrophic tongue other than median rhomboid glossitis. *Clin Exp Dermatol* 32(4):381

**Trachyonychia/20 Nail Dystrophy**

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- Alopecia areata
- Chronic paronychia
- Eczema

- Graft-vs-host disease
- Ichthyosis vulgaris
- IgA deficiency
- Incontinentia pigmenti
- Lichen planus
- Onychophagia
- Psoriasis
- Trauma
- Vitiligo

**Further reading:**

- Scheinfeld NS (2003) Trachonychia: a case report and review of manifestations, associations, and treatments. *Cutis* 71(4):299–302

**Trichomegaly of Eyelashes**

---

- AIDS
- Cetuximab therapy
- Cornelia de Lange syndrome
- Cyclosporine therapy
- Dermatomyositis
- Erlotinib therapy
- Interferon therapy
- Malnutrition
- Metastatic renal cell carcinoma
- Oliver–McFarlane syndrome
- Prostaglandin analogues for glaucoma
- Topiramate
- Visceral leishmaniasis

**Further reading:**

- Aghaei S, Dastgheib L (2006) Acquired eyelash trichomegaly and generalized hypertrichosis associated with breast anomaly. *Dermatol Online J* 12(2):19

## Tufted Folliculitis

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- Actinic keratosis
- Chronic lupus erythematosus
- Chronic staphylococcal infection
- Dissecting cellulitis
- Folliculitis decalvans
- Graham–Little syndrome
- Immunobullous disorders
- Lichen planopilaris

### Further reading:

- Farhi D, Buffard V, Ortonne N et al (2006) Tufted folliculitis of the scalp and treatment with cyclosporine. *Arch Dermatol* 142(2):251–252

## Ulcer, Leg

---

- Artifactual
- Arterial insufficiency
- Atherosclerosis
- Atrophie blanche
- Arteriovenous fistula
- Basal cell carcinoma
- Bites and stings
- Bullous pemphigoid
- Buruli ulcer
- Calciphylaxis
- Cellulitis
- Cholesterol emboli
- Cryoglobulinemia
- Diabetic neuropathic ulcer
- Diffuse large B cell lymphoma of the leg
- Epithelioid sarcoma

- Gummatous ulcer
- Hydroxyurea
- Hypertensive ulcer
- Intravenous drug use
- Kaposi's sarcoma
- Klinefelter syndrome
- Klippel–Trenaunay syndrome
- Leishmaniasis
- Leprosy
- Livedoid vasculopathy
- Malignant fibrous histiocytoma
- Melanoma
- Merkel cell carcinoma
- Metastatic lesion
- Mycobacterial infection
- Mycotic ulcer
- Necrobiosis lipoidica
- Osteomyelitis
- Prolidase deficiency
- Pyoderma gangrenosum
- Radiation
- Rheumatoid ulcers
- Scleroderma
- Sickle cell disease
- Small vessel vasculitis
- Spinal disorders
- Squamous cell carcinoma
- Thalassemia
- Trauma
- Tropical ulcer
- Tuberculous ulcer
- Vascular malformation
- Venous insufficiency
- Yaws

**Further reading:**

- Labropoulos N, Manalo D, Patel NP et al (2007) Uncommon leg ulcers in the lower extremity. *J Vasc Surg* 45(3):568–573
- Suss A, Simon JC, Sticherling M (2007) Primary cutaneous diffuse large B-cell lymphoma, leg type, with the clinical picture of chronic venous ulceration. *Acta Derm Venereol* 87(2):169–170

**Ulcer, Painless**

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- Anthrax
- Lymphogranuloma venereum ulcer
- Lucio phenomenon/leprosy-related ulcers
- Neoplastic ulcers
- Neuropathic ulcers
- Syphilitic chancre
- Syphilitic gumma
- Syringomyelia
- Trigeminal trophic ulcer
- Varicose ulcers

**Further reading:**

- Hernandez FG, Rosa JN, Serra AJ, Rey JP (1999) Diffuse painless ulcerations. *Arch Dermatol* 135(8):984–985, 987–988

**Ulcer with Lymphadenitis (Ulceroglandular Syndrome)**

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- Animal bite
- Anthrax
- Atypical mycobacterium
- Brucella
- Bubonic plague
- Cat-scratch disease
- Chancroid
- Glanders
- Lymphogranuloma venereum

- Melioidosis
- Primary inoculation tuberculosis
- Rat-bite fever
- Sporotrichosis
- Streptococcal/staphylococcal adenitis
- Syphilis
- Tularemia

**Further reading:**

- Boyce S, Pena JR, Davis DA (1999) An ulcerated nodule associated with lymphadenopathy. *Arch Dermatol* 135(8):985, 988

**Umbilicus**

---

- Abscess
- Atopic dermatitis
- Crohn's disease
- Endometriosis
- Fabry's disease
- Hemangioma
- Nickel dermatitis
- Omphalomesenteric duct remnant
- Pemphigoid gestationis
- Perforating calcific elastosis
- Pilonidal sinus
- Pruritic urticarial papules and plaques of pregnancy
- Psoriasis
- Pyogenic granuloma
- Rose spots of typhoid fever
- Scabies
- Seborrheic dermatitis
- Sister Mary Joseph nodule
- Strongyloidiasis
- Tuberculosis
- Vitiligo

**Further reading:**

- Rencic A, Cohen BA (1999) Prominent pruritic periumbilical papules: a diagnostic sign in pediatric atopic dermatitis. *Pediatr Dermatol* 16(6):436–438

**Vesicles, Vesicopustules, and Bullae**

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***Child***

- Acute generalized exanthematous pustulosis
- Dermatitis herpetiformis
- Drug reaction
- Eczema herpeticum
- Erythema multiforme
- Hand, foot, and mouth disease
- Impetigo
- Linear IgA bullous dermatosis
- Pemphigus
- Rickettsialpox
- Scabies
- Smallpox
- TORCH infection
- Varicella
- Vesicular viral exanthem

***Localized***

- Allergic contact dermatitis
- Blistering distal dactylitis
- Bullous fixed drug eruption
- Bullous insect bites
- Bullous morphea
- Bullous pemphigoid
- Bullous tinea pedis
- Chemical burn



- Dermatitis herpetiformis
- Dyshidrotic eczema
- Eczema herpeticum
- Erythema multiforme
- Herpes simplex virus infection
- Herpetic whitlow
- Friction blister
- Pemphigus vulgaris
- Thermal burns
- Staphylococcal scalded-skin syndrome
- Zoster

### **Generalized**

- Bullous drug eruption
- Bullous lichen planus
- Bullous lupus erythematosus
- Bullous Sweet's syndrome (Fig. 3.32)
- Dermatitis herpetiformis



**Fig. 3.32** Bullous Sweet's syndrome (Courtesy of S. Klinger)

- Disseminated zoster
- Eczema herpeticum
- Epidermolysis bullosa acquisita
- Lichen planus pemphigoides
- Linear IgA bullous dermatosis
- Pemphigoid
- Pemphigus
- Smallpox
- Staphylococcal scalded-skin syndrome
- Toxic epidermal necrolysis
- Vesicular pityriasis rosea
- Vesicular viral exanthem

### ***Lower Extremity***

- Allergic contact dermatitis
- Bullosis diabeticorum
- Bullous drug eruption
- Bullous impetigo
- Bullous insect bites
- Edema bullae
- Epidermolysis bullosa acquisita
- Localized bullous pemphigoid

### ***Neonatal/Infantile***

- Acrodermatitis enteropathica
- Acropustulosis of infancy
- Bullous congenital ichthyosiform erythroderma
- Bullous impetigo
- Bullous pemphigoid
- Chronic bullous dermatosis of childhood
- Congenital candidiasis
- Congenital erosive and vesicular dermatosis
- Congenital syphilis

- Eosinophilic pustular folliculitis
- Epidermolysis bullosa
- Erythema toxicum neonatorum
- Herpes simplex virus infection
- Herpes zoster
- Hyperimmunoglobulin E syndrome
- Iatrogenic injury
- Incontinentia pigmenti
- Intrauterine epidermal necrosis
- Intrauterine herpes simplex virus
- Kindler syndrome
- Langerhans cell histiocytosis
- *Listeria monocytogenes* infection
- Mastocytosis
- Maternal autoimmune bullous disease
- Miliaria
- Neonatal cephalic pustulosis
- Neonatal purpura fulminans
- Pemphigoid gestationis
- Porphyrias
- Pustular psoriasis
- Pyoderma gangrenosum
- Scabies
- Staphylococcal scalded-skin syndrome
- Sucking blisters
- Toxic epidermal necrolysis
- Transient bullous dermolysis
- Transient neonatal pustular melanosis
- *Varicella* infection

### **Noninflammatory**

- Bullosis diabeticorum
- Bullous amyloidosis
- Bullous lichen sclerosus

- Bullous pemphigoid
- Drug reaction
- Edema bullae
- Epidermolysis bullosa acquisita
- Friction blister
- Porphyria cutanea tarda
- Suction blister
- Trauma

**Further reading:**

- Forschner A, Fierlbeck G (2005) Localized pemphigoid on the soles of both feet. *Int J Dermatol* 44(4):312–314
- Nanda S, Reddy BS, Ramji S et al (2002) Analytical study of pustular eruptions in neonates. *Pediatr Dermatol* 19(3):210–215
- Vun YY, Malik MM, Murphy GM et al (2005) Congenital erosive and vesicular dermatosis. *Clin Exp Dermatol* 30(2):146–148

**Vulva**

- Acantholytic dyskeratosis of the vulva
- Allergic contact dermatitis
- Angiofibroma of the vulva
- Angiokeratoma
- Bartholin gland cyst/abscess
- Basal cell carcinoma
- Behçet's disease
- Bullous pemphigoid
- Candidiasis
- Chancroid
- Cicatricial pemphigoid
- Ciliated cyst
- Condyloma acuminatum
- Condyloma lata
- Crohn's disease

- Dermographism
- Dysesthetic vulvodynia
- Extramammary Paget's disease
- Granular cell tumor
- Hailey–Hailey disease
- Herpes simplex virus infection
- Irritant contact dermatitis
- Lichen planus
- Lichen sclerosus
- Lymphangioma
- Lymphogranuloma venereum
- Melanocytic nevus
- Melanosis
- Melanoma
- Psoriasis
- Seborrheic dermatitis
- Squamous cell carcinoma
- Syphilis
- Syringomas
- Tinea cruris
- Trichomoniasis
- Verruciform xanthoma
- Vulvar vestibulitis syndrome

**Further reading:**

- Hammock LA, Barrett TL (2005) Inflammatory dermatoses of the vulva. *J Cutan Pathol* 32(9):604–611

**Woolly Hair**

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- Cardiofaciocutaneous syndrome
- Carvajal syndrome
- CHANDS syndrome

- Familial woolly hair
- Naxos syndrome
- Noonan syndrome
- Woolly hair–skin fragility syndrome

**Further reading:**

- Chien AJ, Valentine MC, Sybert VP (2006) Hereditary woolly hair and keratosis pilaris. *J Am Acad Dermatol* 54(2 Suppl):S35–S39

## **Acantholysis**

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- Acantholytic dyskeratosis of the vulva
- Actinic keratosis
- Darier's disease
- Galli–Galli disease
- Grover's disease
- Hailey–Hailey disease
- Herpes simplex virus infection
- Impetigo
- Pemphigus
- Squamous cell carcinoma
- Staphylococcal scalded-skin syndrome
- Subcorneal pustular dermatosis
- Warty dyskeratosis

### **Further reading:**

- Mahalingam M (2005) Follicular acantholysis: a subtle clue to the early diagnosis of pemphigus vulgaris. *Am J Dermatopathol* 27(3):237–239

## **Asteroid Bodies**

---

- Leprosy
- Sarcoidosis

- Sporotrichosis
- Tuberculosis

**Further reading:**

- Rodriguez G, Sarmiento L (1998) The asteroid bodies of sporotrichosis. *Am J Dermatopathol* 20(3):246–249

**Basaloid Cells**

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- Basal cell carcinoma
- Basaloid follicular hamartoma
- Eccrine spiradenoma
- Lymphadenoma
- Merkel cell carcinoma
- Metastatic lesion
- Microcystic adnexal carcinoma
- Nodular hidradenoma
- Poroma
- Sebaceous carcinoma
- Sebaceous epithelioma
- Trichoadenoma
- Trichoblastoma
- Trichoepithelioma

**Further reading:**

- LeBoit PE (2003) Trichoblastoma, basal cell carcinoma, and follicular differentiation: what should we trust? *Am J Dermatopathol* 25(3):260–263

**Borst–Jadassohn Phenomenon**

---

- Actinic keratosis
- Bowen's disease



- Clonal seborrheic keratosis
- Extramammary Paget's disease
- Intraepidermal junctional nevus
- Melanoma in situ
- Porocarcinoma
- Poroma

**Further reading:**

- Amichai B, Grunwald MH, Halevy S (1995) A seborrheic keratosis-like lesion. Intraepidermal epithelioma of Borst–Jadassohn. Arch Dermatol 131(11):1331, 1334

### **Caseation Necrosis**

---

- Demodicosis
- Granulomatous rosacea
- Lupus miliaris disseminata faciei
- Tuberculosis

**Further reading:**

- Ferrara G, Cannone M, Scalvenzi M et al (2001) Facial granulomatous diseases: a study of four cases tested for the presence of *Mycobacterium tuberculosis* DNA using nested polymerase chain reaction. Am J Dermatopathol 23(1):8–15

### **CD30+ Lymphocytes**

---

- Anaplastic large cell lymphoma
- Arthropod bites
- Atopic dermatitis
- Drug reactions
- Hidradenitis suppurativa
- Lymphomatoid papulosis
- Molluscum contagiosum

- Mycosis fungoides
- Nodular scabies
- Parapoxvirus infection

**Further reading:**

- Dummer W, Rose C, Brocker EB (1998) Expression of CD30 on T helper cells in the inflammatory infiltrate of acute atopic dermatitis but not of allergic contact dermatitis. *Arch Dermatol Res* 290(11):598–602
- Rose C, Starostik P, Brocker EB (1999) Infection with parapoxvirus induces CD30-positive cutaneous infiltrates in humans. *J Cutan Pathol* 26(10):520–522

## **Cicatricial Alopecia**

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### ***Lymphocytic***

- Alopecia mucinosa
- Central centrifugal alopecia
- Chronic cutaneous lupus erythematosus
- Classic lichen planus
- Classic pseudopelade (Brocq)
- Frontal fibrosing alopecia
- Graham–Little syndrome
- Keratosis follicularis spinulosa decalvans
- Lichen planopilaris

### ***Neutrophilic***

- Dissecting cellulitis
- Folliculitis decalvans

### ***Mixed***

- Erosive pustular dermatosis
- Folliculitis (acne) keloidalis
- Folliculitis (acne) necrotica

**Further reading:**

- Ross EK, Tan E, Shapiro J (2005) Update on primary cicatricial alopecias. *J Am Acad Dermatol* 53(1):1–37

**Clear Cells**

---

- Adipose tumors
- Balloon cell tumors
- Clear cell acanthoma
- Clear cell basal cell carcinoma
- Clear cell hidradenoma
- Clear cell sarcoma
- Clear cell squamous cell carcinoma
- Clear cell syringoma
- Clear cell trichoblastoma
- Metastatic renal cell cancer
- Pilomatrixoma
- Sebaceous carcinoma
- Squamous cell carcinoma
- Trichilemmal carcinoma
- Trichilemmoma

**Further reading:**

- Forman SB, Ferringer TC (2007) Clear-cell basal cell carcinoma: differentiation from other clear-cell tumors. *Am J Dermatopathol* 29(2):208–209

**Clefts or Crystals**

---

- Amyloidosis (especially nodular)
- Basal cell carcinoma
- Cholesterol emboli syndrome
- Colloid milium
- Factitial disease
- Gout

- Necrobiosis lipoidica
- Necrobiotic xanthogranuloma
- Paraffinoma
- Post-steroid panniculitis
- Scleredema
- Sclerema neonatorum
- Sclerotic fibroma
- Spitz nevus
- Subcutaneous fat necrosis

**Further reading:**

- Torre C de la, Losada A, Cruces MJ (1999) Necrobiosis lipoidica: a case with prominent cholesterol clefting and transepithelial elimination. *Am J Dermatopathol* 21(6):575–577

**Clonal T Cell Populations**

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- Atypical lobular lymphocytic panniculitis
- Clonal dermatitis
- Cutaneous lymphoid hyperplasia
- Cutaneous T cell lymphoma
- Idiopathic erythroderma
- Idiopathic follicular mucinosis
- Lichen planus
- Lichen sclerosus et atrophicus
- Lymphomatoid papulosis
- Pigmented purpuric dermatosis (long standing)
- Pityriasis lichenoides
- Syringolymphoid hyperplasia with alopecia

**Further reading:**

- Guitart J, Magro C (2007) Cutaneous T-cell lymphoid dyscrasia: a unifying term for idiopathic chronic dermatoses with persistent T-cell clones. *Arch Dermatol* 143(7):921–932

## **Cornoid Lamella**

---

- Actinic keratosis
- Basal cell carcinoma
- Porokeratosis
- Seborrheic keratosis
- Squamous cell carcinoma
- Verruca vulgaris

### **Further reading:**

- Shen CS, Tabata K, Matsuki M et al (2002) Premature apoptosis of keratinocytes and the dysregulation of keratinization in porokeratosis. *Br J Dermatol* 147(3):498–502

## **Direct Immunofluorescence**

---

### ***Basement Membrane Zone***

- Bullous pemphigoid
- Chronic active hepatitis
- Dermatitis herpetiformis
- Dermatomyositis
- Epidermolysis bullosa acquisita
- Erythema multiforme
- Leukocytoclastic vasculitis
- Lichen planus
- Linear IgA bullous dermatosis
- Lupus erythematosus
- Paraneoplastic pemphigus
- Pemphigoid gestationis
- Pemphigus erythematosus
- Porphyria cutanea tarda
- Primary biliary cirrhosis
- Pseudoporphyria

- Rheumatoid arthritis
- Rosacea
- Systemic sclerosis

### ***Intercellular Epidermis***

- IgA pemphigus
- Paraneoplastic pemphigus
- Pemphigus erythematosus
- Pemphigus foliaceus
- Pemphigus vulgaris

### **Further reading:**

- Mutasim DF, Adams BB (2001) Immunofluorescence in dermatology. *J Am Acad Dermatol* 45(6):803–822

### **Dyskeratosis**

- Acantholytic dyskeratosis of the vulva
- Acrodermatitis enteropathica
- Arthropod bite
- Darier's disease
- Familial dyskeratotic comedones
- Grover's disease
- Hailey–Hailey disease
- Herpes simplex virus infection
- Incontinentia pigmenti
- Lupus erythematosus
- Lichen planus
- Lichen sclerosis
- Light reactions
- Orf/milker's nodule
- Porokeratosis
- Spitz nevus

- Warts
- Warty dyskeratoma

**Further reading:**

- Steffen C (1988) Dyskeratosis and the dyskeratoses. *Am J Dermatopathol* 10(4):356–363

**Edema, Papillary Dermal**

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- Arthropod bite
- Gianotti–Crosti syndrome
- Pernio
- Polymorphous light eruption
- Sweet’s syndrome

**Further reading:**

- Cribier B, Djeridi N, Peltre B et al (2001) A histologic and immunohistochemical study of chilblains. *J Am Acad Dermatol* 45(6):924–929

**Elastic Tissue, Decreased**

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- Acrokeratoelastoidosis
- Anetoderma
- Cutis laxa
- Fibroelastolytic papulosis
- Granulomatous slack skin
- Middermal elastolysis
- Nevus anelasticus
- Papular elastorrhexis
- Perifollicular elastolysis (acne scars)

**Further reading:**

- Lewis KG, Bercovitch L, Dill SW et al (2004) Acquired disorders of elastic tissue: part II. Decreased elastic tissue. *J Am Acad Dermatol* 51(2):165–185

## Eosinophils

---

- Angiolymphoid hyperplasia
- Arthropod bites and stings
- Atopic dermatitis
- Bullous pemphigoid
- Churg–Strauss syndrome
- Cutaneous T cell lymphoma
- Drug reactions
- Eosinophilic folliculitis
- Eosinophilia–myalgia syndrome
- Eosinophilic cellulitis
- Eosinophilic, polymorphic, and pruritic eruption of radiotherapy
- Eosinophilic ulcer of the tongue
- Granuloma faciale
- Hypereosinophilic syndrome
- Mastocytosis
- Parasitic infestation
- Pemphigus
- Pemphigoid gestationis
- Pruritic urticarial papules and plaques of pregnancy
- Toxic oil syndrome
- Urticaria and angioedema
- Urticarial dermatitis
- Wells syndrome

### Further reading:

- Bahrami S, Malone JC, Webb KG et al (2006) Tissue eosinophilia as an indicator of drug-induced cutaneous small-vessel vasculitis. *Arch Dermatol* 142(2):155–161

## Eosinophilic Deposits, Amorphous

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- Colloid milium
- Erythropoietic protoporphyria
- Gout



- Keratoelastoidosis marginalis
- Lichen sclerosus
- Lipoid proteinosis
- Nodular amyloidosis
- Waldenstrom's macroglobulinemia

**Further reading:**

- Saeed S, Sagatys E, Morgan MB (2006) Acral keratosis with eosinophilic dermal deposits: a distinctive clinicopathologic entity or colloid milium redux? *J Cutan Pathol* 33(10):679–685

## **Eosinophilic Spongiosis**

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- Allergic contact dermatitis
- Arthropod bite reaction
- Drug reaction
- Early bullous pemphigoid
- Eosinophilic folliculitis
- Erythema toxicum neonatorum
- Herpes gestationis
- Incontinentia pigmenti
- Pemphigus
- Photoallergic drug reaction

**Further reading:**

- Machado-Pinto J, McCalmont TH, Golitz LE (1996) Eosinophilic and neutrophilic spongiosis: clues to the diagnosis of immunobullous diseases and other inflammatory disorders. *Semin Cutan Med Surg* 15(4):308–316

## **Epidermal Pallor**

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- Acrodermatitis enteropathica
- Hartnup's disease
- Necrolytic acral erythema
- Necrolytic migratory erythema
- Pellagra

- Psoriasis
- Radiodermatitis
- Syphilis

## Epidermolytic Hyperkeratosis

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- Bullous congenital ichthyosiform erythroderma
- Epidermal nevus
- Follicular cysts
- Ichthyosis hystrix
- Melanocytic nevus
- Seborrheic keratosis
- Vorner's palmoplantar keratoderma

### Further reading:

- Mahaisavariya P, Cohen PR, Rapini RP (1995) Incidental epidermolytic hyperkeratosis. *Am J Dermatopathol* 17(1):23–28

## Epidermotropism

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- Epidermotropic CD8+ T cell lymphoma
- Langerhans cell histiocytosis
- Metastatic adenocarcinoma
- Metastatic melanoma
- Metastatic squamous cell carcinoma
- Mycosis fungoides
- Pagetoid reticulosis
- Xanthoma

### Further reading:

- Arai E, Shimizu M, Tsuchida T et al (2007) Lymphomatoid keratosis: an epidermotropic type of cutaneous lymphoid hyperplasia: clinicopathological, immunohistochemical, and molecular biological study of 6 cases. *Arch Dermatol* 143(1):53–59
- Northcutt AD (2000) Epidermotropic xanthoma mimicking balloon cell melanoma. *Am J Dermatopathol* 22(2):176–178

- Stanko C, Grandinetti L, Baldassano M et al (2007) Epidermotropic metastatic prostate carcinoma presenting as an umbilical nodule – Sister Mary Joseph nodule. *Am J Dermatopathol* 29(3):290–292

## Erythrocyte Extravasation/Hemosiderin

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- Allergic contact dermatitis
- Arthropod bite reaction
- Bleeding disorder
- Dermatofibroma
- Discoid lupus erythematosus
- Erythema ab igne
- Granuloma faciale
- Hemochromatosis
- Kaposi's sarcoma
- Leukocytoclastic vasculitis
- Lichen sclerosus et atrophicus
- Lymphomatoid papulosis
- Pigmented purpuric dermatoses
- Pityriasis rosea
- Pityriasis lichenoides et varioliformis acuta
- Porphyria cutanea tarda
- Renal cell carcinoma
- Rickettsial infection
- Scurvy
- Stasis dermatitis
- Targetoid hemosiderotic hemangioma
- Trichotillomania
- Vascular neoplasms
- Vasculitis
- Viral infection

### Further reading:

- Carlson JA, Chen KR (2007) Cutaneous pseudovasculitis. *Am J Dermatopathol* 29(1):44–55

## Fat in Dermis

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- Goltz syndrome
- Lipedematous alopecia
- Melanocytic nevus
- “Michelin tire baby” syndrome
- Nevus lipomatosus
- Piezogenic pedal papules
- Proteus syndrome

### Further reading:

- Martin JM, Monteagudo C, Montesinos E et al (2005) Lipedematous scalp and lipedematous alopecia: a clinical and histologic analysis of 3 cases. *J Am Acad Dermatol* 52(1):152–156

## Flame Figures

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- Arthropod bite reaction
- Bullous pemphigoid
- Drug reaction
- Eczema
- Hypereosinophilic syndrome
- Parasitic infestation
- Tinea
- Wells syndrome

### Further reading:

- Leiferman KM, Peters MS (2006) Reflections on eosinophils and flame figures: where there’s smoke there’s not necessarily Wells syndrome. *Arch Dermatol* 142(9):1215–1218

## Foam Cells

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- Atypical fibroxanthoma
- Balloon cell melanoma

- Balloon cell nevus
- Dermatofibroma
- Granular cell tumor
- Hibernoma
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis
- Lepromatous leprosy
- Liposarcoma
- Malakoplakia
- Necrobiotic xanthogranuloma
- Pneumocystosis
- Rhinoscleroma
- Sebaceous gland tumors
- Verruciform xanthoma
- Xanthoma disseminatum
- Xanthomas

**Further reading:**

- Terayama K, Hirokawa M, Shimizu M et al (1999) Balloon melanoma cells mimicking foamy histiocytes. *Acta Cytol* 43(2):325–326

**Giant Cells**

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- Atypical fibroxanthoma
- Erythema nodosum
- Foreign body
- Giant cell tumor of the tendon sheath
- Juvenile xanthogranuloma
- Keratin granuloma
- Necrobiosis lipoidica
- Pilomatricoma
- Reticulohistiocytoma
- Sarcoidosis

## Granulomas

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- Actinic granuloma
- Annular elastolytic giant cell granuloma
- Atypical necrobiosis lipoidica
- Blau syndrome
- Chronic granulomatous disease
- Common variable immunodeficiency
- Crohn's disease
- Deep fungal infection
- Foreign body reactions
- Granuloma annulare
- Granuloma multiforme
- Granulomatous mycosis fungoides
- Granulomatous rosacea
- Granulomatous slack skin
- Interstitial granulomatous drug reaction
- Interstitial granulomatous dermatitis with arthritis
- Leishmaniasis
- Lupus miliaris disseminata faciei
- Necrobiosis lipoidica
- Necrobiotic xanthogranuloma
- Protothecosis
- Rheumatic fever nodule
- Rheumatoid nodule
- Sarcoidosis
- Systemic lymphoma
- Tertiary syphilis
- Tuberculoid leprosy
- Tuberculosis
- Wegener's granulomatosis

### Further reading:

- Limas C (2004) The spectrum of primary cutaneous elastolytic granulomas and their distinction from granuloma annulare: a clinicopathological analysis. *Histopathology* 44(3):277–282

- Rongioletti F, Cerroni L, Massone C et al (2004) Different histologic patterns of cutaneous granulomas in systemic lymphoma. *J Am Acad Dermatol* 51(4):600–605

## **Grenz Zone**

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- B cell lymphoma
- Cutaneous T cell lymphoma
- Granuloma faciale
- Lepromatous leprosy
- Lymphocytoma cutis
- Multicentric reticulohistiocytosis

### **Further reading:**

- Ortonne N, Wechsler J, Bagot M et al (2005) Granuloma faciale: a clinicopathologic study of 66 patients. *J Am Acad Dermatol* 53(6):1002–1009

## **Hobnail Endothelium**

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- Angiolymphoid hyperplasia with eosinophilia
- Hobnail (targetoid hemosiderotic) hemangioma
- Endovascular papillary angioendothelioma
- Retiform hemangioendothelioma

### **Further reading:**

- Franke FE, Steger K, Marks A et al (2004) Hobnail hemangiomas (targetoid hemosiderotic hemangiomas) are true lymphangiomas. *J Cutan Pathol* 31(5):362–367

## **Interstitial Inflammation**

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- Abscess/cellulitis
- Arthropod bite reaction
- Erythema marginatum
- Granuloma annulare
- Granuloma faciale
- Interstitial drug reaction

- Interstitial granulomatous dermatitis with arthritis
- Interstitial mycosis fungoides
- Intertriginous eruptions
- Pyoderma gangrenosum
- Sweet's syndrome
- Urticaria
- Urticarial dermatitis
- Wells syndrome

**Further reading:**

- Kwon EJ, Hivnor CM, Yan AC et al (2007) Interstitial granulomatous lesions as part of the spectrum of presenting cutaneous signs in pediatric sarcoidosis. *Pediatr Dermatol* 24(5):517–524

**Lichenoid Reaction Pattern/Band-Like Infiltrate**

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***Cell Rich***

- Chronic graft-vs-host disease
- Cutaneous lymphoid hyperplasia
- Halo nevus
- Hyperkeratosis lenticularis perstans
- Keratosis lichenoides chronica
- Langerhans cell histiocytosis
- Lichen planus
- Lichen sclerosus et atrophicus
- Lichen striatus
- Lichenoid actinic keratosis
- Lichenoid drug eruption
- Lichenoid keratosis
- Lichenoid pigmented purpuric dermatosis
- Lymphomatoid keratosis
- Lymphomatoid papulosis
- Melanoma



- Mycosis fungoides
- Parapsoriasis
- Pityriasis lichenoides et varioliformis acuta
- Poikiloderma atrophicans vasculare
- Secondary syphilis
- Zoon balanitis

### ***Cell Poor***

- Dermatomyositis
- Erythema multiforme
- Fixed drug eruption
- Graft-vs-host disease
- Lupus erythematosus
- Lichen sclerosus et atrophicus
- Morbilliform drug reaction
- Pityriasis lichenoides chronica

### **Further reading:**

- Morgan MB, Stevens GL, Switlyk S (2005) Benign lichenoid keratosis: a clinical and pathologic reappraisal of 1040 cases. *Am J Dermatopathol* 27(5):387–392

## **Perivascular Inflammation**

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### ***Superficial***

- Dermatophytosis
- Drug reaction
- Eczematous dermatitis
- Erythema dyschromicum perstans
- Erythema multiforme
- Pigmented purpuric dermatosis
- Post-inflammatory pigmentary alteration

- Telangiectasia macularis eruptiva perstans
- Urticaria
- Viral exanthem

### ***Superficial and Deep***

- Arthropod bite reaction
- Cutaneous T cell lymphoma
- Discoid lupus erythematosus
- Erythema annulare centrifugum
- Fixed drug eruption
- Gyrate erythemas
- Jessner's lymphocytic infiltrate
- Leukemia/lymphoma
- Lichen striatus
- Lichenoid drug
- Lupus erythematosus
- Lymphocytoma cutis
- Lymphomatoid papulosis
- Pityriasis lichenoides et varioliformis acuta
- Polymorphous light eruption
- Reticular erythematous mucinosis
- Syphilis

### **Further reading:**

- Carlson JA, Chen KR (2007) Cutaneous vasculitis update: neutrophilic muscular vessel and eosinophilic, granulomatous, and lymphocytic vasculitis syndromes. *Am J Dermatopathol* 29(1):32–43

### **Lymphocytic Vasculitis**

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- Angiocentric lymphoma
- Degos' disease

- Erythema annulare centrifugum
- Insect bite reactions
- Kawasaki disease
- Livedoid vasculopathy
- Lupus erythematosus
- Perniosis
- Pigmented purpuric dermatosis
- Pityriasis lichenoides
- Polymorphous light eruption
- Rickettsial infection
- Sjögren's syndrome
- Viral exanthem

**Further reading:**

- Kossard S (2000) Defining lymphocytic vasculitis. *Australas J Dermatol* 41(3):149–155

**Lymphoid Follicles**

- Actinic prurigo cheilitis
- Angiolymphoid hyperplasia with eosinophilia
- Branchial cleft cyst
- Bronchogenic cyst
- Insect bite reaction
- Lupus profundus
- Lymphocytoma cutis
- Lymphoma cutis
- Necrobiosis lipoidica
- Necrobiotic xanthogranuloma

**Further reading:**

- Herrera-Geopfert R, Magana M (1995) Follicular cheilitis. A distinctive histopathologic finding in actinic prurigo. *Am J Dermatopathol* 17(4):357–361

## Mucin

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### *Primary*

- Acral persistent papular mucinosis
- Cutaneous focal mucinosis
- Cutaneous lupus mucinosis
- Cutaneous mucinosis of infancy
- Digital mucous cyst
- Mycosis fungoides-associated follicular mucinosis
- Generalized myxedema
- Lichen myxedematosus
- Mucinous nevus
- Pinkus' follicular mucinosis
- Pretibial myxedema
- Reticular erythematous mucinosis
- Scleredema
- Scleromyxedema
- Self-healing cutaneous mucinosis
- Urticaria-like follicular mucinosis

### *Secondary*

- Actinic elastosis
- Angiolymphoid hyperplasia with eosinophilia
- Basal cell carcinoma
- Chronic graft-vs-host disease
- Cutaneous leukemia
- Degos' disease
- Dermatomyositis
- Epithelial tumors
- Familial reticuloendotheliosis

- Follicular mucinosis
- Granuloma annulare
- Hodgkin's disease
- Hypertrophic lichen planus
- Hypertrophic scar
- Insect bites
- Keratoacanthoma
- Lichen striatus
- Lupus erythematosus
- Lymphoma
- Mesenchymal tumors
- Mycosis fungoides
- Neural tumors
- Pachydermoperiostosis
- Cutaneous lymphoid hyperplasia
- Sarcoidosis
- Scleroderma
- Spongiotic dermatitis
- Squamous cell carcinoma
- UV radiation and PUVA
- Verruca vulgaris

**Further reading:**

- Rongioletti F, Rebora A (2001) Cutaneous mucinoses: microscopic criteria for diagnosis. *Am J Dermatopathol* 23(3):257–267

**Neutrophils**

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- Acropustulosis of infancy
- Acute generalized exanthematous pustulosis
- Atypical mycobacteria
- Behçet's disease
- Bowel bypass syndrome

- Bullous pemphigoid
- Bullous systemic lupus erythematosus
- Candidiasis
- Clear cell acanthoma
- Dermatitis herpetiformis
- Dermatophytosis
- Epidermolysis bullosa acquisita
- Erythema elevatum diutinum
- Fire ant bites
- Geographic tongue
- Gonococcemia
- Granuloma faciale
- Halogenoderma
- IgA pemphigus
- Impetigo
- Infectious diseases
- Leukocytoclastic vasculitis
- Linear IgA bullous dermatosis
- Necrolytic migratory erythema
- Neutrophilic eccrine hidradenitis
- Neutrophilic urticaria
- Palisaded neutrophilic and granulomatous dermatitis
- Pemphigus foliaceus
- Pityriasis lichenoides et varioliformis acuta
- Prurigo pigmentosa
- Psoriasis
- Pustular vasculitis
- Pyoderma gangrenosum
- Pyogenic granuloma
- Rheumatoid neutrophilic dermatosis
- Ruptured cysts/follicles
- Scabies
- Sneddon–Wilkinson disease

- Sweet's syndrome
- Transient neonatal pustular melanosis
- Ulceration

**Further reading:**

- Nischal KC, Khopkar U (2007) An approach to the diagnosis of neutrophilic dermatoses: a histopathological perspective. *Indian J Dermatol Venereol Leprol* 73(4):222–230

**Normal Appearance (Subtle Histologic Abnormalities)**

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- Amyloidosis
- Anetoderma
- Connective tissue nevus
- Cutis laxa
- Dermatophytosis
- Ichthyosis
- Morbilliform drug
- Morphea
- Myxedema
- Post-inflammatory pigmentary alteration
- Tinea versicolor
- Telangiectasia macularis eruptive perstans
- Urticaria
- Urticaria pigmentosa
- Viral exanthem
- Vitiligo

**Pagetoid Cells**

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- Acral melanocytic nevus
- Borst–Jadassohn phenomenon
- Bowen's disease

- Epidermotropic adnexal carcinoma
- Epidermotropic CD8+ T cell lymphoma
- Langerhans' cell histiocytosis
- Lymphomatoid papulosis
- Melanoma
- Merkel cell carcinoma
- Mycosis fungoides
- Paget's disease
- Sebaceous carcinoma

**Further reading:**

- Kohler S, Rouse RV, Smoller BR (1998) The differential diagnosis of pagetoid cells in the epidermis. *Mod Pathol* 11(1):79–92

**Palisading**

---

- Churg-Strauss syndrome
- Granuloma annulare
- Interstitial granulomatous dermatitis
- Necrobiosis lipoidica
- Rheumatoid nodule
- Wegener's granulomatosis

**Papillomatosis, Hyperkeratosis, and Acanthosis**

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- Acanthosis nigricans
- Acrokeratosis verruciformis
- Confluent and reticulated papillomatosis
- Epidermal nevus
- Seborrheic keratosis
- Verruca

**Further reading:**

- Ersoy-Evans S, Sahin S, Mancini AJ et al (2006) The acanthosis nigricans form of epidermal nevus. *J Am Acad Dermatol* 55(4):696–698



## Parakeratosis

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- Actinic keratosis
- Axillary granular parakeratosis
- Benign lichenoid keratosis
- Darier's disease
- Dermatophytosis
- Discoid lupus erythematosus
- Eczematous dermatitis
- Erythema annulare centrifugum
- Grover's disease
- Inflammatory linear verrucous epidermal nevus
- Lichenoid drug eruption
- Mycosis fungoides, plaque stage
- Necrolytic migratory erythema
- Pityriasis lichenoides
- Pityriasis rosea
- Pityriasis rubra pilaris
- Porokeratosis
- Psoriasis
- Seborrheic dermatitis
- Small and large plaque parapsoriasis
- Verruca vulgaris

### *In Mounds*

- Dermatophytosis
- Erythema annulare centrifugum
- Guttate psoriasis
- Pityriasis rosea
- Seborrheic dermatitis
- Small plaque parapsoriasis

### **Further reading:**

- Brady SP (2004) Parakeratosis. *J Am Acad Dermatol* 50(1):77–84

## Parasitized Histiocytes

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- Ehrlichiosis
- Granuloma inguinale
- Histoplasmosis
- Leishmaniasis
- *Penicillium marneffe*i infection
- Rhinoscleroma
- Toxoplasmosis

## Pigment in Dermis

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- Alkaptonuria
- Amiodarone
- Chlorpromazine
- Gold
- Hemosiderin
- Imipramine
- Lipofuscin
- Melanin
- Minocycline
- Silver
- Tattoo

### Further reading:

- Suzuki H, Baba S, Uchigasaki S et al (1993) Localized argyria with chrysiasis caused by implanted acupuncture needles. Distribution and chemical forms of silver and gold in cutaneous tissue by electron microscopy and X-ray microanalysis. *J Am Acad Dermatol* 29(5 Pt 2):833–837

## Plasma Cells

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- Acne keloidalis nuchae
- Actinic keratosis

- Basal cell carcinoma
- Borrelial infection
- Cutaneous plasmacytosis
- Folliculitis
- Foreign body reaction
- HIV infection
- Morphea
- Mucosal surfaces
- Mycosis fungoides
- Necrobiosis lipoidica
- Plasmacytoma
- Rhinoscleroma
- Secondary syphilis
- Squamous cell carcinoma
- Syringocystadenoma papilliferum

**Further reading:**

- Jayaraman AG, Cesca C, Kohler S (2006) Cutaneous plasmacytosis: a report of five cases with immunohistochemical evaluation for HHV-8 expression. *Am J Dermatopathol* 28(2):93–98

**Pseudoepitheliomatous Hyperplasia**

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- Blastomycosis
- Chromoblastomycosis
- Chronic ulcer
- Granular cell tumor
- Halogenoderma
- Hypertrophic lichen planus
- Keratoacanthoma
- Melanoma
- Mycobacterial infections
- Orf
- Pemphigus vegetans

- Pyoderma gangrenosum
- Sporotrichosis
- Syphilis
- Tattoo
- T cell lymphoma
- Venous stasis ulcer
- Verrucous lupus erythematosus

**Further reading:**

- Zayour M, Lazova R (2011) Pseudoepitheliomatous hyperplasia: a review. *Am J Dermatopathol* 33(2):112–122; quiz 123–126

**Spindle Cells**

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- Atypical fibroxanthoma
- Blue nevus
- Dermatofibrosarcoma protuberans
- Fibrous proliferations
- Kaposi's sarcoma
- Leiomyoma
- Leiomyosarcoma
- Melanoma
- Metastatic sarcoma
- Neural neoplasms
- Spindle cell hemangioendothelioma
- Spindle cell lipoma
- Spindle cell squamous cell carcinoma
- Spindle cell xanthogranuloma
- Spitz nevus

**Further reading:**

- Folpe AL, Cooper K (2007) Best practices in diagnostic immunohistochemistry: pleomorphic cutaneous spindle cell tumors. *Arch Pathol Lab Med* 131(10):1517–1524

## Splendore–Hoepli Phenomenon

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- Actinomycosis
- Botryomycosis
- Mycetoma
- Nocardiosis
- Sporotrichosis

### Further reading:

- Rodig SJ, Dorfman DM (2001) Splendore–Hoepli phenomenon. *Arch Pathol Lab Med* 125(11):1515–1516

## Spongiosis

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- Atopic dermatitis
- Bullous pemphigoid
- Contact dermatitis
- Dyshidrotic eczema
- Eczematoid purpura of Doucas and Kapetanakis
- Erythema annulare centrifugum
- Erythema multiforme
- Gianotti–Crosti syndrome
- Herpes gestationis
- Id reaction
- Incontinentia pigmenti
- Insect bite reactions
- Lichen striatus
- Miliaria rubra
- Mycosis fungoides
- Nummular eczema
- Photoallergic contact dermatitis
- Pityriasis rosea

- Seborrheic dermatitis
- Small plaque parapsoriasis
- Spongiotic drug eruption

### **Square Specimen**

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- Lichen myxedematosus
- Keloid
- Morphea
- Necrobiosis lipoidica
- Nephrogenic systemic fibrosis
- Normal back
- Radiation dermatitis
- Scleredema

### **Transepidermal Elimination**

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- Acquired perforating dermatosis
- Calcinosis cutis
- Elastosis perforans serpiginosa
- Granuloma annulare
- Gout
- Melanoma
- Nevus
- Pilomatrixoma
- Pseudoxanthoma elasticum
- Reactive perforating collagenosis

#### **Further reading:**

- Ohnishi T, Nakamura Y, Watanabe S (2003) Perforating pilomatricoma in a process of total elimination. *J Am Acad Dermatol* 49(2 Suppl Case Reports):S146–S147

## Vesicles

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### *Intraepidermal*

- Acrodermatitis enteropathica
- Darier's disease
- Epidermolysis bullosa simplex
- Friction blister
- Grover's disease
- Hailey–Hailey disease
- Herpes simplex virus infection
- IgA pemphigus, intraepidermal type
- Incontinentia pigmenti
- Palmoplantar pustulosis
- Paraneoplastic pemphigus
- Pemphigus vegetans
- Pemphigus vulgaris
- Varicella-zoster virus infection

### *Subcorneal or Intracorneal*

- Acute generalized exanthematous pustulosis
- Candidiasis
- Dermatophytosis
- Erythema toxicum neonatorum
- IgA pemphigus, subcorneal type
- Impetigo
- Infantile acropustulosis
- Miliaria crystallina
- Pemphigus foliaceus
- Pustular psoriasis
- Subcorneal pustular dermatosis
- Staphylococcal scalded-skin syndrome

***Subepidermal with Eosinophils***

- Arthropod bite reaction
- Bullous eosinophilic cellulitis
- Bullous pemphigoid
- Drug eruption
- Pemphigoid gestationis

***Subepidermal with Lymphocytes***

- Erythema multiforme
- Fixed drug eruption
- Lichen planus, bullous type
- Lichen sclerosus et atrophicus
- Paraneoplastic pemphigus
- Polymorphous light eruption

***Subepidermal with Neutrophils***

- Bullous cellulitis
- Bullous leukocytoclastic vasculitis
- Bullous pemphigoid
- Bullous Sweet's syndrome
- Bullous systemic lupus erythematosus
- Cicatricial pemphigoid
- Dermatitis herpetiformis
- Inflammatory epidermolysis bullosa acquisita
- Linear IgA bullous dermatosis
- Pyoderma gangrenosum

***Subepidermal and Noninflammatory***

- Bullous amyloidosis
- Bullous diabetes
- Bullous drug eruption



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- Bullous lichen sclerosus
  - Bullous morphea
  - Bullous pemphigoid, cell-poor type
  - Burns
  - Coma bullae
  - Cryotherapy bullae
  - Noninflammatory epidermolysis bullosa acquisita
  - Porphyria cutanea tarda
  - Pseudoporphyria
  - Suction blister
  - Toxic epidermal necrolysis

### ACE Level Elevated

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- Alpha 1-antitrypsin deficiency
- Amyloidosis
- Asbestosis
- Asthma
- Gaucher's disease
- Hypertension
- Kaposi's sarcoma
- Leprosy
- Liver disease
- Melkersson–Rosenthal syndrome
- Myeloma
- Primary biliary cirrhosis
- Renal failure
- Sarcoidosis
- Silicosis
- Small cell lung cancer
- Smoker
- Tuberculosis
- Type I diabetes mellitus

### Further reading:

- Uçar G, Yildirim Z, Ataol E et al (1997) Serum angiotensin converting enzyme activity in pulmonary diseases: correlation with lung function parameters. *Life Sci* 61(11):1075–1182

## Anemia

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- Aplastic anemia
- Bone marrow infiltration
- Chronic infection
- Chronic inflammatory disease (RA, SLE, etc.)
- Chronic liver disease
- Chronic renal disease
- Congenital anemia
- Fanconi anemia
- Folate deficiency
- Hemoglobinopathy
- Hemolysis
- Internal malignancy
- Iron deficiency
- Leukemia
- Lymphoma
- Malabsorption
- Pregnancy
- Vitamin B12 deficiency

### Further reading:

- Tefferi A (2003) Anemia in adults: a contemporary approach to diagnosis. *Mayo Clin Proc* 78(10):1274–1280

## Antineutrophilic Cytoplasmic Antibodies

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- Churg–Strauss syndrome (P > C)
- Cocaine-associated vasculopathy
- Drug-induced vasculitis (P)
- Hydralazine therapy
- Microscopic polyangiitis (P > C)
- Minocycline therapy

- Primary biliary cirrhosis (P)
- Propylthiouracil therapy
- Rheumatoid arthritis (P)
- Sclerosing cholangitis (P)
- Systemic lupus erythematosus (P)
- Ulcerative colitis (P)
- Wegener's granulomatosis (C > P)

**Further reading:**

- Colglazier CL, Sutej PG (2005) Laboratory testing in the rheumatic diseases: a practical review. *South Med J* 98(2):185–191

**Antinuclear Antibodies**

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- Addison's disease
- Autoimmune hemolytic anemia
- Autoimmune hepatitis
- Autoimmune urticaria
- Cocaine-associated vasculopathy
- Dermatomyositis
- Hashimoto's thyroiditis
- Immune thrombocytopenic purpura
- Mixed connective tissue disease
- Primary biliary cirrhosis
- Rheumatoid arthritis
- Scleroderma
- Sjögren syndrome
- Systemic lupus erythematosus

**Further reading:**

- Kavanaugh A, Tomar R, Reveille J et al (2000) Guidelines for clinical use of the antinuclear antibody test and tests for specific autoantibodies to nuclear antigens. *Arch Pathol Lab Med* 124:71–81

## Eosinophilia

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- Addison's disease
- Allergic bronchopulmonary aspergillosis
- Allergic contact dermatitis
- Atheroembolic disease
- Atopic dermatitis
- Bullous pemphigoid
- Churg–Strauss vasculitis
- Coccidioidomycosis
- Dermatitis herpetiformis
- Dermatomyositis
- Drug hypersensitivity
- Drug-induced interstitial nephritis
- Eosinophilia–myalgia syndrome
- Eosinophilic cellulitis
- Eosinophilic fasciitis
- Eosinophilic pneumonia
- Episodic angioedema with eosinophilia
- Exfoliative erythroderma
- Hypereosinophilic syndrome
- Hyper-IgE syndrome
- Internal malignancy
- Interstitial nephritis
- Leukemia
- Lymphomas
- Mastocytosis
- Omenn syndrome
- Parasitic infestation
- Pemphigus
- Rheumatoid arthritis
- Sarcoidosis
- Scabies

- Scleroderma
- Sezary syndrome
- Systemic lupus erythematosus
- Urticaria

**Further reading:**

- Sade K, Mysels A, Levo Y et al (2007) Eosinophilia: a study of 100 hospitalized patients. *Eur J Intern Med* 18(3):196–201

## **Hypergammaglobulinemia**

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- Angioimmunoblastic lymphadenopathy with dysproteinemia
- Chronic infection
- Chronic inflammatory diseases
- HIV infection
- Monoclonal gammopathy of undetermined significance
- Myeloma
- Sarcoidosis
- Waldenstrom's hypergammaglobulinemia

**Further reading:**

- Kyle RA, Rajkumar SV (2006) Monoclonal gammopathy of undetermined significance. *Br J Haematol* 134(6):573–589

## **Hypogammaglobulinemia**

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- Bruton's agammaglobulinemia
- Common variable immunodeficiency
- Glucocorticosteroids and other immunosuppressants
- Hyper-IgM syndrome
- Lymphoma
- Nephrotic syndrome

- Protein-losing enteropathy
- Severe combined immunodeficiency
- Thymoma (Good syndrome)

**Further reading:**

- Grimbacher B, Schäffer AA, Peter HH (2004) The genetics of hypogammaglobulinemia. *Curr Allergy Asthma Rep* 4(5):349–358

**Liver Enzymes Elevated**

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- Alcoholic hepatitis
- Amebic liver abscess
- Antitrypsin deficiency
- Autoimmune hepatitis
- Bacterial sepsis
- Cholestatic liver disease
- Disseminated fungal infection
- Drug-induced hepatotoxicity
- Gonococcal infection
- Leptospirosis
- Heart failure
- Liver ischemia
- Mononucleosis
- Pancreatic disease
- Sarcoidal hepatitis
- Steatohepatitis
- Tuberculosis
- Viral hepatitis
- Wilson's disease

**Further reading:**

- Pratt DS, Kaplan MM (2000) Evaluation of abnormal liver-enzyme results in asymptomatic patients. *N Engl J Med* 342(17):1266–1271

## Lymphocytosis

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- Drug reaction (especially anticonvulsants)
- Lymphocytic leukemia
- Pertussis
- Syphilis
- Tuberculosis
- Viral infection (especially mononucleosis)

### Further reading:

- Yetgin S, Kuskonmaz B, Aytaç S, Tavit B (2007) An unusual case of reactive lymphocytosis mimicking acute leukemia. *Pediatr Hematol Oncol* 24(2):129–135

## Lymphopenia

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- Chemotherapy
- Chronic renal failure
- Glucocorticosteroids
- Hereditary immunodeficiency syndromes
- HIV infection
- Idiopathic CD4+ lymphopenia
- Internal malignancy
- Lymphoma
- Methotrexate
- Sarcoidosis
- Systemic lupus erythematosus
- Tuberculosis

### Further reading:

- Walker UA, Warnatz K (2006) Idiopathic CD4 lymphocytopenia. *Curr Opin Rheumatol* 18(4):389–395



## Neutropenia

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- Aplastic anemia
- Bacteremia
- Bone marrow infiltration
- Chemotherapy
- Cyclic neutropenia
- Felty's syndrome
- Hereditary (benign) neutropenia
- HIV infection
- Leukemia
- Lupus erythematosus
- Lymphoma
- Nutritional deficiency
- Viral infection

### Further reading:

- Kyono W, Coates TD (2002) A practical approach to neutrophil disorders. *Pediatr Clin North Am* 49(5):929–971

## Neutrophilia

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- Bone marrow infiltration
- Connective tissue disease
- Cushing's syndrome
- Down syndrome
- Glucocorticosteroids
- Inflammatory diseases
- Internal malignancy
- Leukemia
- Myeloproliferative diseases
- Pregnancy
- Systemic infection
- Vasculitis syndromes

**Further reading:**

- Kyono W, Coates TD (2002) A practical approach to neutrophil disorders. *Pediatr Clin North Am* 49(5):929–971

**Rheumatoid Factor Elevated**

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- EBV infection
- Endocarditis
- Hepatitis C infection
- Hypergammaglobulinemic purpura of Waldenstrom
- Leukemia
- Lyme disease
- Mixed cryoglobulinemia
- Rheumatoid arthritis
- Scleroderma
- Sjögren syndrome
- Syphilis
- Systemic lupus erythematosus
- Waldenstrom's macroglobulinemia

**Further reading:**

- Colglazier CL, Sutej PG (2005) Laboratory testing in the rheumatic diseases: a practical review. *South Med J* 98(2):185–191

**Thrombocytopenia**

---

- Aplastic anemia
- B12 deficiency
- Bone marrow infiltration
- Disseminated intravascular coagulation
- Folate deficiency
- Hemolytic uremic syndrome
- Hereditary thrombocytopenia
- HIV infection

- Immune thrombocytopenic purpura
- Leukemia
- Lymphoma
- Medications
- Systemic lupus erythematosus
- Thrombotic thrombocytopenic purpura
- Viral infection

**Further reading:**

- Sekhon SS, Roy V (2006) Thrombocytopenia in adults: a practical approach to evaluation and management. *South Med J* 99(5):491–498

**Thrombocytosis**

---

- Chronic infection
- Chronic inflammatory disease (RA, etc.)
- Essential thrombocytosis
- Internal malignancy
- Iron deficiency
- Leukemia
- Polycythemia vera
- Splenectomy

**Further reading:**

- Dame C, Sutor AH (2005) Primary and secondary thrombocytosis in childhood. *Br J Haematol* 129(2):165–177

**Triglycerides and/or Cholesterol Elevated**

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- Alcohol abuse
- Cyclosporine therapy
- Diabetes mellitus
- Dietary excess

- Estrogen therapy
- Familial dysbetalipoproteinemia (type III hyperlipidemia)
- Familial hypercholesterolemia (type II hyperlipidemia)
- Familial hypertriglyceridemia (type IV hyperlipidemia)
- Familial lipoprotein lipase deficiency (type I hyperlipidemia)
- Glucocorticosteroid therapy
- Hypothyroidism
- Isotretinoin therapy
- Lipodystrophy syndromes
- Monoclonal gammopathies
- Nephrotic syndrome
- Obesity
- Pancreatic disease
- Thiazide therapy
- Type V hyperlipidemia

**Further reading:**

- Eaton CB (2005) Hyperlipidemia. *Prim Care* 32(4):1027–1055
- Yuan G, Al-Shali KZ, Hegele RA (2007) Hypertriglyceridemia: its etiology, effects and treatment. *Can Med Assoc J* 176(8):1113–1120

**VDRL Positive**

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- Antiphospholipid syndrome
- Borreliosis
- Drug abuse
- Endemic treponematoses
- Hepatic cirrhosis
- Idiopathic, familial
- Infectious mononucleosis
- Lepromatous leprosy
- Leptospirosis
- Lymphomas
- Malaria

- Pregnancy
- Syphilis
- Systemic lupus erythematosus

**Further reading:**

- Geusau A, Kittler H, Hein U et al (2005) Biological false-positive tests comprise a high proportion of Venereal Disease Research Laboratory reactions in an analysis of 300,000 sera. *Int J STD AIDS* 16(11):722–726

### Acanthoma Fissuratum (Spectacle Granuloma)

Flesh-colored or erythematous, focal thickening of the skin of the retroauricular fold or nasal sidewall that results from frictional trauma induced by eyeglasses

#### *Differential Diagnosis*

- Actinic keratosis
- Adnexal neoplasm
- Basal cell carcinoma
- Chondrodermatitis nodularis helices
- Foreign body reaction
- Keloid/hypertrophic scar
- Melanocytic nevus
- Seborrheic dermatitis
- Seborrheic keratosis
- Squamous cell carcinoma

#### *Treatment Options*

- Change to better fitting eyewear
- Cryosurgery
- Electrosurgery

#### **Further reading:**

- Betti R, Inselvini E, Pozzi G et al (1994) Bilateral spectacle frame acanthoma. Clin Exp Dermatol 19(6):503–504

## Acanthosis Nigricans

Acquired skin disease associated with a variety of internal diseases that is characterized by velvety, papillomatous, hyperpigmented plaques usually localized to the intertriginous areas, especially the neck, but also in a periorificial distribution in patients with an underlying malignancy

### *Subtypes/Variants*

- Acral
- Drug induced
- Facial (Fig. 6.1)
- Familial
- Insulin-resistance related
- Malignancy related
- Nevoid
- Oral
- Syndromic



**Fig. 6.1** Facial acanthosis nigricans

## ***Differential Diagnosis***

### Cutaneous

- Acanthosis-nigricans-like lesions associated with pemphigus
- Addison's disease
- Atopic dermatitis (dirty neck)
- Becker's nevus
- Berloque dermatitis
- Chronic phototoxicity
- Confluent and reticulated papillomatosis
- Dermatitis neglecta
- Diabetic finger pebbles
- Dowling–Degos disease
- Florid cutaneous papillomatosis
- Granular parakeratosis
- Haber syndrome
- Hemochromatosis
- Ichthyosis hystrix
- Intertrigo
- Kitamura's acropigmentation
- Linear epidermal nevus
- Mycosis fungoides (especially papillomatous type)
- Parapsoriasis en plaque
- Pellagra
- Pemphigus vegetans
- Pseudoatrophoderma colli
- Riehl's melanosis
- Seborrheic keratoses
- Terra firma–forme dermatosis

### Oral

- Oral florid papillomatosis
- Cowden's syndrome
- Dyskeratosis congenita
- Lipoid proteinosis



- Pachyonychia congenita
- Wegener's granulomatosis

### **Associations**

- Acromegaly
- Addison's disease
- Adenocarcinoma
- Alstrom syndrome
- Ataxia–telangiectasia
- Autoimmune disease
- Bannayan–Riley–Ruvalcaba syndrome
- Bardet–Biedl syndrome
- Beare–Stevenson cutis verticis gyrata syndrome
- Bloom syndrome
- Cohen syndrome
- Costello syndrome
- Crouzon's syndrome
- Diabetes
- Down syndrome
- HAIR–AN syndrome
- Hermansky–Pudlak syndrome
- Hypothyroidism
- Insulin resistance
- Lelis syndrome
- Leprechaunism
- Lipodystrophy syndromes
- Malignancy (especially gastric carcinoma)
- Marfan syndrome
- Obesity
- Phenylketonuria
- Pinealoma
- Pituitary tumor
- Prader–Willi syndrome

- Renal transplant
- Stein–Leventhal disease
- Werner syndrome
- Wilson’s disease

### ***Associated Medications***

- Diethylstilbestrol
- Glucocorticoids
- Niacinamide
- Nicotinic acid
- Oral contraceptives
- Triazineate

### ***Evaluation***

- Appropriate cancer screening (malignant type)
- Endocrine evaluation for hyperandrogenism (HAIR–AN)
- Fasting blood glucose/insulin levels
- Review medications

### ***Treatment Options***

- Treat underlying cause
- Topical retinoids
- Topical vitamin D analogues
- Ammonium lactate
- Metformin
- Oral contraceptive pills
- Systemic retinoids

### **Further reading:**

- Sinha S, Schwartz RA (2007) Juvenile acanthosis nigricans. *J Am Acad Dermatol* 57(3):502–508

## **Achenbach Syndrome (Paroxysmal Finger Hematomas)**

---

Acquired, idiopathic vascular disorder that occurs predominantly in females and that is characterized by tender, burning, purpuric hematoma-like nodules or plaques on the volar aspect of the fingers

### ***Differential Diagnosis***

- Acrocyanosis
- Buerger's disease
- Dermatitis artefacta
- Gardner–Diamond syndrome
- Osler's nodes
- Palmoplantar hidradenitis
- Perniosis
- Pressure urticaria
- Raynaud's phenomenon
- Trauma

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Robertson A, Liddington MI, Kay SP (2002) Paroxysmal finger haematomas (Achenbach's syndrome) with angiographic abnormalities. *J Hand Surg [Br]* 27(4):391–393

## **Acne Aestivalis (Mallorca Acne, Actinic Folliculitis)**

---

Subtype of acne characterized by a sunlight-induced, pruritic, erythematous, papulopustular eruption affecting sun-exposed areas (Fig. 6.2)



**Fig. 6.2** Acne aestivalis

### *Differential Diagnosis*

- Acne cosmetica
- Acne vulgaris (photoexacerbated)
- Folliculitis
- Insect-bite reactions
- Photoallergic contact dermatitis (especially sunscreen)
- Photosensitive drug eruption
- Polymorphous light eruption
- Rosacea
- Steroid acne

### *Treatment Options*

- Topical corticosteroids
- Sunscreen
- Topical antibiotics
- Oral tetracycline antibiotics
- Systemic corticosteroids

### **Further reading:**

- Veysey EC, George S (2005) Actinic folliculitis. Clin Exp Dermatol 30(6):659–661

## **Acne Conglobata**

---

Severe, disfiguring nodulocystic variant of acne that is often resistant to therapy and that is characterized by comedones, inflammatory pustules, nodules, and sinus tracts on the face, chest, back, and buttocks

### ***Differential Diagnosis***

- Acne fulminans
- Furunculosis
- Hidradenitis suppurativa
- Chloracne
- Halogenoderma
- PAPA syndrome
- Tropical acne

### ***Associations***

- Dissecting cellulitis of the scalp
- Hidradenitis suppurativa
- PAPA syndrome
- Pilonidal sinus
- SAPHO syndrome

### ***Treatment Options***

- Isotretinoin
- Systemic corticosteroids
- Azithromycin
- Sulfamethoxazole–trimethoprim

### **Further reading:**

- Shirakawa M, Uramoto K, Harada FA (2006) Treatment of acne conglobata with infliximab. *J Am Acad Dermatol* 55(2):344–346

## **Acne Fulminans**

---

Severe variant of acne characterized by necrotizing inflammatory nodules, leukocytosis, bony lesions, and systemic symptoms

### ***Differential Diagnosis***

- Acne conglobata
- Halogenoderma
- PAPA syndrome
- Pyoderma faciale
- Pyoderma gangrenosum
- SAPHO syndrome
- Sweet's syndrome

### ***Associations***

- Arthritis
- Crohn's disease
- Erythema nodosum
- Osteolytic bone lesions
- PAPA syndrome
- SAPHO syndrome
- Pyoderma gangrenosum

### ***Evaluation***

- Bone scan/radiographs
- Complete blood count
- Sedimentation rate

### ***Treatment Options***

- Isotretinoin
- Systemic corticosteroids

- Azithromycin
- Sulfamethoxazole–trimethoprim

**Further reading:**

- Mehrany K, Kist JM, Weenig RH et al (2005) Acne fulminans. *Int J Dermatol* 44(2):132–133

**Acneiform Drug Eruption (Acne Medicamentosa)**

---

Type of follicular drug eruption characterized by monomorphous erythematous papules and pustules without comedones that are located predominantly on the face and upper trunk

***Differential Diagnosis***

- Acne aestivalis
- Acne vulgaris
- Gram-negative folliculitis
- Halogenoderma
- Miliaria
- Pityrosporum folliculitis

***Associated Medications***

- Aripiprazole
- Corticosteroids
- Cyclosporine
- Epidermal growth factor receptor inhibitors
- Haloperidol
- Isoniazid
- Lamotrigine
- Lithium
- Phenytoin
- Progesterone

- Testosterone
- Trazodone

**Further reading:**

- Du-Thanh A, Kluger N, Bensalleh H et al (2011) Drug-induced acneiform eruption. *Am J Clin Dermatol* 12(4):233–245

**Acne, Infantile**

---

Type of comedonal acne affecting infants 3–6 months old and related to intrinsic hormonal imbalances

***Differential Diagnosis***

- Acne cosmetica
- Apert's syndrome
- Benign cephalic histiocytosis
- Candidiasis
- Eosinophilic folliculitis
- Eruptive milia
- Gianotti–Crosti syndrome
- Miliaria
- Molluscum contagiosum
- Pityrosporum folliculitis
- Plane warts
- Sebaceous hyperplasia
- Tinea faciei
- Tuberous sclerosis
- Zinc deficiency

***Associations***

- Adrenocortical tumor
- Congenital adrenal hyperplasia
- Cushing syndrome



### ***Treatment Options***

- Topical retinoids
- Benzoyl peroxide
- Topical erythromycin
- Topical clindamycin

### **Further reading:**

- Mann MW, Ellis SS, Mallory SB (2007) Infantile acne as the initial sign of an adrenocortical tumor. *J Am Acad Dermatol* 56(2 Suppl):S15–S18

### **Acne Keloidalis Nuchae**

Chronic folliculitis of the nape of the neck characterized early by inflammatory papules and pustules and later by keloidal papules, nodules, or plaques

### ***Differential Diagnosis***

- Acne necrotica
- Dissecting cellulitis
- Favus
- Folliculitis decalvans
- Pediculosis capitis
- Pseudofolliculitis barbae
- Scalp folliculitis
- Tinea capitis
- Nevus sebaceus

### ***Associations***

- Anticonvulsants
- Cyclosporine
- Follicular occlusion triad

- Lithium
- Pseudofolliculitis barbae
- Testosterone

### ***Treatment Options***

- Avoidance of close hair trimming
- Intralesional steroids
- Topical steroids
- Topical antibiotics
- Oral antibiotics
- Excisional surgery
- Electrosurgery
- Isotretinoin

### **Further reading:**

- Kelly AP (2003) Pseudofolliculitis barbae and acne keloidalis nuchae. *Dermatol Clin* 21(4):645–653

## **Acne Necrotica (Necrotizing Lymphocytic Folliculitis)**

Uncommon form of folliculitis with superficial (acne necrotica miliaris) and deep (acne necrotica varioliformis) subtypes that is characterized by erythematous papules and pustules on the head, neck, and upper trunk of middle-aged men, which later progress to necrosis and scarring (in the deep form only)

### ***Differential Diagnosis***

- Actinic keratosis
- Bacterial folliculitis
- Erosive pustular dermatosis
- Hydroa vacciniforme
- Metastatic lesions

- Papulonecrotic tuberculid
- Pediculosis capitis
- Pityriasis lichenoides et varioliformis acuta
- Pityrosporum folliculitis
- Tinea capitis
- Vasculitis
- Squamous cell carcinoma

### ***Treatment Options***

- Oral tetracycline antibiotics
- Topical corticosteroids
- Topical antibiotics
- Topical retinoids
- Zinc pyrithione shampoo
- Ketoconazole shampoo
- Isotretinoin

### **Further reading:**

- Zirn JR, Scott RA, Hambrick GW (1996) Chronic acneiform eruption with crateriform scars. Acne necrotica (varioliformis) (necrotizing lymphocytic folliculitis). Arch Dermatol 132(11):1367, 1370

## **Acne, Neonatal (Neonatal Cephalic Pustulosis)**

Acneiform eruption caused by *Malassezia* spp. that affects newborns up to 3 months of age and that is characterized by inflammatory papules on the cheeks and nose

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Candidiasis

- Eosinophilic folliculitis
- Erythema toxicum neonatorum
- Infantile acne
- Langerhans cell histiocytosis
- Miliaria
- Neonatal herpes
- Staphylococcal infection
- Transient neonatal pustular melanosis

### ***Evaluation***

- Bacterial culture
- Fungal culture
- Viral culture (HSV infection)
- Wright stain of pustule

### ***Treatment Options***

- Ketoconazole cream
- Selenium sulfide lotion
- Benzoyl peroxide

### **Further reading:**

- Ayhan M, Sancak B, Karaduman A et al (2007) Colonization of neonate skin by *Malassezia* species: relationship with neonatal cephalic pustulosis. *J Am Acad Dermatol* 57(6):1012–1018

## **Acne Vulgaris**

Inflammatory condition involving abnormal keratinization and plugging of follicles of the face and upper trunk, leading to the formation of comedones which subsequently rupture and give rise to inflammatory papules, pustules, and nodules

### *Differential Diagnosis*

- Acne aestivalis
- Acne cosmetica
- Acne medicamentosa
- Angiofibromas
- Colloid milia
- Contact acne
- Demodex folliculitis
- Dilated pore of Winer
- Eosinophilic folliculitis
- Eruptive vellus hair cysts
- Favre–Racouchot disease
- Fibrofolliculomas
- Verruca plana
- Furuncle/carbuncle
- Gram-negative folliculitis
- Granulomatous periorificial dermatitis
- Insect bites
- Keratosis pilaris
- Lupus miliaris disseminatus faciei
- Milia
- Molluscum contagiosum
- Nevus comedonicus
- Occupation acne
- Osteoma cutis
- Perioral dermatitis
- Pityrosporum folliculitis
- Pseudofolliculitis barbae
- Rosacea
- Sebaceous hyperplasia
- Spitz nevi
- Staphylococcal folliculitis
- Steroid acne
- Syringomas

- Tinea barbae
- Tinea faciei
- Trichodiscomas
- Trichoepitheliomas
- Trichostasis spinulosa

### **Associations**

- Adrenal tumor
- Androgen-induced alopecia
- Apert's syndrome
- Congenital adrenal hyperplasia
- Cushing's syndrome
- Hirsutism
- Ovarian tumor
- PAPA syndrome
- Polycystic ovary disease
- SAHA syndrome
- SAPHO syndrome

### **Evaluation (if Hyperandrogenism Is Suspected)**

- DHEA-S
- LH/FSH
- SHBG
- Testosterone (total and free)
- 17-OH progesterone level

### **Treatment Options**

- Benzoyl peroxide
- Topical retinoids
- Topical antibiotics
- Topical dapsone

- Azelaic acid
- Tetracycline antibiotics
- Sulfamethoxazole–trimethoprim
- Azithromycin
- Oral contraceptive pills
- Spironolactone
- Isotretinoin
- Oral dapsone
- Photodynamic therapy
- Pulsed dye laser

**Further reading:**

- Gebauer K (2000) Acne variants. Am J Clin Dermatol 1(3):187–189

**Acroangiodermatitis of Mali**

Acquired vascular disorder, and type of pseudo-Kaposi's sarcoma, that is associated with chronic venous insufficiency and is characterized by violaceous patches and plaques on the dorsal feet and anterior lower legs with sparing of the soles

***Differential Diagnosis***

- Kaposi's sarcoma
- Lichen amyloidosis
- Lichen planus
- Lichen simplex chronicus
- Multinucleate cell angiohistiocytoma
- Pigmented purpuric dermatosis
- Psoriasis
- Vasculitis

### **Associations**

- Arteriovenous malformation
- Venous stasis

### **Treatment Options**

- Observation and reassurance
- Compression and elevation
- Pentoxifylline
- Aspirin
- Dapsone

### **Further reading:**

- Rongioletti F, Rebora A (2003) Cutaneous reactive angiomatoses: patterns and classification of reactive vascular proliferation. *J Am Acad Dermatol* 49(5):887–896

### **Acrochordon (Skin Tag)**

Benign, fleshy, pedunculated lesion frequently observed in the flexures

### **Differential Diagnosis**

- Basal cell carcinoma (Gorlin's syndrome)
- Dermatitis papulosa nigra
- Fibroepithelioma of Pinkus
- Melanocytic nevus
- Melanoma (including metastatic)
- Neurofibroma
- Seborrheic keratosis
- Wart
- Tick



### **Associations**

- Diabetes
- Nevoid basal cell carcinoma syndrome
- Obesity

### **Further reading:**

- Chiritescu E, Maloney ME (2001) Acrochordons as a presenting sign of nevoid basal cell carcinoma syndrome. *J Am Acad Dermatol* 44(5):789–794
- Rasi A, Soltani-Arabshahi R, Shahbazi N (2001) Skin tag as a cutaneous marker for impaired carbohydrate metabolism: a case-control study. *Int J Dermatol* 46(11):1155–1159

### **Acrocyanosis**

---

Bluish discoloration of the hands and feet that is persistent, associated with hyperhidrosis, exacerbated by a cold environment, and most commonly benign in nature, but that can be a marker of internal disease

### **Differential Diagnosis**

- Achenbach syndrome
- Chilblains (perniosis)
- Erythromelalgia
- Livedo reticularis
- Lupus erythematosus
- Raynaud phenomenon
- Scleroderma

### **Associations**

- Anorexia
- Butyl nitrate
- Cold agglutinin hemolytic anemia

- Connective tissue disease
- Cryoglobulinemia
- Heart failure
- Interferon alpha
- Lymphoma
- Paraneoplastic acral vascular syndrome
- Thromboangiitis obliterans
- Tricyclic antidepressants

### **Evaluation**

- Antinuclear antibodies
- Cold agglutinins
- Complete blood count
- Cryoglobulins
- CT scan
- Echocardiogram

### **Treatment Options**

- Avoidance of cold
- Observation and reassurance

### **Further reading:**

- Strumia R (2005) Dermatologic signs in patients with eating disorders. *Am J Clin Dermatol* 6(3):165–173

## **Acrodermatitis Chronica Atrophicans (Herxheimer Disease)**

---

Cutaneous manifestation of late-stage Lyme disease that predominantly affects the extremities, that is seen more commonly in Europe, that is associated with *Borrelia afzelii* infection, and that is characterized by an edematous phase which progresses slowly to cutaneous atrophy and/or scleroderma-like skin changes

### ***Differential Diagnosis***

- Acrogeria (Gottron syndrome)
- Cold injury
- Eczematous dermatitis
- Eosinophilic fasciitis
- Erysipelas/cellulitis
- Lichen sclerosus et atrophicus
- Morphea
- Normal aging
- Pernio
- Severe photodamage
- Stasis dermatitis
- Steroid atrophy
- Systemic sclerosis
- Venous insufficiency

### ***Evaluation***

- Joint-fluid aspiration (if Lyme arthritis is suspected)
- Lumbar puncture (if CNS Lyme disease is suspected)
- Lyme ELISA and Western blot

### ***Treatment Options***

- See “[Lyme Disease](#)”

### **Further reading:**

- Zalaudek I, Leinweber B, Kerl H et al (2005) Acrodermatitis chronica atrophicans in a 15-year-old girl misdiagnosed as venous insufficiency for 6 years. *J Am Acad Dermatol* 52(6):1091–1094



**Fig. 6.3** Acrodermatitis continua

### **Acrodermatitis Continua of Hallopeau (Dermatitis Repens)**

---

Localized, often refractory variant of psoriasis that affects the distal aspect of the digits and that is characterized by sterile pustules, crusting, and hyperkeratosis of the nail bed and periungual area (Fig. 6.3)

#### ***Differential Diagnosis***

- Acute paronychia
- Blistering distal dactylitis
- Contact dermatitis
- Dyshidrotic eczema
- Herpetic whitlow
- Onychomycosis
- Pompholyx

#### ***Evaluation***

- Bacterial culture

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Topical vitamin D analogues
- Acitretin
- Methotrexate
- Etanercept
- Infliximab
- Adalimumab
- Cyclosporine
- Ustekinumab

### **Further reading:**

- Waller JM, Wu JJ, Murase JE et al (2007) Chronically painful right thumb with pustules and onycholysis. Diagnosis: acrodermatitis continua of Hallopeau. Clin Exp Dermatol 32(5):619–620

### **Acrodermatitis Enteropathica (Brandt's Disease)**

Autosomal-recessive disorder caused by a defect in the SLC39A4 gene which leads to decreased absorption of zinc in the gut and a resulting periorificial and acral erythematous, scaly, and fissuring rash, alopecia, candidiasis, and diarrhea with onset shortly after cessation of breast-feeding

### ***Differential Diagnosis***

#### **Acrodermatitis Enteropathica**

- Atopic dermatitis
- Biotin deficiency
- Chronic mucocutaneous candidiasis
- Cystic fibrosis
- Epidermolysis bullosa
- Essential fatty acid deficiency

- Glucagonoma syndrome
- Hartnup's syndrome
- Langerhans cell histiocytosis
- Maple syrup urine disease
- Multiple carboxylase deficiency
- Necrolytic acral erythema
- Netherton's syndrome
- Olmsted syndrome
- Ornithine transcarbamylase deficiency
- Psoriasis
- Seborrheic dermatitis

#### Acquired Zinc Deficiency

- Biotin deficiency
- Essential fatty acid deficiency
- Hailey–Hailey disease
- Necrolytic migratory erythema
- Pellagra
- Pemphigus foliaceus
- Seborrheic dermatitis

#### **Associations**

- Alcoholism
- Anorexia nervosa
- Chronic renal failure
- Cirrhosis
- Crohn's disease
- Cystic fibrosis
- Decreased intake of zinc
- Dialysis
- Dietary zinc deficiency
- Gastric bypass surgery
- High-fiber diet

- HIV infection
- Malabsorption syndromes
- Lymphoma
- Nephrotic syndrome
- Pregnancy
- Total parenteral nutrition

### ***Evaluation***

- Alkaline phosphatase level (low)
- Serum zinc level

### ***Treatment Options***

- Zinc supplementation

### **Further reading:**

- Maverakis E, Fung MA, Lynch PJ et al (2007) Acrodermatitis enteropathica and an overview of zinc metabolism. *J Am Acad Dermatol* 56(1):116–124

## **Acrodynia**

Cutaneous manifestation of mercury poisoning that affects children predominantly and that is characterized by painful, erythematous, swollen hands and feet along with hyperhidrosis, photophobia, and anorexia

### ***Differential Diagnosis***

- Acrocyanosis
- Acrodermatitis chronica atrophicans
- Acrodermatitis enteropathica
- Acrogeria (Gottron syndrome)
- Acute generalized exanthematous pustulosis

- Arsenic toxicity
- Chilblains
- Cockayne syndrome
- Copper toxicity
- Erythromelalgia
- Glucagonoma syndrome
- Gold toxicity
- Kawasaki disease
- Progeria
- Steroid atrophy
- Thallium toxicity
- Werner's syndrome

### ***Evaluation***

- 24-h urine mercury level
- Serum mercury level

### **Further reading:**

- Boyd AS, Seger D, Vannucci S et al (2000) Mercury exposure and cutaneous disease. *J Am Acad Dermatol* 43(1 Pt 1):81–90

## **Acrokeratoelastoidosis of Costa**

Inherited (AD) or sporadic type of palmoplantar keratoderma caused by fragmentation of elastic fibers that is characterized by translucent, grouped papules in a linear array at the lateral margins of the palms and soles

### ***Differential Diagnosis***

- Acrokeratosis verruciformis of Hopf
- Focal acral hyperkeratosis
- Keratoelastoidosis marginalis
- Verruca



**Further reading:**

- Hu W, Cook TE, Vicki GJ et al (2002) Acrokeratoelastoidosis. *Pediatr Dermatol* 19(4):320–322

**Acrokeratosis Paraneoplastica of Bazex**

---

Uncommon paraneoplastic disorder affecting older patients with underlying aerodigestive squamous cell carcinoma that is characterized by nail dystrophy, violaceous hyperkeratotic plaques on the acral areas, including the nose and ears, and palmoplantar keratoderma

***Differential Diagnosis***

- Acquired zinc deficiency
- Chilblains
- Contact dermatitis
- Dermatophytosis
- Dermatomyositis
- Lupus erythematosus
- Medication reaction
- Necrolytic acral erythema
- Onycholysis
- Onychomycosis
- Photosensitivity reaction
- Psoriasis

***Evaluation***

- Appropriate cancer screening
- Otorhinolaryngologic evaluation

**Further reading:**

- Taher M, Grewal P, Gunn B et al (2007) Acrokeratosis paraneoplastica (Bazex syndrome) presenting in a patient with metastatic breast carcinoma: possible etiologic role of zinc. *J Cutan Med Surg* 11(2):78–83

## **Acrokeratosis Verruciformis of Hopf**

---

Inherited (AD) disorder allelic with Darier's disease that is caused by mutation of the ATP2A2 gene encoding the SERCA2 calcium pump and that is characterized by verrucous papules on the dorsal hands and occasionally the feet

### ***Differential Diagnosis***

- Acrokeratoelastoidosis of Costa
- Actinic keratosis
- Arsenical keratoses
- Colloid milium
- Cowden's disease keratoses
- Darier's disease
- Epidermodysplasia verruciformis
- Verruca plana
- Granuloma annulare
- Lichen planus
- Seborrheic keratosis
- Stucco keratoses

### ***Treatment Options***

- Cryosurgery
- Topical retinoids
- Acitretin
- CO<sub>2</sub> laser

### **Further reading:**

- Rallis E, Economidi A, Papadakis P et al (2005) Acrokeratosis verruciformis of Hopf (Hopf disease): case report and review of the literature. *Dermatol Online J* 11(2):10

## **Acrokeratotic Poikiloderma (of Kindler and Weary)**

---

Inherited blistering disorder (AR) caused by defect in the gene encoding the KIND1 gene that is characterized by neonatal-onset trauma-induced blistering on the hands and feet, photosensitivity, diffuse and progressive poikiloderma, and periodontal disease

### ***Differential Diagnosis***

- Ataxia–telangiectasia
- Bloom's syndrome
- Bullous congenital ichthyosiform erythroderma
- Cockayne syndrome
- Dyskeratosis congenita
- Epidermolysis bullosa
- Erythrokeratoderma variabilis
- Rothmund–Thomson syndrome
- Xeroderma pigmentosum

### **Further reading:**

- Ashton GH (2004) Kindler syndrome. Clin Exp Dermatol 29(2):116–121

## **Acropigmentation of Dohi (Dyschromatosis Symmetrica Hereditaria)**

---

Inherited dyschromatosis (AD) of unknown cause that has been predominantly reported in Japan, and this is characterized by onset in childhood of hyperpigmented and hypopigmented macules on the dorsal hands and feet

### ***Differential Diagnosis***

- Acquired brachial cutaneous dyschromatosis
- Dyschromatosis universalis hereditaria

- Erythema ab igne
- Reticulate acropigmentation of Kitamura

### ***Treatment Options***

- Camouflage

### **Further reading:**

- Obieta MP (2006) Familial reticulate acropigmentation of Dohi: a case report. *Dermatol Online J* 12(3):16

## **Acropustulosis of Infancy**

Pruritic dermatosis affecting infants and young children that is characterized by crops of pustules and papulovesicles situated on the hands, feet, ankles, and forearms that may represent a persistent cutaneous reaction to scabies infestation

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Cutaneous candidiasis
- Dyshidrotic eczema
- Eosinophilic pustular folliculitis
- Erythema toxicum neonatorum
- Hand-foot-mouth disease
- Impetigo, bullous
- Pustular psoriasis
- Scabies
- Subcorneal pustular dermatosis
- Transient neonatal pustular melanosis

### ***Evaluation***

- Mineral oil examination for scabies

### ***Treatment Options***

- Topical corticosteroids

### **Further reading:**

- Mancini AJ, Frieden IJ, Paller AS (1998) Infantile acropustulosis revisited: history of scabies and response to topical corticosteroids. *Pediatr Dermatol* 15(5):337–341

## **Actinic Granuloma (Annular Elastolytic Giant Cell Granuloma)**

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Uncommon granulomatous disorder predominantly affecting middle-aged women that is probably triggered by actinic injury of the dermis and is characterized by annular, erythematous plaques with hypopigmented atrophic centers on the face, neck, or arms (Fig. 6.4)

### ***Differential Diagnosis***

- Anetoderma
- Annular lichen planus
- Cutis laxa
- Elastosis perforans serpiginosa
- Erythema annulare centrifugum
- Granuloma annulare
- Granuloma multiforme
- Granulomatous infections
- Granulomatous slack skin
- Leprosy (especially tuberculoid type)
- Lupus erythematosus
- Morphea
- Necrobiosis lipoidica



**Fig. 6.4** Actinic granuloma  
(Courtesy of K. Guidry)

- Necrobiotic xanthogranuloma
- Sarcoidosis
- Syphilis
- Tinea corporis

### ***Associations***

- Temporal arteritis

### ***Treatment Options***

- Sunscreen
- Topical corticosteroids
- Intralesional corticosteroids
- Observation
- Pentoxifylline

- Systemic retinoids
- Antimalarials
- Cyclosporine

**Further reading:**

- Coelho R, Viana I, Rijo H (2010) Annular lesions on the forehead of a 44-year-old woman. Annular elastolytic giant cell granuloma (AEGCG). Clin Exp Dermatol 35(3):e48–e49

**Actinic Keratosis (Solar Keratosis)**

Precancerous neoplasm with the potential to progress to squamous cell carcinoma that is caused by ultraviolet-light-induced DNA mutations and characterized by hyperkeratotic, erythematous papules and plaques on the chronically sun-exposed areas of the body

***Subtypes/Variants*****Clinical**

- Actinic cheilitis
- Conjunctival
- Hypertrophic
- Lichenoid
- Pigmented
- Proliferative
- Spreading pigmented

**Histological**

- Acantholytic
- Atrophic
- Bowenoid
- Hypertrophic
- Lichenoid
- Pigmented

### ***Differential Diagnosis***

- Acne necrotica
- Acrokeratosis verruciformis
- Atypical fibroxanthoma
- Arsenical keratosis
- Basal cell carcinoma
- Benign lichenoid keratosis
- Bowen's disease
- Chondrodermatitis nodularis helices
- Cowden's disease keratoses
- Disseminated superficial actinic porokeratosis
- Epidermodysplasia verruciformis
- Erosive pustular dermatosis
- Gouty tophus
- Keratoacanthoma
- Large cell acanthoma
- Lichen simplex
- Lupus erythematosus
- Lentigo maligna
- Lichenoid keratosis
- Nummular dermatitis
- Picker's nodule
- Psoriasis
- Seborrheic dermatitis
- Seborrheic keratosis
- Squamous cell carcinoma
- Solar lentigo
- Wart

### ***Treatment Options***

- Cryotherapy
- Curettage
- Topical 5-FU



- Imiquimod cream
- Ingenol mebutate
- Topical retinoids
- Topical diclofenac
- Photodynamic therapy
- Chemical peels
- Ablative lasers
- Dermabrasion

**Further reading:**

- Scheinfeld NS (2007) Actinic keratoses. *Skinmed* 6(4):188–190

**Actinic Prurigo (Hutchinson Prurigo)**

Chronic dermatosis affecting children that is caused by an abnormal reaction to ultraviolet light and characterized by pruritic, photodistributed, papules, vesicles, and plaques with cheilitis and conjunctivitis

***Differential Diagnosis***

- Atopic dermatitis (especially photoexacerbated type)
- Chronic actinic dermatitis
- Hydroa vacciniforme
- Insect bites
- Jessner's lymphocytic infiltrate
- Lupus erythematosus
- Photoallergic contact dermatitis
- Polymorphous light eruption
- Porphyrias (especially erythropoietic protoporphyria)
- Prurigo nodularis
- Scabies
- Solar urticaria

### **Evaluation**

- Antinuclear antibodies
- HLA DRB1\*0407 (HLA DR-4) testing
- Phototesting
- Porphyrin studies

### **Treatment Options**

- Sun avoidance measures
- Narrowband UVB phototherapy
- Systemic corticosteroids
- Antimalarials
- Pentoxifylline
- Azathioprine
- Thalidomide

### **Further reading:**

- Hojyo-Tomoka MT, Vega-Memije ME, Cortes-Franco R et al (2003) Diagnosis and treatment of actinic prurigo. *Dermatol Ther* 16(1):40–44

### **Actinomycosis (Rivalta Disease)**

Chronic infection most commonly caused by *Actinomyces israelii* and characterized by a deep infectious focus (usually the mandible in the setting of poor dentition) with an overlying sinus tract which exudes yellow colony-containing sulfur granules

### **Subtypes/Variants**

- Abdominal
- Cervicofacial

- Pelvic (with intrauterine device)
- Thoracic

### ***Differential Diagnosis***

- Abscess
- Aerobic bacterial infections
- Appendicitis
- Blastomycosis
- Botryomycosis
- Crohn's disease
- Deep fungal infections
- Dental sinus
- Eumycetoma
- Leishmaniasis
- Lymphoma (especially Hodgkin's disease)
- Neoplasm
- Nocardiosis
- Osteomyelitis
- Pelvic inflammatory disease
- Pneumonia
- Tinea barbae (deep type)
- Tuberculosis (especially scrofuloderma)

### ***Evaluation***

- Gram stain and culture of granules
- Immunoperoxidase studies
- CT or MRI scan

### **Further reading:**

- Fazeli MS, Bateni H (2005) Actinomycosis: a rare soft tissue infection. *Dermatol Online J* 11(3):18

## Acute Generalized Exanthematous Pustulosis

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Generalized pustular eruption caused most commonly by drugs (with rapid resolution typical after stopping the offending agent) but also by viruses or mercury toxicity that is characterized by rapid-onset eruption of small, superficial nonfollicular pustules on a background of erythema first on the face and flexures and later on the trunk

### *Differential Diagnosis*

- Acute febrile neutrophilic dermatosis
- Amicrobial pustulosis with autoimmunity
- Candidiasis
- Drug reaction with eosinophilia and systemic symptoms (DRESS)
- Erythema multiforme
- Exanthematous drug eruption
- Impetigo herpetiformis
- Pemphigus foliaceus
- Pustular bacterid
- Pustular psoriasis
- Reiter syndrome
- Staphylococcal scalded-skin syndrome
- Subcorneal pustular dermatosis
- Toxic epidermal necrolysis

### *Associated Medications*

- Acetaminophen
- Allopurinol
- Beta-lactam antibiotics
- Carbamazepine
- Celecoxib
- Chloramphenicol

- Clindamycin
- Co-trimoxazole
- Cytarabine
- Diltiazem
- Famotidine
- Furosemide
- Hydrochlorothiazide
- Hydroxychloroquine
- Ibuprofen
- Imatinib
- Imipenem
- Isoniazid
- Itraconazole
- IV contrast dye
- Macrolides
- Mercury
- Metronidazole
- Morphine
- Naproxen
- Nifedipine
- Olanzapine
- Phenytoin
- Pseudoephedrine
- Ranitidine
- Rifampin
- Sertraline
- Simvastatin
- Terbinafine
- Vancomycin

### ***Evaluation***

- Bacterial culture
- Complete blood count

- Direct immunofluorescence
- Liver function test

### ***Treatment Options***

- Discontinue causative medication
- Systemic corticosteroids

### **Further reading:**

- Knowles SR, Shear NH (2007) Recognition and management of severe cutaneous drug reactions. *Dermatol Clin* 25(2):245–253

## **Acute Hemorrhagic Edema of Childhood (Finkelstein's Disease)**

---

Type of cutaneous small vessel vasculitis that affects children under the age of 2 years and that is characterized by preceding infection or medication use in some patients and typical brightly erythematous to purpuric cockade or targetoid plaques on the face and extremities with edema of the hands and feet

### ***Differential Diagnosis***

- Acrodynea
- Child abuse/contusions
- Erythema multiforme
- Henoch–Schonlein purpura
- Kawasaki disease
- Leukemia cutis
- Meningococemia
- Septic vasculitis
- Sweet's syndrome
- Urticaria
- Urticarial vasculitis

### **Evaluation**

- Serum chemistry
- Complete blood cell count
- Complement levels
- Sedimentation rate
- Urinalysis

### **Treatment Options**

- Observation and reassurance
- Systemic corticosteroids

### **Further reading:**

- Sites LY, Woodmansee CS, Wilkin NK et al (2008) Acute hemorrhagic edema of infancy: case reports and a review of the literature. *Cutis* 82(5):320–324

## **Acute Necrotizing Gingivitis (Trench Mouth)**

---

Acute infectious form of gingivitis seen in patients with extremely poor oral hygiene that is caused by bacterial infection of the gingiva with *Prevotella*, *Actinomyces*, spirochetes, and streptococcal species and that is characterized by fever, gingival swelling, foul odor, and ulceration

### **Differential Diagnosis**

- Aphthous stomatitis (major type)
- Behçet's disease
- Desquamative gingivitis
- Erosive lichen planus
- Medication toxicity
- Pemphigus vulgaris
- Wegener's granulomatosis

**Further reading:**

- Buchanan JA, Cedro M, Mirdin A et al (2006) Necrotizing stomatitis in the developed world. *Clin Exp Dermatol* 31(3):372–374

**Adams–Oliver Syndrome**

Developmental disorder (AD) characterized by a large, stellate type of aplasia cutis congenita on the scalp, transverse limb defects, cutis marmorata telangiectatica congenita, and cardiac and CNS anomalies

***Differential Diagnosis***

- Amniotic band syndrome
- Focal dermal hypoplasia (Goltz)
- Intrauterine varicella or herpes simplex infection
- Johanson–Blizzard syndrome
- Methimazole teratogenicity
- MIDAS syndrome
- Misoprostol
- Oculocerebrocutaneous syndrome
- Oculoectodermal syndrome
- Setleis syndrome (focal facial dermal dysplasia)
- Trisomy 13
- Wolf-Hirschhorn syndrome

**Further reading:**

- Rajabian MH, Aghaei S (2006) Adams–Oliver syndrome and isolated aplasia cutis congenita in two siblings. *Dermatol Online J* 12(6):17

**Adult T Cell Leukemia/Lymphoma**

Type of T cell lymphoproliferative disorder associated with HTLV-1 infection of lymphocytes that is characterized by skin lesions that are clinically indistinguishable from other forms of cutaneous T cell lymphoma, along



with occasional lymphadenopathy, hepatosplenomegaly, lytic bone lesions, and hypercalcemia

### ***Differential Diagnosis***

- Atopic dermatitis
- Contact dermatitis
- HIV infection
- Mycosis fungoides
- Non-Hodgkin's lymphoma

### ***Evaluation***

- Blood smear for floret lymphocytes
- Complete blood count
- HIV test
- HTLV-1 ELISA and Western blot
- Lactate dehydrogenase level
- Radiographic studies
- Serum calcium
- Serum chemistry

### **Further reading:**

- Yamaguchi T, Ohshima K, Karube K et al (2005) Clinicopathological features of cutaneous lesions of adult T-cell leukaemia/lymphoma. *Br J Dermatol* 152(1):76–81

### **Ainhum (Dactylolysis Spontanea)**

Gradual autoamputation of the fifth toe that primarily affects patients in Africa who walk barefoot, that is caused by repeated trauma, and that is characterized by progressive constriction of the digit with thin fibrous band formation and eventual amputation

### ***Differential Diagnosis***

- Arterial insufficiency
- Congenital constricting bands
- Endemic syphilis
- Leprosy
- Morphea
- Pachyonychia congenita
- Pityriasis rubra pilaris
- Porokeratosis
- Pseudoainhum
- Systemic sclerosis
- Syphilis
- Tourniquet syndrome
- Tuberculosis
- Yaws

#### **Further reading:**

- Olivieri I, Piccirillo A, Scarano E, Ricciuti F, Padula A, Molfese V (2005) Dactylolysis spontanea or ainhum involving the big toe. J Rheumatol 32(12):2437–2439

### **Alezzandrini Syndrome**

Rare syndrome of unknown cause that is characterized by facial vitiligo and poliosis with ipsilateral loss of visual acuity and deafness

### ***Differential Diagnosis***

- Piebaldism
- Vitiligo
- Vogt–Koyanagi–Harada syndrome
- Waardenburg syndrome

**Further reading:**

- Shamsadini S, Meshkat MR, Mozzafarina K (1994) Bilateral retinal detachment in Alezzandrini's syndrome. *Int J Dermatol* 33(12):885–886

**Alkaptonuria (Ochronosis)**

Hereditary metabolic disorder (AR) caused by deficiency of homogentisic acid oxidase which is characterized by the accumulation of a black pigment in tissues, including the cartilage, skin, and sclera, as well as accumulation in the urine, which is often the first identifiable feature of this disease in infants

***Differential Diagnosis***

- Argyria
- Calcific aortic stenosis
- Chrysiasis
- Drug-induced hyperpigmentation
- Exogenous ochronosis
- Hemochromatosis
- Minocycline hyperpigmentation
- Nevus of Ota
- Osteoarthritis
- Rheumatoid arthritis

***Evaluation***

- Urinary homogentisic acid level (elevated)
- Sodium hydroxide test (NaOH darkens urine)

**Further reading:**

- Spenny ML, Suwannarat P, Gahl WA et al (2005) Blue pigmentation and arthritis in an elderly man. *J Am Acad Dermatol* 52(1):122–124

## **Alopecia Areata/Totalis/Universalis**

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Type of alopecia that is potentially self-limited, probably autoimmune in etiology, and characterized by circumscribed (areata) nonscarring alopecia, total scalp alopecia (totalis), or total body alopecia (universalis)

### ***Subtypes/Variants***

- Acute diffuse and total alopecia of the scalp
- Circumscribed
- Diffuse
- Gray overnight
- Ophiasis
- Reticular
- Sisaipho
- Totalis
- Universalis

### ***Differential Diagnosis***

- Alopecia neoplastica
- Anagen effluvium
- Androgenetic alopecia
- Aplasia cutis
- Atrichia with papular lesions
- Ectodermal dysplasia
- Frontal fibrosing alopecia
- Loose anagen syndrome
- Lupus erythematosus
- Monilethrix
- Pressure alopecia
- Syphilitic alopecia
- Telogen effluvium
- Temporal triangular alopecia

- Tinea capitis
- Traction alopecia
- Trichotillomania
- Vitamin-D-resistant rickets

### ***Associations***

- Addison's disease
- Atopic dermatitis
- Autoimmune polyglandular syndromes
- Autoimmune thyroid disease
- Celiac disease
- Diabetes
- Down syndrome
- HIV infection
- Lichen planus
- Loose anagen hair syndrome
- Lupus erythematosus
- Pernicious anemia
- Stress
- Vitiligo
- Trachyonychia
- Turner's syndrome

### ***Evaluation***

- AM serum cortisol level
- Antithyroid antibodies
- Complete blood count
- Thyroid function tests

### ***Treatment Options***

- Intralesional corticosteroids
- Topical corticosteroids

- Topical tacrolimus
- Topical minoxidil
- Anthralin cream
- Topical squaric acid dibutyl ester
- Systemic steroids
- Sulfasalazine
- Methotrexate
- Mycophenolate mofetil
- Cyclosporine

**Further reading:**

- Dudda-Subramanya R, Alexis AF, Siu K, Sinha AA (2007) Alopecia areata: genetic complexity underlies clinical heterogeneity. *Eur J Dermatol* 17(5):367–374

## **Alpha-1 Antitrypsin Deficiency Panniculitis**

---

Type of panniculitis that is most severe in patients with homozygous deficiency of alpha-1 antitrypsin (PiZZ phenotype) and is characterized by trauma-induced erythematous and tender subcutaneous nodules on the trunk or extremities which ulcerate and drain an oily brown fluid

### ***Differential Diagnosis***

- Erythema induratum (nodular vasculitis)
- Infectious panniculitis
- Pancreatic panniculitis
- Pyoderma gangrenosum
- Sweet's syndrome
- Traumatic panniculitis (including factitial)

### ***Associations***

- Severe psoriasis

### ***Evaluation***

- Bacterial and fungal cultures
- Chest radiograph
- Liver function tests
- Phenotyping (PiMM is normal; PiZZ indicates severe deficiency)
- Plasma alpha-1 antitrypsin level

### ***Treatment Options***

- Intravenous replacement of alpha-1 antitrypsin

### **Further reading:**

- Walling H, Geraminejad P (2005) Determine alpha-1 antitrypsin level and phenotype in patients with neutrophilic panniculitis. *J Am Acad Dermatol* 52(2):373–374

### **Amalgam Tattoo**

Iatrogenic tattoo that is caused by traumatic implantation or diffusion of dental amalgam into surrounding tissues of a restored tooth and that is characterized by a dark gray or blue macule on the gingival or buccal mucosa

### ***Differential Diagnosis***

- Heavy-metal intoxication
- Hemangioma
- Hemochromatosis
- Laugier–Hunziker syndrome
- Medication reaction
- Melanoma
- Mucosal melanosis

- Nevus
- Oral melanoacanthoma
- Peutz–Jeghers syndrome
- Venous lake

**Further reading:**

- Pigatto PD, Brambilla L, Guzzi G (2006) Amalgam tattoo: a close-up view. *J Eur Acad Dermatol Venereol* 20(10):1352–1353

## **Amebiasis, Cutaneous**

Cutaneous infection most often seen in the perianal area or abdominal area that is caused by the intestinal protozoa *Entamoeba histolytica* and characterized by a painful ulcer with little tendency for spontaneous healing

### ***Differential Diagnosis***

- Chancriform pyoderma
- Chancroid
- CMV infection
- Condyloma acuminata
- Deep fungal infection
- Granuloma inguinale
- Herpes simplex virus infection
- Inflammatory bowel disease
- Leishmaniasis
- Lymphogranuloma venereum
- Tropical phagedenic ulcer
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Streptococci
- Syphilis



### **Evaluation**

- Enzyme immunoassay test for *E. histolytica* antibodies

### **Further reading:**

- Kenner BM, Rosen T (2006) Cutaneous amebiasis in a child and review of the literature. *Pediatr Dermatol* 23(3):231–234

## **Amicrobial Pustulosis with Autoimmune Disease**

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Uncommon pustular dermatosis affecting predominantly female patients with autoimmune diseases such as systemic lupus erythematosus and Sjögren's syndrome that is characterized by a chronic course of pustules on the cutaneous folds, scalp, and periorificial regions of the head and neck

### **Differential Diagnosis**

- Acute generalized exanthematous pustulosis
- Behçet's disease
- Bowel-associated dermatosis–arthritis syndrome
- Bromoderma
- Dermatitis herpetiformis
- Eosinophilic pustular folliculitis
- Erosive pustular dermatosis
- Folliculitis
- Furunculosis
- IgA pemphigus
- Impetigo contagiosa
- Iododerma
- Pemphigus
- Pustular psoriasis

- Subcorneal pustular dermatosis
- Sweet's syndrome

### **Evaluation**

- Antinuclear antibodies
- Bacterial culture of pustules
- Erythrocyte sedimentation rate
- Serum protein electrophoresis
- Specific tests for connective tissue diseases
- Urinalysis

### **Further reading:**

- Boms S, Gambichler T (2006) Review of literature on amicrobial pustulosis of the folds associated with autoimmune disorders. *Am J Clin Dermatol* 7(6):369–374

## **Amyloidosis, Primary Cutaneous**

Localized cutaneous form of amyloidosis which is probably induced by scratching and rubbing, associated with deposition of keratin-derived amyloid in the dermis, and that is characterized by pruritic, waxy hyperkeratotic papules located most commonly on the anterior lower extremities (lichen) or pruritic, hyperpigmented macules and patches most commonly on the upper back (macular)

### **Subtypes/Variants**

- Anosacral
- Lichen (Fig. 6.5)
- Macular (Fig. 6.6)
- Poikiloderma-like
- Vitiliginous



**Fig. 6.5** Lichen amyloidosis



**Fig. 6.6** Macular amyloidosis (Courtesy of K. Guidry)

## ***Differential Diagnosis***

### Lichen

- Contact dermatitis
- Epidermolysis bullosa pruriginosa
- Hypertrophic lichen planus
- Lichen myxedematosus
- Lichen simplex chronicus
- Lichenoid drug eruption
- Mycosis fungoides
- Necrobiosis lipoidica
- Papular mucinosis
- Pemphigoid nodularis
- Postinflammatory hyperpigmentation
- Pretibial myxedema
- Prurigo nodularis

### Macular

- Atopic dermatitis
- Atrophic lichen planus
- Dermatomyositis
- Drug-induced pigmentation
- Erythema dyschromicum perstans
- Lichen simplex chronicus
- Mycosis fungoides
- Phototoxic contact dermatitis
- Pityriasis versicolor
- Postinflammatory hyperpigmentation
- Prurigo pigmentosum
- Tinea corporis

### ***Associations***

- Multiple endocrine neoplasia, type IIa
- Notalgia paresthetica

### ***Treatment Options***

- Topical corticosteroids
- Phototherapy
- Systemic retinoids
- Dermabrasion

### **Further reading:**

- Salim T, Shenoj SD, Balachandran C, Mehta VR (2005) Lichen amyloidosis: a study of clinical, histopathologic and immunofluorescence findings in 30 cases. Indian J Dermatol Venereol Leprol 71(3):166–169

### **Amyloidosis, Nodular**

Localized cutaneous form of amyloidosis which is caused by deposition of light-chain-derived amyloid from plasma cells nearby the deposit and characterized by pink to hyperpigmented firm nodules located anywhere on the body

### ***Differential Diagnosis***

- Basal cell carcinoma
- Colloid milium
- Cutaneous lymphoid hyperplasia
- Epidermal inclusion cyst
- Granuloma annulare
- Granuloma faciale
- Leiomyoma
- Lipoma
- Lupus vulgaris
- Lymphoma
- Nodular mucinosis
- Plasmacytoma
- Pretibial myxedema

- Sarcoidosis
- Xanthoma

### **Associations**

- Plasmacytoma
- Monoclonal gammopathy
- Multiple myeloma
- Sjögren's syndrome

### **Evaluation**

- Serum/urine protein electrophoresis

### **Treatment Options**

- Intralesional corticosteroids
- Excision

### **Further reading:**

- Kalajian AH, Waldman M, Knable AL (2007) Nodular primary localized cutaneous amyloidosis after trauma: a case report and discussion of the rate of progression to systemic amyloidosis. *J Am Acad Dermatol* 57(2 Suppl):S26–S29

## **Amyloidosis, Primary Systemic AL (Lubarsch–Pick Disease)**

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Systemic form of amyloidosis with a high mortality that is caused by an occult overproduction of light chains by plasma cells (with or without overt multiple myeloma) and is characterized by systemic deposition of light-chain-derived amyloid in the internal organs, as well as the skin, with waxy periorbital papules, macroglossia, and purpura being the most common skin findings

### ***Differential Diagnosis***

- Amyloidosis, secondary systemic (AA)
- Condyloma acuminatum
- Histiocytoses
- Familial amyloidosis syndromes
- Kaposi's sarcoma
- Lichen myxedematosus
- Lipoid proteinosis
- Metastatic disease
- Mucinoses
- Multiple trichofolliculomas
- Necrobiotic xanthogranuloma
- Purpura
- Scleromyxedema
- Syringomas
- Xanthelasma
- Xanthoma disseminatum

### ***Evaluation***

- Abdominal fat pad or rectal biopsy
- Bone marrow biopsy
- Echocardiogram
- Serum/urine protein electrophoresis
- Urinalysis

### ***Treatment Options***

- Melphalan
- Systemic corticosteroids
- Interferon therapy
- Lenalidomide
- Bortezomib

**Further reading:**

- Gul U, Soylu S, Kilic A et al (2007) Monoclonal gammopathy of undetermined significance diagnosed by cutaneous manifestations of AL amyloidosis. *Eur J Dermatol* 17(3):255–256

**Amyloidosis, Secondary Systemic (AA)**

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Systemic form of amyloidosis associated with several chronic inflammatory conditions that is caused by deposition of serum amyloid A protein in various organs and that is usually not associated with skin lesions

***Differential Diagnosis***

- Hemodialysis-related amyloidosis
- Hereditary amyloidosis syndromes
- Membranoproliferative glomerulonephritis
- Primary systemic AL amyloidosis

***Associations***

- Chronic infection
- Chronic inflammatory diseases
- Dystrophic epidermolysis bullosa
- Familial Mediterranean fever
- Hidradenitis suppurativa
- Hodgkin's disease
- Inflammatory bowel disease
- Leprosy
- Muckle–Wells disease
- Osteomyelitis
- Psoriatic arthritis
- Rheumatoid arthritis



### ***Evaluation***

- Rectal biopsy
- Renal biopsy
- Renal function tests
- Renal ultrasound
- Serum/urinary protein electrophoresis
- Urinalysis

### ***Treatment Options***

- Treat the underlying cause

### **Further reading:**

- Lachmann HJ, Goodman HJ, Gilbertson JA et al (2007) Natural history and outcome in systemic AA amyloidosis. *N Engl J Med* 356(23):2361–2371

### **Anagen Effluvium**

Type of reversible, nonscarring, diffuse hair loss occurring in the setting of chemotherapy in which the tapering of the hair shaft (Pohl–Pinkus constrictions) occurs as a response to injury to the hair matrix

### ***Differential Diagnosis***

- Alopecia totalis
- Alopecia mucinosa
- Androgenetic alopecia
- Loose anagen syndrome
- Lupus erythematosus
- Malnutrition
- Sezary syndrome
- Syphilitic alopecia
- Telogen effluvium

- Thallium toxicity
- Thyroid disease
- Traction alopecia

**Further reading:**

- Tosti A, Pazzaglia M (2007) Drug reactions affecting hair: diagnosis. *Dermatol Clin* 25(2):223–231

## **Androgenetic Alopecia**

---

Common and inherited form of nonscarring alopecia affecting men and women that is caused by a gradual, androgen-dependent reduction in the size of hair follicles affecting the frontal hairline and vertex in men and the crown in women (with widened partline)

### ***Differential Diagnosis***

- Alopecia areata (diffuse type)
- Anagen effluvium
- Androgen-induced alopecia (virilizing disorder)
- Iron deficiency
- Lupus erythematosus
- Senile alopecia
- Telogen effluvium
- Thyroid disease

### ***Associations***

- Coronary artery disease
- X-linked ichthyosis

### ***Evaluation***

- Complete blood count
- Endocrine evaluation if suspicious hyperandrogenism

- Iron studies
- Thyroid studies

### ***Treatment Options***

- Finasteride
- Spironolactone
- Dutasteride
- Topical minoxidil
- Hair transplantation

### **Further reading:**

- Sehgal VN, Aggarwal AK, Srivastava G, Rajput P (2006) Male pattern androgenetic alopecia. *Skinmed* 5(3):128–135

### **Anetoderma**

Focal loss of elastic tissue due to a variety of causes, associated with a variety of underlying diseases, and characterized by protrusions or depressions of lax skin (Fig. 6.7)



**Fig. 6.7** Anetoderma

### ***Subtypes/Variants***

- Primary
  - With prior inflammation (Jadassohn–Pellizzari)
  - Without prior inflammation (Schweninger–Buzzi)
- Secondary (to an underlying disease)

### ***Differential Diagnosis***

- Arthropod bites
- Atrophic dermatofibroma
- Atrophic scar
- Cutis laxa
- Fascial hernia
- Focal dermal hypoplasia
- Lipoatrophy
- Middermal elastolysis
- Neurofibroma
- Nevus lipomatosus superficialis
- Papular elastorrhesis
- Perifollicular elastolysis (acne scars)
- Pityriasis versicolor atrophicans
- Pseudoxanthoma elasticum
- Postinflammatory elastolysis and cutis laxa (Marshall's syndrome)
- Steroid atrophy
- Striae distensae
- Urticaria

### ***Associations (Secondary)***

- Acne vulgaris
- Acrodermatitis chronica atrophicans
- Alopecia areata

- Antiphospholipid antibody syndrome
- Autoimmune hemolytic anemia
- Dermatofibroma
- Folliculitis
- Granuloma annulare
- Graves' disease
- Hepatitis B immunization
- HIV infection
- Hypergammaglobulinemia
- Hypocomplementemia
- Immunocytoma
- Juvenile xanthogranuloma
- Lepromatous leprosy
- Lichen planus
- Lupus erythematosus
- Lymphocytoma cutis
- Mastocytosis
- Melanocytic nevi
- Molluscum contagiosum
- Nodular amyloidosis
- Penicillamine therapy
- Pilomatrixoma
- Plasmacytoma
- Prematurity
- Prurigo nodularis
- Sarcoidosis
- Syphilis
- Systemic sclerosis
- Thyroiditis
- Tuberculosis
- Urticaria pigmentosum
- Varicella
- Vitiligo
- Xanthomas

## **Evaluation**

- Antinuclear antibodies
- Antiphospholipid antibodies syndrome
- Complete blood count
- Sedimentation rate
- HIV test
- Lyme ELISA and Western blot
- Syphilis serologies

### **Further reading:**

- De Souza EM, Daldon PE, Cintra ML (2007) Anetoderma associated with primary antiphospholipid syndrome. *J Am Acad Dermatol* 56(5):881–882

## **Angioedema**

---

Subcutaneous or submucosal edema with a variety of causes that is characterized by asymptomatic or painful swelling of the face, lips, eyelids, genitals, and/or hands

### **Subtypes/Variants**

- Acquired C1-INH deficiency/dysfunction
- ACE inhibitor induced
- Contrast media induced
- Chronic urticaria associated
- Cold urticaria related
- Episodic angioedema with eosinophilia
- Food related
- Hereditary C1-INH deficiency/dysfunction
- NERDS syndrome
- NSAID induced
- IgE mediated (allergic)
- Opiate related

- Serum sickness related
- Sunlight induced
- Vibratory

### ***Differential Diagnosis***

- Acute contact dermatitis
- Ascher syndrome
- Capillary leak syndrome
- Cellulitis/erysipelas
- Contact urticaria
- Delayed pressure urticaria
- Dermatomyositis
- EBV infection
- Extravasation
- Iatrogenic edema
- Loaiasis (Calabar swelling)
- Lymphedema
- Melkersson–Rosenthal syndrome
- Nephrotic syndrome
- Orofacial granulomatosis
- Rosacea
- Secretan's syndrome (factitial edema)
- Superior vena cava syndrome
- Tumid lupus
- Venous edema

### ***Associations***

#### Hereditary

- Glomerulonephritis
- Pernicious anemia
- Rheumatoid arthritis
- Sjögren's syndrome

- Systemic lupus erythematosus
- Thyroiditis

#### Acquired

- Anti-C1-INH antibodies (acquired, type II)
- Autoimmunity
- Chronic lymphocytic leukemia
- Cryoglobulinemia
- IgA myeloma
- Lymphosarcoma
- Monoclonal gammopathy
- Non-Hodgkin's lymphoma
- Waldenstrom's macroglobulinemia

#### *Evaluation (if Hereditary or Acquired Are Suspected)*

- C1 inhibitor functional assay
- C1 inhibitor level
- C1q level
- C2 level
- C4 level
- Total complement (CH50) level

#### *Treatment Options*

- Discontinue any offending medications
- Antihistamines
- Systemic corticosteroids
- Epinephrine
- Intravenous replacement of C1-INH
- Danazol
- Fresh frozen plasma
- Tranexamic acid
- Aminocaproic acid



**Further reading:**

- Kaplan A et al (2005) Angioedema. *J Am Acad Dermatol* 53:373–388

**Angiofibromas**

Benign proliferation of fibrous and vascular tissue with variable clinical presentation

***Subtypes/Variants***

- Cellular angiofibroma of the vulva
- Facial (adenoma sebaceum)
- Fibrous papule
- Koenen tumors
- Pearly penile papules
- Segmental angiofibromas

***Differential Diagnosis (Facial)***

- Acne vulgaris
- Adnexal tumors
- Basal cell carcinoma
- Cherry angioma
- Fibrofolliculoma
- Folliculitis
- Granuloma annulare
- Melanocytic nevus
- Molluscum contagiosum
- Multinucleate cell angiohistiocytoma
- Perifollicular fibroma
- Rosacea
- Sarcoidosis
- Trichodiscoma

- Trichoepitheliomas
- Verruca plana

### **Associations**

- Birt–Hogg–Dube syndrome
- Multiple endocrine neoplasia, type I
- Tuberous sclerosis

### **Further reading:**

- Trauner MA, Ruben BS, Lynch PJ (2003) Segmental tuberous sclerosis presenting as unilateral facial angiofibromas. J Am Acad Dermatol 49(2 Suppl Case Reports):S164–S166

## **Angioimmunoblastic Lymphadenopathy with Dysproteinemia**

---

Type of T cell lymphoproliferative disorder that affects the elderly and is associated with fever, lymphadenopathy, anemia, hepatosplenomegaly, and a morbilliform exanthem

### **Differential Diagnosis**

- Castleman disease
- DRESS syndrome
- Kikuchi disease
- Lymphoma
- Morbilliform drug eruption
- Myeloma
- Viral exanthem

### **Associations**

- Drugs
- Viral infections

## Evaluation

- Antinuclear antibodies
- Bone marrow biopsy
- Complete blood count
- CT scan of neck, chest, abdomen, and pelvis
- Lactate dehydrogenase level
- Lymph node biopsy
- Rheumatoid factor
- Serum/urinary protein electrophoresis
- T cell immunophenotyping

## Further reading:

- Martel P, Laroche L, Courville P et al (2000) Cutaneous involvement in patients with angioimmunoblastic lymphadenopathy with dysproteinemia: a clinical, immunohistological, and molecular analysis. *Arch Dermatol* 136(7):881–886

## Angiokeratoma

---

Type of vascular ectasia with a hyperkeratotic surface that can be solitary, localized, circumscribed, or diffusely located in a bathing-trunk distribution (angiokeratoma corporis diffusum)

## Subtypes/Variants

- Angiokeratoma circumscriptum (extremities) (Fig. 6.8)
- Angiokeratoma corporis diffusum
- Angiokeratoma of Fordyce (scrotum or labia)
- Angiokeratoma of Mibelli (distal extremities)
- Solitary angiokeratoma (extremities)

## Differential Diagnosis

- Angiokeratoma-like pseudolymphoma
- Angioma serpiginosum



**Fig. 6.8** Angiokeratomas  
(Courtesy of A. Record)

- APACHE syndrome
- Bacillary angiomatosis
- Blue rubber bleb nevus
- Cherry angioma
- Clear cell acanthoma
- Elastosis perforans serpiginosa
- Hemangioma
- Hobnail (targetoid hemosiderotic) hemangioma
- Lymphangioma circumscriptum
- Melanoma
- Pyogenic granuloma
- Seborrheic keratosis
- Venous lake
- Verrucous hemangioma
- Wart

## Associations

### Angiokeratoma Circumscriptum

- Cobb syndrome
- Klippel–Trenaunay syndrome
- Nevus flammeus

### Angiokeratoma Corporis Diffusum

- Alpha-L-fucosidase deficiency
- Beta-galactosidase deficiency
- Beta-mannosidase deficiency
- Fabry's disease
- Neuraminidase deficiency
- Sialidosis

## Evaluation (*Angiokeratoma Corporis Diffusum*)

- Echocardiogram
- MRI of the brain
- Ophthalmologic exam for cornea verticillata
- Renal function test
- Serum alpha-galactosidase level (if negative, consider other causes)
- Urinalysis (maltese cross-lipid globules)

## Further reading:

- Mittal R, Aggarwal A, Srivastava G (2005) Angiokeratoma circumscriptum: a case report and review of the literature. *Int J Dermatol* 44(12):1031–1034

## Angiolymphoid Hyperplasia with Eosinophilia

---

Type of cutaneous lymphoid hyperplasia of unknown cause that affects young- to middle-aged adults and is characterized by erythematous, single, or grouped papules and nodules most commonly located on the head and neck

### ***Differential Diagnosis***

- Amelanotic melanoma
- Angiosarcoma
- Bacillary angiomatosis
- Basal cell carcinoma
- Cutaneous lymphoid hyperplasia
- Cylindromas
- Epidermal inclusion cyst
- Granuloma faciale
- Hemangioma
- Infective perichondritis
- Insect-bite reaction
- Kaposi's sarcoma
- Kimura's disease
- Lymphoma cutis
- Metastatic disease
- Pseudocyst of the auricle
- Pyogenic granuloma
- Relapsing polychondritis
- Sarcoidosis

### ***Treatment Options***

- Surgical excision
- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Electrosurgery
- Isotretinoin

### **Further reading:**

- Chong WS, Thomas A, Goh CL (2006) Kimura's disease and angiolymphoid hyperplasia with eosinophilia: two disease entities in the same patient: case report and review of the literature. *Int J Dermatol* 45(2):139–145

## Angioma Serpiginosum (Hutchinson Disease)

---

Uncommon, often inherited vascular ectasia that predominantly affects women and is characterized by grouped punctate vascular macules and papules most commonly on the lower extremity

### *Differential Diagnosis*

- Angiokeratoma circumscriptum
- Carcinoma telangiectaticum
- Nevus flammeus
- Pigmented purpuric dermatosis
- Unilateral nevoid telangiectasia

### *Treatment Options*

- Electrosurgery
- Pulsed dye laser

### **Further reading:**

- Sandhu K, Gupta S (2005) Angioma serpiginosum: report of two unusual cases. J Eur Acad Dermatol Venereol 19(1):127–128

## Angiosarcoma

---

Malignant endothelial tumor that can arise in a variety of clinical settings but is most commonly characterized by a slow-growing violaceous and erythematous plaque with or without ulceration on the head and neck of the elderly

### *Subtypes/Variants*

- Dabska tumor (endovascular papillary angioendothelioma)
- Epithelioid angiosarcoma
- Idiopathic angiosarcoma of the head and neck

- Irradiation related
- Retiform hemangioendothelioma
- Stewart–Treves syndrome (lymphedema related)

### ***Differential Diagnosis***

#### General

- Acquired progressive lymphangioma
- Angioedema
- Angiolymphoid hyperplasia with eosinophilia
- Benign lymphangiomatosis
- Cutaneous lymphoid hyperplasia
- Epithelioid sarcoma
- Hemangiopericytoma
- Kaposi's sarcoma
- Malignant schwannoma
- Masson's intravascular papillary endothelial hyperplasia
- Melanoma
- Merkel cell carcinoma
- Metastatic lesion
- Reactive angioendotheliomatosis
- Recurrent breast cancer
- Retiform hemangioendothelioma
- Rhinophyma
- Tufted angioma
- Venous malformation

#### Stewart–Treves Syndrome

- Angioendotheliomatosis
- Angiolymphoid hyperplasia
- Hemangioendothelioma
- Hemangiopericytoma
- Kaposi's sarcoma
- Melanoma
- Recurrent or metastatic breast cancer



### ***Associations***

- Breast cancer irradiation
- Chronic solar damage
- Congenital lymphedema
- Iatrogenic lymphedema
- Immunosuppression
- Vinyl chloride exposure

### **Further reading:**

- Mendenhall WM, Mendenhall CM, Werning JW et al (2006) Cutaneous angiosarcoma. *Am J Clin Oncol* 29(5):524–528

### **Annular Erythema of Infancy**

Uncommon annular eruption that arises early in infancy, typically resolves within the first year of life, and is characterized by a cyclic eruption of urticarial papules that evolve to annular erythematous plaques on the head, trunk, and extremities

### ***Differential Diagnosis***

- Acute hemorrhagic edema of infancy
- Dermatophytosis
- Erythema annulare centrifugum
- Erythema marginatum
- Erythema toxicum neonatorum
- Granuloma annulare
- Neonatal lupus
- Serum-sickness-like reaction
- Urticaria

### ***Evaluation***

- Antinuclear antibodies (including SS-A and SS-B)
- Electrocardiography

### ***Treatment Options***

- Observation and reassurance
- Topical corticosteroids

### **Further reading:**

- Wong LC, Kakakios A, Rogers M (2002) Congenital annular erythema persisting in a 15-year-old girl. *Australas J Dermatol* 43(1):55–61

## **Annular Lichenoid Dermatitis of Youth**

---

Uncommon lichenoid dermatitis that affects children and is characterized by persistent, annular erythematous plaques with central hypopigmentation in the groin, periumbilical areas, and flanks

### ***Differential Diagnosis***

- Annular erythema
- Annular atrophic lichen planus
- Lichen sclerosus et atrophicus
- Granuloma annulare
- Leprosy (especially tuberculoid type)
- Lupus erythematosus
- Morphea
- Mycosis fungoides
- Tinea cruris
- Vitiligo

### ***Treatment Options***

- Narrowband UVB phototherapy
- Topical corticosteroids
- Tacrolimus ointment

### **Further reading:**

- Annessi G, Paradisi M, Angelo C et al (2003) Annular lichenoid dermatitis of youth. *J Am Acad Dermatol* 49(6):1029–1036

## **Anthrax**

Bacterial infection caused by the Gram-positive *Bacillus anthracis* that can be acquired through contact with sheep or cows or by acts of bioterrorism and is characterized by a painless, edematous nodule with a black eschar on the extremities (malignant pustule)

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- *Aspergillus* infection
- Atypical mycobacterial infection
- Blastomycosis
- Cat-scratch disease
- Coumadin necrosis
- Cutaneous diphtheria
- Ecthyma gangrenosum
- Glanders
- Leishmaniasis
- Mucormycosis
- Orf/Milker's nodule
- Plague
- Pyoderma gangrenosum
- Rat-bite fever

- Spider bite
- Sporotrichosis
- Staphylococcal pyoderma
- Syphilis
- Tache noir
- Tropical ulcer
- Tularemia

### ***Evaluation***

- Gram stain and culture of tissue
- Gram stain, culture, and PCR of blood

### **Further reading:**

- Hart CA, Beeching NJ (2002) A spotlight on anthrax. *Clin Dermatol* 20(4):365–375

## **Antiphospholipid Antibody Syndrome**

---

Hypercoagulable disorder associated with the presence of antiphospholipid antibodies that is characterized by arterial or venous thrombosis, multiple miscarriages, livedo reticularis, retiform purpura, and cutaneous necrosis

### ***Differential Diagnosis***

- Cholesterol emboli syndrome
- Cocaine-associated vasculopathy
- Cryoglobulinemia/cryofibrinogenemia
- Disseminated intravascular coagulation
- Endocarditis
- Factor V Leiden mutation
- Malignancy
- Oxalate embolism
- Protein-C or protein-S deficiency

- Seronegative antiphospholipid antibody syndrome (SNAPS)
- Systemic vasculitis
- Thrombotic thrombocytopenic purpura
- Waldenstrom's macroglobulinemia

### ***Diagnostic Criteria (Simplified)***

- Clinical (1/2)
  - Thrombosis of arterial, venous, or small vessel circulation confirmed with imaging
  - Three unexplained spontaneous abortions or one fetal death after 10 weeks or premature birth due to placental insufficiency or preeclampsia
- Laboratory (1/2)
  - Anticardiolipin antibody IgG and/or IgM positive on two or more occasions 6 weeks apart
  - Lupus anticoagulant positive on two or more occasions 6 weeks apart

### ***Associations***

- Atrophie blanche
- Autoimmune disease
- Bullous pemphigoid
- Celiac disease
- HIV infection
- Hydralazine
- Internal malignancy
- Lymphoma
- Malignant atrophic papulosis
- Phenytoin
- Primary anetoderma
- Procainamide
- Rheumatoid arthritis

- Sneddon syndrome
- Sulfonamides
- Systemic lupus erythematosus
- Systemic vasculitis syndromes
- Ulcerative colitis
- Viral illness

### ***Evaluation***

- Anticardiolipin IgG and IgM antibodies
- Antinuclear antibodies
- Beta-2-glycoprotein antibodies
- Blood cultures
- Complete blood count
- Cryofibrinogens
- Cryoglobulins
- D-dimer
- Factor V Leiden mutation
- Lupus anticoagulant
- Protein C and protein S
- Prothrombin time and partial thromboplastin time
- Rheumatoid factor

### ***Treatment Options***

- Heparin
- Warfarin
- Aspirin
- Hydroxychloroquine
- Systemic corticosteroids
- Intravenous immunoglobulin
- Cyclophosphamide
- Plasmapheresis

**Further reading:**

- Wilson WA, Gharavi AE, Koike T et al (1999) International consensus statement on preliminary classification criteria for definite antiphospholipid syndrome: report of an international workshop. *Arthritis Rheum* 42(7):1309–1311

**APACHE Syndrome (Acral Pseudolymphomatous Angiokeratoma of Children)**

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Rare, idiopathic type of cutaneous lymphoid hyperplasia that affects children (and, less commonly, adults) and is characterized by angiokeratoma-like red papules predominantly affecting the acral areas and, less commonly, the trunk

***Differential Diagnosis***

- Angiokeratoma circumscriptum
- Angiolymphoid hyperplasia with eosinophilia
- Arthropod-bite reaction
- Eruptive pseudoangiomatosis
- Eruptive pyogenic granulomas
- Lymphomatoid papulosis
- Reactive angioendotheliomatosis

**Further reading:**

- Kim Y, Dawes-Higgs E, Mann S, Cook DK (2005) Acral cutaneous lymphoid hyperplasia angiokeratoma of children (APACHE). *Australas J Dermatol* 46(3):177–180

**Aphthous Stomatitis (Aphthous Ulcers)**

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Common painful, self-limited superficial mucosal ulcerations of uncertain etiology that typically last 7–14 days and affect the nonkeratinized portions of the mouth

### ***Subtypes/Variants***

- Minor
- Major (peradenitis mucosa necrotica recurrens, Sutton's disease)
- Herpetiform

### ***Differential Diagnosis***

- Acatalasemia
- Angina bullosa hemorrhagica
- Behçet's disease
- Candidiasis
- Chemotherapy stomatitis
- Contact dermatitis
- Crohn's disease
- Cyclic neutropenia
- Eosinophilic ulcer
- Erythema multiforme
- Fixed drug eruption
- Hand-foot-mouth disease
- Herpangina
- Herpes simplex virus infection
- Lupus erythematosus
- Lichen planus
- Oral cancer
- Paraneoplastic pemphigus
- Pemphigus vulgaris
- Pyoderma gangrenosum
- Reiter syndrome
- Syphilis
- Trauma
- Vitamin deficiency



### ***Associations***

- Behçet's disease
- Celiac disease
- Cyclic neutropenia
- HIV infection
- PFAPA syndrome

### ***Evaluation***

- Antinuclear antibodies
- Complete blood count
- Iron, B12, and folate studies
- Sedimentation rate
- Viral culture

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Tacrolimus ointment
- Chlorhexidine oral rinse
- Sucralfate
- Pentoxifylline
- Systemic corticosteroids
- Colchicine
- Dapsone
- Azathioprine
- TNF inhibitors

### **Further reading:**

- Letsinger JA, McCarty MA, Jorizzo JL (2005) Complex aphthosis: a large case series with evaluation algorithm and therapeutic ladder from topicals to thalidomide. *J Am Acad Dermatol* 52(3 Pt 1):500–508

## **Aplasia Cutis Congenita**

---

Developmental anomaly representing focal loss of skin in utero that is due to a variety of developmental, traumatic, or ischemic causes and characterized by a well-demarcated stellate or circular, atrophic, smooth, or ulcerated scar-like patch most commonly on the scalp

### ***Subtypes/Variants***

- Group 1 – without anomalies
- Group 2 – with Adams–Oliver syndrome
- Group 3 – with epidermal and organoid nevi
- Group 4 – with embryologic malformations
- Group 5 – with fetus papyraceus, placental infarcts, or other ischemic events
- Group 6 – with epidermolysis bullosa (Bart’s syndrome)
- Group 7 – extremities without blistering
- Group 8 – teratogenic medications or intrauterine infections
- Group 9 – with malformation syndromes

### ***Differential Diagnosis***

- Congenital erosive and vesicular dermatosis
- Congenital varicella
- Encephalocele
- Epidermolysis bullosa
- Focal dermal hypoplasia
- Heterotopic neural tissue
- Iatrogenic injury
- Neonatal herpes simplex virus infection
- Nevus sebaceus
- Scalp pyoderma
- Transient bullous dermolysis

### **Associations**

- Adams–Oliver syndrome
- Amniotic band syndrome
- Cranial or spinal defect
- Focal dermal hypoplasia (Goltz)
- Intrauterine varicella
- Intrauterine herpes simplex infection
- Johanson–Blizzard syndrome
- Methimazole
- MIDAS syndrome
- Misoprostol
- Oculocerebrocutaneous syndrome
- Oculoectodermal syndrome
- Setleis syndrome (focal facial dermal dysplasia)
- Trisomy 13
- Valproic acid
- Wolf–Hirschhorn syndrome

### **Evaluation**

- CT/MRI scan of skull or spine if underlying defect is suspected

### **Further reading:**

- Frieden IJ (1986) Aplasia cutis congenita: a clinical review and proposal for classification. *J Am Acad Dermatol* 14(4): 646–660

### **Aquagenic Syringeal Acrokeratoderma**

---

Acquired condition affecting the palms that is characterized by painful, bilateral, white, translucent papules and wrinkling after the palms are exposed to moisture and resolution after drying

### ***Differential Diagnosis***

- Pompholyx
- Punctate keratoderma
- Tripe palms
- Warm water immersion syndrome
- Warts

### ***Associations***

- Cystic fibrosis

### **Further reading:**

- Luo DQ, Zhao YK, Zhang WJ, Wu LC (2010) Aquagenic acrokeratoderma. *Int J Dermatol* 49(5):526–531

### **Argyria**

Type of mucocutaneous pigmentary disturbance caused by ingestion or contact with silver characterized by blue, gray, or black hyperpigmentation most prominent on the mucosal surfaces and sun-exposed areas

### ***Differential Diagnosis***

- Amiodarone photosensitivity
- Arsenical pigmentation
- Blue nevus (localized as in acupuncture)
- Chloracne
- Chrysiasis
- Cyanosis
- Diffuse melanosis from metastatic melanoma
- Hemochromatosis

- Minocycline hyperpigmentation
- Ochronosis
- Phenothiazine photosensitivity
- Polycythemia vera

**Further reading:**

- White JM, Powell AM, Brady K, Russell-Jones R (2003) Severe generalized argyria secondary to ingestion of colloidal silver protein. *Clin Exp Dermatol* 28(3):254–256

## **Arsenical Keratoses**

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Premalignant hyperkeratotic papules associated with chronic arsenic exposure that are characteristically located on the palms and soles and develop many years after arsenic exposure

### ***Differential Diagnosis***

- Clavus/callus
- Darier disease
- Lichen planus
- Nevoid basal cell carcinoma syndrome
- Palmoplantar psoriasis
- Pityriasis rubra pilaris
- Porokeratosis palmaris et plantaris
- Punctate keratoderma
- Verruca vulgaris

### ***Evaluation***

- Cancer screening (if history or physical exam suggests)

**Further reading:**

- Yerebakan O, Ermis O, Yilmaz E, Basaran E (2002) Treatment of arsenical keratosis and Bowen's disease with acitretin. *Int J Dermatol* 41(2):84–87

## **Arteriovenous Malformation**

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Uncommon vascular malformation in which there is a direct connection between the arterial and venous circulation and that is characterized by an erythematous, violaceous, or flesh-colored, pulsatile nodule most commonly on the head

### ***Subtypes/Variants***

- Acquired (trauma)
- Cirroid aneurysm
- Congenital
- Iatrogenic (hemodialysis)

### ***Differential Diagnosis***

- Epidermal inclusion cyst
- Hemangioma
- Infantile hemangiopericytoma
- Kaposi's sarcoma
- Lipoma
- Pilar cyst
- Venous malformation

### ***Staging***

- I – dormant
- II – expanding/thrill
- III – necrotic
- IV – cardiac decompensation

### ***Associations***

- Cobb syndrome
- Osler-Weber-Rendu disease

- Parkes Weber syndrome
- Stewart–Bluefarb syndrome
- Wyburn–Mason syndrome

**Further reading:**

- Garzon MC, Huang JT, Enjolras O, Frieden IJ (2007) Vascular malformations: part I. J Am Acad Dermatol 56(3):353–370

## **Arthropod-Bite Reaction**

Cutaneous reaction to the bite or sting of a variety of arthropods that has variable cutaneous presentation and can both mimic and lead to a variety of cutaneous and systemic diseases (Fig. 6.9)

### ***Differential Diagnosis***

- Bullous impetigo
- Bullous pemphigoid
- Cutaneous lymphoid hyperplasia



**Fig. 6.9** Arthropod-bite reaction

- Dermatitis artefacta
- Erythema migrans
- Fixed drug eruption
- Furunculosis
- Granuloma annulare
- Jessner's lymphocytic infiltrate
- Idiopathic facial aseptic granuloma
- Leukemia
- Lupus erythematosus tumidus
- Lymphoma cutis
- Lymphomatoid papulosis
- Metastatic lesion
- Nodulocystic acne
- Papular urticaria
- Pityriasis lichenoides et varioliformis acuta
- Pyoderma gangrenosum
- Solitary mastocytoma
- Subacute prurigo
- Urticaria
- Urticarial dermatitis
- Wells syndrome

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Topical anesthetics
- Systemic antihistamines
- Systemic corticosteroids

### **Further reading:**

- Terhune MH, Stibbe J, Siegle RJ (1999) Nodule on the cheek of an 81-year-old woman. Persistent arthropod-bite reaction (cutaneous T-cell pseudolymphoma). Arch Dermatol 135(12):1543–1544, 1546–1547



## Aspergillosis

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Respiratory mycosis with the vessel-invasive fungus, *Aspergillus* spp., that predominantly affects immunosuppressed (especially neutropenic) patients, can be localized (most commonly, *A. flavus*) or disseminated from an initial pulmonary focus (most commonly, *A. fumigatus*), and is characterized by hemorrhagic lesions and necrotic black eschars

### *Differential Diagnosis*

- Candidiasis, disseminated
- Cryptococcosis
- Ecthyma
- Ecthyma gangrenosum
- Fusarium infection
- Histoplasmosis
- Mucormycosis
- Phaeohyphomycosis
- Pyoderma gangrenosum
- Septic vasculitis
- Sweet syndrome
- Zygomycosis

### *Evaluation*

- Tissue, sputum, and blood cultures

### **Further reading:**

- Mays SR, Bogle MA, Bodey GP (2006) Cutaneous fungal infections in the oncology patient: recognition and management. *Am J Clin Dermatol* 7(1):31–43

## **Asteatotic Eczema (Eczema Craquele)**

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Type of eczema that most commonly affects the elderly, is caused by increased transepidermal water loss as it relates to decreased barrier-forming lipids of the skin, and is characterized by pruritic, xerotic, erythematous plaques most commonly located on the anterior legs and trunk

### ***Differential Diagnosis***

- Atopic dermatitis
- Allergic contact dermatitis
- Autoeczematization
- Erythrokeratolysis hiemalis
- Ichthyosis vulgaris
- Irritant contact dermatitis
- Mycosis fungoides
- Nummular eczema
- Scabies
- Subacute prurigo
- Stasis dermatitis

### ***Associations***

- Diuretic therapy
- Fatty acid deficiency
- Internal malignancy
- Radiation
- Statin therapy
- Thyroid disease
- Winter season
- Zinc deficiency

### ***Treatment Options***

- Moisturizers
- Topical steroids
- Phototherapy
- Systemic corticosteroids
- Methotrexate

### **Further reading:**

- Norman RA (2003) Xerosis and pruritus in the elderly: recognition and management. *Dermatol Ther* 16(3):254–259

### **Ataxia–Telangiectasia**

Autosomal-recessive disorder caused by a defect in the ATM gene which is characterized by early childhood onset of cerebellar ataxia, conjunctival and cutaneous telangiectasias, café-au-lait macules, pigmentary changes, noninfectious granulomatous lesions, defective cellular and humoral immunity, recurrent sinopulmonary infections, increased sensitivity to radiation, and lymphoreticular malignancies

### ***Differential Diagnosis***

- Benign essential telangiectasia
- Bloom syndrome
- Coats' disease
- Congenital immunodeficiency
- Congenital syphilis
- Friedreich's ataxia
- Generalized essential telangiectasia
- HIV infection
- Hereditary hemorrhagic telangiectasia
- Infectious conjunctivitis
- Nijmegen breakage syndrome

## **Evaluation**

- Alpha-fetoprotein level (elevated)
- Complete blood count
- CT/MRI scan of brain
- Genetic studies
- HIV test
- Immunoglobulin panel

### **Further reading:**

- Mitra A, Pollock B, Gooi J, Darling JC, Boon A, Newton-Bishop JA (2005) Cutaneous granulomas associated with primary immunodeficiency disorders. *Br J Dermatol* 153(1):194–199

## **Atopic Dermatitis (Besnier Disease)**

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Multifactorial, chronic, and relapsing disorder associated with impaired skin barrier function, environmental hypersensitivity, and asthma that may begin in infancy and is characterized by very pruritic, eczematous skin lesions in age-specific patterns

### ***Differential Diagnosis***

#### **Infantile**

- Acrodermatitis enteropathica
- Ataxia–telangiectasia
- Biotin deficiency
- Chronic mucocutaneous candidiasis
- Congenital syphilis
- Contact dermatitis
- Dermatophytosis
- DiGeorge syndrome
- Ectodermal dysplasias
- Essential fatty acid deficiency
- Hartnup disease

- HTLV-1 infection
- Hyperimmunoglobulin E syndrome
- Ichthyosis vulgaris
- Impetigo
- Infective dermatitis
- Keratosis pilaris
- Langerhans cell histiocytosis
- Netherton's syndrome
- Niacin deficiency
- Phenylketonuria
- Psoriasis
- Pyridoxine deficiency
- Scabies
- Seborrheic dermatitis
- Severe combined immunodeficiency
- Wiskott–Aldrich syndrome

#### Older Children and Adults

- Acquired ichthyosis
- Asteatotic eczema
- Chronic actinic dermatitis
- Contact dermatitis
- Dermatitis herpetiformis
- Dermatomyositis
- Drug eruption
- Graft-vs-host disease
- Infective dermatitis
- Lichen nitidus
- Lichen simplex chronicus
- Lupus erythematosus
- Mycosis fungoides
- Nummular eczema
- Pemphigus foliaceus
- Photoallergic dermatitis

- Pityriasis rubra pilaris
- Psoriasis
- Scabies
- Seborrheic dermatitis
- Sezary syndrome
- Vesicular pemphigoid

### ***Diagnostic Criteria***

#### **AAD Consensus Criteria**

- Essential features: must be present and, if complete, are sufficient for diagnosis:
  - Pruritus
  - Eczematous changes
  - Typical and age-specific patterns
    - Facial, neck, and extensor involvement in infants and children
    - Current or prior flexural lesions in adults/any age
    - Sparing of groin and axillary regions
  - Chronic or relapsing course
- Important features: seen in most cases for support of the diagnosis:
  - Early age of onset
  - Atopy (IgE reactivity)
  - Xerosis
- Associated features: help in suggesting the diagnosis:
  - Keratosis pilaris, ichthyosis vulgaris, and palmar hyperlinearity
  - Atypical vascular responses
  - Perifollicular accentuation/lichenification/prurigo
  - Ocular/periorbital changes

#### **Hanifin and Rajka Criteria**

- Major criteria (3/4)
  - Chronic or relapsing dermatitis
  - Personal or family history of atopy

- Pruritus
- Typical morphology and distribution
- Minor criteria (3/23)
  - Anterior neck folds
  - Anterior subcapsular cataract
  - Cheilitis
  - Course influenced by environmental/emotional factors
  - Dennie–Morgan infraorbital fold
  - Early age of onset
  - Elevated serum IgE
  - Facial pallor/erythema
  - Food intolerance
  - Ichthyosis/palmar hyperlinearity/keratosis pilaris
  - Immediate (type I) skin test reactivity
  - Intolerance to wool and lipid solvents
  - Keratoconus
  - Nipple eczema
  - Orbital darkening
  - Perifollicular accentuation
  - Pityriasis alba
  - Pruritus when sweating
  - Recurrent conjunctivitis
  - Tendency toward cutaneous infections/impaired cell-mediated immunity
  - Tendency toward nonspecific hand or foot dermatitis
  - White dermatographism
  - Xerosis

### ***Treatment Options***

- Moisturizers
- Topical corticosteroids

- Topical calcineurin inhibitors
- Systemic corticosteroids
- Systemic antibiotics
- UVB phototherapy
- Azathioprine
- Mycophenolate mofetil
- Methotrexate
- Cyclosporine

**Further reading:**

- Krol A, Krafchik B (2006) The differential diagnosis of atopic dermatitis in childhood. *Dermatol Ther* 19(2):73–82

**Atrichia with Papular Lesions**

Type of infancy-onset atrichia with autosomal-recessive inheritance that is caused by a defect in either the hairless gene or the vitamin D receptor gene and is characterized by shedding of all hair in the first few months of life followed by the development in early childhood of a milia-like papular eruption on the scalp, face, elbows, and knees (which later involutes to leave pitted scars)

***Differential Diagnosis***

- Alopecia universalis
- Anagen effluvium
- Ectodermal dysplasias
- IFAP syndrome
- Monilethrix
- Netherton syndrome
- Trichothiodystrophy
- Ulerythema ophryogenes



### **Diagnostic Criteria**

- Family history with pattern of inheritance established as autosomal recessive.
- Patients are sometimes born without hair, and none ever grows. More typically, patients are born with normal hair that is shed after several months and never regrows.
- Papules that start to appear during the first year of life, particularly under the midline of the eye, on the face, and on the extremities.
- Few to many papules distributed over some or all of the following areas: scalp, cheeks, arms, elbows, thighs, and knees.
- Normal nails and teeth, normal sweating, and no growth or developmental problems.
- Sparse eyebrows and eyelashes.
- Lack of secondary axillary, pubic, or body hair.
- Whitish hypopigmented streaks on the scalp.
- Lack of response to any treatment modality.
- Biopsy—absence of mature hair follicle structures, cysts filled with cornified material.
- Mutation in the hairless gene.

### **Associations**

- Vitamin-D-resistant rickets

### **Further reading:**

- Bergman R, Schein-Goldshmid R, Hochberg Z et al (2005) The alopecias associated with vitamin D-dependent rickets type IIA and with hairless gene mutations: a comparative clinical, histologic, and immunohistochemical study. *Arch Dermatol* 141(3):343–351
- Zlotogorski A, Panteleyev AA, Aita VM, Christiano AM (2002) Clinical and molecular diagnostic criteria of congenital atrichia with papular lesions. *J Invest Dermatol* 118(5):887–890

## **Atrophoderma of Pasini and Pierini**

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Acquired, benign atrophoderma of unknown cause that is characterized by hyperpigmented, depressed plaques most commonly on the back with a typical shelf-like or cliff-like border

### ***Differential Diagnosis***

- Anetoderma
- Connective tissue nevus
- Erythema dyschromicum perstans
- Fixed drug eruption
- Lichen sclerosus atrophicus
- Linear atrophoderma of Moulin
- Lupus profundus
- Morphea
- Nevus anelasticus
- Steroid atrophy
- Striae atrophicans
- Postinflammatory hyperpigmentation

### ***Associations***

- Lyme borreliosis

### ***Treatment Options***

- Topical corticosteroids
- Doxycycline
- Hydroxychloroquine
- Methotrexate

**Further reading:**

- Amano H, Nagai Y, Ishikawa O (2007) Multiple morphea coexistent with atrophoderma of Pasini–Pierini (APP): APP could be abortive morphea. *J Eur Acad Dermatol Venereol* 21(9):1254–1256

## **Atrophoderma Vermiculatum**

Disorder of follicular keratinization (and type of keratosis pilaris atrophicans) that can occur sporadically or as a feature of a syndrome and is characterized by inflammatory keratotic papules on the cheeks that evolve to worm-eaten atrophic pitted scars

### ***Differential Diagnosis***

- Acne scars (perifollicular elastolysis)
- Atrophia maculosa varioliformis cutis
- Chloracne
- Erythromelanosus faciei
- Infantile acne
- Keratosis pilaris
- Nevus comedonicus
- Varicella scars

### ***Associations***

- Keratosis pilaris atrophicans
- Nicolau–Balus syndrome
- Rombo syndrome

**Further reading:**

- Van Steensel MA, Jaspers NG, Steijlen PM (2001) A case of Rombo syndrome. *Br J Dermatol* 144(6):1215–1218

## **Autoeczematization (Autosensitization) Reaction**

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Type of immune-mediated cutaneous reaction associated with various types of dermatitis that is characterized by symmetric, erythematous papules, vesicles, and eczematous changes in areas distant to the initial, triggering dermatitis (often stasis dermatitis or allergic contact dermatitis)

### ***Differential Diagnosis***

- Airborne contact dermatitis
- Atopic dermatitis
- Contact dermatitis
- Dermatitis herpetiformis
- Drug reaction
- Dyshidrotic eczema
- Erysipelas
- Folliculitis
- Gianotti–Crosti syndrome
- Id reaction
- Mycosis fungoides
- Photoallergic contact dermatitis
- Pityriasis lichenoides
- Prurigo nodularis
- Scabies

### ***Treatment Options***

- Address the underlying cause
- Systemic corticosteroids

### **Further reading:**

- Williams J, Cahill J, Nixon R (2007) Occupational autoeczematization or atopic eczema precipitated by occupational contact dermatitis? *Contact Dermatitis* 56(1):21–26

## **Baboon Syndrome**

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A distinct presentation of either systemic contact dermatitis (especially nickel or mercury related) or drug reaction (especially amoxicillin, also known as symmetrical drug-related intertriginous and flexural exanthema (SDRIFE)) that is characterized by an erythematous, dermatitic eruption with well-defined borders in the flexures, especially the perineal area and buttocks

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Erythrasma
- Fixed drug eruption
- Intertrigo
- Inverse psoriasis
- Tinea cruris
- Streptococcal perianal eruption

### ***Diagnostic Criteria (SDRIFE)***

- Exposure to a systemically administered drug, first or repeated doses (contact allergens excluded)
- Sharply demarcated erythema of the gluteal/perianal area and/or V-shaped erythema of the inguinal/perigenital area
- Involvement of at least one other intertriginous/flexural fold
- Symmetry of affected areas
- Absence of systemic symptoms and signs

### ***Associations***

- Amoxicillin
- Ampicillin
- Erythromycin

- Food additives
- Mercury
- Nickel

### **Treatment Options**

- Systemic corticosteroids

### **Further reading:**

- Hausermann P, Harr T, Bircher AJ (2004) Baboon syndrome resulting from systemic drugs: is there strife between SDRIFE and allergic contact dermatitis syndrome? *Contact Dermatitis* 51(5–6):297–310

## **Bacillary Angiomatosis**

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Cutaneous manifestation of *Bartonella* infection seen most commonly in the profoundly immunosuppressed HIV patient that is caused by *Bartonella henselae* or *Bartonella quintana* and is characterized by angiomatous or violaceous papules or nodules, fever, lymphadenopathy, and hepatic lesions (peliosis hepatis)

### **Differential Diagnosis**

- Angiokeratoma
- Angiolymphoid hyperplasia with eosinophilia
- Angiosarcoma
- Atypical mycobacterial infection
- Cherry hemangioma
- Eruptive pseudoangiomatosis
- Glomangioma
- Kaposi sarcoma
- Melanoma
- Pyogenic granuloma
- Verruga peruana

### **Evaluation**

- HIV test
- CD4 count
- ELISA for *Bartonella* antibodies
- Complete blood count
- Liver function test
- CT scan of abdomen

### **Further reading:**

- Rigopoulos D, Papanizos V, Katsambas A (2004) Cutaneous markers of HIV infection. *Clin Dermatol* 22(6):487–498

### **Balanitis Xerotica Obliterans (Penile Lichen Sclerosus et Atrophicus)**

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Fibrosing process affecting the foreskin of the penis that is classically associated with lichen sclerosus et atrophicus; is characterized by white, atrophic, sclerotic plaques on the glans or prepuce; and may present as phimosis

### **Differential Diagnosis**

- Candidiasis
- Erythroplasia of Queyrat
- Lichen planus
- Phimosis due to chronic inflammation and poor hygiene
- Plasma cell balanitis
- Postinflammatory hypopigmentation
- Psoriasis
- Pseudoepitheliomatous, keratotic, and micaceous balanitis
- Reiter syndrome

- Squamous cell carcinoma
- Vitiligo

### ***Treatment Options***

- Topical corticosteroids
- Topical calcineurin inhibitors
- Circumcision

### **Further reading:**

- Kiss A, Kiraly L, Kutasy B, Merksz M (2005) High incidence of balanitis xerotica obliterans in boys with phimosis: prospective 10-year study. *Pediatr Dermatol* 22(4):305–308

## **Bannayan–Riley–Ruvalcaba Syndrome**

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Inherited malformation disorder (AD) with onset in childhood that is associated with mutation of the PTEN gene and is characterized by genital lentiginosities, lipomas, capillary malformations, intestinal polyps, macrocephaly, and mental retardation

### ***Differential Diagnosis***

- Cowden disease
- Gardner's syndrome
- Multiple lentiginosities
- Peutz–Jeghers syndrome
- Proteus syndrome

### **Further reading:**

- Erkek E et al (2005) Clinical and histopathological findings of Bannayan–Riley–Ruvalcaba syndrome. *J Am Acad Dermatol* 53:639–643



## **Bartonellosis (Oroya Fever, Verruga Peruana)**

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*Bartonella* infection diagnosed predominantly in South America that is caused by *Bartonella bacilliformis*, transmitted by the *Lutzomyia verrucarum* sandfly, and characterized by an acute febrile syndrome with severe hemolytic anemia and septicemia (oroya fever) and a chronic form with hemorrhagic, erythematous papules and nodules on the head and extremities (verruca peruana)

### ***Differential Diagnosis***

- AIDS
- Babesiosis
- Bacillary angiomatosis
- Deep fungal infection
- Dengue fever
- Eruptive pyogenic granulomas
- Leukemia
- Lymphogranuloma venereum
- Lymphoma
- Malaria
- Molluscum contagiosum
- Syphilis
- Tuberculosis
- Warts
- Yaws

### ***Evaluation***

- ELISA and Western blot for *Bartonella* antibodies

### **Further reading:**

- Chian CA, Arrese JE, Pierard GE (2002) Skin manifestations of *Bartonella* infections. *Int J Dermatol* 41(8):461–466

## Basal Cell Carcinoma

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Malignant neoplasm mostly affecting older patients that arises from pluripotent cells of the epidermis or follicle and is characterized as an erythematous, pearly nodule with a rolled border, pigmentation, central umbilication, and/or ulceration most commonly located on the face, neck, and trunk

### *Subtypes/Variants*

#### Clinical

- Fibroepithelioma of Pinkus
- Giant
- Keloidal
- Linear
- Morpheaform
- Nodular/ulcerative
- Pigmented
- Polypoid
- Superficial

#### Histological

- Adamantinoid (ameloblastoma-like)
- Adenoid
- Apocrine
- Basosquamous
- Clear cell
- Cystic
- Eccrine
- Fibroepithelioma of Pinkus
- Follicular
- Granular
- Infiltrative
- Infundibulocystic

- Keloidal
- Keratotic
- Matrical
- Metaplastic
- Micronodular
- Myoepithelial
- Neuroendocrine
- Nodular
- Pigmented
- Pleomorphic (giant cell)
- Sclerosing
- Sebaceous
- Signet ring cell
- Superficial multifocal

### ***Differential Diagnosis***

- Acrochordon (Gorlin's syndrome)
- Actinic keratosis
- Ameloblastoma
- Angioma
- Apocrine hidrocystoma
- Atypical fibroxanthoma
- Basaloid follicular hamartoma
- Bowen's disease
- Chalazion
- Chronic lymphocytic leukemia
- Cryptococcosis
- Dermatofibroma
- Fibrous papule
- Hidroacanthoma simplex
- Keloid
- Lymphadenoma
- Merkel cell carcinoma

- Metastatic disease
- Molluscum contagiosum
- Neurofibroma
- Nevus
- Sebaceoma
- Sebaceous adenoma
- Sebaceous carcinoma
- Sebaceous hyperplasia
- Seborrheic keratoses
- Spectacle granuloma
- Squamous cell carcinoma
- Trichoblastoma
- Trichoepithelioma
- Wart

### ***Associations***

- Albinism
- Arsenic exposure
- Bazex–Dupre–Christol syndrome
- Dyskeratosis congenita
- Myotonic dystrophy
- Nevoid basal cell carcinoma syndrome
- Nevus sebaceus
- Rombo syndrome
- Vaccination scars
- Xeroderma pigmentosum

### ***Treatment Options***

- Surgical excision
- Mohs micrographic surgery
- Electrodesiccation and curettage
- Radiation

- Topical 5-FU
- Imiquimod
- Photodynamic therapy

**Further reading:**

- Hutcheson A et al (2005) Basal cell carcinomas with unusual histologic patterns. *J Am Acad Dermatol* 53:833–837

## **Basaloid Follicular Hamartoma**

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Rare adnexal hamartoma that can be solitary and sporadic or multiple and familial as a part of the basaloid follicular hamartoma syndrome, which is characterized by flesh-colored facial papules, hypotrichosis, hypohidrosis, and palmoplantar pitting

### ***Subtypes***

- Generalized (familial)
- Generalized (acquired)
- Linear type
- Plaque type
- Papular

### ***Differential Diagnosis***

- Angiofibromas of tuberous sclerosis
- Basal cell carcinoma (especially infundibulocystic type)
- Bazex–Dupre–Christol syndrome
- Birt–Hogg–Dube syndrome
- Cowden’s disease
- Melanocytic nevi
- Multiple trichoepitheliomas
- Nevoid basal cell carcinoma syndrome
- Rombo syndrome

- Sebaceous hyperplasia
- Seborrheic keratoses
- Trichoepitheliomas

### **Associations**

#### Generalized Acquired

- Cystic fibrosis
- Myasthenia gravis
- Systemic lupus erythematosus

#### **Further reading:**

- Lee PL, Lourduraj LT, Palko MJ III et al (2006) Hereditary basaloid follicular hamartoma syndrome. *Cutis* 78(1):42–46

### **Bazex–Dupre–Christol Syndrome**

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X-linked dominant disorder associated with multiple facial basal cell carcinomas, hypotrichosis, hypohidrosis, and follicular atrophoderma on the face, dorsal hands, and dorsal feet

### **Differential Diagnosis**

- Anhidrotic ectodermal dysplasia
- Basaloid follicular hamartoma syndrome
- Familial trichoepitheliomas
- Nevoid basal cell carcinoma syndrome
- Nicolau–Balus syndrome
- Rombo syndrome

#### **Further reading:**

- Torrelo A, Sprecher E, Mediero IG, Bergman R et al (2006) What syndrome is this? Bazex–Dupre–Christol syndrome. *Pediatr Dermatol* 23(3):286–290

## **Becker's Nevus**

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Nevoid lesion possibly induced by androgens that most commonly affects males, has onset around puberty, and is characterized by a large unilateral, hyperpigmented patch with hypertrichosis and acne that is located on the chest (with the possible breast hypoplasia), shoulder, or upper arm

### ***Differential Diagnosis***

- Café-au-lait macule
- Congenital melanocytic nevus
- Epidermal nevus
- Localized hypertrichosis
- Melanoma
- Nevus of Ito
- Nevus spilus
- Postinflammatory hyperpigmentation
- Segmental lentiginosis

### ***Associations***

- Breast and limb hypoplasia
- Pigmented hairy epidermal nevus syndrome
- Renal cysts
- Spina bifida
- Supernumerary nipples

### ***Treatment Options***

- Ruby laser
- Nd:YAG laser

### **Further reading:**

- Danarti R, Konig A, Salhi A et al (2004) Becker's nevus syndrome revisited. *J Am Acad Dermatol* 51(6):965–969

## **Beckwith–Wiedemann Syndrome**

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Sporadic syndrome associated with mutation of the p57 gene that is characterized by macrosomia, hemihypertrophy, neonatal hypoglycemia, facial port-wine stain, omphalocele, macroglossia, exophthalmos, and an increased risk of Wilms tumor

### ***Differential Diagnosis***

- Congenital hypothyroidism
- Down syndrome
- Mucopolysaccharidoses
- Proteus syndrome
- Sturge–Weber syndrome

### ***Evaluation***

- Blood glucose (low)
- Renal ultrasound to evaluate for Wilms tumor

### **Further reading:**

- Millington GW (2006) Genomic imprinting and dermatological disease. *Clin Exp Dermatol* 31(5):681–688

## **Bed Bug Bites (Cimicosis)**

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Cutaneous reaction to the early morning bite of the insect, *Cimex lectularius*, that occurs anywhere on the skin surface and that is characterized by an itchy erythematous papule or nodule, often in groups of three, representing the classic “breakfast, lunch, and dinner” sign

### ***Differential Diagnosis***

- Acute urticaria
- Furuncle



- Mosquito bites
- Nodular scabies
- Papular urticaria

### ***Treatment Options***

- Topical corticosteroids
- Antihistamines
- Eradication from the living quarters
- Heat treatment
- Insecticide treatment

### **Further reading:**

- Fallen RS, Gooderham M (2011) Bedbugs: an update on recognition and management. *Skin Therapy Lett* 16(6):5–7

## **Behçet's Disease**

Systemic immune-mediated disease that most commonly affects patients of Mediterranean or Middle Eastern descent and is characterized by oral and genital ulcers, ocular inflammation, erythema nodosum-like skin lesions, and pathergy, among many other systemic and cutaneous manifestations

### ***Differential Diagnosis***

- Artfactual ulceration
- B12 deficiency
- Bowel-associated dermatosis–arthritis syndrome
- Erythema nodosum
- Erosive lichen planus
- Folliculitis
- Herpes simplex virus infection
- Inflammatory bowel disease

- Iron deficiency
- Lupus erythematosus
- MAGIC syndrome
- Major aphthous ulcers (Sutton's disease)
- Pemphigus vulgaris
- Pyridoxine deficiency
- Reactive arthritis
- Riboflavin deficiency
- SAPHO syndrome
- Sexually transmitted disease
- Stevens–Johnson syndrome
- Sweet's syndrome
- Thiamine deficiency
- Zinc deficiency

### ***Diagnostic Criteria***

- Required: aphthous oral ulceration observed by physician or patient recurring at least three times in a 12-month period
- Two or more of:
  - Aphthous genital ulceration or scarring
  - Anterior or posterior uveitis, cells in the vitreous by slit-lamp examination, or retinal vasculitis
  - Erythema-nodosum-like lesions, papulopustular lesions, or acneiform nodules while not on steroids
  - Positive pathergy test at 24–48 h

### ***Evaluation***

- Antinuclear antibodies
- Complete blood cell count
- Iron, B12, and folate levels
- Ophthalmologic exam
- Pathergy test
- Sedimentation rate

### **Treatment Options**

- Topical corticosteroids
- Systemic corticosteroids
- Topical calcineurin inhibitors
- Colchicine
- Dapsone
- Methotrexate
- Azathioprine
- Cyclophosphamide
- Cyclosporine
- Plasmapheresis
- Intravenous immunoglobulin
- TNF inhibitors
- Thalidomide

### **Further reading:**

- Alpsy E, Donmez L, Onder M et al (2007) Clinical features and natural course of Behçet's disease in 661 cases: a multicentre study. *Br J Dermatol* 157(5):901–906

### **Bejel (Endemic Syphilis)**

Treponemal infection caused by *Treponema pallidum* spp. *endemicum* that primarily affects children in impoverished areas of the world and is characterized by rare primary lesions and more common secondary mucous patches of the oral cavity and, if untreated, tertiary gummatous lesions of the mucosal areas, skin, and bone.

### **Differential Diagnosis**

- Aphthous stomatitis
- Atopic dermatitis
- Condyloma acuminatum
- Dermatophytosis

- Herpes simplex virus infection
- Leprosy
- Lupus erythematosus
- Lupus vulgaris
- Mucocutaneous leishmaniasis
- Paracoccidioidomycosis
- Perleche
- Pinta
- Psoriasis
- Rhinoscleroma
- Squamous cell carcinoma
- Tuberculosis
- Venereal syphilis
- Vitamin deficiencies
- Yaws

**Further reading:**

- Antal GM, Lukehart SA, Meheus AZ (2002) The endemic treponematoses. *Microbes Infect* 4(1):83–94

### **Berloque Dermatitis (Freund Dermatitis)**

Type of phototoxic reaction caused by the application of furocoumarin-containing perfume, such as oil of bergamot, to the skin that is characterized by erythema, vesiculation, and hyperpigmentation on the central chest, neck, and face

### ***Differential Diagnosis***

- Acanthosis nigricans
- Contact dermatitis
- Erythromelanosus follicularis faciei et colli
- Fixed drug eruption
- Melasma

- Photosensitive drug eruption
- Phytophotodermatitis
- Postinflammatory hyperpigmentation
- Riehl's melanosis
- Rhus dermatitis

**Further reading:**

- Wang L, Sterling B, Don P (2002) Berloque dermatitis induced by "Florida water". *Cutis* 70(1):29–30

### **Bier Spots (Physiologic Anemic Macules)**

Benign skin finding affecting young adults that is characterized by hypopigmented macules on the arms and legs (Fig. 6.10)

#### ***Differential Diagnosis***

- Cutis marmorata
- Idiopathic guttate hypomelanosis
- Livedo reticularis
- Nevus anemicus



**Fig. 6.10** Bier spots

- Postinflammatory hypopigmentation
- Tinea versicolor
- Vitiligo

**Further reading:**

- Fan YM, Yang YP, Li W et al (2009) Bier spots: six case reports. *J Am Acad Dermatol* 61(3):e11–e12

## **Biotin Deficiency**

Uncommon vitamin deficiency that can be acquired or inherited and can be characterized by neonatal erythroderma, periorificial erosions, alopecia, conjunctivitis, organic aciduria, lethargy, and depression

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- Congenital syphilis
- Cystic fibrosis
- Epidermolysis bullosa, Dowling–Meara type
- Essential fatty acid deficiency
- Hartnup's disease
- Leiner's disease
- Neonatal erythrodermas
- Organic acidurias

### ***Associations***

- Avidin ingestion (raw egg white)
- Biotinidase deficiency (infantile type)
- Holocarboxylase deficiency (neonatal type)
- Malabsorption
- Parenteral nutrition
- Valproic acid therapy

**Further reading:**

- Arbuckle HA, Morelli J (2006) Holocarboxylase synthetase deficiency presenting as ichthyosis. *Pediatr Dermatol* 23(2):142–144

**Birt–Hogg–Dube Syndrome**

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Autosomal-dominant syndrome associated with a defect in folliculin that is characterized by facial fibrofolliculomas and trichodiscomas, as well as a tendency to develop renal oncocytoma (an uncommon type of renal cell carcinoma) and pulmonary cysts, which may manifest as spontaneous pneumothorax

***Differential Diagnosis***

- Basaloid follicular hamartoma syndrome
- Brooke–Spiegler syndrome
- Cowden’s disease
- Multiple trichoepitheliomas
- Rombo syndrome
- Tuberous sclerosis

***Evaluation***

- CT scan of chest, abdomen, and pelvis

**Further reading:**

- Welsch MJ, Kronic A, Medenica MM (2005) Birt–Hogg–Dube syndrome. *Int J Dermatol* 44(8):668–673

**Black Hairy Tongue**

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Disorder affecting the tongue that is caused by inadequate mechanical desquamation of the filiform papillae and is characterized by a thickened surface of the dorsal tongue with dark discoloration

### ***Differential Diagnosis***

- Argyria
- Candidiasis
- Chrysiasis
- Oral hairy leukoplakia
- Oral lichen planus
- Melanoma
- Stain/pigments

### ***Associations***

- Antibiotics
- Coffee or tea consumption
- Oxidizing mouthwashes
- Mouth breathing
- Poor oral hygiene
- Radiation therapy
- Smoking

### ***Treatment Options***

- Tongue scraping
- Topical retinoids
- Nystatin

### **Further reading:**

- Taybos G (2003) Oral changes associated with tobacco use. *Am J Med Sci* 326(4):179–182

### **Blastomycosis, North American (Gilchrist's Disease)**

Type of respiratory mycosis that is caused by the broad-based budding yeast *Blastomyces dermatitidis* and is characterized by a primary pulmonary infection with secondary dissemination to the bones,





**Fig. 6.11** Blastomycosis

genitourinary tract, and skin, giving rise to circumscribed verrucous, crusted, and purulent plaques anywhere on the skin surface (Fig. 6.11)

### ***Differential Diagnosis***

- Anthrax
- Atypical mycobacterial infection
- Blastomycosis-like pyoderma
- Cutaneous tuberculosis (especially tuberculosis verrucosa)
- Granuloma inguinale
- Halogenoderma
- Keratoacanthoma
- Leishmaniasis
- Nocardiosis
- Paracoccidioidomycosis
- Pempfigus vegetans
- Pyoderma gangrenosum, vegetative type
- Sarcoidosis
- Squamous cell carcinoma
- Tertiary syphilis
- Trichophytic granuloma

- Verrucae
- Verrucous carcinoma
- Verrucous mycosis fungoides

### **Evaluation**

- Chest radiograph
- Tissue and blood cultures
- Potassium hydroxide wet mount of purulent material

### **Treatment Options**

- Itraconazole
- Ketoconazole

### **Further reading:**

- Lupi O, Tyring SK, McGinnis MR (2005) Tropical dermatology: fungal tropical diseases. *J Am Acad Dermatol* 53(6):931–951

## **Blastomycosis-Like Pyoderma**

Type of pyoderma caused by several different bacteria including *Staphylococcus aureus* and *Pseudomonas aeruginosa* that is characterized by a large verrucous, crusted plaque studded with pustules

### **Differential Diagnosis**

- Atypical mycobacterium infection
- Blastomycosis
- Botryomycosis
- Deep fungal infections
- Halogenoderma
- Keratoacanthoma
- Majocchi granuloma

- Pemphigus vegetans
- Pyoderma gangrenosum, vegetative type
- Squamous cell carcinoma
- Tuberculosis

### ***Treatment Options***

- Antistaphylococcal antibiotics
- Antipseudomonal antibiotics

### **Further reading:**

- Sawalka SS, Phiske MM, Jerajani HR (2007) Blastomycosis-like pyoderma. Indian J Dermatol Venereol Leprol 73(2):117–119

## **Blau Syndrome**

Autosomal-dominant disorder caused by mutation of the NOD2/CARD15 gene that is characterized by an early-onset sarcoidosis-like presentation with granulomatous papules and plaques, noncaseating granulomatous arthritis, uveitis, and camptodactyly without lung or other visceral involvement

### ***Differential Diagnosis***

- Crohn's disease
- Familial Mediterranean fever
- Granuloma annulare
- Immunodeficiency-related cutaneous granulomas
- Interstitial granulomatous dermatitis with arthritis
- Juvenile rheumatoid arthritis
- Muckle–Wells syndrome
- NOMID syndrome
- PAPA syndrome

- Sarcoidosis
- Tumor necrosis factor receptor-associated periodic fever syndrome

**Further reading:**

- Schaffer JV, Chandra P, Keegan BR et al (2007) Widespread granulomatous dermatitis of infancy: an early sign of Blau syndrome. Arch Dermatol 143(3):386–391

## **Blistering Distal Dactylitis**

Streptococcal infection of the skin of the distal aspect of the digits that is characterized by a tender superficial blister

### ***Differential Diagnosis***

- Acute contact dermatitis
- Acute paronychia
- Bullous diabeticorum
- Bullous tinea
- Burn
- Epidermolysis bullosa
- Friction blister
- Herpetic whitlow
- Parakeratosis pustulosa
- Suction blister

### ***Treatment Options***

- Incision and drainage
- Topical antibiotics
- Systemic antibiotics

**Further reading:**

- Scheinfeld NS (2007) Is blistering distal dactylitis a variant of bullous impetigo? Clin Exp Dermatol 32(3):314–316

## **Bloom's Syndrome**

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Autosomal-recessive disorder caused by a defect in the DNA repair helicase, RECQL3 that is characterized by photosensitivity, photodistributed telangiectasias, café-au-lait macules, growth retardation, recurrent sinopulmonary infections, and tendency to development leukemia and lymphoma

### ***Differential Diagnosis***

- Ataxia–telangiectasia
- Childhood dermatomyositis
- Cockayne syndrome
- Erythropoietic protoporphyria
- Kindler syndrome
- Lupus erythematosus
- Rothmund–Thomson syndrome
- Trichothiodystrophy
- Xeroderma pigmentosum

### ***Evaluation***

- Antinuclear antibodies
- Chest radiograph
- Complete blood count

### **Further reading:**

- Sahn EE, Hussey RH III, Christmann LM (1997) A case of Bloom syndrome with conjunctival telangiectasia. *Pediatr Dermatol* 14(2):120–124

## **Blue Nevus, Common and Cellular (Jadassohn–Tieche Nevus)**

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Benign neoplasm of dermal melanocytes that is characterized by a uniform blue to black-colored dome-shaped papule on the head and neck, dorsal hands, buttocks, or sacral area

### ***Differential Diagnosis***

- Angiokeratoma
- Apocrine hidrocystoma
- Argyria (acupuncture)
- Basal cell carcinoma (pigmented type)
- Dermatofibroma
- Glomus tumor
- Lentigo
- Melanocytic nevus
- Melanoma (including metastatic)
- Pigmented spindle cell nevus
- Sclerosing hemangioma
- Traumatic tattoo
- Venous lake

### ***Associations***

- Carney complex (epithelioid type)

### **Further reading:**

- Bogart MM, Bivens MM, Patterson JW, Russell MA (2007) Blue nevi: a case report and review of the literature. *Cutis* 80(1):42–44

## **Blueberry Muffin Baby (Congenital Extramedullary Hematopoiesis)**

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Cutaneous manifestation of extramedullary hematopoiesis that affects newborns with a variety of underlying diseases and is characterized by small, purpuric macules predominantly on the head, neck, and trunk

### ***Differential Diagnosis***

- Blue rubber bleb nevus syndrome
- Congenital leukemia cutis

- Congenital self-healing reticulohistiocytosis
- Cutaneous metastatic neuroblastoma
- Neonatal hemangiomatosis

### **Associations**

- ABO incompatibility
- Congenital rhabdomyosarcoma
- Congenital leukemia cutis
- Congenital rubella
- Congenital spherocytosis
- Coxsackie virus infection
- Cytomegalovirus infection
- Hemolytic disease of newborn
- Langerhans cell histiocytosis
- Parvovirus B19 infection
- TORCH infections
- Toxoplasmosis
- Twin–twin transfusion

### **Evaluation**

- Abdominal ultrasound/CT scan
- Complete blood count
- Metaiodobenzylguanidine scan
- Skeletal survey
- TORCH infections serologic tests
- Urinary catecholamines

### **Further reading:**

- Shaffer MP, Walling HW, Stone MS (2005) Langerhans cell histiocytosis presenting as blueberry muffin baby. *J Am Acad Dermatol* 53(2 Suppl 1):S143–S146

## **Blue Rubber Bleb Nevus Syndrome**

---

Sporadic condition associated with numerous venous malformations of the skin and gastrointestinal tract that is characterized by blue, soft, compressible, cutaneous nodules with nocturnal pain and gastrointestinal hemorrhage if extensive mucosal lesions are present

### ***Differential Diagnosis***

- AV malformation
- Blueberry muffin baby
- Glomangiomas
- Kaposi's sarcoma
- Klippel–Trenaunay–Weber syndrome
- Maffucci syndrome
- Venous lakes

### ***Evaluation***

- Stool occult blood studies
- Complete blood count
- Endoscopy to identify gastrointestinal lesions

### **Further reading:**

- Lu R, Krathen RA, Sanchez RL et al (2005) Multiple glomangiomas: potential for confusion with blue rubber bleb nevus syndrome. *J Am Acad Dermatol* 52(4):731–732

## **Borrelial Lymphocytoma**

---

Term for type of cutaneous lymphoid hyperplasia that is seen in Europe, is caused by *Borrelia afzelii* or *Borrelia garinii*, and is characterized by a solitary violaceous nodule most commonly on the ear in children



### ***Differential Diagnosis***

- Arthropod-bite reaction
- Foreign body granuloma (especially tick parts)
- Granuloma annulare
- Granuloma faciale
- Granulomatous contact dermatitis
- Keloid
- Lupus erythematosus
- Lymphoma cutis
- Metastatic disease
- Perichondritis
- Polymorphous light eruption
- Sarcoidosis

### ***Evaluation***

- ELISA and Western blot for Lyme disease

### ***Treatment Options***

- Doxycycline
- Intralesional corticosteroids

### **Further reading:**

- Mullegger RR (2004) Dermatological manifestations of Lyme borreliosis. Eur J Dermatol 14(5):296–309

### **Botryomycosis**

Chronic bacterial infection affecting patients with neutrophil dysfunction that is caused most commonly by *Staphylococcus aureus* and is characterized by a crusted, purulent plaque or nodule with draining sinuses that contain granules

## ***Differential Diagnosis***

- Actinomycosis
- Atypical mycobacterial infections
- Deep fungal infection
- Kaposi's sarcoma
- Kerion
- Lymphoma
- Mycetoma
- Orf
- Ruptured epidermoid cyst
- Subcutaneous granuloma annulare
- Tuberculosis
- Tinea barbae

## ***Evaluation***

- Gram stain and culture of granules

## ***Treatment Options***

- Antistaphylococcal antibiotics

## **Further reading:**

- Machado CR, Schubach AO, Conceicao-Silva F et al (2005) Botryomycosis. *Dermatology* 211(3):303–304

## **Bowel-Associated Dermatitis–Arthritis Syndrome**

Complication of jejunoileal bypass surgery that is likely caused by immune complexes related to bacterial overgrowth in the blind loop of bowel and is characterized by pustular vasculitic skin lesions on the upper trunk and extensor extremities, along with episodic, migratory polyarthritis involving the digits

### ***Differential Diagnosis***

- Arthropod bites
- Behçet's disease
- Crohn's disease
- Cutaneous small vessel vasculitis
- Dermatitis herpetiformis
- Erythema multiforme
- Folliculitis
- Gonococemia
- Henoch–Schonlein purpura
- PAPA syndrome
- Pyoderma gangrenosum
- Reiter's syndrome
- SAPHO syndrome
- Subacute bacterial endocarditis
- Sweet's syndrome
- Systemic candidiasis
- Urticarial vasculitis

### ***Evaluation***

- Antinuclear antibodies
- Complement levels
- Complete blood count
- Renal function test
- Rheumatoid factor
- Tissue and blood cultures
- Urinalysis

### ***Treatment Options***

- Surgical excision of blind loop
- Metronidazole
- Tetracyclines

- Clindamycin
- Systemic corticosteroids
- Dapsone
- Cyclosporine
- Azathioprine
- Mycophenolate mofetil

**Further reading:**

- Kawakami A, Saga K, Hida T et al (2006) Fulminant bowel-associated dermatosis–arthritis syndrome that clinically showed necrotizing fasciitis-like severe skin and systemic manifestations. *J Eur Acad Dermatol Venereol* 20(6):751–753

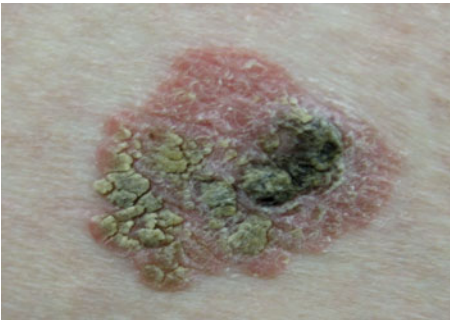
**Bowen's Disease**

---

Distinct type of squamous cell carcinoma in situ that affects older patients and is characterized by an circumscribed erythematous, scaly, superficial, slowly growing plaque on sun-exposed or, commonly, sun-protected areas (Fig. 6.12)

***Differential Diagnosis***

- Actinic keratosis
- Amelanotic melanoma
- Basal cell carcinoma, superficial type
- Epidermotropic metastasis

**Fig. 6.12** Bowen's disease

- Extramammary Paget's disease
- Hidroacanthoma simplex
- Lichen planus
- Lichenoid keratosis
- Lupus erythematosus
- Nummular eczema
- Pagetoid reticulosis
- Psoriasis
- Seborrheic keratosis, clonal type
- Tinea corporis
- Viral warts

### ***Treatment Options***

- Electrodesiccation and curettage
- 5-FU cream
- Imiquimod cream
- Surgical excision

### **Further reading:**

- Cox NH, Eedy DJ, Morton CA (2007) Therapy guidelines and Audit Subcommittee, British Association of Dermatologists. Guidelines for management of Bowen's disease: 2006 update. Br J Dermatol 156(1):11–21

## **Bowenoid Papulosis**

Dysplastic epidermal disorder affecting the sexually active and induced by HPV subtypes 16 and 18 (among others) that is characterized by hyperpigmented verrucous papules and plaques in the genital or perianal areas

### ***Differential Diagnosis***

- Condyloma acuminatum
- Extramammary Paget's disease

- Lichen planus
- Molluscum contagiosum
- Nevi
- Squamous cell carcinoma
- Seborrheic keratoses

### ***Treatment Options***

- Cryosurgery
- Electrodesiccation and curettage
- Imiquimod
- 5-FU cream
- Podophyllin
- Tazarotene cream

### **Further reading:**

- Papadopoulos AJ, Schwartz RA, Lefkowitz A et al (2002) Extragenital Bowenoid papulosis associated with atypical human papillomavirus genotypes. *J Cutan Med Surg* 6(2):117–121

## **Brachioradial Pruritus**

Localized, neurogenic, pruritic disorder caused by cervical nerve compression and characterized by itching or burning of the brachioradial area which the patient will often attempt to soothe by placing an ice pack on the affected area (ice-pack sign)

### ***Differential Diagnosis***

- Acquired brachial cutaneous dyschromatosis
- Asteatotic eczema
- Dermatitis herpetiformis
- Lichen simplex chronicus
- Postherpetic neuralgia

- Tinea corporis
- Scabies

### ***Evaluation***

- CT scan of cervical spine

### ***Treatment Options***

- Capsaicin cream
- Doxepin cream
- Topical lidocaine cream or patch
- Topical corticosteroids
- Gabapentin
- Amitriptyline

### **Further reading:**

- Barry R, Rogers S (2004) Brachioradial pruritus: an enigmatic entity. Clin Exp Dermatol 29(6):637–638

## **Branchial Cleft Cyst**

Developmental anomaly caused by failure of closure of the second branchial cleft that is characterized by a solitary cyst or mass located most commonly on the lateral neck (Fig. 6.13)

### ***Differential Diagnosis***

- Carotid body tumor
- Cystic hygroma
- Ectopic salivary tissue
- Ectopic thyroid tissue
- Epidermal inclusion cyst
- Hemangioma



**Fig. 6.13** Branchial cleft cyst

- Lymphadenopathy
- Pilomatricoma
- Vascular malformation

### ***Associations***

- Branchio-oto-renal syndrome

### ***Evaluation***

- Hearing test
- Renal ultrasound

### **Further reading:**

- Acierno SP, Waldhausen JH (2007) Congenital cervical cysts, sinuses and fistulae. *Otolaryngol Clin North Am* 40(1):161–176



## **Bronchogenic Cyst**

---

Developmental anomaly representing a remnant of the lung bud of the foregut that is characterized by a cutaneous cyst arising early in life and which is located in the midline superior to the sternal notch

### ***Differential Diagnosis***

- Branchial cleft cyst
- Epidermal inclusion cyst
- Lipoma
- Pilomatricoma
- Steatocystoma
- Thymic cyst
- Thyroglossal duct cyst

### **Further reading:**

- Ustundag E, Iseri M, Keskin G et al (2005) Cervical bronchogenic cysts in head and neck region. *J Laryngol Otol* 119(6):419–423

## **Brown Recluse Spider Bite (Necrotic Arachnidism)**

---

Injury caused by *Loxosceles reclusa* with a potential for a severe, toxin-mediated necrotic reaction that is characterized by a painless bite, followed by erythema and edema, and eventual necrosis, bullae, and severe pain over 48–72 h in some patients

### ***Differential Diagnosis***

- Aspergillosis
- Chancriform pyoderma
- Coumarin necrosis

- Ecthyma
- Erythema migrans
- Factitial ulceration
- Herpes simplex infection
- Insect-bite reaction
- Mucormycosis
- Necrotizing fasciitis
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Staphylococcal infection
- Sweet's syndrome
- Thromboangiitis obliterans
- Thromboembolic event
- Tularemia
- Vasculitis

### ***Treatment Options***

- Debridement and wound care
- Elevation
- Immobilization
- Cool compresses
- Dapsone
- Colchicine
- Systemic corticosteroids
- Surgical excision
- Nitroglycerin
- Hyperbaric oxygen

### **Further reading:**

- Dyachenko P, Ziv M, Rozenman D (2006) Epidemiological and clinical manifestations of patients hospitalized with brown recluse spider bite. *J Eur Acad Dermatol Venereol* 20(9):1121–1125

## **Brucellosis (Undulant Fever)**

---

Zoonotic bacterial infection caused by the Gram-negative *Brucella* spp. that is acquired by contact with infected animals or by ingestion of unpasteurized milk and is characterized by fever, headache, malaise, and variable cutaneous findings, including erythema nodosum, vasculitis, or a violaceous papular eruption

### ***Differential Diagnosis***

- Endocarditis
- Henoch–Schonlein purpura
- Hodgkin's disease
- Influenza
- Listeriosis
- Malaria
- Meningococemia
- Mononucleosis
- Sarcoidosis
- Salmonellosis
- Tuberculosis
- Tularemia
- Typhoid fever
- Typhus
- Vasculitis

### ***Evaluation***

- Anti-O polysaccharide antibodies
- Blood cultures
- Complete blood count

### **Further reading:**

- Metin A, Akdeniz H, Buzgan T, Delice I (2001) Cutaneous findings encountered in brucellosis and review of the literature. *Int J Dermatol* 40(7):434–438

**Fig. 6.14** Bullosis diabeticorum



### **Bullosis Diabeticorum**

Uncommon, noninflammatory bullae possibly related to trauma that arises in patients with a long history of diabetes mellitus and is characterized by tense blisters arising on the distal extremities (Fig. 6.14)

#### ***Differential Diagnosis***

- Blistering distal dactylitis
- Bullous cellulitis
- Bullous drug eruptions

- Bullous pemphigoid (localized type)
- Burn
- Epidermolysis bullosa acquisita
- Edema bullae
- Friction blister
- Pompholyx
- Porphyria cutanea tarda
- Pseudoporphyria

### ***Evaluation***

- Direct immunofluorescence

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Aye M, Masson EA (2002) Dermatological care of the diabetic foot. *Am J Clin Dermatol* 3(7):463–474

## **Burning Mouth Syndrome (Burning Tongue Syndrome)**

---

Neurocutaneous disorder without any identifiable underlying cause that predominantly affects postmenopausal women and is characterized by a burning sensation of the tongue, mouth, or lips

### ***Differential Diagnosis***

- Allergic contact stomatitis
- Atrophic glossitis
- B12 deficiency

- Candidiasis
- Diabetes
- Hypothyroidism
- Iron deficiency
- Leukemia
- Lichen planus
- Malignant lesion
- Medication reaction
- Menopause
- Poorly fitting dentures
- Sjögren's syndrome
- Tobacco abuse
- Uremia
- Xerostomia

### ***Evaluation***

- Iron, B12, and folate levels
- Culture for *Candida*
- Sialometry
- Patch testing

### ***Treatment Options***

- Amitriptyline
- Gabapentin
- Nystatin
- B vitamins
- SSRIs
- Cognitive therapy

### **Further reading:**

- Savage NW, Boras VV, Barker K (2006) Burning mouth syndrome: clinical presentation, diagnosis and treatment. *Australas J Dermatol* 47(2):77–81

## **Buruli Ulcer**

---

Type of tropical ulcer affecting young children in Africa that is caused by a mycolactone toxin released by *Mycobacterium ulcerans* and characterized by extensive and deep cutaneous necrotic ulceration most commonly affecting the extremities

### ***Differential Diagnosis***

- Cutaneous tuberculosis
- Deep fungal infection
- Foreign body granuloma
- Fungal infections
- Leishmaniasis
- Necrotizing fasciitis
- Panniculitis
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Suppurative panniculitis
- Tropical phagedenic ulcer
- Vasculitis

### **Further reading:**

- Wansbrough-Jones M, Phillips R (2006) Buruli ulcer: emerging from obscurity. *Lancet* 367(9525):1849–1858

## **Buschke–Ollendorf Syndrome**

---

Autosomal-dominant disorder of elastic tissue possibly caused by a defect in the LEMD3 lamin-binding protein that is characterized by elastic tissue nevi most commonly localized to the back and buttocks (dermatofibrosis lenticularis disseminata) and osteopoikilosis

### ***Differential Diagnosis***

- Connective tissue nevus
- Eruptive collagenoma
- Familial cutaneous collagenoma
- Juvenile elastoma
- Mastocytosis
- Metastatic disease
- Morphea
- Papular elastorrhesis
- Pseudoxanthoma elasticum
- Tuberous sclerosis

### ***Evaluation***

- Radiographs of the hands, lumbosacral spine, tibia, and radius

### **Further reading:**

- Assmann A, Mandt N, Geilen CC, Blume-Peytavi U (2001) Buschke-Ollendorff syndrome: differential diagnosis of disseminated connective tissue lesions. *Eur J Dermatol* 11(6):576–579

### **Café-au-Lait Macule**

Circumscribed hypermelanotic lesion that is present at birth or develops in early childhood and is characterized by solitary or multiple uniformly hyperpigmented oval macules or patches

### ***Differential Diagnosis***

- Becker's nevus
- Congenital melanocytic nevus
- Freckles



- Melasma
- Nevus sebaceus
- Nevus spilus
- Phytophotodermatitis
- Postinflammatory hyperpigmentation
- Solar lentigo

### **Associations**

- Ataxia–telangiectasia
- Bannayan–Riley–Ruvalcaba syndrome
- Bloom syndrome
- Cardiofaciocutaneous syndrome
- Cowden’s disease
- Fanconi’s anemia
- Gastrocutaneous syndrome
- LEOPARD syndrome
- Jaffe–Campanacci syndrome
- Johnson–McMillin syndrome
- Juvenile xanthogranulomas
- Legius syndrome
- McCune–Albright syndrome
- Multiple endocrine neoplasia 1
- Multiple endocrine neoplasia 2B
- Epidermal nevi
- Neurofibromatosis
- Noonan syndrome
- Piebaldism
- Silver–Russell syndrome
- Tay syndrome
- Tuberous sclerosis
- Watson syndrome

### **Further reading:**

- Landau M, Krafchik BR (1999) The diagnostic value of café-au-lait macules. *J Am Acad Dermatol* 40(6 Pt 1):877–890

## **Calcinosis Cutis**

---

Refers to cutaneous calcium deposition due to a variety of causes that is characterized by hard subcutaneous papules, nodules, or plaques with or without overlying ulceration and perforation of a white, chalky material

### ***Subtypes/Variants***

- Dystrophic
- Iatrogenic
- Idiopathic
- Metastatic

### ***Differential Diagnosis***

- Foreign body granuloma
- Gouty tophus
- Granuloma annulare
- Miliium
- Molluscum contagiosum
- Osteoma cutis
- Rheumatoid nodule
- Xanthoma

### ***Associations***

#### Dystrophic

- Acne vulgaris
- Atypical fibroxanthomas
- Basal cell carcinomas
- Burns
- Chondroid syringomas
- CREST syndrome
- Cutaneous tumors
- Dermatomyositis

- Ehlers–Danlos syndrome
- Heel stick injury
- Infections
- Keloids
- Melanocytic nevi
- Panniculitis
- Parasitic infestation
- Pilar cysts
- Pilomatrixoma
- Porphyria cutanea tarda
- Pseudoxanthoma elasticum
- Pyogenic granuloma
- Rothmund–Thompson syndrome
- Scleroderma
- Seborrheic keratoses
- Surgical scars
- Systemic lupus erythematosus
- Trauma
- Trichoepitheliomas
- Werner syndrome

#### Iatrogenic

- Alginate dressing
- Electrode paste
- Extravasation of intravenous fluid containing calcium
- Liver transplantation
- Tumor lysis syndrome

#### Idiopathic

- Idiopathic scrotal calcinosis
- Milia-like calcinosis (Down syndrome)
- Subepidermal calcified nodule
- Tumoral calcinosis

## Metastatic

- Benign nodular calcification
- Calciphylaxis
- Chronic renal failure
- Hyperparathyroidism
- Hypervitaminosis D
- Paraneoplastic hypercalcemia
- Sarcoidosis

## Evaluation

- Serum calcium level (with albumin level)
- Serum phosphate level
- Renal function test
- Parathyroid hormone level
- Antinuclear antibodies
- Vitamin D level

## Treatment Options

- Aluminum hydroxide
- Diltiazem
- Probenecid
- Excision
- Colchicine
- Intralesional corticosteroids
- Bisphosphonates
- Warfarin
- Parathyroidectomy

## Further reading:

- Becuwe C, Roth B, Villedieu MH et al (2004) Milia-like idiopathic calcinosis cutis. *Pediatr Dermatol* 21(4):483–485

**Fig. 6.15** Calciphylaxis  
(Courtesy of M. Lambert)



## Calciphylaxis

Type of metastatic calcification associated with end-stage renal disease that is caused by calcification of subcutaneous arterioles and characterized by hard, purpuric, painful subcutaneous plaques with overlying necrosis and surrounding livedo reticularis which are most commonly located on the lower extremities (Fig. 6.15)

### *Differential Diagnosis*

- Antiphospholipid antibody syndrome
- Benign nodular calcification
- Cholesterol emboli

- Coumarin necrosis
- Cryofibrinogenemia
- Cryoglobulinemia
- Dermatomyositis
- Disseminated intravascular coagulation
- Lupus erythematosus
- Oxaluria
- Polyarteritis nodosa
- Pancreatic panniculitis
- Pyoderma gangrenosum
- Protein-C or protein-S deficiency
- Tumoral calcinosis
- Wegener's granulomatosis

### ***Evaluation***

- Serum calcium level (with albumin level)
- Serum phosphate level
- Renal function test
- Parathyroid hormone level

### ***Treatment Options***

- Surgical debridement
- Sodium thiosulfite
- Bisphosphonates
- Cinacalcet
- Hyperbaric oxygen
- Systemic corticosteroids
- Parathyroidectomy

### **Further reading:**

- Guldbakke KK, Khachemoune A (2007) Calciphylaxis. *Int J Dermatol* 46(3):231–238

## **Calcifying Aponeurotic Fibroma**

---

Benign proliferation of fibrous tissue with stippled calcifications on radiograph that predominantly affects children and is characterized by a slow-growing subcutaneous nodule or cyst-like lesion on the hand or foot

### ***Differential Diagnosis***

- Dupuytren's contracture
- Fibroma of the tendon sheath
- Giant cell tumor of the tendon sheath
- Gouty tophus
- Neuroma
- Plantar fibromatosis
- Rheumatoid nodule
- Sarcoma

### **Further reading:**

- Parker WL, Beckenbaugh RR, Amrami KK (2006) Calcifying aponeurotic fibroma of the hand: radiologic differentiation from giant cell tumors of the tendon sheath. *J Hand Surg [Am]* 31(6):1024–1028

## **Candidiasis, Mucocutaneous**

---

Mucocutaneous infection caused by various *Candida* spp. and characterized by confluent, bright-red erythematous plaques with pustules, white exudate, and/or satellite lesions affecting predominantly the warm, moist intertriginous areas

### ***Subtypes/Variants***

#### **Cutaneous**

- Balanitis
- Diaper dermatitis
- Disseminated/systemic

- Erosio interdigitalis blastomycetica
- Intertrigo
- Paronychia
- Vulvovaginitis

#### Oral

- Acute atrophic
- Acute pseudomembranous
- Angular cheilitis (perleche)
- Chronic atrophic
- Chronic hyperplastic
- Median rhomboid glossitis

#### *Differential Diagnosis*

##### Cutaneous

- Contact dermatitis
- Dermatophyte infection
- Hailey–Hailey disease
- Intertrigo
- Lichen planus
- Psoriasis
- Pseudomonal infection
- Seborrhic dermatitis
- Subcorneal pustular dermatosis

##### Oral

- Aphthous stomatitis
- Fordyce spots
- Hairy leukoplakia
- Herpes simplex virus infection
- Leukoplakia
- Lichen planus
- Pemphigus vulgaris
- White sponge nevus



### **Associations**

- Acrodermatitis enteropathica
- Chediak–Higashi syndrome
- Chronic granulomatous disease
- Chronic mucocutaneous candidiasis
- Corticosteroids
- Cushing syndrome
- Diabetes mellitus
- DiGeorge syndrome
- Down syndrome
- Endocrinopathies
- HIV infection
- Hyper-IgE syndrome
- Nezelof syndrome
- Nutritional deficiency
- Severe combined immunodeficiency
- Thymoma

### **Treatment Options**

- Anticandidal antifungals

### **Further reading:**

- Aly R (2001) Producing experimental lesions of cutaneous candidiasis. *Cutis* 67(5 Suppl):24

### **Candidiasis, Chronic Mucocutaneous**

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Group of disorders associated with an inability to mount an effective immunologic response to *Candida* spp. and characterized by severe, recalcitrant candidal infections, including perleche, candida onychomycosis, and hyperkeratotic candidal granulomas

### ***Subtypes/Variants***

- APECED syndrome
- Familial
- Late onset
- Localized
- With keratitis
- With other immunodeficiency
- With other syndromes

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- DiGeorge syndrome
- Good syndrome
- HIV infection
- Nezelof syndrome
- Severe combined immunodeficiency
- Tuberculosis
- Twenty-nail dystrophy

### ***Associations***

- Acrodermatitis enteropathica
- Adrenal insufficiency
- Alopecia areata
- Autoimmune hepatitis
- Diabetes mellitus
- Ectodermal dysplasias
- Hyper-IgE syndrome
- Hypoparathyroidism
- Keratoconjunctivitis
- KID syndrome

- Iron deficiency
- Malabsorption
- Multiple carboxylase deficiency
- Myasthenia gravis
- Pernicious anemia
- Pulmonary fibrosis
- Thymoma
- Vitiligo

### ***Treatment Options***

- Anticandidal antifungals

### **Further reading:**

- Collins SM, Dominguez M, Ilmarinen T et al (2006) Dermatological manifestations of autoimmune polyendocrinopathy–candidiasis–ectodermal dystrophy syndrome. *Br J Dermatol* 154(6):1088–1093

## **Capillary Leak Syndrome, Idiopathic (Clarkson's Disease)**

Term for an idiopathic syndrome associated with recurrent episodes of shock due to leakage of plasma, generalized edema, hemoconcentration, and hypoalbuminemia, along with sclerosis, livedo, and purpura

### ***Differential Diagnosis***

- Hereditary angioedema
- Hypoalbuminemia
- Liver disease
- Medication reaction
- Nephrogenic fibrosing dermopathy
- Nephrotic syndrome
- Septic shock

- Systemic mastocytosis
- Toxic shock syndrome

### **Associations (Capillary Leak)**

- Acitretin therapy
- Carbon monoxide poisoning
- GCSF therapy
- Gemcitabine therapy
- Hemophagocytic syndrome
- IL-2 therapy
- Interferon therapy
- Multiple myeloma/monoclonal gammopathy
- Postpartum state
- Pustular psoriasis
- Sezary syndrome

### **Evaluation**

- Renal function
- Albumin level
- Urinalysis
- 24-h urine protein
- Liver function test
- Complete blood count
- Chest radiograph
- Echocardiogram
- Serum/urinary protein electrophoresis

### **Further reading:**

- Dhir V, Arya V, Malav IC et al (2007) Idiopathic systemic capillary leak syndrome (SCLS): case report and systematic review of cases reported in the last 16 years. *Intern Med* 46(12):899–904
- Fardet L, Kerob D, Rybojad M et al (2004) Idiopathic systemic capillary leak syndrome: cutaneous involvement can be misleading. *Dermatology* 209(4):291–295

## **Carcinoid Syndrome (Thorson–Biorck Syndrome)**

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Syndrome associated with the presence of a bronchial carcinoid tumor or hepatic metastasis of a gastrointestinal tract carcinoid tumor that is characterized by episodic flushing of the head and neck, telangiectasias, pellagra-like skin changes, abdominal pain, diarrhea, wheezing, and valvular heart disease

### ***Differential Diagnosis***

- Anaphylaxis
- Angioedema
- Carcinoma telangiectaticum
- Islet cell tumors
- Mastocytosis
- Multiple endocrine neoplasia
- Pellagra
- Pheochromocytoma
- Renal cell carcinoma
- Urticaria
- VIPoma

### ***Associations***

- Bronchoconstriction
- Diarrhea
- Pruritus
- Rosacea
- Sclerodermatous skin changes
- Valvular heart disease

### ***Evaluation***

- CT scan of chest, abdomen, and pelvis
- Radiolabeled octreotide scintigraphy scan
- Urinary 5-HIAA

### ***Treatment Options***

- Resection of causative tumor
- Octreotide
- Chemotherapy

### **Further reading:**

- Bell HK, Poston GJ, Vora J, Wilson NJ (2005) Cutaneous manifestations of the malignant carcinoid syndrome. *Br J Dermatol* 152(1):71–75

## **Cardiofaciocutaneous Syndrome**

Genodermatosis of unknown cause that is characterized by heart defects, characteristic facial appearance, sparse woolly hair, café-au-lait macules, keratosis pilaris, and ichthyosis

### ***Differential Diagnosis***

- Costello syndrome
- Down syndrome
- LEOPARD syndrome
- Noonan syndrome
- Pallister–Killian syndrome
- Turner syndrome

### **Further reading:**

- Nanda S, Rajpal M, Reddy BS (2004) Cardio-facio-cutaneous syndrome: report of a case with a review of the literature. *Int J Dermatol* 43(6):447–450

## **Carney Complex (NAME Syndrome, LAMB Syndrome)**

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Autosomal-dominantly inherited syndrome caused by a defect in the *PRKAR1A* gene that is characterized by lentiginosis, blue nevi, atrial and cutaneous myxomas, pigmented nodular adrenocortical disease, acromegaly, and various other tumors

### ***Differential Diagnosis***

- Inherited patterned lentiginosis
- LEOPARD syndrome
- McCune–Albright syndrome
- Multiple endocrine neoplasia
- Neurofibromatosis

### ***Diagnostic Criteria (2/7)***

- Cardiac myxomas
- Cutaneous myxomas
- Mammary myxoid fibromas
- Lentiginoses and blue nevi
- Pigmented nodular adrenocortical disease
- Testicular tumors
- Pituitary GH-secreting tumors

### ***Evaluation***

- Transesophageal echocardiography
- Testicular ultrasound
- CT/MRI scan of the brain, chest, abdomen, and pelvis
- Endocrine evaluation (thyroid, pituitary, adrenal)

### **Further reading:**

- Hachisuka J, Ichikawa M, Moroi Y et al (2006) A case of Carney complex. *Int J Dermatol* 45(12):1406–1407

## **Carotenoderma**

---

Inconsequential alteration in cutaneous color caused by excessive consumption of or decreased metabolism of carotene and characterized by yellow skin discoloration accentuated over the palms, soles, and nasolabial folds

### ***Differential Diagnosis***

- Addison's disease
- Hypopituitarism
- Hypothyroidism
- Jaundice
- Lycopenemia
- Palmar crease xanthoma
- Quinacrine therapy
- Riboflavinemia

### ***Associations***

- Amenorrhea
- Anorexia
- Diabetes
- Hypothyroidism
- Liver disease
- Vegetarian diet

### ***Evaluation***

- Serum beta-carotene level

### **Further reading:**

- Tung EE, Drage LA, Ghosh AK (2006) Carotenoderma and hypercarotenemia: markers for disordered eating habits. *J Eur Acad Dermatol Venereol* 20(9):1147–1148



## Casts, Hair

---

Refers to nit-like keratinous sheaths that arise in hyperkeratotic dermatoses of the scalp, encircle the hair shaft, and, unlike nits, are freely mobile along the hair shaft

### *Differential Diagnosis*

- Pediculosis capitis
- Piedra
- Trichomycosis axillaris

### *Associations*

- Multiple myeloma
- Pityriasis amiantacea
- Psoriasis
- Seborrheic dermatitis

### **Further reading:**

- Miller JJ, Anderson BE, Ioffreda MD et al (2006) Hair casts and cutaneous spicules in multiple myeloma. Arch Dermatol 142(12):1665–1666

## Cat-Scratch Disease (Debre Syndrome)

---

Infection with *Bartonella henselae* that usually affects children, is transmitted by cat scratch, and is characterized by an erythematous papule or pustule at the scratch site with regional lymphadenopathy; oculoglandular syndrome of Parinaud refers to conjunctival inoculation with granulomatous conjunctivitis and preauricular lymphadenopathy

### *Differential Diagnosis*

- Castleman's disease
- Drug reactions

- Leishmaniasis
- Lymphogranuloma venereum
- Lymphoma
- Malignancy
- *Mycobacterium marinum* infection
- Nocardiosis
- Plague
- Primary inoculation tuberculosis
- Sarcoidosis
- Staphylococcal or streptococcal infection
- Syphilis
- Sporotrichosis
- Tularemia
- Viral infections

### **Evaluation**

- Lymph node biopsy
- Serologic test for *Bartonella* antibodies

### **Further reading:**

- Mehmi M, Lim SP, Tan CY (2007) An unusual cutaneous presentation of cat-scratch disease. Clin Exp Dermatol 32(2):219–220

## **Cellulitis and Erysipelas**

---

Types of acute bacterial infection involving the skin and subcutaneous layer (cellulitis) or the lymphatics (erysipelas) that are most commonly caused by *Streptococcus* or *Staphylococcus* and are characterized by pain, erythema, warmth, and swelling that is diffuse, poorly defined, and deep (cellulitis) or well circumscribed and superficial (erysipelas) and most typically localized to the lower extremity

### *Differential Diagnosis*

- Angioedema
- Arthropod-bite reaction
- Dermatitis artefacta
- Calciphylaxis
- Carcinoma erysipelatoides
- Chemical burn
- Compartment syndrome
- Contact dermatitis
- Deep venous thrombosis
- Eosinophilic cellulitis
- Eosinophilic fasciitis
- Erysipelas melanomatosum
- Erysipeloid
- Erythema infectiosum
- Erythema migrans
- Erythema nodosum
- Extramammary Paget's disease
- Familial Mediterranean fever
- Fixed drug eruption
- Foreign body reaction
- Gas gangrene
- Hidradenitis suppurativa
- Infectious perichondritis
- Leukemia cutis
- Lipodermatosclerosis
- Lymphedema
- Lymphoma
- Necrotizing fasciitis
- Neutrophilic eccrine hidradenitis
- Nodular vasculitis
- Osteomyelitis
- Paget's disease
- Panniculitis
- Pyoderma gangrenosum (especially subcutaneous type)

- Pyomyositis
- Relapsing polychondritis
- Seal finger
- Secretan syndrome
- Septic arthritis
- Solid facial edema
- Stasis dermatitis
- Subcutaneous panniculitis-like T cell lymphoma
- Superficial thrombophlebitis
- Sweet's syndrome
- Urticaria
- Urticarial vasculitis
- Vasculitis
- Venous edema
- *Vibrio vulnificus* infection
- Zoster

### **Treatment Options**

- Incision and drainage
- Systemic antibiotics
- Systemic corticosteroids

### **Further reading:**

- Falagas ME, Vergidis PI (2005) Narrative review: diseases that masquerade as infectious cellulitis. *Ann Intern Med* 142(1):47–55
- Torok L (2004) Uncommon manifestations of erysipelas. *Clin Dermatol* 23(5):515–518

## **Central Centrifugal Cicatricial Alopecia**

---

Type of scarring alopecia that predominantly affects women of African descent, is probably caused by repeated follicular injury due to a variety of mechanical and chemical stimuli, and is characterized by noninflammatory cicatricial alopecia that involved the central scalp

### ***Differential Diagnosis***

- Alopecia mucinosa
- Alopecia neoplastica
- Discoïd lupus erythematosus
- Dissecting cellulitis of the scalp
- Folliculitis decalvans
- Lichen planopilaris
- Tinea capitis
- Traction alopecia
- Trichotillomania

### ***Treatment Options***

- Avoidance of chemicals and traction
- Topical corticosteroids
- Intralesional corticosteroids
- Tetracycline antibiotics
- Topical minoxidil
- Hair prosthesis

### **Further reading:**

- Ross EK, Tan E, Shapiro J (2005) Update on primary cicatricial alopecias. J Am Acad Dermatol 53(1):1–37

### **Chalazion/Hordeolum**

Inflammatory lesions of the eyelid that are caused by painless granulomatous inflammation of the meibomian glands (chalazion) or painful acute inflammation of the eyelash follicles (external hordeolum) or meibomian glands (internal hordeolum)

## ***Differential Diagnosis***

- Basal cell carcinoma
- Foreign body granuloma
- Hidrocystoma
- Leishmaniasis
- Merkel cell carcinoma
- Microcystic adnexal carcinoma
- Milia
- Molluscum contagiosum
- Mucocele
- Periorbital cellulitis
- Sarcoidosis
- Sebaceous neoplasm
- Tuberculosis

## ***Associations***

- Chronic blepharitis
- Diabetes
- Hyperlipidemia
- Rosacea

## ***Treatment Options***

- Warm compresses
- Incision and drainage
- Topical antibiotics
- Intralesional corticosteroids
- Ophthalmology referral

## **Further reading:**

- Ozdal PC, Codere F, Callejo S et al (2004) Accuracy of the clinical diagnosis of chalazion. Eye 18(2):135–138

## Chancriform Pyoderma

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A solitary, chronic, necrotizing ulcer on the genitals, tongue, or face that is caused by common bacteria such as *Staphylococcus* or *Pseudomonas*

### *Differential Diagnosis*

- Blastomycosis
- Cat-scratch disease
- Chancroid
- Dermatitis artefacta
- Ecthyma
- Granuloma inguinale
- Inoculation tuberculosis
- Leishmaniasis
- Lymphogranuloma venereum
- Milker's nodule
- Orf
- Pyoderma gangrenosum
- Sporotrichosis
- Syphilis
- Ulcerative basal cell carcinoma
- Ulcerative squamous cell carcinoma

### *Treatment Options*

- Topical antibiotics
- Systemic antibiotics

### **Further reading:**

- Celic D, Lipozencic J, Budimcic D et al (2010) Chancriform pyoderma: a forgotten disease. *Skinmed* 8(2):119–120

## Chancroid (Ducrey Disease)

---

Sexually transmitted disease caused by *Haemophilus ducreyi* and characterized by a soft, painful ragged ulcer with a dirty base on the genitalia along with painful suppurative lymphadenopathy

### *Differential Diagnosis*

- Behçet's disease
- Bubonic plaque
- Chancriform pyoderma
- Crohn's disease
- Donovanosis
- Fixed drug eruption
- Genital herpes
- Lymphogranuloma venereum
- Squamous cell carcinoma
- Primary syphilis
- Pyoderma gangrenosum
- Traumatic ulcer

### *Evaluation*

- Gram stain of purulent exudate
- Viral culture
- Bacterial culture (with vancomycin-containing special media)
- HIV test
- Syphilis serologic tests
- PCR

### **Further reading:**

- Sehgal VN, Srivastava G (2003) Chancroid: contemporary appraisal. *Int J Dermatol* 42(3):182–190



## **Chédiak–Higashi Syndrome**

---

Autosomal-recessive disorder caused by a defect in the *LYST* lysosomal trafficking gene that is characterized by oculocutaneous albinism, recurrent pyogenic infections, platelet dysfunction, neurologic dysfunction, and an accelerated lymphoproliferative phase

### ***Differential Diagnosis***

- Chronic granulomatous disease
- Elejalde syndrome
- Griscelli syndrome
- Hermansky–Pudlak syndrome
- Leukemia
- Oculocutaneous albinism
- Piebaldism
- Pyoderma gangrenosum
- Waardenburg syndrome

### ***Evaluation***

- Complete blood cell count and smear
- Bone marrow biopsy and smear
- CT or MRI scan of the brain

### **Further reading:**

- Maari CH, Eichenfield LF (2007) Congenital generalized hypomelanosis and immunodeficiency in a black child. *Pediatr Dermatol* 24(2):182–185

## **Cheilitis, Actinic**

---

Type of cheilitis caused by chronic sun exposure that is characterized by a whitish, hyperkeratotic, fissured plaque on the lower lip that obscures the vermilion border and that can evolve to squamous cell carcinoma

### ***Differential Diagnosis***

- Cheilitis exfoliativa
- Cheilitis glandularis
- Contact dermatitis
- Lichen planus
- Lupus erythematosus
- Polymorphous light eruption
- Smoker's leukoplakia
- Squamous cell carcinoma

### ***Treatment Options***

- Cryosurgery
- Imiquimod cream
- Diclofenac gel
- 5-FU cream
- Vermilionectomy
- CO<sub>2</sub> laser
- TCA peel

### **Further reading:**

- Markopoulos A, Albanidou-Farmaki E, Kayavis I (2004) Actinic cheilitis: clinical and pathologic characteristics in 65 cases. *Oral Dis* 10(4):212–216

### **Cheilitis/Stomatitis, Allergic Contact**

Inflammation of the lips or oral cavity caused by delayed-type hypersensitivity to a variety of cosmetic preparations, foods, or dental products that is characterized by dryness, fissuring, crusting of the lips (cheilitis) or edema, erythema, erosions, lichen-planus-like changes, or ulcers in the oral cavity (stomatitis)

## *Differential Diagnosis*

### Cheilitis

- Actinic cheilitis
- Angular cheilitis
- Atopic dermatitis
- Candidiasis
- Cheilitis exfoliativa
- Cheilitis glandularis
- Lichen planus
- Lip-licker dermatitis
- Lupus erythematosus
- Pemphigus
- Perioral dermatitis
- Plasma cell cheilitis
- Retinoid cheilitis
- Stevens–Johnson syndrome
- Vitamin deficiency

### Stomatitis

- Aphthous stomatitis
- Behçet's disease
- Candidiasis
- Chemotherapy-related stomatitis
- Drug reaction
- Erythema multiforme
- Lichen planus
- Pemphigus
- Pemphigoid
- Periorificial tuberculosis
- Stevens–Johnson syndrome
- Viral enanthem

## Associations

- Acrylic monomers
- Bismuth
- Chewing gum
- Cosmetics
- Dentifrices
- Epoxy resins
- Food preservatives
- Hardeners
- Lip balms
- Lipsticks
- Mango
- Mercury
- Metals
- Nail polish
- Rubber
- Topical medications

### Further reading:

- Torgerson RR, Davis MD, Bruce AJ et al (2007) Contact allergy in oral disease. *J Am Acad Dermatol* 57(2):315–321

## Cheilitis, Angular (Perleche)

---

Type of intertrigo predominantly affecting the elderly that is caused by excessive moisture and occlusion of the labial commissures which leads to secondary infection with *Candida*, erythema, maceration, and fissuring

### Differential Diagnosis

- Acquired zinc deficiency
- Allergic contact cheilitis

- Glucagonoma syndrome
- Iron deficiency
- Lip-licker dermatitis
- Rhagades
- Seborrheic dermatitis
- Split papule
- Vitamin deficiency

### **Associations**

- Chronic mucocutaneous candidiasis
- Diabetes
- Down syndrome
- Sjögren's syndrome
- Vitamin deficiency
- Zinc deficiency

### **Treatment Options**

- Topical corticosteroids
- Nystatin cream
- Mupirocin ointment
- Fluconazole
- Tacrolimus ointment

### **Further reading:**

- Terai H, Shimahara M (2006) Cheilitis as a variation of *Candida* associated lesions. *Oral Dis* 12(3):349–352

## **Cheilitis Glandularis (Baelz Syndrome)**

Inflammatory disorder of uncertain cause that affects the minor salivary glands of the lower lip and that is characterized by inflammation, swelling, eversion, and occasional clear or purulent discharge from the lower lip

## *Differential Diagnosis*

- Actinic cheilitis
- Allergic cheilitis
- Angioedema
- Cheilitis granulomatosis
- Lip lickers
- Lymphedema
- Plasma cell cheilitis
- Sarcoidosis
- Smoker's lips
- Xerostomia

## *Treatment Options*

- Topical corticosteroids
- Topical antibiotics
- Oral corticosteroids
- Tetracycline
- Intralesional corticosteroids
- 5-FU cream

## **Further reading:**

- Carrington PR, Horn TD (2006) Cheilitis glandularis: a clinical marker for both malignancy and/or severe inflammatory disease of the oral cavity. *J Am Acad Dermatol* 54(2):336–337

## **Cheilitis Granulomatosa**

Chronic inflammatory disorder affecting the lips that is caused by granulomatous infiltration, is characterized by swelling and induration of the upper lip (more commonly than the lower lip), and is associated with scrotal tongue and facial nerve palsy in the Melkersson–Rosenthal syndrome

### ***Differential Diagnosis***

- Angioedema
- Ascher syndrome
- Cheilitis glandularis
- Crohn's disease
- Dental abscess
- Insect-bite reaction
- Leprosy
- Lip trauma
- Sarcoidosis
- Sjögren's syndrome
- Wegener's granulomatosis

### ***Treatment Options***

- Intralesional corticosteroids
- Minocycline
- Methotrexate
- Dapsone
- Clofazimine
- Azathioprine
- Systemic corticosteroids

### **Further reading:**

- Van der Waal RI, Schulten EA, van der Meij EH et al (2002) Cheilitis granulomatosa: overview of 13 patients with long-term follow-up: results of management. *Int J Dermatol* 41(4):225–229

### **Chemotherapy-Related Acral Erythema (Hand–Foot Syndrome, Palmoplantar Erythrodysesthesia)**

---

Adverse effect of chemotherapy that is characterized by numbness and tingling of the palms and soles that evolves to painful, erythematous, and edematous confluent plaques which later blister and desquamate

### ***Differential Diagnosis***

- Contact dermatitis
- Dyshidrotic eczema
- Erythema multiforme
- Erythromelalgia
- Fixed drug eruption
- Graft-vs-host disease
- Lupus erythematosus
- Necrolytic acral erythema
- Palmoplantar hidradenitis
- Perniosis
- Polymorphous light eruption
- Sweet's syndrome

### ***Associated Medications***

- 5-FU
- Adriamycin
- Cytosine arabinoside
- Doxorubicin
- Etoposide
- Hydroxyurea
- Mercaptopurine
- Methotrexate
- Sorafenib
- Sunitinib

### ***Treatment Options***

- Pain control
- Reduction of dose of chemotherapy
- Substitution of chemotherapy
- Systemic corticosteroids



**Further reading:**

- Cetkovska P, Pizinger K, Cetkovsky P (2002) High-dose cytosine arabinoside-induced cutaneous reactions. *J Eur Acad Dermatol Venereol* 16(5):481–485

**Cherry Angioma (Senile Angioma, Campbell de Morgan Spot)**

---

Benign vascular proliferation affecting older patients that is characterized by solitary or multiple small, red dome-shaped papule(s) most commonly located on the trunk

***Differential Diagnosis***

- Angiokeratoma
- Angioma serpiginosum
- Bacillary angiomatosis
- Blue rubber bleb nevus
- Eruptive pseudoangiomatosis
- Glomeruloid hemangiomas
- Insect-bite reaction
- Intravascular lymphoma
- Kaposi's sarcoma
- Melanoma
- Petechiae
- Targetoid hemosiderotic hemangioma

**Further reading:**

- Motegi S, Tamura A, Takeuchi Y, Ishikawa O (2004) Senile angioma-like eruption: a skin manifestation of intravascular large B-cell lymphoma. *Dermatology* 209(2):135–137

**Child Abuse**

---

Various cutaneous disorders can be confused with child abuse

### ***Differential Diagnosis***

- Accidental bruising
- Acute hemorrhagic edema of infancy
- Crohn's disease
- Condyloma acuminatum
- Dermatitis artefacta
- Diaper dermatitis
- Epidermolysis bullosa
- Ehlers–Danlos syndrome
- Genital psoriasis
- Henoch–Schonlein purpura
- Immune thrombocytopenic purpura
- Jellyfish stings
- Kawasaki disease
- Lichen planus
- Lichen sclerosus
- Linear epidermal nevus
- Vulvar pemphigoid
- Millipede burn
- Molluscum contagiosum
- Mongolian spot
- Phytophotodermatitis
- Pinworm infestation
- Plant contact dermatitis
- Pityriasis lichenoides et varioliformis acuta
- Staphylococcal scalded-skin syndrome
- Streptococcal perianal dermatitis

### ***Evaluation***

- Skin biopsy
- Skeletal survey
- Platelet count
- PT/PTT

**Further reading:**

- Swerdlin A, Berkowitz C, Craft N (2007) Cutaneous signs of child abuse. *J Am Acad Dermatol* 57(3):371–392

## **CHILD Syndrome**

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X-linked dominant disorder caused by mutation of the NSDHL gene involved in cholesterol metabolism that is characterized by a large unilateral, inflammatory epidermal nevus involving nearly half of the body but sparing the face, ipsilateral limb defects, and ipsilateral internal organ hemidysplasia

### ***Differential Diagnosis***

- Congenital ichthyosiform erythroderma
- Conradi–Hunermann syndrome
- Epidermal nevus syndrome
- Harlequin color change
- Inflammatory linear verrucous epidermal nevus
- Nevus unius lateris
- Phacomatosis pigmentokeratolica
- Phacomatosis pigmentovascularis

**Further reading:**

- Kaminska-Winciorek G, Brzezinska-Wcislo L, Jezela-Stanek A et al (2007) CHILD syndrome: clinical picture and diagnostic procedures. *J Eur Acad Dermatol Venereol* 21(5):715–716

## **Chloracne**

---

Occupational type of acne caused by exposure to chlorinated hydrocarbons that is characterized by small follicular papules, comedones, and cysts on the cheeks, retroauricular areas, neck, shoulders, and scrotum

### ***Differential Diagnosis***

- Acne cosmetica
- Acne vulgaris
- Dowling–Degos disease
- Favre–Racouchot syndrome
- Gram-negative folliculitis
- Pomade acne
- Radiation acne
- Steroid acne
- Tropical acne

### ***Associations***

- Porphyria cutanea tarda

### ***Evaluation***

- Serum dioxin level

### ***Treatment Options***

- Isotretinoin

### **Further reading:**

- Passarini B, Infusino SD, Kasapi E (2010) Chloracne: still cause for concern. *Dermatology* 221(1):63–70

## **Cholesterol Emboli Syndrome**

Systemic syndrome with cutaneous manifestations that results from embolization of cholesterol crystals from an atherosclerotic plaque as a complication of intra-arterial instrumentation that is characterized by livedo reticularis, purpura, gangrene, and cyanosis

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- Arteriosclerosis obliterans
- Atrial myxoma
- Buerger disease
- Coumadin necrosis
- Cryoglobulinemia
- Heparin necrosis
- Oxalate embolus
- Polyarteritis nodosa
- Polycythemia vera
- Raynaud phenomenon
- Septic emboli
- Subacute bacterial endocarditis
- Vasculitis
- Waldenstrom's macroglobulinemia
- Wegener's granulomatosis

### ***Evaluation***

- Urinalysis
- Renal function
- Complete blood count
- Biopsy of affected organs
- Transesophageal echocardiography

### ***Treatment Options***

- Statins
- Discontinue warfarin if causative
- Heparin
- Pentoxifylline
- Iloprost

- Systemic corticosteroids
- Vasodilators such as nifedipine

**Further reading:**

- Jucgla A, Moreso F, Muniesa C et al (2006) Cholesterol embolism: still an unrecognized entity with a high mortality rate. *J Am Acad Dermatol* 55(5):786–793

## **Chondrodermatitis Nodularis Helicis (Winkler Disease)**

---

Painful disorder affecting the helix (men) or antihelix (women) that is possibly caused by a combination of actinic damage and pressure-related trauma and is characterized by a tender, erythematous papule or nodule with central ulceration or crust

### ***Differential Diagnosis***

- Acanthoma fissuratum
- Actinic keratosis
- Atypical fibroxanthoma
- Basal cell carcinomas
- Calcinosi cutis
- Colloid milium
- Cutaneous horn
- Darwinian tubercle
- Elastotic nodule
- Gouty tophi
- Granuloma annulare
- Keloid
- Keratoacanthomas
- Reactive perforating collagenosis
- Squamous cell carcinoma
- Verrucae
- Weathering nodule

### Treatment Options

- Topical corticosteroids
- Intralesional corticosteroids
- Shave excision
- Punch excision
- Wedge excision
- Cryotherapy

### Further reading:

- Magro CM, Frambach GE, Crowson AN (2005) Chondrodermatitis nodularis helioides as a marker of internal disease [corrected] associated with microvascular injury. *J Cutan Pathol* 32(5):329–333

### Chromoblastomycosis

Chronic deep fungal infection predominantly located on the lower extremities that is caused by traumatic inoculation of a dematiaceous fungus of the *Phialophora*, *Fonsecaea*, *Cladosporium*, or *Rhinocladiella* genera and is characterized by a slow-growing verrucous, sclerotic, or keloid-like plaque or plaques with associated lymphedema (Fig. 6.16)



**Fig. 6.16** Chromoblastomycosis (Courtesy of S. Klinger)

### ***Differential Diagnosis***

- Atypical mycobacterial infection
- Blastomycosis
- Cutaneous tuberculosis
- Elephantiasis
- Filariasis
- Leishmaniasis
- Leprosy
- Lobomycosis
- Mycetoma
- Nocardiosis
- Paracoccidioidomycosis
- Podoconiosis
- Squamous cell carcinoma
- Sporotrichosis
- Tertiary syphilis
- Verrucous carcinoma
- Yaws

### ***Evaluation***

- KOH examination of lesional tissue
- Fungal cultures

### ***Treatment Options***

- Itraconazole
- Terbinafine
- Surgical excision
- Local heat therapy
- Cryotherapy

### **Further reading:**

- Lopez Martinez R, Mendez Tovar LJ (2007) Chromoblastomycosis. Clin Dermatol 25(2):188–194



## Chronic Actinic Dermatitis (Actinic Reticuloid)

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Idiopathic photosensitivity disorder that affects elderly men and is characterized by chronic, thickened, often hypopigmented, eczematous plaques on the sun-exposed areas. Actinic reticuloid is a severe subtype that is characterized by a Sezary-syndrome-like eruption with marked cutaneous infiltration, lymphoma-like histology, and leonine facies

### *Differential Diagnosis*

- Actinic prurigo
- Airborne contact dermatitis
- Atopic dermatitis
- Contact dermatitis
- Cutaneous T cell lymphoma
- Pellagra
- Photosensitive drug eruption
- Photoallergic contact dermatitis
- Lupus erythematosus
- Polymorphous light eruption
- Solar urticaria

### *Diagnostic Criteria*

- Persistent eczematous eruption of infiltrated papules and plaques that predominantly affected exposed skin although sometimes extended to covered areas
- Biopsy consistent with chronic eczema with or without lymphoma-like changes
- Reduction in the minimal erythema dose test to ultraviolet B (UVB) irradiation and often also longer wavelengths

## **Evaluation**

- Phototesting
- Patch testing

## **Treatment Options**

- Sun avoidance measures
- Topical corticosteroids
- Systemic corticosteroids
- Azathioprine
- Cyclosporine
- Hydroxychloroquine
- Mycophenolate mofetil
- Phototherapy

### **Further reading:**

- Hawk JL (2004) Chronic actinic dermatitis. *Photodermatol Photoimmunol Photomed* 20(6):312–314
- Lim HW et al (1994) Chronic actinic dermatitis: an analysis of 51 patients evaluated in the United States and Japan. *Arch Dermatol* 130:1284

## **Chronic Granulomatous Disease (Chie Syndrome)**

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Inherited (XLR or AR) immunodeficiency syndrome that is caused by a mutation in one of several genes (gp91phox, most commonly) involved in the NADPH oxidase system that is responsible for killing catalase positive organisms and is characterized by recurrent skin and respiratory infections, osteomyelitis, eczema, and granulomatous skin lesions

### ***Differential Diagnosis***

- Bruton agammaglobulinemia
- Candidiasis, Chronic mucocutaneous
- Chediak–Higashi syndrome
- Common variable immunodeficiency
- HIV infection
- Hyperimmunoglobulinemia E syndrome
- Hypogammaglobulinemia
- Job syndrome
- Leukocyte adhesion deficiency
- Myeloperoxidase deficiency
- Sarcoidosis
- Seborrheic dermatitis
- Severe combined immunodeficiency
- Wiskott–Aldrich syndrome
- Tuberculosis

### ***Associations***

- *Aspergillus* infection
- Chronic cutaneous lupus-like lesions (adult female carriers)
- *Serratia* osteomyelitis
- Staphylococcal infection

### ***Evaluation***

- Complete blood count
- Nitroblue tetrazolium assay
- Immunoglobulin levels
- Chest radiograph

### **Further reading:**

- Luis-Montoya P, Saez-de Ocariz Mdel M, Vega-Memije ME (2005) Chronic granulomatous disease: two members of a single family with different dermatologic manifestations. *Skinmed* 4(5):320–322

## **Chrysiasis**

---

Hyperpigmentation associated with gold therapy that is characterized by blue-gray pigmentation of the sun-exposed areas

### ***Differential Diagnosis***

- Addison's disease
- Amiodarone photosensitivity
- Argyria
- Arsenicism
- Chlorpromazine photosensitivity
- Diffuse melanosis of metastatic melanoma
- Drug-induced pigmentation
- Hemochromatosis
- Hemosiderosis
- Jaundice
- Minocycline hyperpigmentation

### **Further reading:**

- Geist DE, Phillips TJ (2006) Development of chrysiasis after Q-switched ruby laser treatment of solar lentigines. *J Am Acad Dermatol* 55(2 Suppl):S59–S60

## **Churg–Strauss Syndrome**

---

Systemic vasculitis syndrome that is possibly allergic in etiology and that is characterized by asthma, tissue and circulating eosinophilia, and p-ANCA(+) vasculitis, which presents with palpable purpura and inflammatory cutaneous papules and nodules and a variety of systemic features

### ***Differential Diagnosis***

- Allergic bronchopulmonary aspergillosis
- Asthma

- Atopic dermatitis
- Henoch–Schonlein purpura
- Hypereosinophilic syndrome
- Hypersensitivity pneumonitis
- Lupus erythematosus
- Loeffler syndrome
- Lymphoma
- Lymphomatoid granulomatosis
- Microscopic polyangiitis
- Polyarteritis nodosa
- Rheumatoid arthritis
- Sarcoidosis
- Urticaria
- Wegener granulomatosis

#### ***Diagnostic Criteria (ACR; 4/6)***

- Asthma
- Eosinophilia (>10%)
- Neuropathy
- Pulmonary infiltrates (nonfixed)
- Sinusitis
- Extravascular eosinophils on biopsy

#### ***Evaluation***

- Antinuclear antibodies
- c-ANCA and p-ANCA test
- Chest radiograph
- Complement levels
- Complete blood count
- Renal function test

- Rheumatoid factor
- Urinalysis

### ***Treatment Options***

- Systemic corticosteroids
- Cyclophosphamide
- Methotrexate
- Azathioprine
- Mycophenolate mofetil
- Infliximab
- Chlorambucil
- Plasma exchange

### **Further reading:**

- Fiorentino DF (2003) Cutaneous vasculitis. *J Am Acad Dermatol* 48(3):311–340

## **Ciliated Cyst**

Ciliated type of cutaneous cyst with possible Müllerian origin that predominantly affects women and that is characterized by a solitary cutaneous cyst of the vulva, perineum, or lower extremity

### ***Differential Diagnosis***

- Bartholin's gland cyst
- Endometriosis
- Epidermal inclusion cyst
- Mature cystic teratoma

### **Further reading:**

- Chong SJ, Kim SY, Kim HS et al (2007) Cutaneous ciliated cyst in a 16-year-old girl. *J Am Acad Dermatol* 56(1):159–160

## **Clavus/Callus**

---

Focal hyperkeratosis and thickening of friction-prone or pressure-prone surfaces that are plaque-like (callus) or inverted cone-like (clavus) and most commonly located on the foot

### ***Differential Diagnosis***

- Arsenical keratosis
- Crab yaws
- Ectopic nail
- Focal palmoplantar keratoderma
- Gout
- Keratosis punctata
- Lichen planus
- Lichen simplex chronicus
- Melanocytic nevus
- Neuroma
- Nodular amyloidosis
- Porokeratosis plantaris
- Poroma
- Syphilitic clavus
- Wart

### ***Associations***

- Bulimia (Russell's sign – knuckles)
- Diabetes
- Focal and punctate hereditary palmoplantar keratodermas
- Hereditary painful callosities
- Ill-fitting shoes
- Kneeling
- Manual labor
- Obesity

- Peripheral neuropathy
- Sucking (newborns)
- Weight lifting

**Further reading:**

- Pavicic T, Korting HC (2006) Xerosis and callus formation as a key to the diabetic foot syndrome: dermatologic view of the problem and its management. *J Dtsch Dermatol Ges* 4(11):935–941

## **Clear Cell Acanthoma (Degos Acanthoma)**

---

Benign epidermal neoplasm arising in middle-aged adults that is characterized by an erythematous, moist nodule with a peripheral collarette most commonly located on the lower extremity

### ***Differential Diagnosis***

- Amelanotic melanoma
- Basal cell carcinoma
- Dermatofibroma
- Hydroacanthoma simplex
- Inflamed seborrheic keratosis
- Lichenoid keratosis
- Poroma
- Psoriasis
- Pyogenic granuloma
- Squamous cell carcinoma
- Traumatized hemangioma
- Wart

### ***Associations***

- Ichthyosis
- Psoriasis



**Further reading:**

- Zedek DC, Langel DJ, White WL (2007) Clear-cell acanthoma versus acanthosis: a psoriasiform reaction pattern lacking tricholemmal differentiation. *Am J Dermatopathol* 29(4):378–384

**Clear Cell Sarcoma (Melanoma of the Soft Parts)**

Type of malignant tumor of uncertain relationship to melanoma that arises in the soft tissue of young adults, especially on the lower extremity, and that is characterized by a painful subcutaneous tumor which is fixed to tendons and fascia

***Differential Diagnosis***

- Clear cell myomelanocytic tumor
- Clear cell squamous cell carcinoma
- Dermatofibroma
- Dermatofibrosarcoma
- Epithelioid sarcoma
- Lipoma
- Myxoid liposarcoma
- Neurothekeoma
- Malignant fibrous histiocytoma
- Malignant peripheral nerve sheath tumor
- Malignant schwannoma
- Metastatic melanoma
- Myxoma
- Synovial sarcoma

**Further reading:**

- Malchau SS, Hayden J, Hornicek F, Mankin HJ (2007) Clear cell sarcoma of soft tissues. *J Surg Oncol* 95(6):519–522

## **Cobb Syndrome**

---

Sporadic congenital syndrome characterized by spinal arteriovenous malformations or angiomas along with overlying or closely located cutaneous port-wine stains, angiomas, or other vascular lesions

### ***Differential Diagnosis***

- Angiokeratoma circumscriptum
- Infantile hemangioma
- Klippel–Trenaunay syndrome
- Nevus flammeus
- Sturge–Weber syndrome
- Wyburn–Mason syndrome

### ***Evaluation***

- MRI scan of the spine

### **Further reading:**

- Clinton TS, Cooke LM, Graham BS (2003) Cobb syndrome associated with a verrucous (angiokeratomalike) vascular malformation. *Cutis* 71(4):283–287

## **Cocaine-Associated (Levamisole-Induced) Vasculopathy (Vasculitis)**

---

Vasculopathic disease induced by levamisole, an additive to cocaine, that is characterized by retiform purpura (characteristically on the helices as well as generalized), skin necrosis, arthralgias, leukopenia, antiphospholipid antibodies, and antineutrophil cytoplasmic antibodies (Fig. 6.17)



**Fig. 6.17** Cocaine-related vasculitis

### *Differential Diagnosis*

- Antiphospholipid antibody syndrome
- Cryoglobulinemia
- Disseminated intravascular coagulation
- Idiopathic ANCA + vasculitis
- Polyarteritis nodosa
- Systemic lupus erythematosus
- Wegener's granulomatosis

### *Evaluation*

- Urine drug screen
- Complete blood cell count
- Cryoglobulins
- Anticardiolipin antibodies
- Beta 2 glycoprotein 1 antibodies
- Lupus anticoagulant
- Antinuclear antibodies
- PT/PTT

- Antineutrophil cytoplasmic antibodies
- Rheumatoid factor

### ***Treatment Options***

- Discontinuation of cocaine use
- Wound debridement
- Systemic corticosteroids
- Colchicine
- NSAIDs
- Anticoagulation

### **Further reading:**

- Mouzakis J, Somboonwit C, Lakshmi S et al (2011) Levamisole induced necrosis of the skin and neutropenia following intranasal cocaine use: a newly recognized syndrome. *J Drugs Dermatol* 10(10):1204–1207

## **Coccidioidomycosis**

Respiratory fungal infection associated with cutaneous dissemination that is caused by the dimorphic *Coccidioides immitis* and characterized by cutaneous abscesses, nodules, and verrucous lesions, predominantly on the face

### ***Differential Diagnosis***

- Actinomycosis
- Aspergillosis
- Basal cell carcinoma
- Behçet disease
- Blastomycosis
- Chromoblastomycosis
- Erysipelas
- Granuloma faciale
- Herpes simplex

- Histoplasmosis
- Kaposi's sarcoma
- Leishmaniasis
- Leprosy
- Lichen planus
- Lichen sclerosus et atrophicus
- Lichen simplex chronicus
- Lupus miliaris disseminatus faciei
- Lyme disease
- Malignant melanoma
- Metastatic carcinoma of the skin
- Morphea
- Mycosis fungoides
- Nocardiosis
- Parapsoriasis
- Pityriasis lichenoides
- Rosacea
- Sarcoidosis
- Sporotrichosis
- Syphilis
- Tinea faciei
- Tuberculosis
- Vasculitis
- Wegener's granulomatosis

### **Associations**

- Erythema multiforme
- Erythema nodosum

### **Evaluation**

- ELISA followed by IgG complement-fixing antibody test
- Fungal culture (notify lab)
- Chest radiograph

**Further reading:**

- Dicaudo DJ (2006) Coccidioidomycosis: a review and update. *J Am Acad Dermatol* 55(6):929–942

## **Cockayne's Syndrome**

---

Autosomal-recessive disorder caused by a defect in the DNA repair genes ERCC6 and ERCC8 that is characterized by cachectic dwarfism, bird-like facies, photodistributed erythema and telangiectasia, sensorineural deafness, “salt and pepper” retinitis pigmentosa, severe mental retardation, and intracranial calcifications

### ***Differential Diagnosis***

- Ataxia–telangiectasia
- Bloom's syndrome
- Kindler syndrome
- Hartnup syndrome
- Progeria
- Rothmund–Thomson syndrome
- Trichothiodystrophy
- Werner's syndrome
- Xeroderma pigmentosum

**Further reading:**

- Kraemer KH, Patronas NJ, Schiffmann R et al (2007) Xeroderma pigmentosum, trichothiodystrophy and Cockayne syndrome: a complex genotype–phenotype relationship. *Neuroscience* 145(4):1388–1396

## **Cold Panniculitis (Haxthausen Disease)**

---

Physical type of panniculitis induced by cold exposure that predominantly affects children and is characterized by indistinct erythematous to violaceous, firm nodules on the exposed area, which is commonly the face in children and lateral thighs or arms in women

### ***Differential Diagnosis***

- Atopic dermatitis
- Cellulitis
- Chilblains
- Erythema infectiosum
- Morphea
- Post-steroid panniculitis
- Scleredema
- Sclerema neonatorum
- Sclerosing lipogranuloma
- Subcutaneous fat necrosis of the newborn

### **Further reading:**

- Quesada-Cortés A, Campos-Muñoz L, Díaz-Díaz RM, Casado-Jiménez M (2008) Cold panniculitis. *Dermatol Clin* 26(4):485–489, vii

### **Collagenoma**

Type of connective tissue nevus that is associated with an increased amount of collagen and that is characterized by solitary or multiple, flesh-colored plaques on the trunk, especially the lower back

### ***Subtypes/Variants***

- Eruptive collagenoma
- Familial cutaneous collagenoma
- Shagreen patch of tuberous sclerosis
- Solitary collagenoma

### ***Differential Diagnosis***

- Becker's nevus
- Cutis verticis gyrata

- Elastofibroma
- Elastoma
- Morphea
- Papular elastorrhexis
- Scar
- Smooth muscle hamartoma

### **Associations**

- Down syndrome
- Ehlers–Danlos syndrome
- Tuberous sclerosis

### **Further reading:**

- Ryder HE, Antaya RJ (2005) Nevus anelasticus, papular elastorrhexis, and eruptive collagenoma: clinically similar entities with focal absence of elastic fibers in childhood. *Pediatr Dermatol* 22(2):153–157

## **Colloid Milium (Wagner’s Disease)**

---

Deposition disease that is characterized by waxy papules and plaques on the sun-exposed areas that represent accumulations of colloid material as an acquired response in adults (most commonly to chronic sun exposure) or as an inherited phenomenon in children

### **Differential Diagnosis**

- Erythropoietic protoporphyria
- Epidermal cyst
- Favre–Racouchot syndrome
- Lipoid proteinosis
- Nodular amyloidosis
- Papular mucinosis
- Porphyria cutanea tarda



- Sarcoidosis
- Sebaceous hyperplasia
- Trichoepithelioma
- Tuberous sclerosis
- Xanthoma

### **Associations**

- Ligneous conjunctivitis (juvenile type)
- Ligneous periodontitis (juvenile type)
- Ultraviolet light

### **Further reading:**

- Pourrabbani S, Marra DE, Iwasaki J et al (2007) Colloid milium: a review and update. *J Drugs Dermatol* 6(3):293–296

## **Coma Bullae**

---

Uncommon, subepidermal bullous lesions of uncertain cause that are seen most often in the setting of drug-induced coma (but also coma unrelated to drugs) and are characterized by tense bullae located at sites of pressure

### **Differential Diagnosis**

- Bullous impetigo
- Burn
- Contact dermatitis
- Epidermolysis bullosa acquisita
- Friction blisters
- Herpes simplex virus infection
- Insect bites
- Localized bullous pemphigoid
- Multiple fixed drug eruption
- Porphyria cutanea tarda

**Further reading:**

- Kakurai M, Umemoto N, Yokokura H et al (2006) Unusual clinical features of coma blister mimicking contact dermatitis in rhabdomyolysis: report of a case. *J Eur Acad Dermatol Venereol* 20(6):761–763

**Common Variable Immunodeficiency**

---

Type of acquired immunodeficiency that is characterized by a paucity of antibody-producing B lymphocytes and a decreased cellular immune response and that manifests as recurrent infections, autoimmunity, granulomatous skin lesions, and a tendency to develop lymphoproliferative malignancy

***Differential Diagnosis***

- Bruton's agammaglobulinemia
- Chronic mucocutaneous candidiasis
- Chronic granulomatous disease
- Hyper-IgM syndrome
- HIV infection
- Lymphoma
- Thymoma
- Sarcoidosis
- Severe combined immunodeficiency

***Associations***

- Alopecia areata
- Atopic dermatitis
- Polymorphous light eruption

***Evaluation***

- Immunoglobulin level
- T cell panel

- Antinuclear antibodies
- Complete blood count
- Skin tests to evaluate T cell function (candida, trichophyton, etc.)
- CT scan of chest, abdomen, and pelvis (if lymphoma is suspected)
- T and B cell marker studies

**Further reading:**

- Mitra A, Pollock B, Gooi J et al (2005) Cutaneous granulomas associated with primary immunodeficiency disorders. *Br J Dermatol* 153(1):194–199

### **Condylomata Acuminata (Genital Warts)**

Sexually transmitted human papillomavirus infection characterized by verrucous papules occasionally coalescent into large cauliflower-like plaques on the penis, vulva, and perianal area

#### ***Differential Diagnosis***

- Acantholytic dyskeratosis of the vulva
- Amyloid deposits
- Angiokeratoma
- Bowenoid papulosis
- Condylomata lata
- Epidermoid cysts
- Fordyce spots
- Granular cell tumor
- Granuloma annulare
- Lichen nitidus
- Lichen planus
- Lymphangioma
- Molluscum contagiosum
- Pearly penile papules
- Pseudoverrucous papules/nodules
- Raspberry-like papillomas (Goltz syndrome)
- Reiter syndrome

- Rhinosporidiosis
- Schistosomiasis
- Sebaceous hyperplasia
- Seborrheic keratoses
- Squamous cell carcinoma
- Syringomas
- Verruciform xanthoma
- Verrucous carcinoma

### ***Evaluation***

- HIV test

### ***Treatment Options***

- Cryotherapy
- Imiquimod cream
- Topical sinecatechins ointment
- Podophyllin gel
- Electrodesiccation and curettage
- Surgical excision
- CO<sub>2</sub> laser
- TCA chemical peels
- Cidofovir

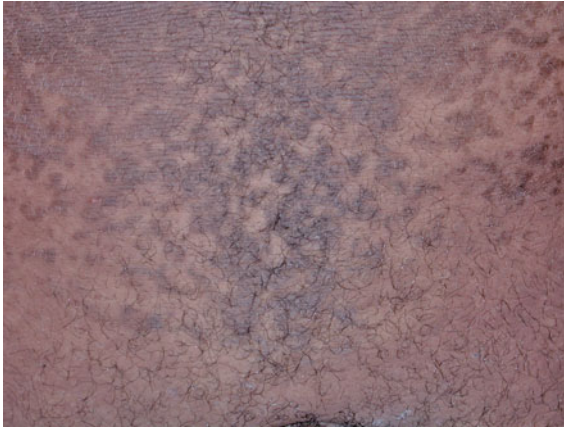
### **Further reading:**

- Brodell LA, Mercurio MG, Brodell RT (2007) The diagnosis and treatment of human papillomavirus-mediated genital lesions. *Cutis* 79(4 Suppl):5–10

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## **Confluent and Reticulated Papillomatosis (of Gougerot and Carteaud)**

Acquired keratinization disorder of uncertain cause that is possibility related to acanthosis nigricans and is characterized by hyperkeratotic and hyperpigmented, papillomatous skin changes in a reticulated pattern on the chest or back (Fig. 6.18)



**Fig. 6.18** Confluent and reticulated papillomatosis (Courtesy of K. Guidry)

### *Differential Diagnosis*

- Acanthosis nigricans
- Darier's disease
- Dermatopathia pigmentosa reticularis
- Dyschromatosis universalis
- Dyskeratosis congenita
- Epidermodysplasia verruciformis
- Eruptive syringomas
- Lichen amyloidosis
- Macular amyloidosis
- Naegeli–Franceschetti–Jadassohn syndrome
- Parapsoriasis
- Pityriasis rubra pilaris
- Prurigo pigmentosa
- Pseudoacanthosis nigricans
- Pseudoatrophoderma colli
- Seborrheic dermatitis
- Terra firma–forme dermatosis
- Tinea versicolor
- Verruca plana

### **Diagnostic Criteria**

- Scaling brown macules and patches, at least part of which appear reticulated and papillomatous.
- Involvement of the upper trunk and neck.
- Fungal staining of scales is negative for fungus.
- No response to antifungal treatment.
- Excellent response to minocycline.

### **Treatment Options**

- Minocycline
- Keratolytic moisturizers
- Tazarotene cream
- Topical vitamin D analogues
- Isotretinoin
- Selenium sulfide
- Oral ketoconazole
- Topical ketoconazole

### **Further reading:**

- Davis MD, Weenig RH, Camilleri MJ (2006) Confluent and reticulate papillomatosis (Gougerot–Carteaud syndrome): a minocycline-responsive dermatosis without evidence for yeast in pathogenesis. A study of 39 patients and a proposal of diagnostic criteria. *Br J Dermatol* 154(2):287–293

## **Congenital Ichthyosiform Erythroderma, Bullous (Epidermolytic Hyperkeratosis)**

---

Inherited (AD) disorder of keratinization that is caused by defects in the genes for keratin 1 or 10 and that is characterized by neonatal-onset erythroderma and bullae that improves during childhood; later in childhood, chronic, unremitting hyperkeratotic plaques with a ridged or cobblestone appearance develop, along with palmoplantar keratoderma in some patients (K1 deficient only)

### **Differential Diagnosis**

- Bullous impetigo
- CHILD syndrome
- Congenital erosive and vesicular dermatosis
- Conradi–Hünemann–Happle syndrome
- Epidermolysis bullosa
- Erythrokeratoderma variabilis
- IBIDS (trichothiodystrophy)
- Ichthyosis bullosa of Siemens
- Ichthyosis hystrix, Curth–Macklin
- Incontinentia pigmenti
- KID syndrome
- Lamellar ichthyosis
- Omenn's syndrome
- Netherton syndrome
- Neutral lipid storage disease
- Peeling skin syndrome
- Sjögren–Larsson syndrome
- Staphylococcal scalded-skin syndrome
- Toxic epidermal necrolysis
- X-linked Ichthyosis

#### **Further reading:**

- Lacz NL, Schwartz RA, Kihiczak G (2005) Epidermolytic hyperkeratosis: a keratin 1 or 10 mutational event. *Int J Dermatol* 44(1):1–6

### **Congenital Ichthyosiform Erythroderma, Nonbullous**

---

Inherited (AR) disorder of keratinization that is caused most commonly by a defect in the transglutaminase 1 gene and is characterized by a colodion baby presentation at birth, neonatal erythroderma, and chronic generalized scaling involving the face, with alopecia and ectropion common complications

### ***Differential Diagnosis***

- Atopic dermatitis
- Collodion baby
- IBIDS
- Ichthyosis vulgaris
- Lamellar ichthyosis
- Leiner's disease
- Omenn's syndrome
- Netherton syndrome
- Neutral lipid storage disease
- Seborrheic dermatitis
- Staphylococcal scalded-skin syndrome

### **Further reading:**

- Akiyama M, Sawamura D, Shimizu H (2003) The clinical spectrum of nonbullous congenital ichthyosiform erythroderma and lamellar ichthyosis. *Clin Exp Dermatol* 28(3):235–240

### **Congenital Self-Healing Reticulohistiocytosis (Hashimoto–Pritzker Disease)**

---

Self-limited type of Langerhans' cell histiocytosis that is present at birth, involutes in the first 6 months, and is characterized by solitary or multiple reddish-brown papules or nodules with occasional ulceration on any part of the body

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Blueberry muffin baby
- Congenital candidiasis
- Congenital leukemia
- Congenital syphilis



- Diffuse neonatal hemangiomatosis
- Erythema toxicum neonatorum
- Herpes simplex virus infection
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis (other types)
- Lymphoma
- Mastocytosis
- Neonatal listeriosis
- Neonatal varicella
- Transient neonatal pustular melanosis

**Further reading:**

- Kapur P, Erickson C, Rakheja D et al (2007) Congenital self-healing reticulohistiocytosis (Hashimoto–Pritzker disease): ten-year experience at Dallas Children’s Medical Center. *J Am Acad Dermatol* 56(2):290–294

**Connective Tissue Nevus**

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Abnormal collection of connective tissue occurring solitarily or as part of a syndrome that is characterized by localized collections of excessive collagen, elastic tissue, or ground substance that manifest as firm, flesh-colored dermal papules or nodules most often located on the lower back

***Subtypes/Variants***

- Dermatofibrosis lenticularis disseminata
- Eruptive collagenomas
- Familial cutaneous collagenoma
- Nevus elasticus
- Nevus mucinosus
- Papular elastorrhesis
- Plantar cerebriform collagenoma
- Shagreen patch

- Solitary collagenoma
- Solitary elastoma

### ***Differential Diagnosis***

- Dermatofibroma
- Dermatomyofibroma
- Elastofibroma
- Keloid
- Knuckle pads
- Morphea
- Papular mucinosis
- Scar
- Sclerotic fibroma

### ***Associations***

- Buschke–Ollendorf syndrome (dermatofibrosis lenticularis)
- Cardiac disease (familial collagenomas)
- Down syndrome
- Hunter syndrome (nevus mucinosis)
- Multiple endocrine neoplasia
- Tuberous sclerosis (shagreen patch)

### **Further reading:**

- Foo CC, Kumarasinghe SP (2005) Juvenile elastoma: A forme fruste of the Buschke–Ollendorf syndrome? *Australas J Dermatol* 46(4):250–252

## **Contact Dermatitis**

Type of dermatitis caused by exposure to one of countless environmental allergens or irritants and characterized by eczematous changes of varying degrees of severity that are localized to the areas to which the contactant was applied (Fig. 6.19)



**Fig. 6.19** Poison ivy dermatitis

### ***Subtypes/Variants***

- Airborne
- Allergic
- Dermal
- Erythema multiforme-like
- Follicular
- Granulomatous
- Ichthyosiform
- Irritant
- Leukodermic

- Lichenoid
- Lymphomatoid
- Photoallergic
- Phototoxic
- Phytophotodermatitis
- Protein
- Purpuric
- Pustular
- Systemic

### ***Differential Diagnosis***

#### Airborne

- Atopic dermatitis
- Chronic actinic dermatitis
- Photoallergic contact dermatitis
- Photoallergic drug eruption
- Seborrheic dermatitis

#### Allergic and Irritant

- Asteatotic eczema
- Atopic dermatitis
- Autoeczematization
- Autoimmune progesterone dermatitis
- Berloque dermatitis
- Contact urticaria
- Cutaneous T cell lymphoma
- Dermatomyositis
- Dermatophytosis
- Dyshidrotic eczema
- Erythema multiforme
- Folliculitis
- Grover's disease
- Id reaction

- Intertrigo
- Lichen nitidus
- Lichen simplex chronicus
- Nummular eczema
- Perioral dermatitis
- Phytophotodermatitis
- Pigmented purpuric dermatosis
- Prurigo nodularis
- Seborrheic dermatitis
- Stasis dermatitis
- Urticarial dermatitis

#### Phytophotodermatitis (Fig. 6.20)

- Allergic contact dermatitis
- Bleomycin pigmentation
- Burn
- Child abuse
- Jellyfish sting
- Mushroom dermatitis
- Porphyria cutanea tarda



**Fig. 6.20** Phytophotodermatitis (Courtesy of K. Guidry)

- Pseudoporphyria
- Rhus dermatitis
- Thrombophlebitis

### **Associations**

#### Airborne

- Chromates
- Epoxy resin
- Sesquiterpene lactone
- Spray paint

#### Allergic Contact Dermatitis

##### *Scalp, Face, and Eyelids*

- Contact lens solution
- Cosmetics
- Dental products
- Elastic headbands
- Eyebrow pencils
- Eyedrops
- Eyeglass frames
- Eyelash curlers
- Fingernail polish
- Foods
- Fragrances
- Glaucoma medications
- Goggles
- Hair dye
- Hats
- Lipstick
- Makeup
- Masks
- Nasal sprays
- Permanent wave solutions

- Pillow material
- Rubber makeup applicators
- Shampoo
- Shaving products
- Spices
- Topical medications

### *Ears and Neck*

- Cosmetics
- Ear drops
- Eyeglass frames
- Fragrance
- Hair care products
- Hearing aids
- Jewelry
- Nail polish
- Pillow material
- Shampoo
- Shaving products
- Telephone
- Topical medications

### *Trunk and Axilla*

- Cobalt
- Clothing dyes
- Deodorants and antiperspirants
- Detergents
- Fabric softeners
- Formaldehyde and formaldehyde releasers
- Fragrances
- Perfumes
- Preservatives in lotion
- Nickel fasteners
- Resins
- Rubber accelerators

*Hands*

- Acrylic monomers
- Alcohol
- Antibacterials soap
- Bacitracin
- Balsam of Peru
- Benzalkonium chloride
- Benzocaine
- Chromates
- Colophony
- Copper
- Essential oils
- Formalin
- Fragrance
- Fruits
- Gloves
- Glutaraldehyde
- Gold
- Latex
- Local anesthetics
- Neomycin
- Nickel
- Paraphenylenediamine
- Plants and flowers
- Resins
- Rubber accelerators
- Vegetables

*Extremities*

- Adhesives
- Chromates
- Clothing dyes
- Neomycin
- Nickel



- Preservatives
- Rhus
- Rubber accelerators
- Topical medications

### *Feet*

- Chromates
- Diisocyanates
- Dyes
- Formaldehyde
- Paraphenylenediamine
- P-tert-butylphenol formaldehyde resin
- Rubber accelerators
- Shoe padding
- Tar
- Topical medications

### Generalized

- Balsam of Peru
- Quaternium-15
- Formaldehyde
- Fragrance mix
- Methylidibromoglutaronitrile
- Propylene glycol
- Diazolidinyl urea
- Imidazolidinyl urea
- Bronopol
- Tixocortol pivalate
- DMDM hydantoin
- Cocamidopropyl betaine
- Ethylene urea melamine formaldehyde
- Amidoamine
- Budesonide

### Lichenoid

- Amalgam
- Aminoglycoside antibiotics
- Gold
- Musk ambrette
- Nickel
- Paraphenylenediamine

### Lymphomatoid

- Cobalt
- Ethylenediamine
- Gold
- Nickel
- Paraphenylenediamine
- Phosphorus

### Photoallergic

- 6-Methylcoumarin
- Benzophenones
- Chlorhexidine
- Cinnamates
- Dibenzoylmethanes
- Musk ambrette
- Oil of sandalwood
- Para-amino benzoic acid
- Sunscreen
- Triclosan

### Phytophotodermatitis

- Agrimony
- Angelica
- Buttercup

- Celery
- Common rice
- Cowslip
- Dill
- Fennel
- Fig
- Grapefruit
- Lichens
- Lime/lemon
- Mango
- Meadow grass
- Mokihana berry
- Mustard
- Oak moss
- Oil of bergamot
- Orange
- Parsley
- Parsnips
- St. John's wort
- Wild carrot

#### Purpuric

- Benzoyl peroxide
- Cobalt
- Disperse dyes
- Eutectic mixture of lidocaine and prilocaine
- Methylmethacrylate
- Paraphenylenediamine
- Rubber

#### Systemic

- Nickel
- Cobalt
- Chromate
- Sesquiterpene lactones

- Thimerosal
- Aminophylline
- Preservatives

### **Treatment Options**

- Avoidance of causative allergen
- Topical corticosteroids
- Systemic corticosteroids
- Tacrolimus ointment
- Cyclosporine
- Azathioprine
- Mycophenolate mofetil
- Methotrexate

### **Further reading:**

- Rietschel RL (2004) Clues to an accurate diagnosis of contact dermatitis. *Dermatol Ther* 17(3):224–230
- [No authors listed] (2009) Adults with generalized dermatitis: what are the common causes? *J Drugs Dermatol* 8(1):80–81

## **Cowden Disease (Multiple Hamartoma Syndrome)**

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Autosomal-dominant syndrome of variable age of onset that is caused by a mutation in the *PTEN* tumor suppressor gene and that is characterized by trichilemmomas, oral papules with a cobblestone appearance, hyperkeratotic papules in the acral areas, and benign and malignant neoplasms arising in the thyroid, breast, and gastrointestinal tract

### **Differential Diagnosis**

- Acanthosis nigricans, malignancy associated
- Angiofibromas
- Bannayan–Riley–Ruvalcaba syndrome
- Basaloid follicular hamartoma syndrome

- Birt–Hogg–Dube syndrome
- Darier’s disease
- Epidermodysplasia verruciformis
- Fibrofolliculoma
- Fibrous papule
- Focal epithelial hyperplasia
- Goltz syndrome
- Lipoid proteinosis
- Multiple endocrine neoplasia (especially type IIB)
- Muir–Torre syndrome
- Multiple trichoepitheliomas
- Neurofibromatosis
- Nevoid basal cell carcinoma syndrome
- Oral florid papillomatosis
- Proteus syndrome
- Seborrheic keratoses
- Steatocystoma multiplex
- Syringomas
- Tuberous sclerosis
- Verruca

***Diagnostic Criteria (Simplified; Need Two Major with One Out of Macrocephaly or LDD or One Major and Three Minor Criteria or Four Minor Criteria)***

- Major criteria
  - Breast cancer
  - Thyroid cancer (follicular type)
  - Macrocephaly
  - Lhermitte–Duclos disease
  - Endometrial carcinoma
- Minor criteria
  - Thyroid goiter or adenoma
  - Mental retardation
  - Gastrointestinal hamartomas

- Fibrocystic disease of the breast
- Lipomas
- Sclerotic fibromas
- Uterine fibroids, renal cell carcinoma, or urinary tract malformation
- $\geq 6$  facial papules ( $\geq 3$  must be trichilemmomas) *or* cutaneous facial papules and mucosal papillomatosis *or* mucosal papillomatosis and acral keratoses *or*  $\geq 6$  palmoplantar keratoses

### **Evaluation**

- Thyroid ultrasound
- Mammography
- CT/MRI scan of the brain
- Pelvic exam
- Endometrial biopsy

### **Further reading:**

- Kovich O, Cohen D (2004) Cowden's syndrome. *Dermatol Online J* 10(3):3
- Eng C (2000) Will the real Cowden syndrome please stand up: revised diagnostic criteria. *J Med Genet* 37(11):828–830

### **CREST Syndrome (Limited Systemic Sclerosis, Thibierge–Weissenbach Syndrome)**

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Limited form of systemic sclerosis associated with anticentromere antibodies, calcinosis cutis, Raynaud's phenomenon, esophageal dysmotility, sclerodactyly, mat-like telangiectasias, and pulmonary hypertension

### **Differential Diagnosis**

- Carcinoid syndrome
- Dermatomyositis
- Diabetic cheiroarthropathy

- Diffuse systemic sclerosis
- Eosinophilia–myalgia syndrome
- Eosinophilic fasciitis
- Generalized essential telangiectasia
- Hereditary hemorrhagic telangiectasia
- Mixed connective tissue disease
- Raynaud's disease
- Spider angiomas
- Thromboangiitis obliterans
- Unilateral nevoid telangiectasia
- Werner syndrome

### ***Associations***

- Primary biliary cirrhosis (Reynolds syndrome)

### ***Evaluation***

- Anticentromere antibodies
- Antimitochondrial antibodies
- Antinuclear antibodies
- Anti-Scl 70 antibodies
- Barium swallow
- Echocardiography
- Liver function test
- Pulmonary function test
- Renal function test

### ***Treatment Options***

- Nifedipine
- Diltiazem
- ACE inhibitors

- Alprostadil
- Bosentan
- Systemic corticosteroids
- Methotrexate
- Penicillamine
- Fluoxetine
- Sildenafil
- Cilostazol
- Proton pump inhibitors
- H2 blockers
- Topical nitroglycerine
- Pulsed dye laser

**Further reading:**

- Chung L, Lin J, Furst DE, Fiorentino D (2006) Systemic and localized scleroderma. *Clin Dermatol* 24(5):374–392

## **Crohn's Disease, Cutaneous**

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Cutaneous involvement in Crohn's disease that most often occurs as a result of direct extension of inflammation to the skin or mucous membranes but can occur distally (metastatic Crohn's disease) and is characterized by a variable clinical presentation, including genital swelling, erythematous papules, nodules, or plaques with or without ulceration, cobblestone appearance of the oral cavity, and pyostomatitis vegetans

### ***Differential Diagnosis***

- Actinomycosis
- Behçet's disease
- Cheilitis granulomatosis
- Deep fungal infections
- Panniculitis



- Foreign body reactions
- Granuloma inguinale
- Hidradenitis suppurativa
- Lupus vulgaris
- Lymphogranuloma venereum
- Mycobacterial infections
- Pyoderma gangrenosum
- Sarcoidosis
- Tuberculosis
- Wegener's granulomatosis

### **Evaluation**

- Colonoscopy
- Barium swallow with small bowel follow-through
- Anti-*Saccharomyces cerevisiae* antibodies

### **Treatment Options**

- Metronidazole
- Topical corticosteroids
- Intralesional corticosteroids
- Infliximab
- Adalimumab
- Systemic corticosteroids
- Methotrexate
- Tacrolimus ointment
- Sulfasalazine
- 6MP
- Azathioprine

### **Further reading:**

- Eames T, Landthaler M, Karrer S (2009) Crohn's disease: an important differential diagnosis of granulomatous skin diseases. *Eur J Dermatol* 19(4):360–364

## **Cronkhite–Canada Syndrome**

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Acquired disorder of unknown cause that affects older patients and is characterized by gastrointestinal polyposis, diffuse hyperpigmentation of the skin and mucous membranes, generalized alopecia, nail dystrophy, and weight loss and nutritional deficiency as a consequence of chronic diarrhea

### ***Differential Diagnosis***

- Bandler syndrome
- Celiac disease and Addison's disease
- Dermatopathia pigmentosa reticularis
- Familial polyposis
- Gardner's syndrome
- Intestinal parasitic disease
- Laugier–Hunziker disease
- Peutz–Jeghers syndrome
- Protein-losing enteropathy
- Whipple disease

### ***Evaluation***

- Antinuclear antibodies
- B12 and folate levels
- Colonoscopy and gastroscopy
- Complete blood count
- CT scan of chest, abdomen, and pelvis
- Iron studies
- Serum albumin and protein levels
- Serum electrolyte studies including calcium and magnesium level
- Stool for occult blood
- Thyroid function tests

**Further reading:**

- Bruce A, Ng CS, Wolfsen HC et al (1999) Cutaneous clues to Cronkhite–Canada syndrome: a case report. *Arch Dermatol* 135(2):212

**Cryoglobulinemia/Cryofibrinogenemia**

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Disorder caused by cold precipitation of circulating immunoglobulins or fibrinogens that is characterized by livedo reticularis, acral retiform purpura (type I), inflammatory purpura (types II or III), and acral necrosis

***Subtypes/Variants***

- Type I (monoclonal immunoglobulins)
- Type II (monoclonal rheumatoid factor and polyclonal IgG)
- Type III (polyclonal rheumatoid factor and polyclonal IgG)

***Differential Diagnosis***

- Acrocyanosis
- Antiphospholipid antibody syndrome
- Atrial myxoma
- Calciphylaxis
- Churg–Strauss syndrome
- Cholesterol emboli syndrome
- Cocaine-associated vasculopathy
- Disseminated intravascular coagulation
- Microscopic polyangiitis
- Oxalosis
- Polyarteritis nodosa
- Raynaud's phenomenon
- Sarcoidosis
- Septic vasculitis
- Serum sickness
- Systemic lupus erythematosus
- Wegener's granulomatosis

## **Associations**

### Cryofibrinogens

- Diabetes
- Chronic lung disease
- Connective tissue disease
- Hypothyroidism
- Internal malignancy
- Pregnancy
- Oral contraceptive drugs
- Thromboembolic disease

### Cryoglobulins

- Chronic lymphocytic leukemia
- Hepatitis C infection (types II/III)
- HIV infection
- Inflammatory bowel disease
- Lymphoma (type II/III)
- Multiple myeloma (type I)
- Rheumatoid arthritis
- Sjögren's syndrome
- Subacute bacterial endocarditis
- Systemic lupus erythematosus
- Waldenstrom's macroglobulinemia (type I)

## **Evaluation**

- Antinuclear antibodies
- Complement levels
- Complete blood count
- CT scan of chest, abdomen, and pelvis (if lymphoma is suspected)
- Renal function test
- Rheumatoid factor
- Serum/urinary protein electrophoresis

- Test for cryoglobulins and cryofibrinogens
- Urinalysis
- Viral hepatitis panel

### ***Treatment Options***

- Treatment of underlying cause
- Systemic corticosteroids
- Plasmapheresis
- Cyclophosphamide
- Azathioprine
- Mycophenolate mofetil
- Rituximab

### **Further reading:**

- Carlson JA, Chen KR (2006) Cutaneous vasculitis update: small vessel neutrophilic vasculitis syndromes. *Am J Dermatopathol* 28(6):486–506

## **Cryptococcosis (European Blastomycosis, Busse–Buschke Disease)**

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Infection with the opportunistic encapsulated yeast, *Cryptococcus neoformans*, that is characterized most commonly by cutaneous lesions in the setting of disseminated disease including molluscum-like lesions, cellulitis, erythematous papules, nodules, and ulcers

### ***Differential Diagnosis***

- Acanthamebiasis
- Acne
- Aspergillosis
- Bacillary angiomatosis
- Bacterial cellulitis
- Blastomycosis
- Coccidioidomycosis

- Granuloma annulare
- Histoplasmosis
- Lymphoma (especially CNS)
- Molluscum contagiosum
- Nocardiosis
- Syphilis
- Toxoplasmosis
- Tuberculosis

### ***Evaluation***

- CT/MRI scan of brain
- HIV test
- Lumbar puncture
- Serum latex agglutination test for cryptococcal antigen

### **Further reading:**

- Laffleur L, Beaty S, Colome-Grimmer MI et al (2004) Cryptococcal cellulitis in a patient on prednisone monotherapy for myasthenia gravis. *Cutis* 74(3):165–170

## **Cutis Laxa**

Inherited (AD, AR, XLR) or acquired disorder of elastic tissue with a variety of associated conditions that is caused by inadequate/faulty production of or a loss of elastic tissue and is characterized by focal or widespread loose, saggy, redundant, aged-appearing skin in a generalized or localized distribution (Fig. 6.21)

### ***Differential Diagnosis***

- Anetoderma
- Atrophoderma of Pasini and Pierini
- Costello syndrome
- Cutis pleonasmus



**Fig. 6.21** Digital cutis laxa

- De Barsy syndrome
- Ehlers–Danlos syndrome
- Granulomatous slack skin
- Marfan syndrome
- Michelin tire baby syndrome
- Middermal elastolysis
- Pseudoatrophoderma colli
- Pseudoxanthoma elasticum
- SCARF syndrome
- Striae distensae

### ***Associations***

#### Hereditary

- Aneurysms
- Emphysema
- Gastrointestinal diverticula
- Hernias
- Valve disease
- Vocal cord abnormalities

## Acquired

- Amyloidosis
- Angioedema
- *Borrelia burgdorferi* infection
- Celiac disease
- Hemolytic anemia
- Dermatitis herpetiformis
- Erythema multiforme
- Myeloma
- Nephrotic syndrome
- Penicillamine
- Rheumatoid arthritis
- Sarcoidosis
- Sweet's syndrome
- Systemic lupus erythematosus
- Urticaria

## Evaluation

- Serum/urinary protein electrophoresis (acquired generalized)
- Chest radiography (inherited)
- Antinuclear antibodies (acquired generalized)
- Echocardiography

## Further reading:

- Ringpfeil F (2005) Selected disorders of connective tissue: pseudoxanthoma elasticum, cutis laxa, and lipoid proteinosis. *Clin Dermatol* 23(1):41–46

## Cutis Marmorata Telangiectatica Congenita (van Lohuizen Syndrome)

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Congenital vascular anomaly of unknown cause that is associated with a variety of disorders and characterized by persistent, reticulated vascular mottling on the lower extremities that does not resolve with warming



### ***Differential Diagnosis***

- Benign cutis marmorata
- Bockenheimer syndrome
- Diffuse cutaneous mastocytosis
- Focal dermal hypoplasia
- Homocystinuria
- Klippel–Trenaunay syndrome
- Livedo reticularis
- Neonatal lupus erythematosus
- Reticular infantile hemangioma
- Reticular port-wine stain

### ***Associations***

- Adams–Oliver syndrome
- Capillary malformations
- Craniofacial abnormalities
- Glaucoma
- Hypospadias
- Klippel–Trenaunay syndrome
- Mental retardation
- Phakomatosis pigmentovascularis, type V
- Rothmund–Thomson syndrome
- Sturge–Weber syndrome
- Syndactyly

### **Further reading:**

- Heughan CE, Kanigsberg N (2007) Cutis marmorata telangiectatica congenita and neonatal lupus. *Pediatr Dermatol* 24(3):320

### **Cutis Verticis Gyrate**

Scalp condition that can be a primary disorder or secondary to a variety of causes and is characterized by deep, linear, and convoluted folds on the scalp

### ***Differential Diagnosis***

- AL amyloidosis
- Cerebriform melanocytic nevus
- Connective tissue nevus
- Cutis laxa
- Lipedematous alopecia
- Multiple cylindromas
- Nevus lipomatosus
- Sarcoidosis

### ***Associations***

- Acanthosis nigricans
- Acromegaly
- Amyloidosis
- Beare–Stevenson syndrome
- Darier’s disease
- Ehlers–Danlos syndrome
- Epilepsy
- Fragile X syndrome
- Hyperinsulinism
- Leukemia
- Myxedema
- Noonan syndrome
- Pachydermoperiostosis
- Schizophrenia
- Syphilis
- Tuberous sclerosis
- Turner syndrome

### ***Evaluation***

- Endocrine evaluation (if suspect pituitary abnormality)
- EEG and MRI of brain (if neurologic abnormality is suspected)

**Further reading:**

- Larsen F, Birchall N (2007) Cutis verticis gyrata: three cases with different aetiologies that demonstrate the classification system. *Australas J Dermatol* 48(2):91–94

## **Cylindroma**

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Benign adnexal neoplasm of questionable apocrine or eccrine origin which, when multiple and familial, is associated with a defect in the CYLD gene and is characterized by flesh-colored to erythematous to red “tomato-like” tumors most commonly located on the scalp

### ***Differential Diagnosis***

- Angiolymphoid hyperplasia with eosinophilia
- Cutis verticis gyrata
- Eccrine spiradenoma
- Lymphoma
- Metastatic disease
- Pilar cyst
- Proliferating pilar tumor
- Sebaceous adenoma

### ***Associations***

- Brooke–Spiegler syndrome

**Further reading:**

- Retamar RA, Stengel F, Saadi ME et al (2007) Brooke–Spiegler syndrome – report of four families: treatment with CO<sub>2</sub> laser. *Int J Dermatol* 46(6):583–586

## **Cysticercosis**

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Infestation with the pork tapeworm *Taenia solium* that is characterized most commonly by CNS disease and less commonly by subcutaneous nodules

### ***Differential Diagnosis***

- Brain abscess
- Brain tumor
- Cerebrovascular accident
- Coccidioidomycosis
- Cryptococcosis
- Encephalitis
- Nocardiosis
- Sarcoidosis
- Toxoplasmosis
- Tuberculosis

#### **Further reading:**

- Uthida-Tanaka AM, Sampaio MC, Velho PE et al (2004) Subcutaneous and cerebral coccidioidomycosis. J Am Acad Dermatol 50(2 Suppl):S14–S17

### **Cytophagic Histiocytic Panniculitis**

Type of panniculitis that lies on spectrum of disease with subcutaneous T cell lymphoma and is characterized by erythematous, painful nodules on the extremities and trunk, fever, and a hemophagocytic syndrome, with cytopenias, hepatosplenomegaly, and liver failure

### ***Differential Diagnosis***

- Antitrypsin deficiency panniculitis
- Erythema nodosum
- Factitial disease
- Lupus panniculitis
- Nodular vasculitis
- Polyarteritis nodosa
- Pancreatic panniculitis
- Subcutaneous panniculitis-like T cell lymphoma

- Sweet's syndrome
- Traumatic panniculitis

### **Evaluation**

- Antinuclear antibodies
- Bone marrow biopsy
- Complete blood count
- CT scan of chest, abdomen, and pelvis
- Immunophenotyping and T cell gene rearrangement of tissue
- Lactate dehydrogenase level
- Liver function test
- Renal function test

### **Further reading:**

- Secmeer G, Sakalli H, Gok F et al (2004) Fatal cytophagic histiocytic panniculitis. *Pediatr Dermatol* 21(3):246–249

## **Dabska Tumor (Endovascular Papillary Angioendothelioma)**

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Rare, low-grade angiosarcoma that affects predominantly children, is likely lymphatic in origin, and is characterized by a slow-growing, violaceous, or blue subcutaneous mass on the head and neck, trunk, or extremities

### **Differential Diagnosis**

- Angiolymphoid hyperplasia with eosinophilia
- Angiosarcoma
- Benign intravascular endothelial hyperplasia
- Glomeruloid hemangioma
- Hobnail hemangioma
- Infantile hemangioma, deep type
- Kaposi's sarcoma

- Reactive angioendotheliomatosis
- Retiform hemangioendothelioma
- Venous malformation
- Tufted angioma

**Further reading:**

- Schwartz RA, Dabski C, Dabska M (2000) The Dabska tumor: a thirty-year retrospect. *Dermatology* 201(1):1–5

**Darier's Disease (Keratosis Follicularis)**

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Keratinization disorder that is caused by an autosomal-dominantly inherited defect in the ATP2A2 gene which encodes the SERCA2 calcium pump and is characterized by childhood or adolescent onset of keratotic papules that become coalescent into greasy, markedly hyperkeratotic and vegetating plaques on the central chest, upper back, neck, scalp, and intertriginous areas, as well as verrucous papules on the dorsal hands and nail changes (Fig. 6.22)

***Differential Diagnosis***

- Acrokeratosis verruciformis of Hopf
- Blastomycosis-like pyoderma
- Familial dyskeratotic comedones
- Folliculitis
- Grover's disease
- Langerhans cell histiocytosis
- Hailey–Hailey disease
- Pemphigus foliaceus
- Pemphigus vegetans
- Pityriasis lichenoides chronica
- Pityriasis rubra pilaris
- Seborrheic dermatitis



**Fig. 6.22** Darier's disease (Courtesy of K. Guidry)

### *Associations*

- Bipolar personality disorder
- Epilepsy

### *Treatment Options*

- Topical retinoids
- Systemic retinoids
- Systemic steroids
- Oral antibiotics

### **Further reading:**

- Sehgal VN, Srivastava G (2005) Darier's (Darier-White) disease/keratosis follicularis. *Int J Dermatol* 44(3):184–192

## **Decubitus Ulcer**

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Type of ulcer that is caused by ischemia related to prolonged pressure and is characterized by a superficial or deep punched-out ulcer most commonly located on the sacral area or lower extremities

### ***Differential Diagnosis***

- Bullous pemphigoid
- Burn
- Cellulitis
- Coma bullae
- Contact dermatitis, irritant
- Factitial ulcer
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Spider bite
- Stasis ulcer
- Vasculitis

### ***Staging***

- Stage I – blanchable erythema
- Stage II – partial thickness (into dermis)
- Stage III – intermediate thickness (into subcutaneous layer)
- Stage IV – full thickness (into muscle, fascia, tendons, bone)

### ***Treatment Options***

- Relief of pressure
- Debridement and wound care
- Topical antibiotics
- Hydrocolloid dressings
- Becaplermin gel



**Further reading:**

- Parish LC, Lowthian P, Witkowski JA (2007) The decubitus ulcer: many questions but few definitive answers. *Clin Dermatol* 25(1):101–108

**Delusions of Parasitosis (Ekbom's Disease)**

Type of monosymptomatic hypochondriasis that is caused by a fixed, incontrovertible delusion held by the patient that he or she is infested with insects, worms, or other ectoparasites and is characterized by excoriations, prurigo nodularis, ulcers, and presentation to the physician evidence of infestation, usually in the form of a bag containing various debris (matchbox sign)

***Differential Diagnosis***

- B12 deficiency
- Bird mites
- Canine scabies
- Cheyletiella
- Cocaine abuse
- Dermatitis herpetiformis
- Formication
- Lymphoma
- Multiple sclerosis
- Papular urticaria
- Pediculosis
- Scabies
- Substance abuse
- Thyroid storm

***Evaluation***

- Microscopic examination of patient specimens
- Thyroid function test

- Serum B12 and folate levels
- Urine drug screen
- Liver function test
- Renal function test

### ***Treatment Options***

- Pimozide
- Risperidone
- Olanzapine

### **Further reading:**

- Koo J, Lee CS (2001) Delusions of parasitosis. A dermatologist's guide to diagnosis and treatment. *Am J Clin Dermatol* 2(5):285–290

## **Demodicosis**

Cutaneous infestation with the hair follicle mite *Demodex folliculorum* that manifests as a papulopustular rosacea-like eruption (often unilateral), a follicular-based papular eruption with fine scale (pityriasis folliculorum), blepharitis, or hyperpigmentation

### ***Differential Diagnosis***

- Acne vulgaris
- Contact dermatitis
- Cutaneous lymphoma
- Eosinophilic folliculitis
- Favus
- Perioral dermatitis
- Rosacea
- Seborrheic dermatitis
- Tinea faciei

### ***Treatment Options***

- Permethrin 5% cream
- Ivermectin

### **Further reading:**

- Hsu CK, Hsu MM, Lee JY (2009) Demodicosis: a clinicopathological study. *J Am Acad Dermatol* 60(3):453–462

## **Dengue Fever**

Flaviviral infection that is caused by the dengue virus, a virus that is endemic in various tropical and subtropical regions, is transmitted by the *Aedes* mosquito, and is characterized by fever, a centrifugal exanthem with islands of sparing, and hemorrhage

### ***Differential Diagnosis***

- Ebola virus
- Endemic typhus
- Epidemic typhus
- Influenza
- Leptospirosis
- Malaria
- Meningococemia
- Pityriasis rubra pilaris
- Rocky Mountain spotted fever
- Scarlet fever
- Viral hepatitis
- Yellow fever

### ***Evaluation***

- Chest radiograph
- Complete blood count

- Liver function tests
- Prothrombin and partial thromboplastin time
- Serum chemistry
- Serum ELISA for dengue virus

**Further reading:**

- Pincus LB, Grossman ME, Fox LP (2008) The exanthem of dengue fever: clinical features of two US tourists traveling abroad. *J Am Acad Dermatol* 58(2):308–316

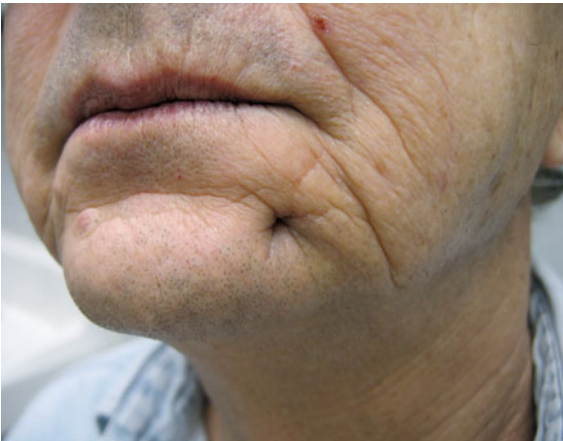
## Dental Sinus

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Sinus tract that originates from a dental abscess and is characterized by a fistulous opening or erythematous nodule most commonly on the jaw line (Fig. 6.23)

### *Differential Diagnosis*

- Actinomycosis
- Basal cell carcinoma
- Chronic factitial ulcer of the chin



**Fig. 6.23** Dental sinus

- Dermoid sinus
- Epidermal inclusion cyst
- Granuloma faciale
- Lupus erythematosus
- Melanoma
- Nocardiosis
- Orificial tuberculosis
- Osteomyelitis
- Paracoccidioidomycosis
- Pyogenic granuloma
- Scrofuloderma
- Squamous cell carcinoma
- Sporotrichosis
- Tinea barbae

### ***Evaluation***

- Panoramic radiograph of the jaw

### **Further reading:**

- Cantatore JL, Klein PA, Lieblich LM (2002) Cutaneous dental sinus tract, a common misdiagnosis: a case report and review of the literature. *Cutis* 70(5):264–267

## **Dercum's Disease (Adiposis Dolorosa)**

Disorder predominantly affecting postmenopausal women with psychiatric illness that is characterized by multiple, symmetric, painful lipomas on the trunk and extremities

### ***Differential Diagnosis***

- Familial multiple lipomatosis
- Fibromyalgia
- Multiple symmetrical lipomatosis (Madelung's disease)

- Neurofibromatosis
- Lipodystrophy, acquired progressive
- Proteus syndrome

### ***Diagnostic Criteria***

- Multiple, painful, fatty masses
- Generalized obesity, usually in menopausal age
- Asthenia, weakness, and fatigability
- Mental disturbances, including emotional instability, depression, epilepsy, confusion, and dementia

### **Further reading:**

- Brodovsky S, Westreich M, Leibowitz A, Schwartz Y (1994) Adiposis dolorosa (Dercum's disease): 10-year follow-up. *Ann Plast Surg* 33(6):664–668
- Wortham NC, Tomlinson IP (2005) Dercum's disease. *Skinmed* 4(3):157–162

## **Dermatitis Artefacta**

Self-inflicted skin disease associated with stress, psychological illness, or secondary gain that is characterized by skin lesions with bizarre morphology or distribution, angulated or linear borders, erosions, ulcers, or necrosis in areas that are accessible to the patient (Fig. 6.24)

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Atopic dermatitis
- Bacterial pyoderma
- Herpes simplex virus infection
- Herpes zoster
- Nodular vasculitis
- Polyarteritis nodosa
- Pyoderma gangrenosum



**Fig. 6.24** Dermatitis artefacta

- Scabies
- Septic vasculitis
- Subcutaneous lymphoma
- Wegener's granulomatosis

### ***Treatment Options***

- Cognitive therapy
- SSRIs

### **Further reading:**

- Kwon EJ, Dans M, Koblenzer CS et al (2006) Dermatitis artefacta. *J Cutan Med Surg* 10(2):108–113

## **Dermatitis Herpetiformis**

Subepidermal autoimmune blistering disease with onset in early to mid-adulthood that is associated with granular IgA deposition at the basement membrane zone and is characterized by pruritic, grouped vesicles and excoriations located most commonly on the buttocks, knees, and elbows

## ***Differential Diagnosis***

- Allergic contact dermatitis
- Atopic dermatitis
- Autosensitization eczema
- Brachioradial pruritus
- Bullous erythema multiforme
- Bullous lupus erythematosus
- Bullous pemphigoid
- Epidermolysis bullosa acquisita
- Grover's disease
- Herpes simplex virus infection
- Id reaction
- Insect bites
- Linear IgA bullous dermatosis
- Neurotic excoriations
- Nummular eczema
- Papular eczema
- Pemphigus foliaceus
- Pemphigus herpetiformis
- Scabies
- Zoster

## ***Associations***

- Achlorhydria/atrophic gastritis
- Gluten-sensitive enteropathy
- Iron or folate deficiency
- Lupus erythematosus
- Pernicious anemia
- Potassium iodide
- Sjögren's syndrome
- Small bowel lymphoma
- Thyroid disease
- Vitiligo



### ***Evaluation***

- Antinuclear antibodies
- Complete blood count
- Direct immunofluorescence of perilesional skin
- Evaluation for gluten-sensitive enteropathy
- Liver function test
- Renal function test
- Small bowel study (if lymphoma is suspected)
- Thyroid function test
- Tissue transglutaminase antibodies

### ***Treatment Options***

- Gluten-free diet
- Dapsone
- Sulfasalazine
- Systemic steroids
- Colchicine
- Nicotinamide and tetracycline

### **Further reading:**

- Alonso-Llamazares J, Gibson LE, Rogers RS III (2007) Clinical, pathologic, and immunopathologic features of dermatitis herpetiformis: review of the Mayo Clinic experience. *Int J Dermatol* 46(9):910–919

### **Dermatofibroma (Fibrous Histiocytoma)**

Benign neoplasm possibly derived from the dermal dendrocyte that is characterized by a firm, solitary, circular, fibrous nodule most commonly on trauma-prone areas such as the lower extremity

## *Differential Diagnosis*

- Angioma
- Blue nevus
- Calcification
- Chondroma
- Clear cell acanthoma
- Dermatofibrosarcoma protuberans
- Desmoplastic trichoepithelioma
- Epidermal cyst
- Foreign body granuloma
- Granular cell tumor
- Histioid leprosy
- Insect-bite reaction
- Juvenile xanthogranuloma
- Keloid
- Leiomyoma
- Leprosy
- Mastocytoma
- Melanocytic nevus
- Melanoma
- Metastasis
- Nodular scabies
- Papular sarcoidosis
- Perforating disorder
- Pilomatrixoma
- Prurigo nodule
- Scar
- Sclerosing sweat duct tumor
- Spindle cell xanthogranuloma
- Spitz nevus
- Wart



**Fig. 6.25** Multiple dermatofibromas

**Associations (Multiple; Fig. 6.25)**

- Chronic myelogenous Leukemia
- HAART therapy
- HIV infection
- Immunosuppression
- Systemic lupus erythematosus

**Further reading:**

- Chan I, Robson A, Mellerio JE (2005) Multiple dermatofibromas associated with lupus profundus. *Clin Exp Dermatol* 30(2):128–130

**Dermatofibrosarcoma Protuberans**

Low-grade malignant neoplasm that is locally aggressive, frequently recurrent, but rarely metastatic and is characterized by a firm, multinodular mass or plaque with a sclerotic base most commonly located on the trunk (Fig. 6.26)



**Fig. 6.26** Dermatofibrosarcoma protuberans (Courtesy of K. Guidry)

### *Subtypes/Variants*

- Bednar tumor (pigmented variant)
- Giant cell fibroblastoma (juvenile variant)

### *Differential Diagnosis*

- Breast cancer
- Cellular blue nevus
- Dermatofibroma
- Dermatomyofibroma
- Desmoid tumor
- Epidermoid cyst
- Fibrosarcoma
- Fibrous hamartoma of infancy
- Keloid
- Leiomyosarcoma
- Lobomycosis
- Lipoma

- Lymphoma
- Malignant fibrous histiocytoma
- Melanoma
- Metastases
- Morphea
- Neurofibroma (including plexiform)
- Nodular fasciitis
- Sarcoidosis
- Sclerosing hemangioma
- Sweat gland carcinoma
- Syphilitic gumma

### ***Treatment Options***

- Excisional surgery
- Mohs micrographic surgery
- Imatinib

### **Further reading:**

- Monnier D, Vidal C, Martin L et al (2006) Dermatofibrosarcoma protuberans: a population-based cancer registry descriptive study of 66 consecutive cases diagnosed between 1982 and 2002. *J Eur Acad Dermatol Venereol* 20(10):1237–1242

## **Dermatographism**

Type of physical urticaria that develops within minutes of stroking the skin and is characterized by linear, pruritic wheals

### ***Differential Diagnosis***

- Cold urticaria
- Contact urticaria
- Darier's sign of mastocytosis
- Delayed pressure urticaria

- White dermatographism
- Trauma

### ***Associations***

- Hypereosinophilic syndrome
- Mastocytosis
- Scabies

### ***Treatment Options***

- Oral antihistamines
- Montelukast
- Dapsone
- Colchicine
- Cyclosporine
- Mycophenolate mofetil

### **Further reading:**

- Taskapan O, Harmanyeri Y (2006) Evaluation of patients with symptomatic dermatographism. *J Eur Acad Dermatol Venereol* 20(1):58–62

## **Dermatomyofibroma**

Benign proliferation of myofibroblasts that arises predominantly in young women and is characterized by an erythematous to brown, firm, circumscribed plaque on the upper trunk or neck

### ***Differential Diagnosis***

- Connective tissue nevus
- Cutaneous lymphoid hyperplasia
- Dermatofibroma

- Dermatofibrosarcoma protuberans
- Desmoid tumor
- Elastofibroma
- Fibrous hamartoma of infancy
- Granuloma annulare
- Keloid
- Kaposi's sarcoma
- Leiomyoma
- Neurofibroma

**Further reading:**

- Gilaberte Y, Coscojuela C, Doste D et al (2005) Dermatomyofibroma in a male child. *J Eur Acad Dermatol Venereol* 19(2):257–259

**Dermatomyositis (Wagner–Unverricht Syndrome)**

Autoimmune disease with variable clinical features that is characterized by myositis, potential internal malignancy, and numerous skin findings, including Gottron's papules and sign, heliotrope erythema, calcinosis cutis, photodistributed poikiloderma, a pityriasis-rubra-pilaris-like eruption, flagellate erythema, Raynaud's phenomenon, a seborrheic-dermatitis-like eruption, panniculitis, and nail-fold telangiectasias

***Differential Diagnosis*****Skin and Systemic**

- Acrokeratosis paraneoplastica
- Aldosteronism
- Atopic dermatitis
- Cutaneous T cell lymphoma
- CREST syndrome
- Cyclophosphamide side effect
- Dermatophytosis
- Dermatomyositis–meningoencephalitis syndrome

- Erythema dyschromicum perstans
- Graft-vs-host disease
- Hepatitis-B-related dermatomyositis-like syndrome
- Leishmaniasis
- Lichen myxedematosus
- Lichen planus
- Mixed connective tissue disease
- Multicentric reticulohistiocytosis
- Mycosis fungoides
- Parapsoriasis
- Parvovirus B19 infection
- Pemphigus foliaceus
- Photosensitive drug eruption
- Pityriasis lichenoides chronica
- Pityriasis rubra pilaris
- Polymorphous light eruption
- Poikiloderma of Civatte
- Psoriasis
- Rosacea
- Sarcoidosis
- Scleroderma
- Seborrheic dermatitis
- Systemic lupus erythematosus
- Thyroid disease
- Toxoplasmosis
- Trichinosis

### Myositis

- Amyotrophic laterosclerosis
- Antimalarials
- Colchicine
- Cushing's disease
- Diabetic neuropathy
- Guillain–Barre syndrome



- Hyperthyroidism
- Hypokalemia
- Hypothyroidism
- Inclusion body myositis
- Isotretinoin
- Metabolic myopathies
- Muscular dystrophy
- Myasthenia gravis
- Rheumatic disease
- Statin myopathy
- Steroid myopathy
- Viral myositis
- Zidovudine

***Diagnostic Criteria (Must Have First; Four Is Definite; Three Is Probable)***

- Compatible cutaneous disease
- Progressive proximal symmetrical weakness
- Elevated muscle enzyme levels
- Abnormal findings on electromyograms
- Abnormal findings from muscle biopsy

***Associated Medications***

- Etoposide
- Hydroxyurea
- NSAIDS
- Phenytoin
- Statins

***Evaluation***

- Aldolase level
- Chest radiograph

- Complete blood count
- Creatine kinase level
- CT/MRI scan of chest, abdomen, and pelvis
- Electromyography
- Electrocardiogram
- Esophageal studies
- Jo-1, PM, Ku, Mi-2 antibodies
- Muscle biopsy (with or without prebiopsy MRI scan)
- Pelvic and breast examination
- Pulmonary function tests
- Thyroid function
- Urinalysis
- Urinary creatine level

### ***Treatment Options***

- Sun avoidance
- Topical corticosteroids
- Topical calcineurin inhibitors
- Systemic corticosteroids (muscle)
- Hydroxychloroquine (skin)
- Methotrexate
- Mycophenolate mofetil (skin)
- Azathioprine
- Dapsone
- Diltiazem
- Intravenous immunoglobulin (muscle)
- Rituximab (muscle)
- Etanercept
- Infliximab
- Plasmapheresis

### **Further reading:**

- Bohan A, Peter JB (1975) Polymyositis and dermatomyositis. *N Engl J Med* 292(Part 1):344–347

## **Dermatosis Papulosa Nigra (Castellani Dermatitis)**

---

Benign, often familial dermatosis affecting predominantly patients of African descent that is characterized by small hyperpigmented seborrheic-keratosis-like papules on the face, neck, and, occasionally, the chest

### ***Differential Diagnosis***

- Acrochordons
- Adenoma sebaceum
- Centrofacial lentiginosis
- Melanocytic nevi
- Seborrheic keratosis
- Solar lentigines
- Syringomas
- Trichilemmomas
- Trichoepitheliomas
- Verrucae

### **Further reading:**

- Schwartzberg JB, Ricotti CA Jr, Ballard CJ, Nouri K (2007) Eruptive dermatosis papulosa nigra as a possible sign of internal malignancy. *Int J Dermatol* 46(2):186–187

## **Dermoid Cyst**

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Developmental anomaly typically identified at birth or early in life that is caused by failure of normal distribution of several different ectodermal structures as embryonic fusion lines close and characterized by a subcutaneous mass usually in a periocular or midline distribution of the head and neck

### ***Differential Diagnosis***

- Ectopic meningeal tissue
- Encephalocele

- Epidermal inclusion cyst
- Fibrosarcoma
- Hemangioma
- Metastatic disease
- Nasal glioma
- Pilar cyst
- Rhabdomyosarcoma
- Steatocystoma

**Further reading:**

- Golden BA, Zide MF (2005) Cutaneous cysts of the head and neck. J Oral Maxillofac Surg 63(11):1613–1619

**Desmoid Tumor**

A deeply infiltrating benign tumor derived from the myofibroblast and often associated with a history of abdominal surgery that is characterized by a firm, deep-seated adherent mass with normal overlying skin most commonly located on the anterior abdominal wall

***Subtypes/Variants***

- Intra-abdominal
- Abdominal
- Extra-abdominal

***Differential Diagnosis***

- Dermatofibrosarcoma protuberans
- Dermatomyofibroma
- Fibrosarcoma
- Keloid
- Leiomyosarcoma
- Metastasis
- Nodular fasciitis

## **Associations**

- Gardner syndrome
- Previous abdominal surgery

### **Further reading:**

- Owens CL, Sharma R, Ali SZ (2007) Deep fibromatosis (desmoid tumor): cytopathologic characteristics, clinicoradiologic features, and immunohistochemical findings on fine-needle aspiration. *Cancer* 111(3):166–172

## **Diabetic Dermopathy**

---

Cutaneous manifestation of diabetes mellitus that is characterized by erythematous to brown atrophic macules and patches most commonly located on the anterior lower extremity

### **Differential Diagnosis**

- Lupus erythematosus
- Lichen sclerosus
- Lichen planus
- Morphea
- Necrobiosis lipoidica
- Pigmented purpuric dermatosis
- Scars

### **Treatment Options**

- Control of diabetes
- Observation and reassurance

### **Further reading:**

- Ahmed I, Goldstein B (2006) Diabetes mellitus. *Clin Dermatol* 24(4):237–246

## **Digital Mucous Cyst**

---

Mucin-containing pseudocyst that is likely derived from the synovium of underlying arthritic joints and is characterized by a periungual, translucent papule or nodule with or without associated nail dystrophy

### ***Differential Diagnosis***

- Acquired digital fibrokeratoma
- Acral persistent papular mucinosis
- Epidermoid cyst
- Giant cell tumor of the tendon sheath
- Gouty tophus
- Heberden node
- Myxoid liposarcoma
- Myxoma
- Rheumatoid nodule
- Subcutaneous granuloma annulare
- Xanthoma

### ***Associations***

- Connective tissue disease (multiple)
- Osteoarthritis

### **Further reading:**

- Connolly M, de Berker DA (2006) Multiple myxoid cysts secondary to occupation. *Clin Exp Dermatol* 31(3):404–406

## **Digitate Hyperkeratosis, Multiple Minute**

---

Rare skin eruption characterized by nonfollicular digitate hyperkeratosis affecting the trunk and extremities

### ***Differential Diagnosis***

- Arsenical keratosis
- Darier's disease
- Hyperkeratotic spicules of myeloma
- Multiple filiform verrucae
- Multiple minute digitate hyperkeratosis
- Lichen spinulosus
- Phrynoderma
- Spiny keratoderma
- Postirradiation digitate keratosis
- Trichodysplasia spinulosa

#### **Further reading:**

- Caccetta TP, Dessauvage B, McCallum D et al (2010) Multiple minute digitate hyperkeratosis: a proposed algorithm for the digitate keratoses. *J Am Acad Dermatol*

### **Dilated Pore of Winer**

Follicular dilatation of unknown cause that is characterized by a keratin-filled pore most commonly on the head, neck, or back of men

### ***Differential Diagnosis***

- Epidermoid cyst
- Favre–Racouchot syndrome
- Pilar sheath acanthoma
- Pore-like basal cell carcinoma
- Trichoepithelioma
- Trichofolliculoma

#### **Further reading:**

- Mittal RR, Sethi PS, Jha A (2002) Dilated pore of Winer. *Indian J Dermatol Venereol Leprol* 68(4):239–240

## **Diphtheria, Cutaneous**

---

Tropical bacterial infection of the skin caused by *Corynebacterium diphtheriae* that is characterized by a punched-out ulcer or ulcers most commonly located on the extremities

### ***Differential Diagnosis***

- Aspergillosis
- Atypical mycobacterial infection
- Chancroid
- Ecthyma
- Erythema multiforme
- Granuloma inguinale
- Majocchi's granuloma
- Nocardiosis
- Bacterial pyoderma
- Pyoderma gangrenosum
- Syphilis
- Tropical ulcer

### **Further reading:**

- Wagner J, Ignatius R, Voss S et al (2001) Infection of the skin caused by *Corynebacterium ulcerans* and mimicking classical cutaneous diphtheria. Clin Infect Dis 33(9):1598–1600

## **Dissecting Cellulitis of the Scalp (Perifolliculitis Capitis Abscedens et Suffodiens, Hoffman's Disease)**

---

Chronic inflammatory dermatosis involving the hair follicles of the scalp that is characterized by pustules, interconnecting abscesses, sinus tracts, and scarring alopecia



### ***Differential Diagnosis***

- Acne keloidalis nuchae
- Alopecia neoplastica
- Bacterial infection
- Folliculitis decalvans
- Keratosis follicularis spinulosa decalvans
- Lichen planopilaris
- Lupus erythematosus
- Sarcoidosis
- Tinea capitis (especially kerion)

### ***Associations***

- Acne conglobata
- Acne keloidalis
- Hidradenitis suppurativa
- Pilonidal sinus
- Spondyloarthropathy

### ***Evaluation***

- Bacterial and fungal culture of purulent material

### ***Treatment Options***

- Incision and drainage
- Systemic antibiotics
- Intralesional corticosteroids
- Systemic corticosteroids
- Dapsone
- Sulfasalazine
- Adalimumab
- Infliximab
- Zinc sulfate

- Isotretinoin
- Excision and grafting

**Further reading:**

- Salim A, David J, Holder J (2003) Dissecting cellulitis of the scalp with associated spondylarthropathy: case report and review. *J Eur Acad Dermatol Venereol* 17(6):689–691

## **Disseminate and Recurrent Infundibulofolliculitis (of Hitch and Lund)**

---

Idiopathic, pruritic eruption most commonly affecting patients of African descent that is characterized by a widespread, monomorphic, papular, keratosis-pilaris-like eruption on the trunk (Fig. 6.27)

### ***Differential Diagnosis***

- Acne vulgaris
- Darier's disease



**Fig. 6.27** Disseminate and recurrent infundibulofolliculitis (Courtesy of K. Guidry)

- Folliculitis
- Juxtaclavicular beaded lines
- Keratosis pilaris
- Lichen nitidus
- Lichen planopilaris
- Miliaria
- Papular eczema
- Phrynoderma
- Pityriasis rosea
- Pityriasis rubra pilaris
- Pityrosporum folliculitis
- Trichostasis spinulosa

### **Associations**

- Atopic dermatitis

### **Treatment Options**

- Topical corticosteroids
- Isotretinoin

### **Further reading:**

- Aroni K, Grapsa A, Agapitos E (2004) Disseminate and recurrent infundibulofolliculitis: response to isotretinoin. *J Drugs Dermatol* 3(4):434–435

## **Dowling–Degos Disease**

Familial disorder (AD) that is associated with keratin-5 gene mutations and that is characterized by reticulated hyperpigmentation of the neck, axilla, and inguinal regions, along with pitted scars and comedones around the mouth, neck, and trunk (Fig. 6.28)



**Fig. 6.28** Dowling-Degos disease

### *Differential Diagnosis*

- Acanthosis nigricans
- Carney's complex
- Chloracne
- Confluent and reticulated papillomatosis
- Dermatitis neglecta
- Dyskeratosis congenita
- Galli-Galli disease
- Haber syndrome
- Naegeli-Franceschetti-Jadassohn syndrome
- Reticulate acropigmentation of Kitamura
- Scleroderma
- Terra firma-forme dermatosis

### *Associations*

- Follicular occlusion triad
- Hidradenitis suppurativa

### ***Treatment Options***

- Topical retinoids
- Hydroquinone
- Erbium YAG laser
- Azelaic acid cream
- Isotretinoin

### **Further reading:**

- Wu YH, Lin YC (2007) Generalized Dowling–Degos disease. *J Am Acad Dermatol* 57(2):327–334

### **Drug Eruption**

Immunologic or nonimmunologic reaction of variable morphologies that is caused by numerous drugs and is most commonly characterized by a morbilliform, pruritic symmetric eruption involving the trunk and extremities

### ***Subtypes/Variants***

- Acneiform
- Acute generalized exanthematous pustulosis
- Autoimmune bullous disease
- Bullous
- Drug reaction with eosinophilia and systemic symptoms
- Erythrodermic
- Exanthematous (morbilliform)
- Fixed
- Lichenoid
- Photosensitive
- Pseudoporphyria
- Serum sickness-like
- Subacute cutaneous lupus erythematosus

- Toxic epidermal necrolysis
- Urticarial
- Vasculitis

### ***Differential Diagnosis***

- Autoimmune blistering disease
- Contact dermatitis
- Erythema multiforme
- Exfoliative erythroderma
- Folliculitis
- Graft-vs-host disease
- Kawasaki disease
- Lichen planus
- Lymphoma
- Pityriasis rosea
- Pustular psoriasis
- Scarlet fever
- Serum sickness
- Staphylococcal scalded-skin syndrome
- Still's disease
- Syphilis
- Urticaria
- Vasculitis
- Viral exanthem

### ***Evaluation***

- Liver function test
- Complete blood count
- Urinalysis
- Renal function test
- Antinuclear antibodies (including SS-A and SS-B)

### ***Treatment Options***

- Discontinue offending medication
- Topical corticosteroids
- Oral antihistamines
- Systemic corticosteroids

### **Further reading:**

- Wolf R, Orion E, Marcos B (2005) Life-threatening acute adverse cutaneous drug reactions. *Clin Dermatol* 23(2):171–181

## **Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS)**

---

Potentially fatal type of drug-induced hypersensitivity syndrome that typically develops several weeks or months into therapy with the triggering medication and is characterized by facial edema, a morbilliform or bullous eruption, fever, eosinophilia, and hepatotoxicity

### ***Differential Diagnosis***

- Angioimmunoblastic lymphadenopathy with dysproteinemia
- Cutaneous lymphoid hyperplasia
- Simple drug eruption
- Hypereosinophilic syndrome
- Lymphoma
- Serum-sickness-like reactions
- Viral illness

### ***Diagnostic Criteria (Japanese Consensus Group)***

- HHV-6 reactivation
- Prolonged clinical symptoms 2 week after discontinuation of causative drug
- Maculopapular rash developing >3 week after starting with limited number of drugs

- Fever  $>38^{\circ}\text{C}$
- Lymphadenopathy
- Liver abnormalities
- Leukocytosis, atypical lymphocytosis, or eosinophilia

### ***Associated Medications***

- Abacavir
- Allopurinol
- Beta-lactam antibiotics
- Carbamazepine
- Dapsone
- Gold
- Lamotrigine
- Minocycline
- Nitrofurantoin
- Phenytoin
- Sulfonamides
- Terbinafine
- Valproic acid

### ***Evaluation***

- Complete blood count
- Liver function test
- Renal function test
- Thyroid function test (3 months after)
- Urinalysis

### ***Treatment Options***

- Discontinue offending medication
- Topical corticosteroids
- Oral antihistamines
- Systemic corticosteroids



**Further reading:**

- Ang CC, Wang YS, Yoosuff EL et al (2010) Retrospective analysis of drug-induced hypersensitivity syndrome: a study of 27 cases. *J Am Acad Dermatol* 63(2):219–27. Epub 2010 Jun 3
- Wolf R, Orion E, Marcos B, Matz H (2005) Life-threatening acute adverse cutaneous drug reactions. *Clin Dermatol* 23(2):171–181

**Dupuytren's Contracture**

---

Idiopathic fibromatosis with various associated diseases that affects the palm and is characterized by a cord-like, often bilateral thickening of the palm overlying the fourth metacarpal joint with flexion contracture of the fourth digit

***Differential Diagnosis***

- Calcifying aponeurotic fibroma
- Calluses
- Epithelioid sarcoma
- Ganglion cysts
- Giant cell tumor of the tendon sheath
- Soft tissue sarcoma
- Tenosynovitis
- Ulnar nerve injury

***Associations***

- Cirrhosis
- Diabetes
- Epilepsy
- Gardner syndrome
- Indinavir
- Knuckle pads
- Peyronie's disease
- Plantar fibromatosis
- Smoking

### ***Treatment Options***

- Needling
- Intralesional corticosteroids
- Collagenase clostridium hystolyticum injections
- Surgery

#### **Further reading:**

- Shaw RB Jr, Chong AK, Zhang A et al (2007) Dupuytren's disease: history, diagnosis, and treatment. *Plast Reconstr Surg* 120(3):44e–54e

### **Dyschromatosis Universalis Hereditaria**

Inherited dyschromatosis (AD, AR) of unknown cause that is characterized by childhood onset of hyperpigmented and hypopigmented macules in a generalized distribution, including the face, palms, and soles, but not the mucous membranes

### ***Differential Diagnosis***

- Acropigmentation of Dohi
- Arsenical dyschromia
- Dowling–Degos disease
- Dyskeratosis congenita
- Epidermolysis bullosa with mottled pigmentation
- Pinta
- Primary cutaneous amyloidosis
- Syphilitic leukoderma
- Xeroderma pigmentosum
- Ziprkowski–Margolis syndrome

#### **Further reading:**

- Al Hawsawi K, Al Aboud K, Ramesh V, Al Aboud D (2002) Dyschromatosis universalis hereditaria: report of a case and review of the literature. *Pediatr Dermatol* 19(6):523–526

## Dyshidrotic Eczema (Pompholyx, Chronic Vesiculobullous Hand Eczema)

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Form of hand and foot eczema characterized by recurrent crops of pruritic, small tapioca-like deep-seated vesicles, pustules, and occasional bullae which are located primary on the sides of the palms, soles, and digits

### *Differential Diagnosis*

- Blistering distal dactylitis
- Bullosis diabeticorum
- Bullous drug eruption
- Bullous pemphigoid
- Bullous tinea manuum
- Bullous tinea pedis
- Contact dermatitis
- Id reaction
- Juvenile plantar dermatitis
- Keratoderma climacterium
- Keratolysis exfoliativa
- Lichen nitidus
- Lichen planus
- Mycosis fungoides palmaris et plantaris
- Palmoplantar psoriasis
- Scabies
- Secondary syphilis

### *Associations*

- Atopic diathesis
- Dermatophytosis
- Nickel allergy
- Intravenous immunoglobulin
- Stress

### ***Treatment Options***

- Topical corticosteroids
- Topical calcineurin inhibitors
- Systemic corticosteroids
- Acitretin
- Methotrexate
- Cyclosporine

### **Further reading:**

- Wollina U (2010) Pompholyx: a review of clinical features, differential diagnosis, and management. *Am J Clin Dermatol* 11(5):305–314

### **Dyskeratosis Congenita (Zinsser–Engman–Cole Syndrome)**

Inherited syndrome (XLR, AR, or AD) caused by defects in genes regulating telomerase function (especially dyskerin in the XLR form) that is characterized by reticulated pigmentation in the sun-exposed areas, atrophic nail changes, premalignant oral leukoplakia, pancytopenia, and tendency toward developing skin cancer and other malignancies later in life

### ***Differential Diagnosis***

- Acanthosis nigricans
- Acropigmentation of Dohi
- Ataxia–telangiectasia
- Bloom syndrome
- Dowling–Degos disease
- Graft-vs-host disease
- Fanconi anemia
- Naegeli–Franceschetti–Jadassohn syndrome
- Reticulate acropigmentation of Kitamura
- Rothmund–Thomson syndrome

### **Evaluation**

- Appropriate cancer screening
- Bone marrow biopsy
- Chest radiograph
- Complete blood count

### **Further reading:**

- Bessler M, Wilson DB, Mason PJ (2004) Dyskeratosis congenita and telomerase. *Curr Opin Pediatr* 16(1):23–28

### **Eccrine Acrospiroma**

Broad term for a family of benign acrosyringeal neoplasms that vary based on depth of the proliferation and the clinical presentation and most commonly arise on the soles (poroma), the head and neck (nodular and clear cell hidradenoma), or anywhere on the body (dermal duct tumor)

### ***Subtypes/Variants***

- Clear cell hidradenoma
- Dermal duct tumor
- Hydroacanthoma simplex
- Nodular hidradenoma
- Poroma
- Solid–cystic hidradenoma

### ***Differential Diagnosis***

- Amelanotic melanoma
- Basal cell carcinoma
- Chondroid syringoma
- Cylindroma

- Dermatofibroma
- Eccrine spiradenoma
- Eccrine carcinoma
- Epidermal cyst
- Glomus tumor
- Hemangioma
- Lymphangioma
- Pyogenic granuloma
- Sebaceous adenoma
- Seborrheic keratosis
- Squamous cell carcinoma

**Further reading:**

- Gilaberte Y, Grasa MP, Carapeto FJ (2006) Clear cell hidradenoma. J Am Acad Dermatol 54(5 Suppl):248–249

**Eccrine Angiomatous Hamartoma (Sudoriparous Angioma)**

Hamartoma of both eccrine and endothelial derivation that usually arises in childhood and is characterized by a bluish or violaceous tender nodule on the distal extremities, with hypertrichosis and hyperhidrosis (upon stroking). The term sudoriparous angioma is considered by some to be a distinct entity.

***Differential Diagnosis***

- Blue rubber bleb nevus
- Eccrine nevus
- Glomangioma
- Glomus tumor
- Smooth muscle hamartoma
- Solitary mastocytoma
- Traumatic hemorrhage

- Tufted angioma
- Venous malformations

**Further reading:**

- Dadlani C, Orlow SJ (2006) Eccrine angiomatous hamartoma. *Dermatol Online J* 12(5):9

## **Eccrine Spiradenoma**

Eccrine neoplasm that arises in young adults and is characterized by a solitary, tender, pink or blue, subcutaneous nodule typically located on the scalp, neck, or upper trunk

### ***Differential Diagnosis***

- Angiolipoma
- Blue rubber bleb nevus
- Cylindroma
- Dermatofibroma
- Cutaneous endometriosis
- Glomus tumor
- Leiomyoma
- Neuroma
- Poroma
- Schwannoma

### ***Associations***

- Brooke–Spiegler syndrome

**Further reading:**

- Ter Poorten MC, Barrett K, Cook J (2003) Familial eccrine spiradenoma: a case report and review of the literature. *Dermatol Surg* 29(4):411–414

## **Eccrine Syringosquamous Metaplasia**

Rare eruption named for its histologic feature that is characterized by a micropapular, vesicular, pustular, or erosive eruption on the trunk more often than the extremities

### ***Differential Diagnosis***

- Bullous pyoderma gangrenosum
- Drug hypersensitivity
- Erythema multiforme
- Graft-vs-host disease
- Herpes simplex virus infection
- Leukemia cutis
- Neutrophilic eccrine hidradenitis
- Pressure necrosis
- Recall phenomenon
- Septic emboli
- Squamous cell carcinoma
- Sweet's syndrome
- Urticaria
- Vasculitis

### ***Associations***

- Burn scars
- Chemotherapy
- Lichen simplex chronicus
- Morphea
- Neutrophilic eccrine hidradenitis
- Pyoderma gangrenosum
- Radiation ports
- Thromboangiitis obliterans
- Ulcers



**Further reading:**

- El Darouti MA, Marzouk SA, El Hadidi HA, Sobhi RM (2001) Eccrine syringosquamous metaplasia. *Int J Dermatol* 40(12):777–781

**Ecthyma**

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Streptococcal or staphylococcal infection that leads to ulceration of the entire thickness of the epidermis and part of the upper dermis and is characterized by well-circumscribed ulcers with a firm crust and surrounding erythema

***Differential Diagnosis***

- Anthrax
- Atypical mycobacterial infection
- Cutaneous diphtheria
- Excoriation
- Herpes simplex virus infection
- Insect-bite reaction
- Leishmaniasis
- Lymphoma
- Nocardia
- Pyoderma gangrenosum
- Spider bite
- Sporotrichosis
- Sweet's syndrome
- Tungiasis

***Evaluation***

- Gram stain and culture of exudate

***Treatment Options***

- Systemic antibiotics
- Topical antibiotics

**Further reading:**

- Matz H, Orion E, Wolf R (2005) Bacterial infections: uncommon presentations. Clin Dermatol 23(5):503–508

**Ecthyma Gangrenosum**

Cutaneous manifestation of blood-borne infection with several different vessel-invasive bacterial and fungal pathogens (classically *Pseudomonas*) and characterized by an erythematous plaque that develops hemorrhagic bullous changes and subsequently “gun-metal gray” gangrenous ulceration most commonly on the buttocks and perineum

**Differential Diagnosis**

- Antiphospholipid antibody syndrome
- Chemotherapy reaction
- Cholesterol emboli syndrome
- Cocaine-associated vasculopathy
- Cryoglobulinemia
- Ecthyma
- Herpes simplex virus infection
- HUS/TTP
- Meningococemia
- Paroxysmal nocturnal hemoglobinuria
- Purpura fulminans (disseminated intravascular coagulation)
- Pyoderma gangrenosum
- Vasculitis
- Warfarin necrosis

**Associations**

- *Aeromonas*
- *Aspergillus fumigatus*
- *Candida*

- *Escherichia coli*
- *Fusarium*
- *Klebsiella*
- *Mucor*
- *Pseudomonas*
- *Serratia*
- *Staphylococcus aureus*

### **Evaluation**

- Blood cultures
- Complete blood count

### **Treatment Options**

- Systemic antibiotics

### **Further reading:**

- Duman M, Ozdemir D, Yis U et al (2006) Multiple erythematous nodules and ecthyma gangrenosum as a manifestation of *Pseudomonas aeruginosa* sepsis in a previously healthy infant. *Pediatr Dermatol* 23(3):243–246

## **Ectodermal Dysplasias**

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A group of inherited disorders (XLR, AD, or AR) characterized by various combinations of defects in ectodermal structures, including hair, nails, sweat glands, and teeth

### **Subtypes/Variants**

- ADULT syndrome
- APECED syndrome
- Cleft lip/palate–ectodermal dysplasia (Margarita Island type)
- Ectodermal dysplasia with absent dermatoglyphics (Basan syndrome)

- Ectodermal dysplasia with skin fragility (McGrath syndrome)
- EEC syndrome (Rudiger syndrome)
- Ellis–van Creveld syndrome
- Hay–Wells syndrome (AEC syndrome)
- Hidrotic ectodermal dysplasia (Clouston)
- Hypohidrotic ectodermal dysplasia
- Hypohidrotic ectodermal dysplasia with immunodeficiency (Zonana)
- Lelis syndrome
- Limb–Mammary syndrome
- Rapp–Hodgkin syndrome

### ***Differential Diagnosis***

- Adams–Oliver syndrome
- Aplasia cutis congenita
- Congenital ichthyosis
- Congenital syphilis
- CHANDS syndrome
- Dyskeratosis congenita
- Epidermolysis bullosa
- Goltz syndrome
- KID syndrome
- Incontinentia pigmenti
- Naegeli–Franceschetti–Jadassohn syndrome
- Netherton syndrome
- Odontotrichomelic syndrome
- Pachyonychia congenita
- Papular atrichia
- Tooth-and-nail syndrome (Witkop)

### **Further reading:**

- Lamartine J (2003) Towards a new classification of ectodermal dysplasias. *Clin Exp Dermatol* 28(4):351–355

## **Ectodermal Dysplasia, Anhidrotic (Christ–Siemens–Touraine Syndrome)**

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X-linked recessive type of ectodermal dysplasia caused by a defect in the ectodysplasin A gene that is characterized by early childhood onset of hypohidrosis, hyperthermia, sparse hair, midface hypoplasia with frontal bossing, partial or total anodontia, nail dystrophy, and sinusitis

### ***Differential Diagnosis***

- APECED syndrome
- Bazex–Dupre–Christol syndrome
- Congenital syphilis
- EEC syndrome
- Hidrotic ectodermal dysplasia
- Naegeli–Franceschetti–Jadassohn syndrome
- Netherton syndrome
- Rapp–Hodgkin syndrome
- Tooth-and-nail syndrome

### **Further reading:**

- Palit A, Inamadar AC (2006) What syndrome is this? Christ–Siemens–Touraine syndrome (anhidrotic/hypohidrotic ectodermal dysplasia). *Pediatr Dermatol* 23(4):396–398

## **Ectodermal Dysplasia, Hidrotic (Clouston Syndrome)**

---

Autosomal-dominant disorder caused by defective GJB6 gene (encoding connexin 30) that has normal sweat gland function and normal facial features and that is characterized by alopecia, nail dystrophy, palmoplantar keratoderma, and cataracts

### ***Differential Diagnosis***

- Chronic mucocutaneous candidiasis
- Dyskeratosis congenita
- Anhidrotic ectodermal dysplasia
- Pachyonychia congenita
- Hereditary palmoplantar keratodermas
- Naegeli–Franceschetti–Jadassohn syndrome
- Netherton syndrome
- Tooth-and-nail syndrome

### **Further reading:**

- van Steensel MA, Jonkman MF, van Geel M et al (2003) Clouston syndrome can mimic pachyonychia congenita. *J Invest Dermatol* 121(5):1035–1038

### **Eczema Herpeticum**

A serious complication of atopic dermatitis involving superinfection with herpes simplex virus that is characterized by grouped, umbilicated vesicles in areas of eczema

### ***Differential Diagnosis***

- Bacterial superinfection
- Bullous pemphigoid
- Contact dermatitis
- Dermatitis herpetiformis
- Erythema multiforme
- Herpes gladiatorum
- Hydroa vacciniforme
- Impetigo

- Molluscum contagiosum
- Pemphigus
- Varicella

### **Evaluation**

- Bacterial and viral culture of vesicles
- Direct fluorescent antibody for herpes simplex virus

### **Treatment Options**

- Systemic antivirals
- Treatment of eczema

### **Further reading:**

- Wollenberg A, Zoch C, Wetzel S et al (2003) Predisposing factors and clinical features of Eczema herpeticum: a retrospective analysis of 100 cases. *J Am Acad Dermatol* 49(2):198–205

## **Ehlers–Danlos Syndrome**

Inherited disorder (AD or AR) of connective tissue of which there are at least six major subtypes that is caused by a variety of defects in collagen synthesis and is characterized by joint hypermobility, increased stretchability of skin, molluscum pseudotumors, easy bruising, broad “fish-mouth” scarring, and blood vessel fragility

### **Subtypes/Variants**

- Classic (types I and II)
- Hypermobility (type III)
- Vascular (type IV)
- Kyphoscoliosis (type VI)
- Arthrochalasia (types VIIA and VIIB)

- Dermatosparaxis (type VIIC)
- Others (types V, VIII, X, XI)

### ***Differential Diagnosis***

- Cartilage–hair syndrome
- Cutis laxa
- Marfan syndrome
- Menkes syndrome
- Pseudoxanthoma elasticum
- Turner syndrome

### **Further reading:**

- Uitto J (2005) The Ehlers–Danlos syndrome: phenotypic spectrum and molecular genetics. *Eur J Dermatol* 15(5):311–312

## **Ehrlichiosis/Anaplasmosis**

Identical illnesses caused by related tick-borne bacteria that infect granulocytes (human granulocytic anaplasmosis by *Anaplasma phagocytophilum* or human granulocytic ehrlichiosis by *Ehrlichia equi*) or monocytes (human monocytic ehrlichiosis by *Ehrlichia chaffeensis*) and are characterized by fever, headache, and rarely, a morbilliform exanthem

### ***Differential Diagnosis***

- Exanthematous drug eruption
- Infectious mononucleosis
- Leptospirosis
- Meningococemia
- Q fever
- Rocky Mountain spotted fever
- Thrombotic thrombocytopenic purpura
- Tularemia
- Typhus
- Viral hepatitis



## ***Evaluation***

- Complete blood count with smear
- Serum immunofluorescent antibody (IgG)
- Liver function test

### **Further reading:**

- Wormser GP, Dattwyler RJ, Shapiro ED et al (2006) The clinical assessment, treatment, and prevention of Lyme disease, human granulocytic anaplasmosis, and babesiosis: clinical practice guidelines by the Infectious Diseases Society of America. *Clin Infect Dis* 43(9):1089–1134

## **Elastofibroma Dorsi**

Uncommon, reactive, elastic tissue pseudotumor possibly induced by repeated, strenuous, mechanical labor and characterized by a large sub-cutaneous, fibrous mass on the scapular area of the back

### ***Differential Diagnosis***

- Connective tissue nevus
- Desmoid tumor
- Dermatofibrosarcoma protuberans
- Hemangiomas
- Lipoma
- Liposarcoma
- Malignant fibrous histiocytoma
- Metastatic disease
- Morphea (especially deep type)
- Neurofibroma (especially plexiform)

### **Further reading:**

- Parodi PC, Nadalig B, Rampino Cordaro E et al (2007) Non-traumatic elastofibroma dorsi. *Eur J Dermatol* 17(2):169–170

## Elastosis Perforans Serpiginosa (Lutz–Miescher Syndrome)

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Rare, perforating dermatosis of elastic tissue with onset in the first or second decade of life that is characterized by keratotic papules arrayed in circinate or serpiginous patterns, most commonly on the face or neck (Fig. 6.29)

### *Differential Diagnosis*

- Acne keloidalis nuchae
- Actinic granuloma
- Cutaneous larva migrans
- Folliculitis



**Fig. 6.29** Elastosis perforans serpiginosa

- Kyrle's disease
- Lupus erythematosus
- Perforating folliculitis
- Perforating granuloma annulare
- Perforating pseudoxanthoma elasticum
- Porokeratosis of Mibelli
- Prurigo nodularis
- Reactive perforating collagenosis
- Sarcoidosis
- Tinea corporis

### ***Associations***

- Acrogeria
- Down syndrome
- Ehlers–Danlos syndrome
- Marfan syndrome
- Osteogenesis imperfecta
- Penicillamine therapy
- Pseudoxanthoma elasticum
- Rothmund–Thomson syndrome
- Scleroderma
- XYY syndrome

### ***Treatment Options***

- Tazarotene cream
- Cryosurgery
- Isotretinoin

### **Further reading:**

- Vearrier D, Buka RL, Roberts B et al (2006) What is standard of care in the evaluation of elastosis perforans serpiginosa? A survey of pediatric dermatologists. *Pediatr Dermatol* 23(3):219–224

## **Elastotic Nodule of the Ear**

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Nodule comprised of degenerated elastic tissue that arises on the ear of patients with a history of chronic sun exposure and is characterized by a flesh-colored nodule most commonly located on the antihelix

### ***Differential Diagnosis***

- Actinic keratosis
- Basal cell carcinoma
- Calcinosis cutis
- Chondrodermatitis nodularis helices
- Colloid milium
- Gout
- Granuloma annulare
- Milia
- Nodular amyloidosis
- Rheumatoid nodule
- Sarcoidosis
- Squamous cell carcinoma
- Weathering nodule
- Xanthoma

### **Further reading:**

- Seite S, Zucchi H, Septier D et al (2006) Elastin changes during chronological and photo-ageing: the important role of lysozyme. *J Eur Acad Dermatol Venereol* 20(8):980–987

## **Elephantiasis Nostras Verrucosa**

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Term for secondary changes occurring in the skin as a result of chronic lymphedema that are characterized by hyperkeratosis, verrucous or cobblestone appearance, massive thickening, and fibrosis of the affected area, most commonly the lower extremity

### ***Differential Diagnosis***

- Chromoblastomycosis
- Lobomycosis
- Podoconiosis
- Pretibial myxedema, elephantiasic type
- Tuberculosis verrucosa cutis

### ***Associations***

- Congenital lymphedema
- Klippel–Trenaunay syndrome
- Lymphatic filariasis
- Morbid obesity
- Venous insufficiency
- Recurrent cellulitis

### ***Treatment Options***

- Systemic antibiotics
- Bleach baths
- Acitretin
- Compression
- Weight loss/weight loss surgery

### **Further reading:**

- Vaccaro M, Borgia F, Guarneri F, Cannavo SP (2000) Elephantiasis nostras verrucosa. *Int J Dermatol* 39(10):764–766

## **Encephalocele**

Developmental anomaly caused by a neural tube defect that contains heterotopic CNS tissue and a persistent connection to the subarachnoid space and is characterized by a soft, compressible, transilluminating mass on the midline, which increases in size with crying

### ***Differential Diagnosis***

- Aplasia cutis congenita
- Arteriovenous malformation
- Dermoid cyst
- Infantile hemangioma
- Lipoma
- Meningioma
- Nasal glioma
- Sinus pericranii
- Venous malformation

### ***Evaluation***

- CT/MRI scan of the skull or spine

### **Further reading:**

- Patrick MG, Kwong PC (2004) Anterior encephalocele with subcutaneous right facial nodule. *J Am Acad Dermatol* 51(2 Suppl):S77–S79

## **Endometriosis, Cutaneous (Villar Tumor)**

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Ectopic endometrial tissue in the skin that is characterized by tender, brown, occasionally hemorrhagic nodules on the abdominal wall, especially around the umbilicus (Fig. 6.30), and typically after pelvic surgical procedures

### ***Differential Diagnosis***

- Cutaneous ciliated cyst
- Eccrine spiradenoma
- Epidermal cyst
- Glomangioma



**Fig. 6.30** Cutaneous endometriosis (Courtesy of E. Bardin)

- Hidradenoma papilliferum
- Lipoma
- Metastatic lesion
- Pyogenic granuloma
- Sister Mary Joseph nodule
- Suture granuloma

**Further reading:**

- Friedman PM, Rico MJ (2000) Cutaneous endometriosis. *Dermatol Online J* 6(1):8

### **Eosinophilic Cellulitis (Wells Syndrome)**

Acquired, recurrent inflammatory skin condition of uncertain etiology but with a variety of associated triggers that is characterized by a pruritic, erythematous, indurated plaque most commonly on the trunk or extremities (Fig. 6.31)

#### ***Subtypes***

- Annular granuloma-like
- Bullous
- Fixed drug eruption-like



**Fig. 6.31** Wells syndrome (Courtesy of K. Guidry)

- Papulovesicular
- Plaque type
- Urticaria-like

### *Differential Diagnosis*

- Allergic contact dermatitis
- Bacterial cellulitis
- Bullous pemphigoid
- Churg–Strauss syndrome
- Erysipelas
- Erythema migrans
- Erythema multiforme
- Fixed drug eruption
- Granuloma annulare
- Hypereosinophilic syndrome
- Inflammatory metastases
- Insect-bite reaction
- Morphea
- Panniculitis



- *Toxocara canis* infection
- Urticaria
- Urticarial dermatitis

### **Associations**

- Arthropod bites
- Atopic dermatitis
- Churg–Strauss syndrome
- Dermatophytosis
- HIV infection
- Hypereosinophilic syndrome
- Immunization
- Intestinal parasites
- Internal malignancy
- Mumps
- Myeloproliferative disease
- Onchocerciasis
- Tetanus vaccine
- Varicella

### **Evaluation**

- Complete blood count
- Direct immunofluorescence (if bullous)

### **Treatment Options**

- Systemic corticosteroids
- Topical corticosteroids
- Dapsone

**Further reading:**

- Caputo R, Marzano AV, Vezzoli P, Lunardon L (2006) Wells syndrome in adults and children: a report of 19 cases. *Arch Dermatol* 142(9):1157–1161
- Chung CL, Cusack CA (2000) Wells syndrome: an enigmatic and therapeutically challenging disease. *J Drugs Dermatol* 5(9):908–911

**Eosinophilia–Myalgia Syndrome**

Acquired scleroderma-like syndrome associated with the consumption of L-tryptophan that is characterized by sclerodermoid skin lesions sparing the digits, absence of Raynaud's phenomenon, peripheral eosinophilia, severe proximal muscle weakness and myalgias, and arthralgias, among other systemic features

***Differential Diagnosis***

- CREST syndrome
- Dermatomyositis
- Eosinophilic fasciitis
- Hypereosinophilic syndrome
- Mixed connective tissue disease
- Systemic sclerosis
- Toxic oil syndrome
- Trichinosis

***Diagnostic Criteria***

- Blood eosinophil count greater than 1,000 cells/ml
- Incapacitating myalgias
- No evidence of infectious (e.g., trichinosis), allergic, or neoplastic conditions that would account for these findings

### **Evaluation**

- Antinuclear antibodies
- Chest radiograph
- Complete blood count
- Creatine kinase and aldolase
- CT scan of chest, abdomen, and pelvis
- Electromyography
- Liver function test
- MRI scan of affected area
- MRI scan of the brain
- Pulmonary function test
- Serum protein electrophoresis

### **Treatment Options**

- Avoidance of L-tryptophan
- Systemic corticosteroids

### **Further reading:**

- Hertzman PA, Clauw DJ, Duffy J et al (2001) Rigorous new approach to constructing a gold standard for validating new diagnostic criteria, as exemplified by the eosinophilia–myalgia syndrome. *Arch Intern Med* 161(19):2301–2306

## **Eosinophilic Fasciitis (Shulman's Syndrome)**

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Acquired scleroderma-like syndrome of unknown cause and associated with strenuous physical exertion that is characterized by rapid-onset skin tightening and induration (most commonly involving the forearms) and possible evolution to flexion contractures

### **Differential Diagnosis**

- *Borrelia burgdorferi* infection
- Eosinophilia–myalgia syndrome

- Morphea
- Nephrogenic fibrosing dermopathy
- Scleroderma
- Scleromyxedema
- Toxic oil syndrome

### ***Associations***

- Aplastic anemia
- Carpal tunnel syndrome
- Hemolytic anemia
- Leukemia/lymphoma
- Monoclonal gammopathy
- Multiple myeloma
- Myelodysplasia
- Statin therapy
- Systemic lupus erythematosus
- Thrombocytopenia
- Thyroiditis

### ***Evaluation***

- Antinuclear antibodies
- Chest radiograph
- Complete blood count
- Creatine kinase and aldolase
- Electromyography
- Gamma globulin level
- Liver function test
- MRI scan of affected area
- Pulmonary function tests
- Serum protein electrophoresis

### ***Treatment Options***

- Systemic corticosteroids
- Hydroxychloroquine
- Cyclosporine
- Methotrexate
- Cimetidine
- Azathioprine
- Sulfasalazine

### **Further reading:**

- Antic M, Lautenschlager S, Itin PH (2006) Eosinophilic fasciitis 30 years after: what do we really know? Report of 11 patients and review of the literature. *Dermatology* 213(2):93–101

## **Eosinophilic Pustular Folliculitis, Adult**

Idiopathic type of folliculitis that is characterized by pruritic papules and pustules sometimes in an annular configuration on the head, neck, and upper chest and occasionally the palms and soles

### ***Subtypes/Variants***

- Classic eosinophilic folliculitis of Ofuji
- HIV-associated eosinophilic folliculitis

### ***Differential Diagnosis***

- Acne vulgaris
- Demodex folliculitis
- Dermatitis herpetiformis
- Dermatophyte folliculitis
- Drug-induced folliculitis
- Erosive pustular dermatosis

- Follicular mucinosis
- Folliculitis decalvans
- Herpes simplex virus infection
- Infectious folliculitis
- Langerhans cell histiocytosis
- Papular urticaria
- Pemphigus foliaceus
- Pemphigus erythematosus
- Pemphigus herpetiformis
- Pityrosporum folliculitis
- Pseudofolliculitis barbae
- Pustular psoriasis
- Rosacea
- Scabies
- Seborrheic dermatitis
- Staphylococcal folliculitis
- Subcorneal pustular dermatosis

### ***Associations***

- HIV infection
- Kimura disease

### ***Evaluation***

- HIV test
- CD4 count
- Complete blood count
- Direct immunofluorescence

### ***Treatment Options***

- Indomethacin
- Topical corticosteroids

- Systemic corticosteroids
- Dapsone
- Permethrin cream
- Tetracycline antibiotics
- Ivermectin
- Cetirizine
- Antiretroviral therapy
- Metronidazole
- Ultraviolet B phototherapy

**Further reading:**

- Nervi SJ, Schwartz RA, Dmochowski M (2006) Eosinophilic pustular folliculitis: a 40-year retrospect. *J Am Acad Dermatol* 55(2):285–289

## **Eosinophilic Pustular Folliculitis, Infantile**

---

Uncommon dermatosis affecting infants and characterized by repeated crops of pruritic tiny pustules most often located on the scalp and distal extremities

### ***Differential Diagnosis***

- Acropustulosis of infancy
- Bacterial folliculitis
- Benign cephalic histiocytosis
- Candidiasis
- Erythema toxicum neonatorum
- Impetigo
- Infantile acne
- Langerhans cell histiocytosis
- Miliaria pustulosa
- Scabies
- Seborrheic dermatitis
- Transient neonatal pustular melanosis

### **Evaluation**

- Wright stain of pustule
- Culture for bacteria and fungus

### **Treatment Options**

- Topical corticosteroids
- Ketoconazole cream
- Selenium sulfide
- Tacrolimus ointment
- Cetirizine
- Permethrin

### **Further reading:**

- Buckley DA, Munn SE, Higgins EM (2001) Neonatal eosinophilic pustular folliculitis. Clin Exp Dermatol 26(3):251–255

## **Eosinophilic Ulcer of the Tongue**

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Trauma-induced oral ulcer with an eosinophilic infiltrate that is characterized by a solitary, asymptomatic or painful ulcer with an indurated border which lasts weeks to months and is most commonly located on the dorsal tongue

### **Differential Diagnosis**

- Allergic stomatitis
- Aphthous ulcer
- Fixed drug eruption
- Lymphoma (especially CD30+ types)
- Pyogenic granuloma
- Pyostomatitis vegetans
- Riga–Fede disease



- Squamous cell carcinoma
- Syphilis
- Traumatic ulcer
- Tuberculosis

### ***Treatment Options***

- Magic mouthwash
- Topical corticosteroids
- Topical anesthetics
- Intralesional corticosteroids
- NSAIDs
- Systemic corticosteroids

### **Further reading:**

- Segura S, Romero D, Mascaro JM Jr et al (2006) Eosinophilic ulcer of the oral mucosa: another histological simulator of CD30+ lymphoproliferative disorders. *Br J Dermatol* 155(2):460–463

## **Ephelides (Freckles)**

Hyperpigmented macules affecting patients with fair skin that are composed of melanocytes that have undergone increased melanin production as a response to sun exposure and that are accentuated and more numerous in the summer months

### ***Differential Diagnosis***

- Café-au-lait macules
- Junctional nevi
- Seborrheic keratosis
- Multiple lentigines
- Solar lentigines
- Tinea versicolor

### **Associations**

- Neurofibromatosis (Crowe's sign)
- Xeroderma pigmentosum

### **Epidermal Growth Factor Receptor Inhibitor Acneiform Eruption**

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Acneiform rash triggered by cetuximab, erlotinib, and gefitinib that is characterized by erythematous papules and pustules without comedones on the face, chest, shoulders, and back and associated with an increased response of the cancer to the medication

### **Differential Diagnosis**

- Acne vulgaris
- Demodicosis
- Exfoliative erythroderma
- Folliculitis
- Halogenoderma
- Neutrophilic eccrine hidradenitis
- Toxic epidermal necrolysis

### **Grading**

- I – asymptomatic macular or papular eruption
- II – symptomatic macular or papular eruption or desquamation affecting <50% BSA
- III – symptomatic macular, papular, or vesicular eruption affecting =50% BSA
- IV – generalized exfoliative, ulcerative, or bullous dermatitis

### **Treatment Options**

- Benzoyl peroxide
- Topical clindamycin

- Topical erythromycin
- Tetracycline antibiotics
- Isotretinoin

**Further reading:**

- Hu JC, Sadeghi P, Pinter-Brown LC et al (2007) Cutaneous side effects of epidermal growth factor receptor inhibitors: clinical presentation, pathogenesis, and management. *J Am Acad Dermatol* 56(2):317–326

## **Epidermal Nevus**

Congenital hamartoma of ectodermal tissue that is often linear in shape, follows Blaschko's lines, and is comprised of either epidermal, sebaceous, follicular, apocrine, or eccrine structures or any of these in combination

### ***Subtypes/Variants***

- Acantholytic dyskeratotic epidermal nevus
- Apocrine nevus
- Becker's nevus
- Cowden nevus
- Eccrine nevus
- Ichthyosis hystrix
- Inflammatory linear verrucous epidermal nevus
- Nevus comedonicus
- Nevus sebaceus
- Nevus unius lateris
- Porokeratotic eccrine ostial and dermal duct nevus
- Systematized epidermal nevus
- Verrucous epidermal nevus
- White sponge nevus

## ***Differential Diagnosis***

### Linear Verrucous Type

- Acanthosis nigricans
- Darier's disease
- Incontinentia pigmenti, verrucous stage
- Juvenile xanthogranuloma
- Lichen striatus
- Linear porokeratosis
- Linear psoriasis
- Nevus sebaceus
- Seborrheic keratoses
- Wart
- Xanthoma

### Ichthyosis Hystrix

- Bullous congenital ichthyosiform erythroderma
- Hystrix-like ichthyosis with deafness (HID) syndrome
- Ichthyosis hystrix Curth–Macklin
- Keratitis–ichthyosis–deafness (KID) syndrome
- Widespread prokeratotic eccrine ostial and dermal duct nevus

## ***Associations***

- Epidermal nevus syndrome
- Gardner's syndrome
- KID syndrome
- Phakomatosis pigmentovascularis
- Proteus syndrome
- Rubinstein–Taybi syndrome
- Vitamin-D-resistant rickets
- Various anomalies

### ***Treatment Options***

- Shave excision
- Cryotherapy
- Surgical excision
- Dermabrasion
- Ablative laser
- Systemic retinoids

### **Further reading:**

- Kriner J, Montes LF (1997) Gigantic ichthyosis hystrix. *J Am Acad Dermatol* 36(4):646–647
- Sarifakioglu E, Yenidunya S (2007) Linear epidermolytic verrucous epidermal nevus of the male genitalia. *Pediatr Dermatol* 24(4):447–448

## **Epidermal Nevus Syndrome**

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Autosomal-dominant group of disorders caused by a lethal mutation that is rescued by mosaicism and characterized by an epidermal nevus in association with several systemic defects, including skeletal abnormalities, CNS disturbance (seizures), and ocular disease (cataracts), among many other reported defects

### ***Subtypes/Variants***

- CHILD syndrome
- Nevus comedonicus syndrome
- Phakomatosis pigmentokeratocica
- Becker nevus syndrome
- Proteus syndrome
- Schimmelpenning syndrome

### ***Differential Diagnosis***

- Bullous congenital ichthyosiform erythroderma
- Cowden's disease

- Encephalocraniocutaneous lipomatosis
- Darier's disease
- Neurofibromatosis
- Oculocerebrocutaneous syndrome
- Phakomatosis pigmentovascularis
- Tuberous sclerosis

### ***Evaluation***

- CT/MRI scan of the brain
- Ophthalmologic exam
- Electroencephalogram
- Skeletal radiographs

### **Further reading:**

- Chatproedprai S, Wananukul S, Prasarnnaem T, Noppakun N (2007) Epidermal nevus syndrome. *Int J Dermatol* 46(8):858–860

## **Epidermodysplasia Verruciformis**

Inherited disorder caused by depressed cell-mediated immunity against several different types of human papillomavirus that is characterized by numerous flat warts on the face, upper trunk, and arms that have a potential to become squamous cell carcinoma, especially in those with a history of chronic, cumulative sun exposure

### ***Differential Diagnosis***

- Acrokeratosis verruciformis of Hopf
- Actinic keratosis
- Basal cell carcinoma
- Darier's disease
- Papular mucinosis
- Seborrheic keratoses
- Squamous cell carcinoma

- Solar elastosis
- Tinea versicolor
- Trichoepithelioma
- Verruca plana

### ***Treatment Options***

- Sunscreen
- Cryotherapy
- 5-FU cream
- Topical retinoids
- Systemic retinoids
- Interferon
- Imiquimod cream
- Photodynamic therapy

### **Further reading:**

- Yanagi T, Shibaki A, Tsuji-Abe Y et al (2006) Epidermodysplasia verruciformis and generalized verrucosis: The same disease? Clin Exp Dermatol 31(3):390–393

## **Epidermoid Cyst (Epidermal Inclusion Cyst)**

Very common keratinous cyst caused by proliferation of the infundibular portion of the hair follicle within the dermis that is characterized by a circumscribed dermal nodule with a central punctum and a malodorous, cheese-like keratinous substance

### ***Differential Diagnosis***

- Branchial cleft cyst
- Calcinosis cutis
- Dermoid cyst

- Dilated pore of Winer
- Foreign body granuloma
- Granuloma annulare
- Hybrid cyst
- Insect-bite reactions
- Keloid
- Lipoma
- Lymphocytic infiltrate
- Metastasis
- Nodular fasciitis
- Phaeohyphomycotic cyst
- Proliferating epidermoid cyst
- Rheumatoid nodule
- Sarcoidosis
- Steatocystoma multiplex
- Subcutaneous dirofilariasis
- Traumatic arteriovenous fistula
- Trichilemmal cyst
- Verrucous cyst

### ***Associations***

- Acne vulgaris
- Gardner syndrome
- Leukonychia and renal calculi
- Imiquimod use
- Nevoid basal cell syndrome
- Pachyonychia congenita
- Squamous cell carcinoma

### **Further reading:**

- Garcia-Zuazaga J, Ke MS, Willen M (2009) Epidermoid cyst mimicry: report of seven cases and review of the literature. *J Clin Aesthet Dermatol* 2(10):28–33



## **Epidermolysis Bullosa Acquisita**

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Subepidermal autoimmune blistering disease that is caused by deposition of antibodies against type VII collagen and is characterized by either noninflammatory mechanobullous features (skin fragility, blisters in trauma-prone areas, etc.) or a less common generalized inflammatory bullous eruption

### ***Differential Diagnosis***

- Bullosis diabeticorum
- Bullous drug eruption
- Bullous lupus erythematosus
- Bullous pemphigoid
- Cicatricial pemphigoid
- Dermatitis herpetiformis
- Dystrophic epidermolysis bullosa
- Erythema multiforme
- Porphyria cutanea tarda
- Pseudoporphyria
- Pyridoxine excess

### ***Diagnostic Criteria***

- Adult onset
- Blister formation beneath basal lamina
- Clinical lesions of dystrophic EB with increased skin fragility, trauma-induced blistering, milia over extensor surfaces, and nail dystrophy
- Deposition of IgG below basal lamina
- Direct immunofluorescence positive for IgG at the dermoepidermal junction
- Exclusion of bullous pemphigoid, bullous drug eruption, porphyria cutanea tarda, and dermatitis herpetiformis
- Lack of a family history of epidermolysis bullosa

### **Associations**

- Amyloidosis
- Chronic lymphocytic leukemia
- Dermatitis herpetiformis
- Diabetes
- Inflammatory bowel disease
- Lung cancer
- Lymphoma
- Monoclonal cryoglobulinemia
- Myeloma
- Psoriasis
- Rheumatoid arthritis
- Thyroiditis

### **Evaluation**

- 24-h urine porphyrins
- Antinuclear antibodies
- Appropriate cancer screening
- Colonoscopy
- Direct immunofluorescence
- Fasting blood glucose
- Indirect immunofluorescence (with salt-split skin)
- Rheumatoid factor
- Serum/urinary protein electrophoresis

### **Treatment Options**

- Systemic corticosteroids
- Dapsone
- Azathioprine
- Colchicine
- Intravenous immunoglobulin

- Mycophenolate mofetil
- Cyclophosphamide
- Cyclosporine
- Rituximab
- Plasmapheresis

**Further reading:**

- Hallel–Halevy D, Nadelman C, Chen M, Woodley DT (2001) Epidermolysis bullosa acquisita: update and review. *Clin Dermatol* 19(6):712–718

## **Epidermolysis Bullosa, Junctional and Dystrophic**

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Inherited group of mechanobullous disorders (AD, AR) that are caused by several different defects in structural proteins or basement membrane zone and are characterized by skin fragility, blisters in trauma-prone areas, variable mucosal involvement, and scarring and potential for severe deformity

### ***Subtypes***

#### **Recessive Dystrophic**

- Generalized
- Severe (Hallopeau–Siemens)
- Mitis
- Inversa
- Centripetalis

#### **Dominant Dystrophic**

- Cockayne–Touraine type
- Pasini type
- Transient bullous dermolysis of the newborn

#### **Junctional**

- Generalisata mitis
- Generalized atrophic benign epidermolysis bullosa

- Herlitz type
- Inversa
- Localisata
- Progressiva
- With pyloric atresia (Carmi syndrome)

### ***Differential Diagnosis***

- Bullous impetigo
- Bullous pemphigoid
- Burns
- Bullous congenital ichthyosiform erythroderma
- Congenital erosive and vesicular dermatosis
- Ectodermal dysplasia with skin fragility
- Epidermolysis bullosa acquisita
- Friction blisters
- Herpes simplex virus infection
- Linear IgA bullous dermatosis
- Peeling skin syndrome
- Pemphigus vulgaris
- Porphyria cutanea tarda
- Shabbir syndrome
- Weary–Kindler disease

### ***Treatment Options***

- Specialized wound care
- Infection control
- Skin cancer monitoring
- Pain control
- Oral hygiene
- Ophthalmologic care
- Tetracycline
- Phenytoin
- Thalidomide

**Further reading:**

- Pasmooij AM, Pas HH, Jansen GH et al (2007) Localized and generalized forms of blistering in junctional epidermolysis bullosa due to COL17A1 mutations in the Netherlands. *Br J Dermatol* 156(5):861–870

**Epidermolysis Bullosa Simplex**

Inherited group of intraepidermal mechanobullous diseases (AD, AR) most commonly caused by defects in keratins 5 and 14 that are characterized by either localized vesicles, bullae, and milia on the hands, elbows, knees, and/or feet or a more generalized presentation

**Subtypes**

- Dowling–Meara type
- Koebner type
- Oagna type
- Superficialis type
- Weber–Cockayne type
- With mottled pigmentation
- With muscular dystrophy

**Differential Diagnosis**

- Acrodermatitis enteropathica
- Autoimmune blistering diseases
- Bart syndrome
- Bullous congenital ichthyosiform erythroderma
- Bullous impetigo
- Bullous mastocytosis
- Congenital erosive and vesicular dermatosis
- Ectodermal dysplasia with skin fragility
- Erythrokeratoderma variabilis

- Friction blisters
- Gunther disease
- Herpes simplex virus infection
- Ichthyosis bullosa of Siemens
- Kindler syndrome
- Peeling skin syndrome (especially superficialis)
- Staphylococcal scalded-skin syndrome
- Sucking blisters

### ***Treatment Options***

- Wound care

### **Further reading:**

- Okulicz JF, Kihiczak NI, Janniger CK (2002) Epidermolysis bullosa simplex. *Cutis* 70(1):19–21

## **Episodic Angioedema with Eosinophilia (Gleich's Syndrome)**

Cytokine-mediated syndrome with a benign course that is characterized by recurrent episodes of angioedema of the face and extremities, urticaria, fever, elevated IgM, and marked eosinophilia

### ***Differential Diagnosis***

- Drug-induced angioedema
- Hereditary angioedema
- Hypereosinophilic syndrome
- Muckle–Wells syndrome
- Nonepisodic angioedema with eosinophilia
- Schnitzler's syndrome
- Secretan's syndrome

### **Evaluation**

- Complete blood count
- Immunoglobulin levels
- Complement levels

### **Treatment Options**

- Antihistamines
- Systemic corticosteroids
- Cyclosporine

### **Further reading:**

- Banerji A, Weller PF, Sheikh J (2006) Cytokine-associated angioedema syndromes including episodic angioedema with eosinophilia (Gleich's syndrome). *Immunol Allergy Clin North Am* 26(4):769–781

## **Epithelioid Sarcoma**

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Malignant fibrous neoplasm with a poor prognosis that arises predominantly in young adult men and is characterized by a subcutaneous nodule on the hand or wrist or, less commonly, the genitals, with eventual ulceration (Fig. 6.32)

### **Differential Diagnosis**

- Angiosarcoma
- Calcifying aponeurotic fibroma
- Dupuytren's contracture
- Epithelioid angiosarcoma
- Epithelioid hemangioendothelioma
- Fibroma of tendon sheath
- Ganglion cyst
- Giant cell tumor of the tendon sheath



**Fig. 6.32** Epithelioid sarcoma

- Granuloma annulare (especially subcutaneous type)
- Metastatic carcinoma
- Myxoid cyst
- Nodular fasciitis
- Rheumatoid nodule

**Further reading:**

- Pai KK, Pai SB, Sripathi H, Pranab, Rao P (2006) Epithelioid sarcoma: a diagnostic challenge. *Indian J Dermatol Venereol Leprol* 72(6):446–448



## **Erosive Adenomatosis of the Nipple** **(Papillary Adenoma of the Nipple)**

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Benign neoplasm of the lactiferous duct that is characterized by a unilateral, erythematous, eroded, crusted nodule on the nipple

### ***Differential Diagnosis***

- Apocrine gland tumors
- Basal cell carcinoma
- Breast cancer
- Contact dermatitis
- Eczema
- Hidradenoma papilliferum
- Nevoid hyperkeratosis of the nipple
- Paget's disease of breast
- Syringocystadenoma papilliferum

### **Further reading:**

- Lee HJ, Chung KY (2002) Erosive adenomatosis of the nipple: conservation of nipple by Mohs micrographic surgery. *J Am Acad Dermatol* 47(4):578–580

## **Erosive Pustular Dermatitis**

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Erosive disorder affecting the scalp that predominantly affects the elderly; that is associated with trauma, actinic damage, and atrophy; and that is characterized by superficial crusted plaques that are unroofed to reveal moist, erythematous, nonhealing erosions with pustules, surrounding atrophy, and cicatricial alopecia

### ***Differential Diagnosis***

- Amicrobial pustulosis with autoimmunity
- Bacterial folliculitis

- Blastomycosis-like pyoderma
- Brunsting–Perry cicatricial pemphigoid
- Erosive candidiasis
- Folliculitis decalvans
- Hypertrophic actinic keratoses
- Kerion
- Pemphigus
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Temporal arteritis

### **Evaluation**

- Bacterial and fungal cultures
- Direct immunofluorescence

### **Treatment Options**

- Topical corticosteroids
- Tacrolimus ointment
- Tetracycline antibiotics
- Topical vitamin D analogues
- Acitretin

### **Further reading:**

- Patton D, Lynch PJ, Fung MA, Fazel N (2007) Chronic atrophic erosive dermatosis of the scalp and extremities: a recharacterization of erosive pustular dermatosis. *J Am Acad Dermatol* 57(3):421–427

### **Eruptive Lingual Papillitis**

Type of acute stomatitis of possible viral etiology that affects infants and is characterized by hypertrophy of the fungiform papillae, burning sensation, hypersalivation, and difficulty feeding

### ***Differential Diagnosis***

- Candidiasis
- Food allergy
- Geographic tongue
- Herpes stomatitis
- Hand–foot–mouth disease
- Nutritional deficiency
- Teething

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Roux O, Lacour JP (2004) Paediatricians of the region var-Cote d'azur. Eruptive lingual papillitis with household transmission: a prospective clinical study. *Br J Dermatol* 150(2):299–303

### **Eruptive Pseudoangiomatosis**

Uncommon, benign, asymptomatic eruption with probable viral etiology that arises in childhood and is characterized by an acute eruption of erythematous, angioma-like papules on the face and trunk, with resolution typically in a few days

### ***Differential Diagnosis***

- Bacillary angiomatosis
- Carcinoma telangiectaticum
- Cholinergic urticaria
- Chronic meningococemia
- Cherry angiomas

- Gianotti–Crosti syndrome
- Insect bites
- Papular pityriasis rosea
- Papular urticaria
- Secondary syphilis
- Spider telangiectasias
- Verruga peruana

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Pitarch G, Torrijos A, Garciaescriva D, Martinezmenchon T (2007) Eruptive pseudoangiomatosis associated to cytomegalovirus infection. *Eur J Dermatol* 17(5):455–456

### **Eruptive Vellus Hair Cysts**

Tiny vellus hair-containing cysts arising as a result of abnormal development of vellus hair follicles that are characterized by small, acneiform papules on the chest and extremities

### ***Differential Diagnosis***

- Acne vulgaris
- Eruptive syringoma
- Folliculitis
- Keratosis pilaris
- Milia
- Nevus of Ota
- Steatocystoma multiplex
- Trichostasis spinulosa

## Associations

- Ectodermal dysplasias
- Pachyonychia congenita
- Steatocystoma multiplex

### Further reading:

- Chan KH, Tang WY, Lam WY, Lo KK (2007) Eruptive vellus hair cysts presenting as bluish-grey facial discoloration masquerading as naevus of Ota. Br J Dermatol 157(1):188–189

## Erysipeloid of Rosenbach

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Trauma-related bacterial infection caused by *Erysipelothrix rhusiopathiae* that is characterized by a well-demarcated, tender, erythematous to violaceous, erysipelas-like eruption most commonly affecting the dorsal hand, digits, and web spaces

### Differential Diagnosis

- Cellulitis
- Cutaneous larva migrans
- Erysipelas
- Fixed drug eruption
- Herpetic whitlow
- Leishmaniasis
- Milker's nodule
- *Mycobacterium marinum* infection
- Orf
- Seal finger
- Spider bites
- Sporotrichosis
- Streptococcus iniae infection

- Sweet's syndrome
- *Vibrio vulnificus* infection

### **Evaluation**

- Complete blood count
- Gram stain and bacterial culture (special media) of tissue and blood
- Echocardiography

### **Further reading:**

- Varella TC, Nico MM (2005) Erysipeloid. *Int J Dermatol* 44(6):497–498

## **Erythema Ab Igne**

Refers to changes that occur in the skin after localized, chronic exposure to a heat source, such as a heating pad, that are characterized by reticulate hyperpigmentation, telangiectasias, poikiloderma, and the potential to develop squamous cell carcinoma (Fig. 6.33)

### **Differential Diagnosis**

- Carcinoma telangiectaticum
- Cutaneous T cell lymphoma
- Cutis marmorata
- Dermatomyositis
- Dyschromia
- Livedo reticularis/racemosa
- Livedoid vasculopathy
- Morphea
- Poikiloderma atrophicans vasculare
- Radiation dermatitis
- Unilateral nevoid telangiectasia



**Fig. 6.33** Erythema ab igne

### *Associations*

- Low back pain
- Pain from underlying malignancy

### *Treatment Options*

- Observation and reassurance
- Topical retinoids
- 5-FU cream

### **Further reading:**

- Mohr MR, Scott KA, Pariser RM, Hood AF (2007) Laptop computer-induced erythema ab igne: a case report. *Cutis* 79(1):59–60



**Fig. 6.34** Erythema annulare centrifugum (Courtesy of K. Guidry)

## Erythema Annulare Centrifugum

Type of gyrate erythema that is probably caused by hypersensitivity to various pathogens, drugs, or foods and is characterized by slowly enlarging, annular or figurate erythematous plaques with a trailing scale which are most commonly located on the thigh (Fig. 6.34)

### *Differential Diagnosis*

- Annular psoriasis
- Annular syphilis
- Autoimmune progesterone dermatitis
- Benign lymphocytic infiltrate
- Erythema gyratum repens
- Erythema marginatum
- Erythema migrans
- Granuloma annulare



- Jessner's lymphocytic infiltrate
- Leprosy
- Lupus erythematosus tumidus
- Lymphoma cutis
- Metastatic carcinoma
- Mycosis fungoides
- Sarcoidosis
- Seborrhic dermatitis
- Sjögren syndrome
- Subacute cutaneous lupus erythematosus
- Tinea corporis
- Urticaria
- Urticarial dermatitis

### ***Associations***

- Blue cheese consumption
- Candidiasis
- Dermatophytosis
- Graves disease
- Insect bites
- Internal malignancy
- Medications
- Parasitic infestation
- Sarcoidosis
- Tomato consumption
- Tuberculosis
- Urinary tract infection

### ***Associated Medications***

- Amitriptyline
- Antimalarials
- Cimetidine
- Diuretics

- Gold
- Piroxicam
- Salicylates

### ***Evaluation***

- Antinuclear antibodies
- Appropriate cancer screening
- Complete blood count
- Examination for dermatophytosis
- Liver function tests
- Potassium hydroxide evaluation of scale
- Stool examination for parasites
- Tuberculin skin test
- Urinalysis

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Systemic antibiotics
- Topical calcipotriene
- Systemic antifungals

### **Further reading:**

- Weyers W, Diaz-Cascajo C, Weyers I (2003) Erythema annulare centrifugum: results of a clinicopathologic study of 73 patients. *Am J Dermatopathol* 25(6):451–462

## **Erythema Dyschromicum Perstans (Ashy Dermatitis, Ramirez Syndrome)**

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Idiopathic disorder affecting predominantly Latin American patients that is possibly related to lichen planus and is characterized by gray macules and patches with an elusive, thin erythematous border which are typically located on the face, trunk, and upper extremities

### ***Differential Diagnosis***

- Contact dermatitis
- Erythema multiforme
- Hemochromatosis
- Idiopathic eruptive macular hyperpigmentation
- Leprosy
- Lichen planus
- Lichen planus pigmentosus
- Lichenoid drug eruption
- Maculae cerulea
- Macular amyloidosis
- Macular urticaria pigmentosum
- Multiple fixed drug eruption
- Parapsoriasis
- Pinta
- Pityriasis rosea
- Postinflammatory hyperpigmentation
- Tinea versicolor
- Urticaria pigmentosum

### ***Treatment Options***

- Observation and reassurance
- Clofazimine
- Dapsone
- Systemic corticosteroids

### **Further reading:**

- Muñoz C, Chang AL (2011) A case of Cinderella: erythema dyschromicum perstans (ashy dermatosis or dermatosis cinicienta). *Skinmed* 9(1):63–64

## **Erythema Elevatum Diutinum (Bury Disease)**

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Uncommon, chronic fibrosing type of cutaneous leukocytoclastic vasculitis with various associated diseases that is characterized by yellow-red firm nodules located over the joints, on the dorsal hands, and buttocks

### ***Differential Diagnosis***

- Dermatofibroma
- Dermatomyositis
- Erythema multiforme
- Gout
- Granuloma annulare
- Insect-bite reaction
- Keloid
- Multicentric reticulohistiocytosis
- Neutrophilic dermatosis of the dorsal hands
- Rheumatoid nodules
- Sarcoidosis
- Sweet's syndrome
- Xanthomas

### ***Associations***

- Celiac disease
- Dermatitis herpetiformis
- HIV infection
- Hyper-IgD syndrome
- Erythropoietin therapy
- IgA monoclonal gammopathy
- IgA antineutrophil cytoplasmic antibodies

- Inflammatory bowel disease
- Myelodysplastic syndrome
- Ocular abnormalities
- Pyoderma gangrenosum
- Relapsing polychondritis
- Rheumatoid arthritis
- Streptococcal infection
- Tuberculosis

### ***Evaluation***

- Antineutrophilic cytoplasmic antibodies (especially IgA type)
- Antinuclear antibodies
- Antistreptolysin O antibodies
- Complete blood count
- HIV test
- Immunoglobulin levels
- Rheumatoid factor
- Serum/urinary protein electrophoresis

### ***Treatment Options***

- Dapsone
- Systemic corticosteroids
- Colchicine
- Antimalarials
- Cyclophosphamide

### **Further reading:**

- Wahl CE, Bouldin MB, Gibson LE (2005) Erythema elevatum diutinum: clinical, histopathologic, and immunohistochemical characteristics of six patients. *Am J Dermatopathol* 27(5):397–400

## **Erythema Gyrate Repens (Gammel Syndrome)**

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Type of gyrate erythema associated with internal malignancy (most commonly lung cancer) that is characterized by extensive, bizarre configurations of pruritic, rapidly migrating, wood grain-like erythematous annular and figurate plaques on the trunk and extremities

### ***Differential Diagnosis***

- Bullous pemphigoid
- Erythema annulare centrifugum
- Erythema marginatum
- Erythrokeratoderma variabilis
- Figurate psoriasis
- Granuloma annulare
- Necrolytic migratory erythema
- Pityriasis rubra pilaris
- Sarcoidosis
- Sjögren's syndrome
- Subacute cutaneous lupus erythematosus
- Tinea corporis
- Tinea imbricata
- Urticaria

### ***Associations***

- Internal malignancy
- Tuberculosis

### ***Evaluation***

- Appropriate cancer screening (especially CT scan of chest)

### ***Treatment Options***

- Treat the underlying cause

#### **Further reading:**

- Stone SP, Buescher LS (2005) Life-threatening paraneoplastic cutaneous syndromes. *Clin Dermatol* 23(3):301–306

### **Erythema Induratum of Bazin**

Term for tuberculid form of nodular vasculitis affecting patients with pulmonary tuberculosis that is characterized by recurrent crops of erythematous, tender, subcutaneous nodules with or without ulceration that are most commonly located on the posterior calf

### ***Differential Diagnosis***

- Antitrypsin deficiency panniculitis
- Chilblains
- Cold panniculitis
- Cytophagic histiocytic panniculitis
- Erythema induratum of Whitfield (nodular vasculitis)
- Erythema nodosum
- Erythema nodosum leprosum
- Factitial panniculitis
- Infectious panniculitis
- Lupus panniculitis
- Lymphoma
- Pancreatic panniculitis
- Perniosis
- Polyarteritis nodosa
- Subcutaneous panniculitis-like lymphoma
- Thrombophlebitis
- Venous stasis

### ***Evaluation***

- Bacterial, mycobacterial, and fungal cultures of blood and lesional tissue
- Chest radiograph
- Complete blood count
- PCR of lesional skin
- Sedimentation rate
- Tuberculin skin test

### ***Treatment Options***

- Treat the underlying cause

### **Further reading:**

- Jacinto SS, Nograles KB (2003) Erythema induratum of Bazin: role of polymerase chain reaction in diagnosis. *Int J Dermatol* 42(5):380–381

## **Erythema Infectiosum (Fifth Disease)**

Self-limited childhood illness caused by parvovirus B19 that is characterized by a bright-red macular eruption of the cheeks, followed by a morbiliform exanthem on the trunk and extremities, and then a lacy, reticulated, heat-exacerbated, erythematous rash on the extremities

### ***Differential Diagnosis***

- Acute hemorrhagic edema of infancy
- Allergic hypersensitivity reaction
- Cutis marmorata
- Drug reaction
- Enteroviral infection
- Erythema marginatum
- Juvenile rheumatoid arthritis
- Livedo reticularis



- Lupus erythematosus
- Lyme disease
- Measles
- Roseola infantum
- Rubella
- Scarlet fever

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Vafaie J, Schwartz RA (2005) Erythema infectiosum. *J Cutan Med Surg* 9(4):159–161

## **Erythema Marginatum**

Cutaneous eruption associated with early rheumatic fever that is characterized by evanescent, polycyclic, erythematous patches on the trunk and proximal extremities

### ***Differential Diagnosis***

- Erythema annulare centrifugum
- Erythema infectiosum
- Erythema migrans
- Erythema multiforme
- Juvenile rheumatoid arthritis
- NOMID syndrome
- Urticaria
- Viral exanthem

### ***Evaluation***

- Antistreptolysin O antibody titers
- Cardiac enzymes

- Echocardiography
- Electrocardiogram
- Joint-fluid aspiration
- Neurologic examination
- Throat culture

### ***Treatment Options***

- Antistreptococcal antibiotics

### **Further reading:**

- Ravisha MS, Tullu MS, Kamat JR (2003) Rheumatic fever and rheumatic heart disease: clinical profile of 550 cases in India. Arch Med Res 34(5):382–387

## **Erythema Migrans**

The earliest cutaneous manifestation of Lyme disease that is characterized by a centrifugally expanding, erythematous annular patch around the site of the original tick bite with or without smaller satellite lesions

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Cellulitis
- Contact dermatitis
- Dermatophytosis
- Drug reactions
- Erysipelas
- Erythema annulare centrifugum
- Erythema marginatum
- Erythema multiforme
- Fixed drug reaction
- Granuloma annulare
- Jessner's lymphocytic infiltrate

- Lymphocytoma cutis
- Sarcoidosis
- Spider bite
- Tularemia
- Urticaria
- Wells syndrome

### **Evaluation**

- Lyme disease ELISA and Western blot

### **Further reading:**

- Tibbles CD, Edlow JA (2007) Does this patient have erythema migrans? J Am Med Assoc 297(23):2617–2627

## **Erythema Multiforme**

Acute, potentially recurrent skin eruption possibly resulting from a cellular immune reaction against pathogen-derived (most commonly HSV) or medication-derived antigens that is characterized by target lesions (containing central dusky necrosis, a middle ring of pink edema, and peripheral erythema) which are located most consistently on the dorsal hands, palms, extremities, and mucosal surfaces (Fig. 6.35)

### **Differential Diagnosis**

- Acute hemorrhagic edema of infancy
- Aphthous stomatitis
- Autosensitization dermatitis
- Behçet's disease
- Bullous arthropod-bite reaction
- Bullous pemphigoid
- Contact dermatitis, erythema multiforme-like
- Erythema annulare centrifugum



**Fig. 6.35** Erythema multiforme

- Erythema-multiforme-like pityriasis rosea
- Fixed drug eruptions
- Granuloma annulare
- Hand foot and mouth disease
- Henoch–Schonlein purpura
- Herpes gestationis
- Herpes gingivostomatitis
- Id reaction
- Kawasaki disease
- Linear IgA bullous dermatosis
- Lupus erythematosus
- Mycosis fungoides
- Paraneoplastic pemphigus
- Pernio
- Polymorphous light eruption
- Rowell syndrome
- Secondary syphilis
- Staphylococcal scalded-skin syndrome
- Stevens–Johnson syndrome
- Subacute cutaneous lupus erythematosus

- Sweet's syndrome
- Urticaria
- Urticarial vasculitis
- Vasculitis
- Viral exanthem

### **Associations**

- Erythema multiforme
- BCG immunization
- Deep fungal infections
- Herpes simplex virus infection
- Inflammatory bowel disease
- Medications (especially sulfonamides)
- Mononucleosis
- Mycoplasma infection
- Orf
- Phenytoin
- Pregnancy
- Radiation (especially cranial while on anticonvulsant therapy)
- Sarcoidosis
- Sulfonamides
- Systemic lupus erythematosus
- Tuberculosis
- Viral infection
- Yersinia infections

### **Contact Erythema Multiforme**

- Bermuda fire sponge
- Disperse blue dyes
- DNCB
- Nickel
- Nitrogen mustard
- Oxybenzone

- Paraphenylenediamine
- Primula
- Rhus dermatitis
- Rosewood
- Topical steroids

### ***Evaluation***

- Direct immunofluorescence
- Herpes simplex virus serologic tests
- Viral culture

### ***Treatment Options***

- Systemic antivirals
- Systemic corticosteroids
- Topical corticosteroids
- Dapsone
- Antimalarials
- Cyclosporine
- Azathioprine

### **Further reading:**

- Aurelian L, Ono F, Burnett J (2003) Herpes simplex virus (HSV)-associated erythema multiforme (HAEM): a viral disease with an autoimmune component. *Dermatol Online J* 9(1):1

## **Erythema Nodosum**

Immune-mediated panniculitis associated with numerous diseases that is characterized by acute, self-resolving (or less commonly, chronic) erythematous, tender nodules most commonly on the anterior lower extremities that heal to bruise-like lesions

### **Differential Diagnosis**

- Arthropod bites
- B cell lymphoma of the leg
- Behçet's disease erythema-nodosum-like nodules
- Bowel-associated dermatosis–arthritis syndrome
- Cellulitis
- Cytophagic histiocytic panniculitis
- Erysipelas
- Erythema induratum
- Familial Mediterranean fever
- Halogenoderma
- Infective panniculitis
- Intravascular lymphoma
- Lipodermatosclerosis (especially early)
- Lymphomatoid granulomatosis
- Polyarteritis nodosa
- Pancreatic panniculitis
- Rheumatoid nodules
- Subcutaneous sarcoidosis
- Subcutaneous T cell lymphoma
- Superficial thrombophlebitis
- Traumatic panniculitis

### **Associations**

- Amebiasis
- Behçet's disease
- Blastomycosis
- *Brucellosis*
- *Campylobacter*
- *Chlamydia*
- CMV infection
- Coccidioidomycosis
- Dermatophyte infection
- EBV infection

- Giardiasis
- Hepatitis B
- Histoplasmosis
- Inflammatory bowel disease
- Lymphomas
- Medications
- Pregnancy
- Reiter syndrome
- *Salmonella*
- Sarcoidosis
- Sjögren syndrome
- Streptococcal infection
- Systemic lupus erythematosus
- Toxoplasmosis
- Tuberculosis
- *Yersinia*

### ***Associated Medications***

- Bromides
- Echinacea
- Gold salts
- Hepatitis B vaccine
- Iodides
- Isotretinoin
- Minocycline
- Oral contraception
- Penicillins
- Sulfonamides
- Thalidomide

### ***Evaluation***

- ACE level
- Antistreptolysin O titer
- Appropriate cancer screening



- Chest radiograph
- Evaluation for inflammatory bowel disease
- Pregnancy test
- Throat culture
- Tuberculin skin test

### ***Treatment Options***

- Rest
- Indomethacin
- Systemic corticosteroids
- Potassium iodide
- Colchicine
- Hydroxychloroquine
- Dapsone
- Mycophenolate mofetil

### **Further reading:**

- Mana J, Marcoval J (2007) Erythema nodosum. Clin Dermatol 25(3):288–294

## **Erythema Nodosum Leprosum (Type II Lepra Reaction)**

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A serious complication of Hansen's disease that is mediated by immune complex deposition and characterized by widespread painful, erythematous dermal nodules and a variety of systemic symptoms, including peripheral neuropathy and ocular inflammation

### ***Differential Diagnosis***

- Behçet's disease
- Erythema elevatum diutinum
- Erythema nodosum
- Leprosy
- Polyarteritis nodosa

- Subcutaneous panniculitis-like lymphoma
- Vasculitis

### ***Treatment Options***

- Aspirin
- Pentoxifylline
- Systemic corticosteroids
- Thalidomide
- Clofazimine

### **Further reading:**

- Cuevas J, Rodriguez-Peralto JL, Carrillo R et al (2007) Erythema nodosum leprosum: reactional leprosy. *Semin Cutan Med Surg* 26(2):126–130

## **Erythema Toxicum Neonatorum**

Benign eruption affecting healthy newborns that starts around day 2 of life and resolves by day 10 and is characterized by erythematous macules, papules, and pustules predominantly affecting the face, trunk, and extremities, but not the palms and soles

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Bullous impetigo
- Congenital candidiasis
- Dermatophytosis
- Eosinophilic pustular folliculitis
- Folliculitis
- Herpes simplex virus infection
- Incontinentia pigmenti
- Infantile acropustulosis
- Insect-bite reactions

- Miliaria rubra
- Neonatal acne
- Scabies
- Transient neonatal pustular melanosis
- Urticaria

### **Evaluation**

- Wright stain of pustule
- Viral, bacterial, and fungal cultures

### **Treatment Options**

- Observation and reassurance

### **Further reading:**

- Akoglu G, Ersoy Evans S, Akca T, Sahin S (2006) A unusual presentation of erythema toxicum neonatorum: delayed onset in a preterm infant. *Pediatr Dermatol* 23(3):301–302

## **Erythrasma**

Superficial bacterial infection caused by the porphyrin-producing diphtheroid *Corynebacterium minutissimum* and characterized by a well-demarcated red-brown plaque in the axilla, groin, or toe-web spaces

### **Differential Diagnosis**

- Acanthosis nigricans
- Candidiasis
- Contact dermatitis
- Intertrigo
- Inverse psoriasis
- Lichen simplex chronicus

- Seborrheic dermatitis
- Tinea corporis
- Tinea cruris
- Tinea versicolor

### **Associations**

- Diabetes mellitus
- Obesity

### **Treatment Options**

- Topical clindamycin
- Topical erythromycin
- Benzoyl peroxide
- Oral macrolide antibiotics

### **Further reading:**

- Lee PL, Lemos B, O'Brien SH et al (2007) Cutaneous diphtheroid infection and review of other cutaneous Gram-positive *Bacillus* infections. *Cutis* 79(5):371–377

## **Erythrokeratoderma, Progressive Symmetric (Gottron Syndrome)**

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Rare autosomal-dominant type of erythrokeratoderma with onset in childhood that is characterized by fixed, symmetric, sharply marginated hyperkeratotic plaques with an erythematous base that are most commonly located on face, buttocks, and extremities, but not the trunk

### **Differential Diagnosis**

- Atopic dermatitis
- Erythrokeratoderma variabilis
- Erythrokeratoderma with ataxia
- Erythrokeratolysis hiemalis

- Ichthyosis linearis circumflexa
- Lamellar ichthyosis
- Mycosis fungoides
- Pityriasis rubra pilaris
- Psoriasis
- Vohwinkel syndrome

**Further reading:**

- Gray LC, Davis LS, Guill MA (1996) Progressive symmetric erythrokeratoderma. J Am Acad Dermatol 34(5 Pt 1):858–859

**Erythrokeratoderma Variabilis (Mendes de Costa Syndrome)**

Inherited disorder (AD) of keratinization that is caused by a defect in the gene encoding connexin 31 or 30.3 and is characterized by neonatal onset of transient, variable erythematous patches which eventually become less common and childhood-onset fixed, hyperkeratotic thick plaques on the extremities (including the palms and soles) and trunk, with sparing of the face (Fig. 6.36)

***Differential Diagnosis***

- Atopic dermatitis
- Erythrokeratoderma with ataxia
- Erythrokeratolysis hiemalis
- Gyrate erythema
- Ichthyosis linearis circumflexa
- Lamellar ichthyosis
- Mycosis fungoides
- Pityriasis rubra pilaris
- Progressive symmetric erythrokeratoderma
- Psoriasis
- Vohwinkel syndrome



**Fig. 6.36** Erythrokeratoderma variabilis (Courtesy of K. Guidry)

### ***Treatment Options***

- Keratolytic moisturizers
- Topical retinoids
- Acitretin
- Isotretinoin

### **Further reading:**

- Strober BE (2003) Erythrokeratoderma variabilis. *Dermatol Online J* 9(4):5

### **Erythromelalgia (Mitchell Syndrome)**

Disorder of peripheral vasodilation with a variety of possible mechanisms that is characterized by heat-induced episodic swelling, pain, erythema, and warmth of the feet, and, less commonly, the hands

### ***Differential Diagnosis***

- Acrodynia
- Carpal tunnel syndrome
- Chemotherapy-associated acral erythema
- Cellulitis
- Diabetic autonomic neuropathy
- Diabetic stiff skin (diabetic cheiroarthropathy)
- Fabry's disease
- Frostbite
- Immersion foot syndrome
- Peripheral vascular disease
- Mushroom poisoning
- Myeloproliferative disease
- Peripheral neuropathy
- Raynaud phenomenon
- Reflex sympathetic dystrophy

### ***Associations***

- Calcium channel blockers
- Cyclosporine
- Diabetes mellitus
- Essential thrombocytosis
- Fabry's disease
- Hypercholesterolemia
- Multiple sclerosis
- Mushroom poisoning
- Polycythemia vera
- Systemic lupus erythematosus
- Isopropyl alcohol
- Thrombotic thrombocytopenic purpura

### **Evaluation**

- Antinuclear antibodies
- Complete blood count
- Fasting blood glucose
- HIV test
- Nerve conduction study
- Rheumatoid factor

### **Treatment Options**

- Aspirin
- Gabapentin
- Pregabalin
- Sertraline
- Venlafaxine

### **Further reading:**

- Brill TJ, Funk B, Thaçi D, Kaufmann R (2009) Red ear syndrome and auricular erythromelgia: the same condition? *Clin Exp Dermatol* 34(8):e626–e628
- Ljubojevic S, Lipozenic J, Pustisek N (2005) Erythromelalgia. *Skinmed* 4(1):55–57

### **Erythromelanosia Follicularis Faciei et Colli**

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Uncommon, idiopathic skin disorder that predominantly affects young men and that is characterized by well-demarcated erythema, hyperpigmentation, and follicular papules with an irregular border and a symmetric distribution over the bilateral cheeks, jaws, and sides of neck. A variant involving the medial aspect of the face is more common in women and is called erythrosis pigmentosa peribuccalis



### *Differential Diagnosis*

- Berloque dermatitis
- Keratosis pilaris rubra
- Keratosis pilaris atrophicans faciei
- Lichen spinulosus
- Melasma
- Poikiloderma of Civatte
- Riehl melanosis
- Rosacea

### *Treatment Options*

- Topical retinoids
- Hydroquinone
- Azelaic acid
- Ammonium lactate lotion

### **Further reading:**

- Karakatsanis G et al (2007) Erythromelanosis follicularis faciei et colli. *Cutis* 79:459–461

## **Erythroplasia of Queyrat**

Squamous cell carcinoma in situ of the glans or prepuce that affects uncircumcised men and is characterized by a chronic, nonhealing solitary or multiple erythematous plaques with or without overlying scale, crusts, or verrucous changes

### *Differential Diagnosis*

- Balanitis xerotica obliterans
- Bowen's disease

- Candidiasis
- Condyloma acuminatum
- Contact dermatitis
- Erosive lichen planus
- Fixed drug eruption
- Lichen planus
- Paget's disease
- Psoriasis
- Squamous cell carcinoma
- Trauma
- Zoon balanitis

### ***Treatment Options***

- 5-FU cream
- Imiquimod cream
- Surgical excision
- Mohs micrographic surgery
- Radiation
- Photodynamic therapy
- Cryotherapy

### **Further reading:**

- Porter WM, Francis N, Hawkins D et al (2002) Penile intraepithelial neoplasia: clinical spectrum and treatment of 35 cases. *Br J Dermatol* 147(6):1159–1165

## **Erythropoietic Protoporphyrria**

Autosomal-dominantly inherited type of porphyria caused by a defect in the ferrochelatase gene that is characterized by a sunlight-induced burning and pruritic reaction, scarring, waxy papules and plaques, gallstones, hepatotoxicity, and end-stage liver disease (if untreated)

### ***Differential Diagnosis***

- Actinic prurigo
- Congenital erythropoietic porphyria
- Hereditary coproporphyrria
- Hydroa vacciniforme
- Juvenile colloid milium
- Lipoid proteinosis
- Porphyria cutanea tarda
- Phototoxic drug reactions
- Polymorphous light eruption
- Solar urticaria
- Xeroderma pigmentosum

### ***Associations***

- Myelodysplasia (late onset)

### ***Evaluation***

- Erythrocyte and plasma protoporphyrin levels
- Liver function tests
- Complete blood count
- Abdominal ultrasound
- 24-h urine porphyrins
- Liver biopsy
- Antinuclear antibodies
- Iron studies

### ***Treatment Options***

- Sunscreen
- Beta-carotene
- UVB phototherapy

- Vitamin C
- Vitamin E
- Liver transplant

**Further reading:**

- Murphy GM (2003) Diagnosis and management of the erythropoietic porphyrias. *Dermatol Ther* 16(1):57–64

## **Essential Fatty Acid Deficiency**

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Type of nutritional deficiency with prominent cutaneous effects that is characterized by infections, impaired wound healing, alopecia, xerosis, and moist, erythematous, erosions predominantly in the intertriginous areas

### ***Differential Diagnosis***

- Acquired zinc deficiency
- Acrodermatitis enteropathica
- Biotin deficiency
- Contact dermatitis
- Glucagonoma syndrome
- Pellagra
- Pyridoxine deficiency
- Riboflavin deficiency

### ***Associations***

- Cystic fibrosis
- Inflammatory bowel disease
- Malabsorption
- Total parenteral nutrition

**Further reading:**

- Darmstadt GL, McGuire J, Ziboh VA (2000) Malnutrition-associated rash of cystic fibrosis. *Pediatr Dermatol* 17(5):337–347

## Extramammary Paget's Disease

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Intraepidermal adenocarcinoma with or without an underlying adnexal, genitourinary tract, or gastrointestinal tract carcinoma that is characterized by a chronic, pruritic, erythematous, eczematous plaque in the groin or, less commonly, the axilla

### *Differential Diagnosis*

- Basal cell carcinoma
- Bowen's disease
- Bowenoid papulosis
- Candidiasis
- Contact dermatitis
- Erythrasma
- Eyelid dermatitis
- Hailey–Hailey disease
- Intertrigo
- Lichen planus
- Lichen sclerosus
- Melanoma
- Otitis externa
- Pagetoid dyskeratosis
- Psoriasis
- Seborrheic dermatitis
- Superficial spreading melanoma
- Tinea cruris

### *Treatment Options*

- Excisional surgery
- Mohs micrographic surgery
- Photodynamic therapy
- Radiation

- Systemic 5-FU
- Topical 5-FU
- Imiquimod cream
- CO<sub>2</sub> laser

**Further reading:**

- Kanitakis J (2007) Mammary and extramammary Paget's disease. *J Eur Acad Dermatol Venereol* 21(5):581–590

## **Fabry Disease**

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X-linked recessive disease with onset in childhood or adolescence that is caused by a deficiency in the lysosomal enzyme alpha-galactosidase A and is characterized by angiokeratoma corporis diffusum, acral paresthesias, corneal opacities, hypohidrosis, recurrent abdominal pain, and other renal, cardiac, and CNS changes

### ***Differential Diagnosis***

- Aspartylglycosaminuria
- Erythromelalgia
- Fucosidosis
- Galactosialidosis
- GM1 gangliosidosis
- Kanzaki disease
- Mercury poisoning
- Rheumatic fever
- Sialidosis
- $\beta$ -mannosidase

### ***Evaluation***

- Urinalysis (maltose cross-lipid globules)
- Renal function test

- MRI of the brain
- Echocardiogram
- Ophthalmologic exam for cornea verticillata
- Serum alpha-galactosidase level (if negative, consider other causes)

**Further reading:**

- Larralde M, Boggio P, Amartino H, Chamoles N (2004) Fabry disease: a study of 6 hemizygous men and 5 heterozygous women with emphasis on dermatologic manifestations. *Arch Dermatol* 140(12):1440–1446

## **Familial Dyskeratotic Comedones**

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Rare, inherited dermatosis (AD) of unknown pathogenesis that develops in childhood and is characterized by numerous noninflammatory, comedone-like keratotic papules on the trunk and extremities

### ***Differential Diagnosis***

- Acantholytic dyskeratosis of the vulva
- Acne vulgaris
- Darier's disease
- Flegel's disease
- Grover's disease
- Keratosis pilaris
- Kyrle's disease
- Lichen spinulosus
- Nevus comedonicus
- Perforating folliculitis
- Reactive perforating collagenosis

**Further reading:**

- Van Geel NA, Kockaert M, Neumann HA (1999) Familial dyskeratotic comedones. *Br J Dermatol* 140(5):956–959

## **Familial Mediterranean Fever**

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Autosomal-recessive disorder caused by mutation of the pyrin gene that is characterized by periodic fever, erysipelas-like erythema on the legs, pleuritis and abdominal serositis, arthritis, orchitis, and renal AA amyloidosis

### ***Differential Diagnosis***

- Appendicitis
- CINCA/NOMID syndrome
- Cyclic neutropenia
- Drug-induced lupus erythematosus
- Erysipelas
- Henoch–Schonlein purpura
- Hereditary angioedema
- Hyperimmunoglobulin D syndrome
- Juvenile rheumatoid arthritis
- Muckle–Wells syndrome
- Pancreatitis
- Pelvic inflammatory disease
- PFAPA syndrome
- Pleurisy
- Pneumonia
- Polyarteritis nodosa
- Porphyria
- Pretibial fever
- Septic arthritis
- Systemic lupus erythematosus
- Tumor necrosis factor alpha receptor periodic fever syndrome (TRAPS)



**Diagnostic Criteria (Two Major or One major and Two minor)**

- Major criteria
  - Recurrent febrile episodes of peritonitis, synovitis, or pleuritis
  - AA amyloidosis with no predisposing disease
  - Favorable response to continuous colchicine treatment
- Minor criteria
  - Recurrent febrile episodes
  - Erysipelas-like erythema
  - FMF in a first-degree relative

**Evaluation**

- Serum/urinary protein electrophoresis
- Kidney or rectal biopsy
- Urinalysis
- Renal function test
- Sedimentation rate
- Complete blood count
- Blood cultures
- Antinuclear antibodies
- 24-h urine protein
- Chest radiography
- Echocardiography
- Abdominal CT scan

**Treatment Options**

- Colchicine
- TNF inhibitors
- Anakinra
- Interferon

**Further reading:**

- Livneh A, Langevitz P, Zemer D et al (1997) Criteria for the diagnosis of familial Mediterranean fever. *Arthritis Rheum* 40(10):1879–1885

- Samuels J, Ozen S (2006) Familial Mediterranean fever and the other autoinflammatory syndromes: evaluation of the patient with recurrent fever. *Curr Opin Rheumatol* 18(1):108–117

## **Favre–Racouchot Syndrome**

Cutaneous disorder affecting photoaged men that is characterized by symmetric, multiple comedones and solar elastosis on the temples, periorcular area, and, occasionally, the neck

### ***Differential Diagnosis***

- Acne vulgaris
- Actinic granuloma
- Chloracne
- Colloid milia
- Milia en plaque
- Nevus comedonicus
- Sebaceous hyperplasia
- Syringoma
- Trichoepitheliomas
- Xanthoma

### ***Associations***

- Smoking

### ***Treatment Options***

- Topical retinoids

### **Further reading:**

- Patterson WM, Fox MD, Schwartz RA (2004) Favre–Racouchot disease. *Int J Dermatol* 43(3):167–169

## Favus

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Chronic type of tinea capitis caused by *Trichophyton schoenleinii* and characterized by yellowish, cup-shaped crusts called scutula

### *Differential Diagnosis*

- Chronic mucocutaneous candidiasis
- Discoid lupus erythematosus
- Dissecting cellulitis
- Folliculitis decalvans
- Langerhans cell histiocytosis
- Pediculosis capitis
- Pemphigus foliaceus
- Pityriasis amiantacea
- Psoriasis
- Scalp demodicosis
- Scalp impetigo
- Seborrheic dermatitis

### *Treatment Options*

- Terbinafine
- Griseofulvin
- Fluconazole
- Itraconazole

### **Further reading:**

- Cecchi R, Paoli S, Giomi A, Rossetti R (2003) Favus due to *Trichophyton schoenleinii* in a patient with metastatic bronchial carcinoma. Br J Dermatol 148(5):1057

## **Fibroelastolytic Papulosis of the Neck** **(White Fibrous Papulosis, PXE-Like Papillary Dermal Elastolysis)**

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Acquired disorder of elastic tissue that affects middle-aged to elderly patients that is characterized by asymptomatic white-yellow papules in cobblestone-like plaques on the neck

### ***Differential Diagnosis***

- Colloid milium
- Papular elastorrhexis
- Pseudoxanthoma elasticum
- Eruptive xanthomas
- Solar elastosis

### **Further reading:**

- Song YC, Oh BH, Ko JH et al (2011) A case of fibroelastolytic papulosis on the neck of a young man. *Ann Dermatol* 23(2):193–197

## **Fibroepithelioma of Pinkus**

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Uncommon variant of basal cell carcinoma that is characterized by a pedunculated, flesh-colored, fibrous nodule on the lower back, groin, or thigh

### ***Differential Diagnosis***

- Acrochordon
- Amelanotic melanoma
- Melanocytic nevus
- Neurofibroma
- Nevus sebaceus

- Seborrheic keratosis (especially reticulated)
- Tumor of follicular infundibulum

**Further reading:**

- Su MW, Fromer E, Fung MA (2006) Fibroepithelioma of Pinkus. *Dermatol Online J* 12(5):2

**Fibrofolliculoma**

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Benign neoplasm of follicular derivation that is associated with Birt–Hogg–Dube syndrome (when multiple) and that is characterized by a small flesh-colored papule on the head and neck, often on the face

***Differential Diagnosis***

- Acrochordon
- Angiofibroma
- Basal cell carcinoma
- Fibrous papule
- Perifollicular fibroma
- Syringoma
- Trichodiscoma
- Trichoepithelioma
- Trichofolliculoma

**Further reading:**

- Vincent A, Farley M, Chan E, James WD (2003) Birt–Hogg–Dube syndrome: a review of the literature and the differential diagnosis of firm facial papules. *J Am Acad Dermatol* 49(4):698–705

**Fibrokeratoma, Acquired Digital**

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Benign fibrous neoplasm possibly induced by trauma that is found on acral skin, has a dome-shaped or protuberant shape, is located on the palms or periungual area, and has a peripheral collarette (Fig. 6.37)



**Fig. 6.37** Acquired digital fibrokeratoma

### *Differential Diagnosis*

- Acral fibromyxoma
- Cutaneous horn
- Dermatofibroma
- Eccrine poroma
- Infantile digital fibromatosis
- Periungual fibroma (Koenen tumor)
- Pyogenic granuloma
- Supernumerary digit
- Traumatic neuroma
- Verruca

### **Further reading:**

- Baykal C, Buyukbabani N, Yazganoglu KD, Saglik E (2007) Acquired digital fibrokeratoma. *Cutis* 79(2):129–132

## **Fibrous Hamartoma of Infancy**

---

Type of benign fibrous proliferation that is present at birth or that arises in the first year of life that is characterized by a firm nodule or plaque in the axilla, upper trunk, or proximal extremities which continues to grow with the child

### ***Differential Diagnosis***

- Connective tissue nevus
- Dermatofibroma
- Dermatomyofibroma
- Infantile digital fibromatosis
- Neuroblastoma
- Leukemia cutis
- Lipoblastoma
- Lipoma
- Mucinosis of infancy
- Leiomyosarcoma
- Epidermal inclusion cyst
- Rhabdomyosarcoma
- Subcutaneous fat necrosis

### **Further reading:**

- Scott DM, Pena JR, Omura EF (1999) Fibrous hamartoma of infancy. *J Am Acad Dermatol* 41(5 Pt 2):857–859

## **Fibrous Papule**

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Type of angiofibroma that develops in early adulthood that is characterized by a flesh-colored or red-brown dome-shaped papule on the central face

### ***Differential Diagnosis***

- Angioma
- Appendageal tumor
- Basal cell carcinoma
- Intradermal melanocytic nevus
- Milium
- Perifollicular fibroma
- Pyogenic granuloma
- Rhinophyma
- Seborrheic keratosis
- Syringoma
- Trichoblastoma
- Trichodiscoma
- Trichoepithelioma

### **Further reading:**

- Lee AN, Stein SL, Cohen LM (2005) Clear cell fibrous papule with NKI/C3 expression: clinical and histologic features in six cases. *Am J Dermatopathol* 27(4):296–300

### **Fibroxyanthoma, Atypical**

Rapidly growing, malignant neoplasm possibly derived from the dermal dendrocyte that is seen in the elderly and characterized by an erythematous nodule with ulceration on the head and neck or other sun-exposed areas

### ***Differential Diagnosis***

- Amelanotic melanoma
- Basal cell carcinoma
- Cutaneous metastasis
- Dermatofibrosarcoma protuberans



- Leiomyosarcoma
- Merkel cell carcinoma
- Malignant fibrous histiocytoma
- Pyogenic granuloma
- Spindle cell neoplasm
- Squamous cell carcinoma

**Further reading:**

- Farley R, Ratner D (2006) Diagnosis and management of atypical fibroxanthoma. *Skinmed* 5(2):83–86

## Filariasis, Lymphatic

Parasitic infestation of the lymphatic system with several filarial worms (most commonly *Wuchereria bancrofti*, *Brugia malayi*, and *Brugia timori*) that is characterized by chronic lymphedema, elephantiasis, and verrucous or papillomatosis skin changes

### ***Differential Diagnosis***

- Bacterial or fungal lymphadenitis
- Hydrocele
- Klippel–Trenaunay syndrome
- Leprosy
- Lymphogranuloma venereum
- Lymphedema-related elephantiasis
- Lymphoma
- Milroy disease
- Podoconiosis
- Traumatic lymphedema

**Further reading:**

- Melrose WD (2002) Lymphatic filariasis: new insights into an old disease. *Int J Parasitol* 32(8):947–960



**Fig. 6.38** Fixed drug eruption

### **Fixed Drug Eruption**

Type of drug eruption that recurs in the same location upon re-exposure to the causative agent and that is characterized by a solitary (or multiple) erythematous patch, often on the genital or oral mucosa, that eventually blisters, erodes, and, with withdrawal of the triggering medication, heals with hyperpigmentation (Fig. 6.38)

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Bullosis diabeticorum
- Bullous pemphigoid
- Cellulitis
- Chemical burn

- Contact dermatitis
- Eosinophilic ulcer of the tongue
- Erosive lichen planus
- Erythema dyschromicum perstans
- Erythema migrans
- Erythema multiforme
- Erythroplasia of Queyrat
- Factitial disease
- Herpes simplex virus infection
- Large plaque parapsoriasis
- Lichenoid drug eruption
- Lupus erythematosus
- Pityriasis rotunda
- Postinflammatory hyperpigmentation
- Psoriasis
- Pyoderma gangrenosum (superficial type)
- Spider bite
- Stevens–Johnson syndrome
- Zoon’s balanitis

### ***Associated Medications***

- Acetaminophen
- Allopurinol
- Aspirin
- Barbiturates
- Ciprofloxacin
- Fluconazole
- Griseofulvin
- Hydrochlorothiazide
- Ketoconazole
- Metronidazole
- Naproxen/NSAIDs
- Phenolphthalein

- Pseudoephedrine
- Sulfonamides
- Terbinafine
- Tetracycline
- Trimethoprim

### ***Treatment Options***

- Discontinuation of offending medication
- Topical corticosteroids
- Systemic corticosteroids

### **Further reading:**

- Sehgal VN, Srivastava G (2006) Fixed drug eruption (FDE): changing scenario of incriminating drugs. *Int J Dermatol* 45(8):897–908

## **Focal Dermal Hypoplasia (Goltz Syndrome)**

X-linked dominant disorder of unknown cause that affects females and presents at birth with linear, reticulate, or whorled areas of dermal atrophy, telangiectasia and fat herniation, hypodontia, lobster-claw deformity, coloboma, raspberry-like papillomas in the periorificial areas, and osteopathia striata and other musculoskeletal deformities

### ***Differential Diagnosis***

- Adams–Oliver syndrome
- Aplasia cutis congenita
- Bart syndrome
- CHILD syndrome
- Congenital erosive and vesicular dermatosis
- Conradi–Hünemann–Happle syndrome
- EEC syndrome
- Goldenhar syndrome

- Incontinentia pigmenti
- MIDAS syndrome
- Nevus lipomatosus superficialis
- Oculocerebrocutaneous syndrome
- Proteus syndrome

### **Evaluation**

- Ophthalmologic examination
- Skeletal survey
- CT/MRI scan of the brain

### **Further reading:**

- Mianda SB, Delmaestro D, Bertoli R et al (2005) Focal dermal hypoplasia with exuberant fat herniations and skeletal deformities. *Pediatr Dermatol* 22(5):420–423

## **Fogo Selvagem (Endemic Pemphigus)**

Endemic form of pemphigus foliaceus affecting young patients in Brazil that is possibly related to exposure to the *Simulium* black fly and is characterized by superficial vesicles, bullae, and crusts in a seborrheic distribution or occasionally a generalized distribution

### **Differential Diagnosis**

- Atopic dermatitis
- Epidermolysis bullosa
- Erythema multiforme
- Impetigo
- Lupus erythematosus
- Necrolytic migratory erythema
- Pemphigus vulgaris
- Seborrheic dermatitis
- Subcorneal pustular dermatosis

## **Evaluation**

- Direct immunofluorescence
- Antidesmoglein 1 and antidesmoglein 3 antibody titers

## **Treatment Options**

- See [Treatment Options](#) of “Pemphigus”

### **Further reading:**

- Rocha-Alvarez R, Ortega-Loayza AG, Friedman H et al (2007) Endemic pemphigus vulgaris. Arch Dermatol 143(7):895–899

## **Folliculitis**

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Inflammation of the hair follicle due to a variety of infectious and noninfectious causes that is characterized follicular erythematous papules and pustules

## **Subtypes/Variants**

- Bacterial
- Candida
- Demodex
- Drug induced
- Eosinophilic
- Fungal
- Gram-negative
- Herpes simplex virus
- Hot tub
- Occlusion
- Perforating
- Pityrosporum
- Pseudolymphomatous folliculitis

- Staphylococcal folliculitis
- Steroid related

### ***Differential Diagnosis***

- Acne vulgaris
- Acquired perforating disease
- Acute graft-vs-host disease
- Darier's disease
- Disseminate and recurrent infundibulofolliculitis
- Drug eruption (including acneiform eruptions)
- Eruptive syringomas
- Eruptive vellus hair cysts
- Follicular eczema
- Follicular lichen planus
- Follicular mucinosis
- Folliculotropic mycosis fungoides
- Grover's disease
- Hailey–Hailey disease
- Halogenoderma
- Insect-bite reaction
- Keratitis pilaris
- Miliaria
- Pemphigus foliaceus
- Perioral dermatitis
- Pityriasis rubra pilaris
- Pseudofolliculitis barbae
- Rosacea
- Scabies

### **Further reading:**

- Luelmo-Aguilar J, Santandreu MS (2004) Folliculitis: recognition and management. *Am J Clin Dermatol* 5(5):301–310

## **Folliculitis Decalvans (Quinquaud Disease)**

---

Type of scarring alopecia possibly caused by staphylococcal infection of the scalp that is characterized by tender inflammatory plaques of hyperkeratosis, pustules, crusts, erosions, and tufting

### ***Differential Diagnosis***

- Central centrifugal cicatricial alopecia
- Cicatricial pemphigoid, Brunsting–Perry type
- Dissecting cellulitis
- Erosive pustular dermatosis of the scalp
- Favus
- Keratosis follicularis spinulosa decalvans
- Lichen planopilaris
- Lupus erythematosus
- Pemphigus foliaceus
- Pemphigus vulgaris
- Tinea capitis, especially kerion

### ***Evaluation***

- Bacterial and fungal culture of lesional tissue

### ***Treatment Options***

- Systemic antibiotics
- Topical antibiotics
- Intralesional corticosteroids
- Zinc sulfate
- Dapsone
- Isotretinoin
- Excision



**Further reading:**

- Brooke RC, Griffiths CE (2001) Folliculitis decalvans. *Clin Exp Dermatol* 26(1):120–122

**Folliculitis, Hot Tub**

Self-limited type of folliculitis caused most commonly by *Pseudomonas* spp. and characterized by discrete erythematous papules and pustules on the trunk and proximal extremities

***Differential Diagnosis***

- Acne vulgaris
- Contact dermatitis
- Eosinophilic folliculitis
- Grover's disease
- Insect bites, including bed bugs
- Majocchi granuloma
- Miliaria
- Papular urticaria
- Pityriasis lichenoides et varioliformis acuta
- Scabies
- Seabather's eruption
- Staphylococcal folliculitis
- Swimmer's itch

***Treatment Options***

- Observation and reassurance
- Fluoroquinolone antibiotics

**Further reading:**

- Yu Y, Cheng AS, Wang L et al (2007) Hot tub folliculitis or hot hand–foot syndrome caused by *Pseudomonas aeruginosa*. *J Am Acad Dermatol* 57(4):596–600

## Foreign Body Granuloma

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Persistent foreign body reaction to a variety of environmental substances that is characterized by a firm, erythematous to brown papule or nodule anywhere on the body

### *Differential Diagnosis*

- Dermatofibroma
- Epidermal inclusion cyst
- Granuloma annulare
- Granuloma faciale
- Kerion
- Leprosy
- Lymphoma
- Phaeohyphomycosis cyst
- Ruptured cyst
- Sarcoidosis
- Sporotrichosis
- Tuberculosis

### *Associations*

- Aluminum (vaccinations)
- Beryllium
- Cactus spines
- Calcinosis
- Coral fragments
- Corticosteroid injection
- Dermal filler substances
- Foreign collagen
- Gout
- Ingrown hair
- Jellyfish stings

- Keratin
- Paraffin
- Ruptured epidermoid cyst
- Ruptured follicle
- Sea urchin spines
- Silica
- Silicone
- Starch
- Suture material
- Suture
- Talc
- Tattoo pigment
- Thorns
- Tick mouth parts
- Wood splinter
- Zirconium

**Further reading:**

- Ghislanzoni M, Bianchi F, Barbareschi M, Alessi E (2006) Cutaneous granulomatous reaction to injectable hyaluronic acid gel. *Br J Dermatol* 154(4):755–758

### **Fox–Fordyce Disease (Apocrine Miliaria)**

---

Chronic dermatosis related to obstruction of apocrine sweat ducts that affects the axillary and inguinal areas of young women and is characterized by pruritic monomorphic flesh-colored to erythematous papules

***Differential Diagnosis***

- Candidiasis
- Contact dermatitis
- Follicular hamartoma
- Folliculitis
- Granular parakeratosis

- Hidradenitis suppurativa
- Intertriginous xanthomas
- Lichen nitidus
- Lichen planus
- Milia
- Miliaria
- Pseudofolliculitis
- Pseudoxanthoma elasticum
- Syringomas

### ***Treatment Options***

- Topical steroids
- Oral contraceptive pills
- Topical clindamycin
- Topical retinoids
- Isotretinoin

### **Further reading:**

- Ozcan A, Senol M, Aydin NE, Karaca S, Sener S (2003) Fox–Fordyce disease. J Eur Acad Dermatol Venereol 17(2):244–245

### **Friction Blisters**

Intraepidermal blister caused by repeated frictional trauma to the skin

### ***Differential Diagnosis***

- Bullous amyloidosis
- Bullosis diabeticorum
- Callus
- Coma blister
- Contact dermatitis
- Dyshidrotic eczema

- Epidermolysis bullosa acquisita
- Epidermolysis bullosa simplex (especially Weber–Cockayne type)
- Pemphigus foliaceus
- Suction blister

**Further reading:**

- Mailler EA, Adams BB (2004) The wear and tear of 26.2: dermatological injuries reported on marathon day. *Br J Sports Med* 38(4):498–501

**Frictional Lichenoid Dermatitis**

Dermatosis affecting young boys that is probably caused by friction and characterized by scaly, grouped, flesh-colored papules most commonly located on the extensor extremities, especially around the elbows and knees

***Differential Diagnosis***

- Atopic dermatitis
- Gianotti–Crosti syndrome
- Lichen nitidus
- Lichen spinulosus
- Molluscum
- Pityriasis rubra pilaris (circumscribed type)
- Psoriasis
- Verruca plana

***Treatment Options***

- Topical corticosteroids
- Ammonium lactate
- Salicylic acid
- Glycolic acid
- Urea

**Further reading:**

- Serna MJ, Espana A, Idoate MA, Quintanilla E (1994) Lichenoid papular eruption in a child. Frictional lichenoid dermatitis of childhood (FLDC). Arch Dermatol 130(1):106–107, 109–110

## **Frontal Fibrosing Alopecia**

Distinct clinical subtype of scarring alopecia that predominantly affects postmenopausal women, has the histologic features of lichen planopilaris, and is characterized by a band of alopecia with perifollicular erythema and eventual loss of follicles on the frontotemporal scalp, often with eye-brow involvement (Fig. 6.39)

### *Differential Diagnosis*

- Actinic granuloma/annular elastolytic giant cell granuloma
- Alopecia areata (especially ophiasis type)
- Alopecia neoplastica
- Androgenetic alopecia
- Lupus erythematosus
- Sarcoidosis
- Traction alopecia



**Fig. 6.39** Frontal fibrosing alopecia

### ***Treatment Options***

- See “[Lichen Planopilaris](#)”

#### **Further reading:**

- Conde Fernandes I, Selores M, Machado S (2011) Frontal fibrosing alopecia: a review of eleven patients. *Eur J Dermatol* 21(5):750–752

### **Frostbite**

Most severe form of cold injury that is characterized by cold, firm and edematous, initially painless and later painful, cyanotic, or gangrenous skin changes with or without bullae

### ***Differential Diagnosis***

- Acrocyanosis
- Chilblains (pernio)
- Cold panniculitis
- Cryoglobulinemia
- Immersion foot syndromes
- Raynaud phenomenon
- Subcutaneous fat necrosis

### ***Treatment Options***

- Rapid rewarming
- Debridement of devitalized tissue

#### **Further reading:**

- Meffert JJ (1999) Environmental skin diseases and the impact of common dermatoses on medical readiness. *Dermatol Clin* 17(1):1–17

## **Furuncle/Carbuncle**

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Common type of cutaneous infection centered around a hair follicle that is most commonly caused by *Staphylococcus* and is characterized by a solitary (furuncle) or multiloculated (carbuncle) tender erythematous cutaneous abscess

### ***Differential Diagnosis***

- Atypical mycobacterium
- Bites
- Cystic acne
- Deep fungal infection
- Dental abscess
- Erythema nodosum
- Factitial disease
- Folliculitis
- Foreign body reaction
- Furuncular myiasis
- Hidradenitis suppurativa
- Inflamed epidermal inclusion cyst
- Kerion
- Leishmaniasis
- Metastatic disease
- Nocardiosis
- Panniculitis
- Phaeohyphomycosis cyst
- Ruptured pilar cyst
- Spider bite
- Syphilis
- Tuberculosis
- Tularemia
- Yaws



### **Associations**

- Diabetes mellitus
- Immunodeficiency

### **Treatment Options**

- Incision and drainage
- Antibiotics guided by sensitivity

### **Further reading:**

- Sidwell RU, Ibrahim MA, Bunker CB (2002) A case of common variable immunodeficiency presenting with furunculosis. *Br J Dermatol* 147(2):364–367

### **Ganglion Cyst**

Benign tumor arising from the periarticular soft tissue of the hand that is characterized by a firm, compressible, asymptomatic subcutaneous mass most commonly located on the dorsal wrist

### **Differential Diagnosis**

- Aneurysm
- Arteriovenous malformations
- Arthritis
- Digital mucous cyst
- Epidermoid inclusion cyst
- Extensor digitorum brevis manus muscle
- Fibroma of the tendon sheath
- Foreign body granuloma
- Giant cell tumor of the tendon sheath
- Gouty tophus
- Lipoma
- Neurilemmoma

- Neuroma
- Nodular fasciitis
- Rheumatoid nodule
- Sarcoma

**Further reading:**

- Nahra ME, Bucchieri JS (2004) Ganglion cysts and other tumor related conditions of the hand and wrist. *Hand Clin* 20(3):249–260

## **Gardner Syndrome**

Inherited syndrome (AD) caused by mutation of the APC tumor suppressor gene that is characterized by colonic polyposis with potential for colon carcinoma, desmoid tumors, epidermoid cysts, pilomatrixomas, osteomas of the jaw, and congenital hypertrophy of the pigmented retinal epithelium

### ***Differential Diagnosis***

- Cowden's disease
- Familial adenomatous polyposis
- Juvenile polyposis
- Muir–Torre syndrome
- Multiple epidermoid cysts
- Peutz–Jeghers syndrome
- Turcot syndrome

### ***Evaluation***

- Colonoscopy
- Ophthalmologic examination
- Radiography of the mandible and long bones
- Thyroid function test and ultrasound
- Appropriate cancer screening

**Further reading:**

- Herrmann SM, Adler YD, Schmidt-Petersen K et al (2003) The concomitant occurrence of multiple epidermal cysts, osteomas and thyroid gland nodules is not diagnostic for Gardner syndrome in the absence of intestinal polyposis: a clinical and genetic report. *Br J Dermatol* 149(4):877–883

**Gardner–Diamond Syndrome  
(Autoerythrocyte Sensitization, Psychogenic Purpura)**

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Poorly understood, possibly factitial syndrome affecting women with psychiatric illness that is characterized by recurrent, spontaneous bruises on the extremities with preceding and concomitant pain and a variety of associated symptoms, including headache, gastrointestinal disturbance, and arthralgias

***Differential Diagnosis***

- Amyloidosis
- Bleeding disorder
- Child abuse
- Ehlers–Danlos syndrome
- Factitial disorder
- Henoch–Schonlein purpura
- Leukemia
- Solar purpura

***Evaluation***

- Antinuclear antibodies
- Bleeding time
- Complete blood count
- Prothrombin time and partial thromboplastin time
- Psychiatric evaluation

**Further reading:**

- Siddi GM, Montesu MA (2006) Gardner–Diamond syndrome. *J Eur Acad Dermatol Venereol* 20(6):736–737

**Gaucher's Disease**

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Autosomal-recessive lysosomal storage disease with onset at any age that is caused by deficiency of acid beta-glucosidase and is characterized by a collodion membrane presentation (infantile type), bronze melasma-like pigmentation on the face and hands (adult type), symmetric hyperpigmentation on the lower legs, Erlenmeyer flask deformity of the femur and bone pain, pancytopenia, pinguecula, and progressive neurologic deterioration (infantile type)

**Subtypes/Variants**

- Type I – adult type
- Type II – infantile type
- Type III – juvenile type

**Differential Diagnosis**

- Addison's disease
- Adrenoleukodystrophy (Schilder's disease)
- Farber's disease
- Hemochromatosis
- Krabbe disease
- Niemann–Pick disease
- Neutral lipid storage disease
- Sjögren–Larsson disease
- Tay–Sachs disease

### ***Evaluation***

- Glucocerebrosidase activity study
- Complete blood count
- Liver function test
- Abdominal MRI
- Skeletal survey
- Bone marrow biopsy

### **Further reading:**

- Holleran WM, Ziegler SG, Goker-Alpan O et al (2006) Skin abnormalities as an early predictor of neurologic outcome in Gaucher disease. *Clin Genet* 69(4):355–357

### **Geographic Tongue (Benign Migratory Glossitis)**

---

Benign inflammatory disorder of the dorsal tongue possibly related to psoriasis that is characterized by serpiginous erythematous plaques devoid of filiform papillae with a yellow hyperkeratotic border

### ***Differential Diagnosis***

- Burns
- Candidiasis
- Contact stomatitis
- Eruptive lingual papillitis
- Herpetic geometric glossitis
- Lichen planus
- Lingua plicata
- Median rhomboid glossitis
- Syphilis

### ***Associations***

- AIDS
- Atopic dermatitis

- Fissured tongue
- Lithium therapy
- Psoriasis

### ***Treatment Options***

- Soothing mouthwashes
- Topical corticosteroids
- Fluconazole
- Topical retinoids
- Topical calcineurin inhibitors

### **Further reading:**

- Zargari O (2006) The prevalence and significance of fissured tongue and geographical tongue in psoriatic patients. *Clin Exp Dermatol* 31(2):192–195

## **Gianotti–Crosti Syndrome (Papular Acrodermatitis of Childhood)**

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Self-limited childhood eruption caused by a variety of viruses, including EBV and hepatitis B, that is characterized by erythematous papules and papulovesicles on the face, buttocks, and extremities, but not the trunk (Fig. 6.40)



**Fig. 6.40** Gianotti–Crosti syndrome

### ***Differential Diagnosis***

- Arthropod bites
- Atopic dermatitis
- Contact dermatitis
- Dermatophytosis
- Drug eruption
- Eruptive pseudoangiomatosis
- Erythema multiforme
- Frictional lichenoid dermatitis
- Granuloma annulare
- Henoch–Schonlein purpura
- Langerhans cell histiocytosis
- Lichen nitidus
- Lichen planus
- Lichen striatus
- Molluscum contagiosum
- Papular and purpuric gloves and socks syndrome
- Papular urticaria
- Pityriasis lichenoides
- Pityriasis rosea
- Polymorphous light eruption
- Sarcoidosis
- Scabies
- Unilateral laterothoracic exanthem
- Verruca plana
- Viral exanthem

### ***Diagnostic Criteria***

- Monomorphous, flat-topped, pink to red-brown papular or papulovesicular lesions 1–10 mm in diameter
- Symmetric distribution favoring cheeks, extensor surfaces of the extremities, and buttocks

- Lesions remain for at least 10 days
- Spares trunk and not scaly

### ***Treatment Options***

- Systemic corticosteroids
- Topical corticosteroids
- Oral antihistamines

### **Further reading:**

- Brandt O, Abeck D, Gianotti R, Burgdorf W (2006) Gianotti–Crosti syndrome. *J Am Acad Dermatol* 54(1):136–145

## **Giant Cell Tumor of the Tendon Sheath**

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Benign tumor arising from the tendons of young adults that is characterized by a firm subcutaneous nodule most commonly located on the flexor tendons of the hand and wrist

### ***Differential Diagnosis***

- Calcifying aponeurotic fibroma
- Clear cell sarcoma
- Epithelioid sarcoma
- Fibroma of the tendon sheath
- Ganglion cyst
- Morton's neuroma
- Myxoid cyst
- Rheumatoid nodule
- Subcutaneous granuloma annulare

### **Further reading:**

- Walsh EF, Mechrefe A, Akelman E, Schiller AL (2005) Giant cell tumor of tendon sheath. *Am J Orthop* 34(3):116–121



## **Glanders (Farcy)**

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Rare, potentially fatal, zoonotic infection affecting horse and donkey handlers or laboratory personnel that is caused by *Burkholderia mallei* and is characterized by multiple erythematous nodules along the lymphatics that ulcerate and drain a purulent exudate

### ***Differential Diagnosis***

- Anthrax
- Atypical mycobacteriosis
- Blastomycosis
- Brucellosis
- Coccidioidomycosis
- Melioidosis
- Nocardiosis
- Plague
- Sporotrichosis
- Tuberculosis
- Tularemia

### ***Evaluation***

- Gram stain and culture of blood and tissue
- Complement fixation test

### **Further reading:**

- Lupi O, Madkan V, Tyring SK (2006) Tropical dermatology: bacterial tropical diseases. *J Am Acad Dermatol* 54(4):559–578

## **Glomangioma (Glomuvenous Malformation)**

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Type of vascular malformation associated with glomulin gene mutation that is present at birth, resembles a venous malformation, and is characterized by multiple, bluish, and hyperkeratotic, noncompressible, painful nodules predominantly located on the extremities (Fig. 6.41)



**Fig. 6.41** Glomangiomas (Courtesy of K. Guidry)

### *Differential Diagnosis*

- Blue rubber bleb nevus
- Glomus tumor
- Infantile hemangioma
- Maffucci syndrome
- Venous malformation

### **Further reading:**

- Lu R, Krathen RA, Sanchez RL et al (2005) Multiple glomangiomas: potential for confusion with blue rubber bleb nevus syndrome. *J Am Acad Dermatol* 52(4):731–732

### **Glomus Tumor (Barre–Masson Syndrome)**

---

Benign proliferation of glomus cells that is characterized by a small blue papule on the acral areas, typically the nail bed, and associated with cold-induced pain

### ***Differential Diagnosis***

- Angioleiomyoma
- Angiolipoma
- Arteriovenous malformation
- Blue nevus
- Blue rubber bleb nevus
- Hemangioma
- Kaposi's sarcoma
- Leiomyoma
- Maffucci syndrome
- Melanoma
- Neurilemmoma
- Spiradenoma
- Tufted angioma

### ***Associations (Multiple)***

- Neurofibromatosis I

### **Further reading:**

- D'Acri AM, Ramos-e-Silva M, Basilio-de-Oliveira C et al (2002) Multiple glomus tumors: recognition and diagnosis. *Skinmed* 1(2):94–98

## **Glomeruloid Hemangioma**

Benign, reactive vascular proliferation associated with POEMS syndrome and Castleman's disease that is characterized by multiple red angioma-like papules on the trunk or proximal extremities

### ***Differential Diagnosis***

- Cherry angiomas
- Dabska's tumor

- Intravascular papillary endothelial hyperplasia
- Intravascular pyogenic granuloma
- Microvenular hemangioma
- Multinucleate cell angiohistiocytoma
- Tufted angioma

### **Evaluation (for POEMS)**

- Serum/urinary protein electrophoresis
- Endocrine evaluation
- Complete blood count
- Cerebrospinal fluid examination
- Skeletal survey
- Bone marrow biopsy (if myeloma is suspected)
- Lymph node biopsy (if Castleman's disease is suspected)
- Nerve conduction studies

### **Further reading:**

- Phillips JA, Dixon JE, Richardson JB et al (2006) Glomeruloid hemangioma leading to a diagnosis of POEMS syndrome. *J Am Acad Dermatol* 55(1):149–152

## **Gonococemia**

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Bacteremia with *Neisseria gonorrhoea* that predominantly affects women and is characterized by fever, arthralgias, acral hemorrhagic pustules, and, if untreated, septic arthritis and other systemic complications

### **Differential Diagnosis**

- Bowel bypass dermatitis–arthritis syndrome
- Candidemia
- Cryoglobulinemia
- Infective endocarditis
- Lupus erythematosus

- Lyme disease
- Meningococemia
- Polyarteritis nodosa
- Rat-bite fever
- Reactive arthritis
- Rheumatic fever
- Rheumatoid arthritis
- Rickettsial diseases
- Septic vasculitis
- Syphilis
- Typhoid fever

### **Associations**

- Pregnancy
- Menstruation
- HIV infection
- Systemic lupus erythematosus

### **Evaluation**

- Gram stain and culture (with antibiotic sensitivity) of urethra, cervix, joint fluid, and blood
- Joint-fluid studies

### **Further reading:**

- Mehrany K, Kist JM, O'Connor WJ, Dicaudo DJ (2003) Disseminated gonococemia. *Int J Dermatol* 42(3):208–209

## **Gout, Chronic Tophaceous**

Chronic form of gout characterized by the deposition of urate crystals in the joints and skin, which appears to have firm, erythematous to yellow nodules most commonly of the helix of the ear but also the hands, feet, and elbows

### ***Differential Diagnosis***

- Calcinosis cutis
- Chondrodermatitis nodularis helices
- Erythema elevatum diutinum
- Foreign body granuloma
- Granuloma annulare
- Heberden's nodes
- Multicentric reticulohistiocytosis
- Pilomatrixoma
- Rheumatoid nodule
- Sarcoidosis
- Weathering nodule
- Xanthoma

### ***Associations***

- Acidosis
- Alcohol ingestion
- Dehydration
- Diuretics
- Drugs
- Hemodialysis
- High-purine diet
- Hypothyroidism
- Idiopathic
- Lead poisoning
- Lesch–Nyhan syndrome
- Leukemia
- Lymphoma
- Obesity
- Psoriasis
- Renal failure
- Tumor lysis syndrome

## ***Evaluation***

- Serum uric acid level
- Renal function test
- Urinalysis
- Joint-fluid examination
- Radiography of affected joints

### **Further reading:**

- Falasca GF (2006) Metabolic diseases: gout. *Clin Dermatol* 24(6):498–508

## **Graft-vs-Host Disease**

Common complication of bone marrow transplant that is caused by histoincompatible donor lymphocytes reacting against epithelial tissues and characterized by an early acute phase (first 100 days), which manifests cutaneously as a follicular-based erythematous eruption that begins acraly and a later chronic phase, which is characterized by lichen-planus-like lesions or sclerodermoid skin changes

## ***Differential Diagnosis***

### **Acute**

- Acute radiation dermatitis
- Chemotherapy-induced acral erythema
- Chemotherapy-related reaction
- Contact dermatitis
- Eruption of lymphocytic recovery
- Erythema multiforme (especially radiation related)
- Lupus erythematosus
- Morbilliform drug eruption
- Necrolytic acral erythema
- Paraneoplastic pemphigus
- Staphylococcal scalded-skin syndrome

- Thymoma
- Toxic epidermal necrolysis
- Viral exanthem

### Chronic Lichenoid

- Lichenoid drug eruption
- Lichen planus
- Lichen sclerosus et atrophicus
- Lupus erythematosus
- Paraneoplastic pemphigus
- Pityriasis lichenoides chronica
- Pseudoporphyria (esp. voriconazole)

### Chronic Sclerodermoid

- Lichen sclerosus et atrophicus
- Morphea
- Porphyria cutanea tarda
- Progressive systemic sclerosis
- Pseudoporphyria (esp. voriconazole)
- Sclerodermatous drug reaction (e.g., bleomycin)

### **Evaluation**

- Liver function tests
- Serum chemistry
- Complete blood count

### **Treatment Options**

- Acute
  - Systemic corticosteroids
  - Cyclosporine
  - Tacrolimus
  - Mycophenolate mofetil



- Sirolimus
- Antithymocyte globulin
- Extracorporeal photochemotherapy
- Infliximab
- Chronic
  - Tacrolimus
  - Mycophenolate mofetil
  - Thalidomide
  - Acitretin
  - Hydroxychloroquine
  - Infliximab
  - Extracorporeal photochemotherapy
  - UVB phototherapy
  - UVA1 phototherapy

**Further reading:**

- Schaffer JV (2006) The changing face of graft-versus-host disease. *Semin Cutan Med Surg* 25(4):190–200

**Graham–Little–Piccardi–Lasseur Syndrome**

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Uncommon idiopathic lichenoid dermatosis characterized by lichen planopilaris of the scalp, nonscarring alopecia of the axilla and groin, and follicular lichen planus of the trunk, with or without a history of classic lichen planus

***Differential Diagnosis***

- Cutaneous T cell lymphoma
- Discoid lupus erythematosus
- Folliculitis decalvans
- Lichenoid drug reaction
- Lichen planus
- Keratosis follicularis spinulosa decalvans

- Pityriasis rubra pilaris
- Sarcoidosis

### ***Treatment Options***

- See “[Lichen Planus](#)”

### **Further reading:**

- Srivastava M, Mikkilineni R, Konstadt J (2007) Lasseur–Graham–Little–Piccardi syndrome. *Dermatol Online J* 13(1):12

## **Gram-Negative Toe-Web Infection**

Gram-negative bacterial infection of the toe-web spaces that is characterized by inflammation (can be quite severe), desquamation, pustules, erosions, and maceration affecting the toe-web spaces and neighboring areas

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Bullosis diabeticorum
- Bullous drug eruption
- Candidiasis
- Epidermolysis bullosa (especially Weber–Cockayne type)
- Erythrasma
- Juvenile plantar dermatosis
- Immersion foot
- Interdigital tinea pedis (especially bullous type)
- Intertrigo
- Necrolytic acral erythema
- Pitted keratolysis
- Pompholyx

### ***Evaluation***

- Potassium hydroxide preparation and fungal culture
- Gram stain and culture of tissue

### ***Treatment Options***

- Systemic antibiotics
- Systemic corticosteroids
- Topical antibiotics
- Topical antifungals
- Systemic antifungals
- Vinegar and water soaks

### **Further reading:**

- Aste N, Atzori L, Zucca M et al (2001) Gram-negative bacterial toe web infection: a survey of 123 cases from the district of Cagliari, Italy. *J Am Acad Dermatol* 45(4):537–541

## **Granular Cell Tumor (Abrikossoff Tumor)**

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Benign neural tumor (with a malignant counterpart) arising predominantly in adults, especially adults of African descent, that is characterized by a solitary, smooth, or verrucous papule or nodule on the head and neck, especially the tongue, or, less commonly, other areas of the body

### ***Differential Diagnosis***

#### **Cutaneous**

- Adnexal tumor
- Compound nevi
- Condyloma acuminatum

- Dermatofibroma
- Epidermal inclusion cyst
- Fibroma
- Neurofibroma
- Squamous cell carcinoma
- Verruca
- Verrucous carcinoma

#### Oral

- Ameloblastoma
- Congenital epulis
- Fibroma
- Foreign body granuloma
- Odontogenic cyst
- Neurofibroma
- Warty dyskeratoma
- Verruciform xanthoma

#### *Associations (Multiple)*

- Phacomatosis pigmentovascularis, type III

#### **Further reading:**

- Tomson N, Abdullah A, Tan CY (2006) Multiple granular cell tumors in a child with growth retardation. Report of a case and review of the literature. *Int J Dermatol* 45(11):1358–1361

#### **Granular Parakeratosis**

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Idiopathic dermatosis that affects the axilla and less commonly the inguinal folds and that is characterized by hyperkeratotic, hyperpigmented papules and plaques (Fig. 6.42)



**Fig. 6.42** Granular parakeratosis  
(Courtesy of A. Record)

### *Differential Diagnosis*

- Acanthosis nigricans
- Contact dermatitis
- Confluent and reticulated papillomatosis
- Darier's disease
- Dermatophytosis
- Erythrasma
- Fox–Fordyce disease
- Hailey–Hailey disease
- Intertrigo
- Pemphigus vegetans
- Psoriasis inversa
- Seborrheic keratosis

### *Treatment Options*

- Topical corticosteroids
- Topical vitamin D analogues

- Topical retinoids
- Ammonium lactate
- Tacrolimus ointment
- Cryotherapy
- Curettage

**Further reading:**

- Scheinfeld N et al (2005) Granular parakeratosis: pathologic and clinical correlation of 18 cases of granular parakeratosis. J Am Acad Dermatol 52:863–867

**Granulocytic Sarcoma (Chloroma)**

Tumor of immature granulocytes that is associated with myelogenous leukemia and is characterized by solitary or multiple violaceous (and less commonly, green) nodules or plaques on the head and neck or trunk

***Differential Diagnosis***

- Extramedullary hematopoiesis
- Lymphoma
- Neuroblastoma
- Mastocytoma
- Melanoma
- Merkel cell carcinoma
- Metastatic carcinoma
- Rhabdomyosarcoma
- Sweet's syndrome

***Evaluation***

- Bone marrow biopsy
- Complete blood count

**Further reading:**

- Beswick SJ, Jones EL, Mahendra P, Marsden JR (2002) Chloroma (aleukaemic leukaemia cutis) initially diagnosed as cutaneous lymphoma. *Clin Exp Dermatol* 27(4):272–274

**Granuloma Annulare**

Idiopathic dermatosis with a variable clinical presentation in both children and adults that is characterized by annular arrangements of erythematous dermal papules (or less commonly, subcutaneous nodules) that are localized to the extensor surfaces of the extremities or in a more generalized distribution (Fig. 6.43)

**Subtypes**

- Plaque
- Patch
- Subcutaneous



**Fig. 6.43** Granuloma annulare (Courtesy of K. Guidry)

- Acute-onset painful acral
- Disseminated papular
- Perforating

### ***Differential Diagnosis***

- Acquired perforating dermatosis
- Actinic granuloma
- Annular lichen planus
- Arthropod bites
- Deep morphea
- Dermatofibroma
- Drug eruption
- Elastosis perforans serpiginosa
- Epithelioid sarcoma
- Erythema annulare centrifugum, deep type
- Erythema elevatum diutinum
- Erythema migrans
- Frictional lichenoid dermatitis
- Granuloma multiforme
- Granulomatous mycosis fungoides
- Granulomatous skin lesions associated with systemic lymphoma
- Immunodeficiency-related noninfectious granuloma
- Insect-bite reactions
- Interstitial granulomatous dermatitis with arthritis
- Interstitial granulomatous drug reaction
- Kaposi's sarcoma
- Keratoacanthoma
- Knuckle pads
- Lennert's lymphoma
- Leprosy
- Lichen myxedematosus
- Lichen planus
- Lichenoid drug reaction



- Lipoma
- Lupus erythematosus
- Lyme disease
- Metastatic disease
- Molluscum contagiosum
- Multinucleate cell angiohistiocytoma
- *Mycobacterium marinum* infection
- Necrobiosis lipoidica
- Nodular amyloidosis
- Nodular fasciitis
- Nodular syphilis
- Non-X-type histiocytoses
- Palisaded neutrophilic and granulomatous dermatitis
- Papular sarcoidosis
- Reactive perforating collagenosis
- Rheumatic fever nodules
- Rheumatoid neutrophilic dermatosis
- Rheumatoid nodules
- Sarcoidosis
- Secondary syphilis
- Subcutaneous sarcoidosis
- Tertiary syphilis
- Tinea
- Tuberculosis
- Xanthomas

### **Associations**

- Allopurinol
- Amlodipine
- Autoimmune thyroiditis
- Diabetes mellitus
- Hepatitis B vaccine
- Herpes zoster scars

- HIV
- Hodgkin's disease
- Hyperlipidemia
- Necrobiosis lipoidica
- Non-Hodgkin's lymphoma
- Tetanus vaccination
- Thyroid disease

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Topical calcineurin inhibitors
- Dapsone
- Isotretinoin
- Cyclosporine
- Hydroxychloroquine
- Pentoxifylline
- Nicotinamide
- Infliximab
- Etanercept
- Adalimumab

### **Further reading:**

- Kovich O, Burgin S (2005) Generalized granuloma annulare. *Dermatol Online J* 11(4):23

## **Granuloma Faciale**

Uncommon idiopathic dermatosis affecting predominantly the face of middle-aged patients that is characterized by solitary or multiple erythematous to brown papules, nodules, or plaques with pustulous follicles (Fig. 6.44)



**Fig. 6.44** Granuloma faciale

### *Differential Diagnosis*

- Angiolymphoid hyperplasia with eosinophilia
- Basal cell carcinoma
- Cutaneous lymphoid hyperplasia
- Cutaneous Rosai–Dorfman disease
- Discoid lupus erythematosus
- Erythema elevatum diutinum
- Fixed drug eruption
- Follicular mucinosis
- Foreign body granuloma
- Granulomatous rosacea
- Jessner's lymphocytic infiltrate
- Leprosy
- Lupus vulgaris
- Lymphoma
- Rhinophyma
- Sarcoidosis
- Syphilis
- Sweet's syndrome
- Tumid lupus

### *Association*

- Angiocentric eosinophilic fibrosis

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Topical tacrolimus
- Dapsone
- Pulsed dye laser

### **Further reading:**

- Ortonne N et al (2005) Granuloma faciale: a clinicopathologic study of 66 patients. J Am Acad Dermatol 53:1002–1009

### **Granuloma Gluteale Infantum**

Uncommon, multifactorial dermatosis affecting infants with concomitant diaper dermatitis that is characterized by erythematous or violaceous papules and nodules in the skin folds of the groin and perineum and, occasionally, the neck

### ***Differential Diagnosis***

- Candidiasis
- Cold abscesses
- Contact dermatitis
- Folliculitis
- Foreign body granuloma
- Furunculosis
- Halogenoderma
- Jacquet's erosive diaper dermatitis
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis
- Lymphoma
- Mastocytosis
- Molluscum contagiosum
- Nodular scabies

- Pseudoverrucous papules and nodules
- Pyogenic granuloma
- Sarcoma
- Syphilis
- Tuberculosis

### **Associations**

- Candidiasis
- Fluorinated steroids
- Irritation and maceration

### **Treatment Options**

- Observation and reassurance
- Discontinuation of topical steroids
- Anticandidal therapy

### **Further reading:**

- Robson KJ, Maugham JA, Purcell SD (2006) Erosive papulonodular dermatosis associated with topical benzocaine: a report of two cases and evidence that granuloma gluteale, pseudoverrucous papules, and Jacquet's erosive dermatitis are a disease spectrum. *J Am Acad Dermatol* 55(5 Suppl):S74–S80

## **Granuloma Inguinale (Donovanosis)**

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Tropical bacterial infection that is possibly transmitted sexually, caused by *Klebsiella granulomatis*, and characterized by painful genital ulcers with beefy-red granulation tissue and lymphedema that have the potential to evolve to squamous cell carcinoma in long-standing cases

### **Differential Diagnosis**

- Amebiasis
- Chancriform pyoderma
- Chancroid

- Chronic herpes simplex virus infection
- Condylomata lata
- Crohn's disease
- Leishmaniasis
- Lymphogranuloma venereum
- Lichen sclerosus
- Pyoderma gangrenosum
- Scrofuloderma
- Squamous cell carcinoma
- Syphilis
- Tuberculosis

### ***Evaluation***

- Tissue crush examination with Wright stain (Donovan bodies)

### **Further reading:**

- Lupi O, Madkan V, Tyring SK (2006) Tropical dermatology: bacterial tropical diseases. *J Am Acad Dermatol* 54(4):559–578

## **Granuloma Multiforme (of Leiker)**

Idiopathic granulomatous disease predominantly diagnosed in Africa that is characterized by indurated papules that evolve to large annular plaques with central hypopigmentation on the arms and upper trunk

### ***Differential Diagnosis***

- Actinic granuloma
- Annular elastolytic giant cell granuloma
- Annular lichenoid dermatitis of youth
- Annular syphilis
- Granuloma annulare
- Leprosy (especially tuberculoid type)
- Lupus vulgaris

- Necrobiosis lipoidica
- Pinta
- Sarcoidosis
- Yaws

**Further reading:**

- Sandhu K, Saraswat A, Gupta S, Shukla R, Handa S (2004) Granuloma multiforme. Int J Dermatol 43(6):441–443

## **Granulomatous Drug Reaction, Interstitial**

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Type of drug reaction characterized by granuloma-annulare-like skin lesions with a predilection for the flexural areas, trunk, and extremities, but not the face

### ***Differential Diagnosis***

- Cutaneous T cell lymphoma
- Dermatomyositis
- Eczema
- Erythema annulare centrifugum
- Granuloma annulare
- Granulomatous mycosis fungoides
- Interstitial granulomatous dermatitis with arthritis
- Lichen planus
- Pigmented purpura
- Pityriasis rosea
- Sarcoidosis
- Subacute cutaneous lupus erythematosus

### ***Associated Medications***

- ACE inhibitors
- Allopurinol

- Anticonvulsants
- Antidepressants
- Antihistamines
- Calcium channel blockers
- Diuretics
- Gold
- Lipid-lowering agents
- NSAIDs
- Sennoside
- Soy

### ***Treatment Options***

- Discontinuation of offending medication

### **Further reading:**

- Magro CM, Crowson AN, Schapiro BL (1998) The interstitial granulomatous drug reaction: a distinctive clinical and pathological entity. *J Cutan Pathol* 25(2):72–78

## **Granulomatous Periorificial Dermatitis (Facial Afro-Caribbean Childhood Eruption (FACE), Facial Idiopathic Granulomas with Regressive Evolution)**

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Idiopathic eruption affecting children, especially children of African descent, that is characterized by tiny erythematous papules around the mouth, nose, and eyes

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Eruptive milia
- Granulomatous rosacea
- Lupus miliaris disseminata faciei
- Perioral dermatitis



- Sarcoidosis
- Syringomas
- Tinea incognito

### ***Treatment Options***

- Topical metronidazole
- Tacrolimus ointment
- Topical erythromycin
- Oral erythromycin
- Tetracycline antibiotics

### **Further reading:**

- Kroshinsky D, Glick SA (2006) Pediatric rosacea. *Dermatol Ther* 19(4):196–201

## **Granulomatous Slack Skin**

Clinical variant of cutaneous T cell lymphoma that is characterized by atrophic, redundant, pendulous plaques in the axilla and groin

### ***Differential Diagnosis***

- Anetoderma
- Cutis laxa
- Granulomatous mycosis fungoides
- Pseudoxanthoma elasticum
- Steroid atrophy
- Striae atrophicans

### ***Treatment Options***

- See “[Lymphoma, Cutaneous T Cell](#)”

**Further reading:**

- Teixeira M, Alves R, Lima M et al (2007) Granulomatous slack skin. *Eur J Dermatol* 17(5):435–438

**Granulosis Rubra Nasi**

Rare familial dermatosis affecting children that resolves by puberty and is characterized by hyperhidrosis, miliaria, and erythema of the central face, especially the tip of the nose

***Differential Diagnosis***

- Acne
- Erythrosis pigmentosa peribuccalis
- Keratosis pilaris rubra
- Lupus erythematosus
- Lupus pernio
- Miliaria
- Perioral dermatitis
- Perniosis
- Photosensitivity
- Rosacea

***Associations***

- Pheochromocytoma

***Treatment Options***

- Observation and reassurance

**Further reading:**

- Akhdari N (2007) Granulosis rubra nasi. *Int J Dermatol* 46(4):396



**Fig. 6.45** *Pseudomonas* green-nail syndrome

## **Green-Nail Syndrome**

---

Nail disorder caused by bacterial overgrowth of the nail unit with *Pseudomonas aeruginosa* that is characterized by onycholysis and greenish discoloration of the nail (Fig. 6.45)

### ***Differential Diagnosis***

- *Aspergillus* infection
- Dermatitis neglecta
- Foreign body
- Melanocytic nevus
- Melanoma
- Onychomycosis
- Subungual hematoma
- Subungual wart

### **Treatment Options**

- Topical gentamicin
- Identify and treat underlying nail bed disease, such as wart
- Systemic fluoroquinolones
- Vinegar and water soaks
- Nail avulsion

#### **Further reading:**

- Sakata S, Howard A (2007) *Pseudomonas chloronychia* in a patient with nail psoriasis. *Med J Aust* 186(8):424

### **Griscelli Syndrome**

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Autosomal-recessive disorder caused by defects in the gene encoding the melanosomal transport proteins myosin Va (also known as Elejalde syndrome) or RAB27A that is characterized by partial albinism with silvery hair and either immunodeficiency with hemophagocytic syndrome (RAB27A) or severe neurologic and psychomotor symptoms (myosin Va)

### **Differential Diagnosis**

- Chediak–Higashi syndrome
- Chronic granulomatous disease
- Familial hematophagocytic lymphohistiocytosis
- Hermansky–Pudlak syndrome
- Oculocutaneous albinism
- Phenylketonuria
- Wiskott–Aldrich syndrome
- X-linked lymphoproliferative syndrome (Duncan's disease)

#### **Further reading:**

- Emanuel PO, Sternberg LJ, Phelps RG (2007) Griscelli syndrome. *Skinmed* 6(3):147–149



**Fig. 6.46** Grover's disease

### **Grover's Disease (Transient Acantholytic Dermatitis)**

---

Idiopathic acantholytic disease that predominantly affects older men and is characterized by a chronic, heat-exacerbated eruption of pruritic papulovesicles on the upper chest and shoulder area (Fig. 6.46)

#### ***Subtypes (Histologic)***

- Benign familial pemphigus type
- Darier's disease type
- Pemphigus foliaceus type
- Pemphigus vulgaris type
- Spongiotic type

#### ***Differential Diagnosis***

- Allergic contact dermatitis
- Asteatotic eczema
- Bullous pemphigoid

- Darier's disease
- Disseminate and recurrent infundibulofolliculitis
- Dermatitis herpetiformis
- Drug eruption
- Eczema herpeticum
- Familial dyskeratotic comedones
- Folliculitis
- Galli–Galli disease
- Hailey–Hailey disease
- Herpes simplex virus infection
- Insect bites
- Miliaria rubra
- Nummular eczema
- Papular eczema
- Papular urticaria
- Parapsoriasis
- Pemphigus foliaceus
- Pityriasis lichenoides et varioliformis acuta
- Pityriasis rosea
- Pityrosporum folliculitis
- Psoriasis
- Retiform parapsoriasis
- Scabies
- Secondary syphilis
- Subacute prurigo
- Tinea corporis
- Urticaria

### ***Associations***

- Asteatotic eczema
- Atopic dermatitis
- Chemotherapeutic agents

### *Treatment Options*

- Topical corticosteroids
- Systemic corticosteroids
- Tetracycline antibiotics
- Antihistamines
- Isotretinoin
- Acitretin
- Methotrexate

### **Further reading:**

- Davis MD, Dinneen AM, Landa N, Gibson LE (1999) Grover's disease: clinicopathologic review of 72 cases. *Mayo Clin Proc* 74(3):229–234

### **Hailey–Hailey Disease (Familial Benign Pemphigus)**

---

Inherited disorder (AD) that is caused by a mutation in the gene (ATP2C1) encoding the epidermal calcium pump (hSPCA1) and is characterized by chronic, recurrent vesicles and erosions predominantly affecting the flexures that are made worse or triggered by bacterial and candidal superinfection, maceration, occlusion, moisture, and heat (Fig. 6.47)

### *Differential Diagnosis*

- Acantholytic dyskeratosis of the vulva
- Atopic dermatitis
- Candidiasis
- Darier's disease
- Extramammary Paget's disease
- Granular parakeratosis
- Herpes simplex virus infection
- Impetigo
- Intertrigo
- Inverse psoriasis
- Irritant dermatitis



**Fig. 6.47** Hailey–Hailey disease

- Lichen simplex chronicus
- Necrolytic migratory erythema
- Pemphigus foliaceus
- Pemphigus vegetans
- Pemphigus vulgaris
- Seborrheic dermatitis
- Tinea cruris

### ***Evaluation***

- Viral, bacterial, and fungal cultures of lesional tissue

### ***Treatment Options***

- Oral antibiotics
- Oral anticandidal therapy



- Topical corticosteroids
- Topical calcineurin inhibitors
- Dapsone
- Systemic corticosteroids
- Systemic retinoids
- Cyclosporine
- CO<sub>2</sub> laser

**Further reading:**

- Mckibben J, Smalling C (2006) Hailey–Hailey. *Skinmed* 5(5):250–252

### **Halo Nevus (Sutton's Nevus, Leukoderma Acquisitum Centrifugum)**

---

Benign melanocytic nevus that develops an antimelanocyte lymphocytic infiltrate and is characterized by a typical nevus with or without signs of regression and a peripheral halo of hypopigmentation or depigmentation (Fig. 6.48)

#### ***Differential Diagnosis***

- Atypical melanocytic nevi
- Cutaneous T cell lymphoma
- Dermatofibromas
- Lichen planus
- Melanoma
- Molluscum contagiosum
- Meyerson's nevus
- Nevus en cocarde
- Psoriasis
- Sarcoidosis
- Seborrheic keratoses
- Spitz nevi



**Fig. 6.48** Halo nevus  
(Courtesy of  
K. Guidry)

### **Associations**

- Melanoma
- Turner syndrome
- Vitiligo

### **Evaluation**

- Total body skin examination (for melanoma)

### **Further reading:**

- Brazzelli V, Larizza D, Martinetti M et al (2004) Halo nevus, rather than vitiligo, is a typical dermatologic finding of Turner's syndrome: clinical, genetic, and immunogenetic study in 72 patients. *J Am Acad Dermatol* 51(3):354–358

### **Halogenoderma (Iododerma, Bromoderma)**

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Cutaneous eruption associated with the ingestion or administration of iodide-, bromide-, or fluoride-containing products that is characterized by vesiculopustular, vegetating, and ulcerative lesions on the face, trunk, or extremities

### ***Differential Diagnosis***

- Blastomycosis
- Chronic mucocutaneous candidiasis
- Drug-induced acne
- Erythema nodosum
- Folliculitis
- Multiple granular cell tumors
- Multiple keratoacanthoma
- Mycosis fungoides (tumoral or verrucous type)
- Neutrophilic eccrine hidradenitis
- Pemphigus vegetans
- Pyoderma gangrenosum, vegetative type
- Rosacea
- Sarcoidosis
- Sweet's syndrome
- Syphilitic gumma
- Tuberculosis

### ***Evaluation***

- Serum iodine and bromine levels

### **Further reading:**

- Anzai S, Fujiwara S, Inuzuka M (2003) Bromoderma. *Int J Dermatol* 42(5):370–371

### **Hand–Foot–Mouth Disease**

---

Common, benign enteroviral infection affecting children and characterized by vesicles that first arise on the palate, gingiva, buccal mucosa, and tongue and then later involve the edges of the palms and soles

### ***Differential Diagnosis***

- Acropustulosis of infancy
- Aphthous ulcers
- Dyshidrotic eczema
- Erythema multiforme
- Gonococemia
- Herpangina
- Herpes stomatitis
- Reiter's syndrome
- Varicella
- Secondary syphilis

#### **Further reading:**

- Scott LA, Stone MS (2003) Viral exanthems. *Dermatol Online J* 9(3):4

### **Harlequin Ichthyosis (Riecke Syndrome)**

Inherited (AR) ichthyosis that is associated with an ABCA12 gene defect and is characterized by severe, armor-plate-like hyperkeratosis, markedly distorted facial features with ectropion and eclabium, low birth weight, and early death or stillbirth

### ***Differential Diagnosis***

- Collodion baby (see Chap. 3)
- Neu-Laxova syndrome
- Restrictive dermopathy

#### **Further reading:**

- Akiyama M (2006) Pathomechanisms of harlequin ichthyosis and ABCA transporters in human diseases. *Arch Dermatol* 142(7):914–918

## Hartnup Disease

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Inherited metabolic disorder (AR) caused by a mutation in the SLC6A19 gene encoding a tryptophan transporter that results in decreased amounts of available tryptophan and episodes of photodistributed dermatitis, diarrhea, ataxia, and nystagmus

### *Differential Diagnosis*

- Actinic prurigo
- Ataxia–telangiectasia
- Atopic dermatitis
- Carcinoid syndrome
- Cockayne syndrome
- Hydroa vacciniforme
- Lupus erythematosus
- Pellagra
- Phenylketonuria
- Porphyria
- Seborrheic dermatitis
- Xeroderma pigmentosum

### *Evaluation*

- Urinary amino acid analysis

### **Further reading:**

- Seyhan ME, Selimoglu MA, Ertekin V et al (2006) Acrodermatitis enteropathica-like eruptions in a child with Hartnup disease. *Pediatr Dermatol* 23(3):262–265

## Hemangioendothelioma, Epithelioid

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Low-grade angiosarcoma that arises in adolescents and young adults and is characterized by a slow-growing deep nodule or mass on the distal extremities

### *Differential Diagnosis*

- Angiolymphoid hyperplasia with eosinophilia
- Arteriovenous malformation
- Epithelioid angiosarcoma
- Epithelioid sarcoma
- Melanoma
- Metastatic carcinoma
- Nodular fasciitis
- Pyogenic granuloma
- Reactive angioendotheliomatosis
- Retiform hemangioendothelioma
- Spindle cell hemangioendothelioma

#### **Further reading:**

- Requena L, Sangueza OP (1998) Cutaneous vascular proliferations. Part III. Malignant neoplasms, other cutaneous neoplasms with significant vascular component, and disorders erroneously considered as vascular neoplasms. *J Am Acad Dermatol* 38(2 Pt 1):143–175

### **Hemangioendothelioma, Kaposiform**

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Vascular proliferation presenting in the first 2 years of life that is associated with Kasabach–Merritt syndrome and is characterized by a large, rapidly growing, red, multinodular plaque on the trunk, extremities, or retroperitoneum

### *Differential Diagnosis*

- Dabska tumor
- Infantile hemangioma
- Infantile hemangiopericytoma
- Infantile myofibromatosis
- Kaposi's sarcoma

- Spindle cell hemangioendothelioma
- Tufted angioma

### ***Evaluation***

- Complete blood count

### **Further reading:**

- Gruman A, Liang MG, Mulliken JB et al (2005) Kaposiform hemangioendothelioma without Kasabach–Merritt phenomenon. *J Am Acad Dermatol* 52(4):616–622

## **Hemangioendothelioma, Retiform**

Low-grade angiosarcoma arising that arises in young adults and is characterized by slowly growing exophytic mass or subcutaneous nodule most commonly on lower extremities

### ***Differential Diagnosis***

- Angiosarcoma
- Dabska tumor
- Dermatofibrosarcoma protuberans
- Hobnail hemangioma
- Lymphoma
- Pyogenic granuloma

### **Further reading:**

- Ioannidou D, Panayiotides J, Krasagakis K et al (2006) Retiform hemangioendothelioma presenting as bruise-like plaque in an adult woman. *Int J Dermatol* 45(1):53–55

## **Hemangioendothelioma, Spindle Cell**

Benign vascular proliferation arising in children or young adults that is characterized by multiple blue nodules on the distal extremities

### ***Differential Diagnosis***

- Angiosarcoma
- Glomangioma
- Intravascular papillary endothelial hyperplasia
- Kaposi's sarcoma
- Pyogenic granuloma
- Tufted angioma
- Venous malformation

### ***Associations***

- Congenital lymphedema
- Klippel–Trenaunay syndrome
- Maffucci syndrome
- Varicose veins

### **Further reading:**

- Dhawan SS, Raza M (2007) Spindle cell hemangioendothelioma. *Cutis* 79(2):125–128

### **Hemangioma, Infantile**

Benign proliferation of endothelial cells that develops in the first few months of life (or, less commonly, is present at birth) that is characterized by a superficial, deep, or mixed vascular mass affecting any portion of the body which rapidly proliferates (and potentially ulcerates), reaches a peak size, then slowly and spontaneously involutes over the first 10 years

### ***Differential Diagnosis***

- Angiosarcoma
- Arteriovenous malformation
- Capillary malformation
- Eccrine angiomatous hamartoma
- Congenital fibrosarcoma



- Congenital hemangiopericytoma
- Gorham syndrome
- Infantile myofibromatosis
- Kaposiform hemangioendothelioma
- Lipoblastoma
- Maffucci syndrome
- Nasal glioma
- Neuroblastoma
- Noninvoluting congenital hemangioma (NICH)
- Primitive neuroectodermal tumor
- Pyogenic granuloma
- Rapidly involuting congenital hemangioma (RICH)
- Rhabdomyosarcoma
- Spindle cell hemangioendothelioma
- Telangiectasia
- Teratoma
- Tufted angioma
- Venous, lymphatic, or combined malformation

### ***Associations***

- Benign neonatal hemangiomatosis
- Cobb syndrome
- Diffuse neonatal hemangiomatosis
- Hypothyroidism
- PELVIS syndrome
- PHACES syndrome
- Spinal dysraphism

### ***Evaluation (if PHACES Is Suspected)***

- Doppler ultrasound (if deep component is suspected)
- MRI of brain
- Echocardiography and aortography
- Ophthalmologic examination
- Radiograph of the sternum

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Propranolol
- Pulsed dye laser
- Surgical excision
- Vincristine

### **Further reading:**

- Bruckner AL, Frieden IJ (2003) Hemangiomas of infancy. *J Am Acad Dermatol* 48(4):477–493
- Metry D, Heyet G, Hess C et al (2009) Consensus statement on diagnostic criteria for PHACE syndrome. *Pediatrics* 124(5):1447–1456. Epub 2009 Oct 26

### **Hemangiopericytoma, Infantile**

Benign vascular neoplasm of periendothelial cell derivation (possibly myofibroblast cell) that appears in the first year of life and is characterized by solitary or multiple blue or red subcutaneous nodules most commonly located on the head and neck (but can occur anywhere)

### ***Differential Diagnosis***

- Angioleiomyoma
- Fibrous histiocytoma
- Glomangioma
- Infantile fibrosarcoma
- Infantile hemangioma
- Infantile myofibromatosis
- Malignant fibrous histiocytoma
- Mesenchymal chondrosarcoma
- Myxoid lipoma
- Myxoid liposarcoma
- Rapidly involuting congenital hemangioma
- Subcutaneous pyogenic granuloma
- Venous malformation

#### **Further reading:**

- Requena L, Sanguenza OP (1997) Cutaneous vascular proliferation. Part II. Hyperplasias and benign neoplasms. *J Am Acad Dermatol* 37(6):887–919

### **Hemochromatosis, Hereditary (Hanot–Chauffard Syndrome)**

Inherited disorder (AR) of iron metabolism that is caused by one of several different mutations in the HFE gene (which leads to excessive amounts of iron in tissues) and is characterized by diffuse hyperpigmentation accentuated in the sun-exposed areas, porphyria cutanea tarda, cirrhosis, diabetes, arthritis, and an increased incidence of hepatocellular carcinoma

### ***Differential Diagnosis***

- Addison's disease
- Alcoholic liver disease
- Argyria

- Chrysiasis
- Drug-induced pigmentation
- Gaucher disease
- Hepatitis C infection
- Niemann–Pick disease
- Polymorphous light eruption
- Postinflammatory pigmentation
- Rheumatoid arthritis
- Riehl melanosis
- Wilson's disease

### ***Evaluation***

- Iron studies
- Echocardiography
- HFE gene studies
- Fasting blood glucose
- Liver function test
- Liver biopsy
- Electrocardiography

### **Further reading:**

- Franchini M (2006) Hereditary iron overload: update on pathophysiology, diagnosis, and treatment. *Am J Hematol* 81(3):202–209

## **Henoch–Schonlein Purpura (Anaphylactoid Purpura)**

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IgA-mediated systemic vasculitis syndrome that affects children more commonly than adults, is caused by IgA immune complex deposition in the skin and viscera, and is characterized by palpable purpura usually on the legs and buttocks, arthralgias, gastrointestinal bleeding and abdominal pain, and nephritis, with the potential to result in chronic renal failure

### ***Differential Diagnosis***

- Acute appendicitis
- Acute hemorrhagic edema of childhood
- Child abuse
- Churg–Strauss syndrome
- Cryoglobulinemia
- Endocarditis
- Erythema multiforme
- Hemolytic uremic syndrome
- Juvenile rheumatoid arthritis
- Lupus erythematosus
- Meningococemia
- Polyarteritis nodosa
- Pigmented purpuric dermatosis
- Rheumatoid arthritis
- Rocky Mountain spotted fever
- Urticaria
- Urticarial vasculitis

### ***Diagnostic Criteria (2/4)***

- Age  $\geq$ 20 years at presentation
- Bowel angina
- Palpable purpura
- Vessel wall neutrophils on biopsy

### ***Associations***

- Drugs
- IgA nephropathy
- Malignancy
- Viral or bacterial upper respiratory infection

## **Evaluation**

- Abdominal ultrasound
- Antinuclear antibodies
- Antistreptolysin O titer
- Chest radiograph
- Complement levels
- Direct immunofluorescence of affected tissue
- Renal function tests
- Rheumatoid factor
- Stool for occult blood
- Upper or lower endoscopy
- Urinalysis

## **Treatment Options**

- Observation and reassurance
- Topical corticosteroids
- Systemic corticosteroids
- NSAIDS
- Azathioprine
- Plasmapheresis
- Intravenous immunoglobulin
- Cyclophosphamide

### **Further reading:**

- Mills JA, Michel BA, Bloeh DA et al (1990) The American College of Rheumatology criteria for the classification of Henoch–Schonlein purpura. *Arthritis Rheum* 33:1114–1121
- Roberts PE, Waller TA, Brinker TM et al (2007) Henoch–Schonlein purpura: a review article. *South Med J* 100(8):821–824

## **Heparin Necrosis**

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Drug-induced necrosis caused by heparin-dependent antiplatelet antibodies that can be localized to the injection site or more widespread and is characterized by erythematous, painful plaques that become purpuric

and necrotic as well as excessive platelet aggregation leading to thrombosis and thrombocytopenia

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- Calciphylaxis
- Cholesterol emboli syndrome
- Cocaine-associated vasculopathy
- Coumadin necrosis
- Factitial disease
- Fixed drug eruption
- Herpes simplex virus infection
- Polyarteritis nodosa
- Purpura fulminans
- Spider-bite reaction
- Thrombotic thrombocytopenic purpura

### ***Diagnostic Criteria***

- Heparin exposure >5 days
- Relative thrombocytopenia: decrease in platelet count by 50% from baseline OR absolute thrombocytopenia: decrease in platelet count to less than  $100-150 \times 10^9/l$
- Absence of other causes of thrombocytopenia
- Development of new thrombosis or extension of preexisting thrombosis while receiving heparin therapy
- Confirmation by laboratory testing
- Return to normal platelet count when heparin is discontinued

### ***Evaluation***

- Protein-C and protein-S level
- Factor V Leiden mutation study

- Complete blood count
- Prothrombin time and partial thromboplastin time
- Antithrombin III level
- Heparin-platelet factor IV antibody assay (with the heparin-induced platelet aggregation test or the serotonin release assay)

### ***Treatment Options***

- Warfarin
- Argatroban
- Lepirudin

### **Further reading:**

- Harenberg J, Hoffmann U, Huhle G et al (2001) Cutaneous reactions to anticoagulants. Recognition and management. *Am J Clin Dermatol* 2(2):69–75
- Warkentin TE, Cook DJ (2005) Heparin, low molecular weight heparin, and heparin-induced thrombocytopenia in the ICU. *Crit Care Clin* 21(3):513–529

## **Hermansky–Pudlak Syndrome**

Rare inherited syndrome (AR) caused by one of seven different defects in the genes (HSP1–HSP7) encoding proteins responsible for the formation of specialized lysosomes (melanosomes, dense bodies, etc.) that is characterized by bleeding tendency, oculocutaneous albinism, and ceroid lipofuscin deposition in the lungs (leading to pulmonary fibrosis) and other organs

### ***Differential Diagnosis***

- Chediak–Higashi syndrome
- Elejalde syndrome
- Griscelli syndrome
- Oculocutaneous albinism



### **Associations**

- Inflammatory bowel disease
- Systemic lupus erythematosus

### **Evaluation**

- Genetic testing
- Platelet function studies
- Chest CT scan and pulmonary function test
- Ophthalmologic examination

### **Further reading:**

- Dimson O, Drolet BA, Esterly NB (1999) Hermansky–Pudlak syndrome. *Pediatr Dermatol* 16(6):475–477

## **Herpangina**

---

Self-limited, acute viral disease caused by coxsackievirus A that mainly affects children and is characterized by fever, headache, sore throat, and small vesicles on the soft palate and pharynx with peripheral erythema

### **Differential Diagnosis**

- Aphthous stomatitis
- Behçet's disease
- Drug eruption
- Erythema multiforme
- Forschheimer's spots
- Hand, foot, and mouth disease
- Koplik spots
- Lupus erythematosus
- Primary herpetic gingivostomatitis

### **Further reading:**

- Scott LA, Stone MS (2003) Viral exanthems. *Dermatol Online J* 9(3):4

## **Herpes, Genital**

---

Sexually transmitted HSV infection of the genital area with a predilection for recurrent disease and characterized by painful, grouped vesicles on an erythematous base

### ***Differential Diagnosis***

- Behçet's disease
- Chancriform pyoderma
- Chancroid
- CMV infection
- Erosive candidiasis
- Erythema multiforme
- Fixed drug eruption
- Granuloma inguinale
- Lipschutz ulcer
- Syphilis
- Trauma

### ***Evaluation***

- HSV serology
- Tzanck prep
- Direct fluorescent antibody test
- Viral culture

### ***Treatment Options***

- Systemic antivirals

### **Further reading:**

- Yeung-Yue KA, Brentjens MH, Lee PC, Tyring SK (2002) Herpes simplex viruses 1 and 2. *Dermatol Clin* 20(2):249–266



**Fig. 6.49** Herpes gladiatorum

## Herpes Gladiatorum

Herpes simplex virus infection that is spread among wrestlers and other athletes and that is characterized by randomly distributed umbilicated vesicles, bullae, and crusts, some of which are in herpetiform arrangements (Fig. 6.49)

### *Differential Diagnosis*

- Bullous impetigo
- Contact dermatitis
- Eczema herpeticum
- Tinea gladiatorum

### *Evaluation*

- Viral culture
- Bacterial culture
- Fungal culture

### ***Treatment Options***

- Oral antiviral therapy
- Suspension from wrestling for 7–10 days

### **Further reading:**

- Johnson R (2004) Herpes gladiatorum and other skin diseases. *Clin Sports Med* 23(3):473–484

### **Herpes Labialis**

HSV infection of the perioral area with a predilection for recurrent disease and characterized by painful, grouped vesicles on an erythematous base

### ***Differential Diagnosis***

- Aphthous stomatitis
- Behçet's disease
- Bullous pemphigoid
- Candidiasis
- Contact dermatitis
- Erythema multiforme
- Fixed drug eruption
- Herpangina
- Impetigo
- Lupus erythematosus
- Orificial tuberculosis
- Pemphigus vulgaris
- Stevens–Johnson syndrome
- Syphilis
- Varicella
- Zoster

### **Associations**

- Emotional stress
- Erythema multiforme
- Febrile illness
- Sun exposure
- Trauma

### **Evaluation**

- HSV serology
- Tzanck prep
- Direct fluorescent antibody test
- Viral culture

### **Treatment Options**

- Systemic antivirals
- Topical docosanol
- Topical acyclovir
- Topical penciclovir
- L-lysine

### **Further reading:**

- Yeung-Yue KA, Brentjens MH, Lee PC, Tyring SK (2002) Herpes simplex viruses 1 and 2. *Dermatol Clin* 20(2):249–266

### **Herpes, Neonatal**

---

Infection with HSV2 that is transmitted through an infected birth canal, is characterized by grouped vesicles and erosions on a erythematous base with a predilection for the head and neck, and is associated with severe, life-threatening, disseminated disease

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Bullous impetigo
- Congenital candidiasis
- Congenital syphilis
- Congenital varicella
- Epidermolysis bullosa
- Erythema toxicum neonatorum
- Langerhans cell histiocytosis
- Miliaria
- Neonatal acne
- Transient bullous dermolysis
- Transient neonatal pustular melanosis

### ***Treatment Options***

- Systemic antivirals

### **Further reading:**

- Kimberlin DW, Whitley RJ (2005) Neonatal herpes: What have we learned? *Semin Pediatr Infect Dis* 16(1):7–16

## **Herpes Zoster**

Acute eruption that is caused by reactivation of latent varicella-zoster virus and is characterized by painful grouped vesicles and erosions usually confined to a single dermatome

### ***Subtypes/Variants***

- Disseminated
- Nodular

- Ophthalmic
- Ramsay Hunt syndrome

### ***Differential Diagnosis***

- Appendicitis
- Bell's palsy
- Brachioradial pruritus
- Bullous impetigo
- Bullous pemphigoid
- Candidiasis
- Caterpillar dermatitis
- Cellulitis
- Cholecystitis
- Contact dermatitis
- Erysipelas
- Folliculitis
- Incontinentia pigmenti
- Intervertebral disc disease
- Jellyfish sting
- Lichen striatus
- Myocardial infarction
- Pemphigus
- Photoallergic reaction
- Phytophotodermatitis
- Pleurisy
- Renal stone
- Rhus dermatitis
- Trigeminal neuralgia
- Urticaria
- Zosteriform herpes simplex virus infection
- Zosteriform metastasis

***Associations (Skin Disease in Zoster Scars)***

- Chronic lymphocytic leukemia
- Cutaneous lymphoid hyperplasia
- Granuloma annulare
- Granulomatous vasculitis
- Lichen planus
- Lichen sclerosis
- Prurigo nodularis
- Reactive perforating collagenosis
- Rosai–Dorfman disease

***Evaluation***

- Direct fluorescent antibody test
- Viral culture
- Tzanck prep

***Treatment Options***

- Systemic antivirals
- Systemic corticosteroids
- Gabapentin
- Pregabalin
- Amitriptyline
- Topical anesthetics
- Capsaicin cream

**Further reading:**

- Chen TM, George S, Woodruff CA, Hsu S (2002) Clinical manifestations of varicella-zoster virus infection. *Dermatol Clin* 20(2):267–282



## **Herpetic Whitlow**

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Infection of the distal aspect of a finger with HSV1 or HSV2 characterized by painful, grouped vesicles on an erythematous base

### ***Differential Diagnosis***

- Acrodermatitis continua
- Acute paronychia
- Bacterial paronychia
- Blistering distal dactylitis
- Bullous impetigo
- Contact dermatitis
- Dyshidrotic eczema
- Hand, foot, and mouth disease
- Orf

### ***Treatment Options***

- Systemic antivirals

### **Further reading:**

- Bowling JC, Saha M, Bunker CB (2005) Herpetic whitlow: a forgotten diagnosis. Clin Exp Dermatol 30(5):609–610

## **Hidradenitis, Idiopathic Palmoplantar**

---

Idiopathic, inflammatory disorder of the eccrine sweat glands that most commonly affects children and is characterized by recurrent episodes of sudden-onset erythematous tender nodules on the palms and soles that resolve spontaneously within a few days

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Atypical erythema nodosum

- Chilblains
- Contact dermatitis
- Contact urticaria
- Erythema multiforme
- Granuloma annulare
- Juvenile plantar dermatosis
- Pseudomonal hot-foot syndrome
- Neutrophilic eccrine hidradenitis

### ***Treatment Options***

- Observation and reassurance
- NSAIDs

### **Further reading:**

- Rubinson R, Larralde M, Santos-Munoz A et al (2004) Palmoplantar eccrine hidradenitis: seven new cases. *Pediatr Dermatol* 21(4):466–468

## **Hidradenitis Suppurativa**

Chronic, recurrent inflammatory disorder involving follicular occlusion in the intertriginous areas and characterized papules, pustules, abscesses, and draining sinuses that heal with hypertrophic scarring

### ***Differential Diagnosis***

- Actinomycosis
- Bartholin cyst
- Carbuncle
- Crohn's disease
- Fox–Fordyce disease
- Furunculosis
- Granuloma inguinale
- Inflamed epidermal cyst
- Lymphogranuloma venereum

- Lymphoma
- Mycetoma
- Scrofuloderma
- Tularemia

### ***Associations***

- Acne conglobata
- Arthritis
- Dissecting cellulitis
- Dowling–Degos disease
- Fox–Fordyce disease
- Hirsutism
- Inflammatory bowel disease
- Lithium
- Obesity
- Pilonidal sinus
- Pityriasis rubra pilaris, type VI
- Pyoderma gangrenosum
- SAPHO syndrome
- Smoking
- Steatocystoma multiplex

### ***Evaluation***

- Bacterial culture of exudate

### ***Treatment Options***

- Oral antibiotics
- Surgical excision
- Spironolactone
- Oral contraceptive pills

- Isotretinoin
- Adalimumab
- Infliximab
- Dapsone
- Pentoxifylline

**Further reading:**

- Wiseman MC (2004) Hidradenitis suppurativa: a review. *Dermatol Ther* 17(1):50–54

### **Hidradenoma Papilliferum (Papillary Hidradenoma)**

---

Benign neoplasm of apocrine derivation (a type of apocrine adenoma) that is characterized by a firm dermal or subcutaneous nodule most commonly located on the vulva or perianal area

***Differential Diagnosis***

- Bartholin cyst
- Ciliated cyst of the vulva
- Cutaneous endometriosis
- Epidermoid cyst
- Hemangioma
- Leiomyoma
- Melanoma
- Metastatic adenocarcinoma
- Pyogenic granuloma
- Squamous cell carcinoma
- Sweat gland carcinoma

**Further reading:**

- Handa Y, Yamanaka N, Inagaki H, Tomita Y (2003) Large ulcerated perianal hidradenoma papilliferum in a young female. *Dermatol Surg* 29(7):790–792

## **Hidroacanthoma Simplex**

---

Superficial type of acrospiroma (essentially, an intraepidermal poroma) that predominantly arises in the elderly and is characterized by a seborrheic-keratosis-like papule on the lower extremities or trunk

### ***Differential Diagnosis***

- Actinic keratosis
- Basal cell carcinoma
- Benign lichenoid keratosis
- Bowen's disease
- Clear cell acanthoma
- Dermatofibroma
- Large cell acanthoma
- Pyogenic granuloma
- Seborrheic keratosis, especially clonal type

### **Further reading:**

- Kurokawa I, Nishijima S, Kusumoto K et al (2005) A case report of hidroacanthoma simplex with an immunohistochemical study of cytokeratins. *Int J Dermatol* 44(9):775–776

## **Hidrocystoma, Apocrine/Eccrine**

---

Benign cystic tumor of apocrine or eccrine derivation that is characterized by solitary or multiple translucent, bluish, or pigmented papules on the face, especially in the periorbital area

### ***Differential Diagnosis***

- Basal cell carcinoma (especially cystic type)
- Blue nevus
- Colloid milium

- Epidermal inclusion cyst
- Malignant melanoma
- Milia
- Mucous cyst
- Syringoma

### **Associations**

- Focal dermal hypoplasia
- Schopf–Schulz–Passarge syndrome

### **Further reading:**

- Anzai S, Goto M, Fujiwara S, Da T (2005) Apocrine hidrocystoma: a case report and analysis of 167 Japanese cases. *Int J Dermatol* 44(8):702–703

## **Histiocytosis, Benign Cephalic**

---

Benign type of non-X-type histiocytosis that presents in the first year of life, spontaneously resolves within a few months to years, and is characterized by small, erythematous papules on the head and neck without any associated systemic symptoms

### **Differential Diagnosis**

- Congenital self-healing histiocytosis (Hashimoto–Pritzker disease)
- Erythema toxicum neonatorum
- Generalized eruptive histiocytoma
- Infantile acne
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis
- Molluscum contagiosum
- Neonatal cephalic pustulosis
- Transient neonatal pustular melanosis

### **Associations**

- Generalized eruptive histiocytoma
- Juvenile xanthogranuloma

### **Treatment Options**

- Observation and reassurance

### **Further reading:**

- Sidwell RU, Francis N, Slater DN, Mayou SC (2005) Is disseminated juvenile xanthogranulomatosis benign cephalic histiocytosis? *Pediatr Dermatol* 22(1):40–43

### **Histoplasmosis (Darling's Disease)**

---

Respiratory mycotic infection caused by *Histoplasma capsulatum* that is usually asymptomatic in the immunocompetent patient or widely disseminated in the immunocompromised patient and is characterized by a variable clinical presentation with erythematous papules, pustules, nodules, or purpuric lesions as well as mucocutaneous ulcerations and granulomatous lesions, often in the oropharynx or nasopharynx (Fig. 6.50)

### **Differential Diagnosis**

- Acanthamebiasis
- Aphthous stomatitis
- Blastomycosis
- Coccidioidomycosis
- Cryptococcosis
- Herpes simplex virus infection
- Lymphoma
- Malignancy
- Paracoccidioidomycosis
- Sarcoidosis
- Squamous cell carcinoma



**Fig. 6.50** Histoplasmosis

- Syphilis
- Tuberculosis (especially miliary or orificial types)

### ***Evaluation***

- Blood cultures
- Chest radiography
- Complete blood count
- CT/MRI scan of the brain
- HIV test
- Liver function test
- Lumbar puncture
- Renal function test
- Urinary histoplasmosis antigen test

### **Further reading:**

- Verma SB (2006) Chronic disseminated cutaneous histoplasmosis in an immunocompetent individual – a case report. *Int J Dermatol* 45(5):573–576



## **Howel–Evans Syndrome**

---

Autosomal-dominant disorder caused by mutation of the TOC gene that is characterized by childhood onset of focal nonepidermolytic palmoplantar keratoderma followed by esophageal carcinoma which develops in the fifth decade of life

### ***Differential Diagnosis***

- Acrokeratosis paraneoplastica of Bazex
- Focal nonepidermolytic palmoplantar keratoderma with oral, genital, and follicular lesions
- Focal palmoplantar and gingival keratosis
- Hereditary painful callosities
- Nummular epidermolytic palmoplantar keratoderma
- Pachyonychia congenita, type I
- Richner–Hanhart syndrome (tyrosinemia, type II)
- Tripe palms

### ***Evaluation***

- Esophageal gastroduodenoscopy

### **Further reading:**

- Maillefer RH, Greydanus MP (1999) To B or not to B: Is tylosis B truly benign? Two North American genealogies. *Am J Gastroenterol* 94(3):829–834

## **Hunter Syndrome/Hurler Syndrome**

---

Two mucopolysaccharidoses caused by deficiency of the enzymes, iduronate sulfatase (Hunter syndrome, X-linked) and alpha-L-iduronidase (Hurler syndrome, AR) that are characterized by coarse facial features, hypertrichosis, mental retardation, hepatosplenomegaly, gargoylism (Hurler syndrome), genital infantilism, corneal opacities (Hurler syndrome),

flesh-colored papules on the scapular areas representing mucinous connective tissue nevi (nevus mucinosus, Hunter syndrome), extensive dermal melanocytosis, and early death

### *Differential Diagnosis*

- Ambras syndrome
- Congenital syphilis
- Cornelia de Lange syndrome
- Donahue syndrome
- Ectodermal dysplasias
- Fetal alcohol syndrome
- Gaucher's disease
- Niemann–Pick disease
- Osteogenesis imperfecta
- Other mucopolysaccharidoses
- Phakomatosis pigmentovascularis
- Vitamin-D-resistant rickets
- Tuberous sclerosis

### **Further reading:**

- Lonergan CL, Payne AR, Wilson WG et al (2004) What syndrome is this? Hunter syndrome. *Pediatr Dermatol* 21(6):679–681

## **Hydroa Vacciniforme**

Childhood idiopathic photodermatosis that is characterized by photodistributed umbilicated vesicles that heal to smallpox-like scars

### *Differential Diagnosis*

- Actinic prurigo
- EBV infection
- Erythema multiforme

- Erythropoietic protoporphyria
- Hartnup syndrome
- Herpes simplex virus infection
- Hydroa-like cutaneous T cell lymphoma
- Lupus erythematosus
- Lymphomatoid papulosis
- Pityriasis lichenoides et varioliformis acuta
- Polymorphous light eruption
- Porphyria cutanea tarda
- Pseudoporphyria
- Varicella infection

### ***Evaluation***

- Antinuclear antibodies
- Complete blood count
- EBV titers
- Erythrocyte, plasma, and urinary porphyrin studies
- Phototesting
- T cell gene rearrangement of lesional tissue (if lymphoma is suspected)

### ***Treatment Options***

- Sunscreen
- Phototherapy
- Antimalarials
- Beta-carotene
- Azathioprine
- Cyclosporine
- Thalidomide

### **Further reading:**

- Gupta G, Man I, Kemmett D (2000) Hydroa vacciniforme: a clinical and follow-up study of 17 cases. *J Am Acad Dermatol* 42(2 Pt 1):208–213

## **Hypereosinophilic Syndrome**

---

Acquired syndrome associated with idiopathic eosinophilia that is caused by excessive production of eosinophil-stimulating cytokines and characterized by pruritus, urticaria, erythroderma, and other eosinophil-rich cutaneous and visceral infiltrates

### ***Subtypes/Variants***

- Lymphoproliferative
- Myeloproliferative

### ***Differential Diagnosis***

- Angiolymphoid hyperplasia with eosinophilia
- Atopic dermatitis
- Bullous pemphigoid
- Churg–Strauss syndrome
- Drug reaction
- Eosinophilia–myalgia syndrome
- Eosinophilic fasciitis
- Eosinophilic leukemia
- Episodic angioedema with eosinophilia
- Leukemia
- Lupus erythematosus
- Lymphoma
- Parasitic infections
- Urticaria
- Urticarial dermatitis
- Wells syndrome

### ***Diagnostic Criteria***

- Eosinophils >1,500 for more than 6 months
- Evidence of parenchymal organ involvement

- No apparent underlying disease to explain eosinophilia
- No vasculitis

### ***Associations***

- Aquagenic pruritus
- Bullous pemphigoid
- Erythema annulare centrifugum
- Raynaud phenomenon
- Splinter hemorrhages
- Wells syndrome

### ***Evaluation***

- Bone marrow biopsy
- Chest radiograph
- Complete blood count
- Direct immunofluorescence
- Echocardiography
- Immunoglobulin levels
- Liver function test
- Renal function test
- Stool studies for parasites
- Urinalysis

### ***Treatment Options***

- Systemic corticosteroids
- Hydroxyurea
- Imatinib
- Chemotherapy
- Interferon
- Alemtuzumab

**Further reading:**

- Leiferman KM, Gleich GJ (2004) Hypereosinophilic syndrome: case presentation and update. *J Allergy Clin Immunol* 113(1):50–58

**Hypergammaglobulinemic Purpura of Waldenstrom, Benign**

Chronic, benign purpuric disorder association with elevated gamma globulins (especially IgG) and a variety of autoimmune diseases that is characterized by repeated episodes of noninflammatory petechiae and purpura all over the body, especially the lower extremities (Fig. 6.51)

***Differential Diagnosis***

- Benign pigmented purpura
- Chronic meningococemia
- Cutaneous small vessel vasculitis
- Disseminated intravascular coagulation
- Drug-induced purpura



**Fig. 6.51** Benign hypergammaglobulinemic purpura of Waldenstrom

- Immune thrombocytopenic purpura
- Platelet dysfunction
- Scurvy
- Thrombotic thrombocytopenic purpura

### **Associations**

- Chronic lymphocytic leukemia
- Monoclonal gammopathy
- Hashimoto's thyroiditis
- Idiopathic
- Rheumatoid arthritis
- Sarcoidosis
- Sjögren syndrome
- Systemic lupus erythematosus

### **Evaluation**

- Antinuclear antibodies (including SS-A and SS-B)
- Complement levels
- Complete blood count
- Immunoglobulin levels
- Prothrombin time and partial thromboplastin time
- Rheumatoid factor
- Serum/urinary protein electrophoresis
- Thyroid function test

### **Treatment Options**

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- Treat underlying cause
- Systemic corticosteroids
- Indomethacin
- Hydroxychloroquine

**Further reading:**

- Malaviya AN, Kaushik P, Budhiraja S et al (2000) Hypergammaglobulinemic purpura of Waldenstrom: report of 3 cases with a short review. *Clin Exp Rheumatol* 18(4):518–522

**Hyperimmunoglobulin E Syndrome (Job Syndrome)**

---

Inherited syndrome (AD) of uncertain cause characterized by coarse facies, potentially severe eczema, recurrent candidiasis and staphylococcal infections (presenting as cold abscesses), retention of primary teeth, bony fractures, various systemic infections (especially pulmonary), and high levels of IgE

***Differential Diagnosis***

- Atopic dermatitis
- Chronic granulomatous disease
- Chronic mucocutaneous candidiasis
- Common variable immunodeficiency
- DiGeorge syndrome
- Leukocyte adhesion deficiency
- Nezelof syndrome
- Omenn syndrome
- Recurrent furunculosis
- Wiskott–Aldrich syndrome
- X-linked hypogammaglobulinemia

***Evaluation***

- Bacterial and fungal cultures (of any infected sites)
- Chest radiograph or CT scan
- Complete blood count
- Immunoglobulin levels



- Panoramic radiograph of teeth
- Skeletal survey

**Further reading:**

- Dewitt CA, Bishop AB, Buescher LS et al (2006) Hyperimmunoglobulin E syndrome: two cases and a review of the literature. *J Am Acad Dermatol* 54(5):855–865

## **Hyperkeratosis Lenticularis Perstans (Flegel's Disease)**

---

Uncommon, acquired dermatosis of unknown cause characterized by small, flat, brown, hyperkeratotic papules predominantly on the lower extremities

### ***Differential Diagnosis***

- Acquired perforating dermatosis
- Acrokeratosis verruciformis of Hopf
- Actinic keratoses
- Darier's disease
- Disseminated superficial actinic porokeratosis
- Epidermodysplasia verruciformis
- Guttate psoriasis
- Stucco keratoses
- Verruca plana

### ***Treatment Options***

- 5-FU cream
- Topical vitamin D analogues
- Topical retinoids
- Acitretin

**Further reading:**

- Vando K, Hattori H, Yamauchi Y (2006) Histopathological differences between early and old lesions of hyperkeratosis lenticularis perstans (Flegel's disease). *Am J Dermatopathol* 28(2):122–126

## **Hypertensive Ulcer (Martorell's Ulcer)**

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Type of ulcer associated with severe, uncontrolled hypertension that is characterized by an extremely painful ulcer on the lateral aspects on the lower extremity which is occasionally bilateral and symmetrical or surrounded by satellite lesions

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- Arterial insufficiency ulcer
- Arthropod-bite reaction
- Chancriform pyoderma
- Cholesterol emboli syndrome
- Dermatitis artefacta
- Livedoid vasculopathy
- Pyoderma gangrenosum
- Sickle cell ulcer
- Tropical ulcer
- Vasculitis

### ***Treatment Options***

- Wound care
- Control of hypertension

### **Further reading:**

- Graves JW, Morris JC, Sheps SG (2001) Martorell's hypertensive leg ulcer: case report and concise review of the literature. *J Hum Hypertens* 15(4):279–283

## **Hypomelanosis of Ito (Incontinentia Pigmenti Achromians)**

---

Pigmentary disturbance that may be associated with a variety of CNS defects and is characterized by linear and whorled hypomelanosis following Blaschko's lines that fails to have any preceding stage of vesicles and verrucous lesions that are classically seen in incontinentia pigmenti (Fig. 6.52)



**Fig. 6.52** Hypomelanosis of Ito  
(Courtesy of  
K. Guidry)

### ***Differential Diagnosis***

- Incontinentia pigmenti, stage IV
- Linear and whorled nevoid hypermelanosis
- Nevus depigmentosus
- Pallister–Killian syndrome
- Phylloid hypomelanosis
- Postinflammatory hypopigmentation
- Segmental vitiligo
- Tuberous sclerosis

### ***Associations***

- Deafness
- Developmental disturbance
- Mental retardation
- Seizures
- Skeletal abnormalities
- Visual disturbance

## **Evaluation**

- CT/MRI scan of brain
- Electroencephalogram
- Hearing test
- Ophthalmologic exam
- Skeletal surgery
- Vision test

## **Further reading:**

- Taibjee SM, Bennett DC, Moss C (2004) Abnormal pigmentation in hypomelanosis of Ito and pigmentary mosaicism: the role of pigmentary genes. *Br J Dermatol* 151(2):269–282

## **Ichthyosis Bullosa of Siemens**

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Autosomal-dominant ichthyosis caused by mutation of the keratin-2e gene that is characterized by mild trauma-induced blistering at birth that is replaced by mild flexural hyperkeratosis and superficial molting of the skin later in childhood

## **Differential Diagnosis**

- Bullous congenital ichthyosiform erythroderma
- Collodion baby
- Epidermolysis bullosa
- Lamellar ichthyosis
- Omenn's syndrome
- Peeling skin syndrome
- Pemphigus foliaceus (including maternal disease)
- Staphylococcal scalded-skin syndrome
- Syphilitic pemphigus
- Transient bullous dermolysis
- Weary–Kindler syndrome

**Further reading:**

- Akiyama M, Tsuji-Abe Y, Yanagihara M et al (2005) Ichthyosis bullosa of Siemens: its correct diagnosis facilitated by molecular genetic testing. *Br J Dermatol* 152(6):1353–1356

**Ichthyosis, Lamellar**

Inherited disorder (AR) of keratinization that is caused by mutation of the gene encoding epidermal transglutaminase 1 and characterized by collodion baby presentation at birth, followed by chronic, generalized plate-like scaling, including the face and flexures

***Differential Diagnosis***

- Conradi–Hunermann–Happle disease
- CHIME syndrome
- IBIDS syndrome
- KID syndrome
- Leiner’s disease
- Netherton syndrome
- Neutral lipid storage disorder
- Nonbullous congenital ichthyosiform erythroderma
- Psoriatic erythroderma
- Refsum disease
- Seborrheic dermatitis (generalized)
- Sjögren–Larsson syndrome
- X-linked ichthyosis

**Further reading:**

- Oji V, Traupe H (2006) Ichthyoses: differential diagnosis and molecular genetics. *Eur J Dermatol* 16(4):349–359

## **Ichthyosis Vulgaris**

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Inherited disorder (AD) of keratinization associated with decreased conversion of profilaggrin to filaggrin that is characterized by fine scaling predominantly affecting the extensor surfaces of the extremities with sparing of the flexures and tendency toward improvement in the summer months

### ***Differential Diagnosis***

- Acquired ichthyosis
- Asteatotic eczema
- Atopic dermatitis
- CHIME syndrome
- Dermatophytosis
- Dermatitis neglecta
- IBIDS syndrome
- KID syndrome
- Netherton syndrome
- Neutral lipid storage disease
- Refsum disease
- Sarcoidosis
- Sjögren–Larsson syndrome
- Xerosis
- X-linked ichthyosis

### ***Associations***

- Atopic dermatitis
- Keratosis pilaris

### **Further reading:**

- Oji V, Traupe H (2006) Ichthyoses: differential diagnosis and molecular genetics. *Eur J Dermatol* 16(4):349–359

## **Ichthyosis, X-Linked**

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X-linked recessive disorder of keratinization caused by a defect in the gene encoding steroid sulfatase and characterized by large brown scales on the neck and extensor surfaces with sparing of the flexures, as well as cryptorchidism, a history of maternal failure of progression of labor, and comma-shaped corneal opacities

### ***Differential Diagnosis***

- Asteatotic eczema
- Atopic dermatitis
- CHIME syndrome
- Chondrodysplasia punctata
- Dermatitis neglecta
- Ichthyosis vulgaris
- Lamellar ichthyosis
- Multiple sulfatase deficiency
- Netherton syndrome
- Nonbullous congenital ichthyosiform erythroderma
- Peeling skin syndrome

### ***Associations***

- Androgenetic alopecia
- Kallmann syndrome
- Multiple sulfatase deficiency

### ***Evaluation***

- Testicular ultrasound
- Ophthalmologic exam

**Further reading:**

- Hazan C, Orlow SJ, Schaffer JV (2005) X-linked recessive ichthyosis. *Dermatol Online J* 11(4):12

**Idiopathic Facial Aseptic Granuloma**

Idiopathic granulomatous lesion that arises on the face of children and is characterized by a reddish-brown papule or nodule

***Differential Diagnosis***

- Dermoid cyst
- Epidermal inclusion cyst
- Foreign body granuloma
- Granulomatous infection
- Hemangioma
- Juvenile xanthogranuloma
- Molluscum contagiosum
- Nodulocystic acne
- Pilomatricoma
- Pyogenic granuloma
- Sarcoidosis
- Spitz nevus

**Further reading:**

- Boralevi F, Leaute-Labreze C, Lepreux S et al (2007) Idiopathic facial aseptic granuloma: a multicentre prospective study of 30 cases. *Br J Dermatol* 156(4):705–708

**Idiopathic Guttate Hypomelanosis**

Acquired idiopathic type of leukoderma that predominantly affects women and is characterized by small white macules on the anterior lower extremities and, less commonly, on the forearms



### ***Differential Diagnosis***

- Atrophie blanche
- Cryotherapy leukoderma
- Darier's disease leukodermic macules
- Excoriation or arthropod-bite scars
- Hypopigmented mycosis fungoides
- Leprosy
- Lichen sclerosus
- Malignant atrophic papulosis (Degos disease)
- Occupational leukoderma
- Pinta
- Pityriasis lichenoides chronica
- Postinflammatory hypopigmentation
- Secondary syphilis
- Tinea versicolor
- Verruca plana
- Vitiligo, especially punctate type

### ***Treatment Options***

- Observation and reassurance

#### **Further reading:**

- Kaya TI, Yazici AC, Tursen U et al (2005) Idiopathic guttate hypomelanosis: Idiopathic or ultraviolet induced? *Photodermatol Photoimmunol Photomed* 21(5):270–271

### **Idiopathic Eruptive Macular Pigmentation**

Rare, acquired pigmentary disorder with onset in the first two decades of life that is characterized by asymptomatic brown macules and patches on the face, trunk, and proximal extremities that spontaneously resolve within a few years

## **Differential Diagnosis**

- Erythema dyschromicum perstans
- Lichenoid drug eruption
- Lichen planus pigmentosus
- Macula cerulea
- Multiple fixed drug eruption
- Postinflammatory hyperpigmentation, especially due to pityriasis rosea
- Tinea versicolor
- Urticaria pigmentosum

## **Treatment Options**

- Observation and reassurance

### **Further reading:**

- Jang KA, Choi JH, Sung KS et al (2001) Idiopathic eruptive macular pigmentation: report of 10 cases. *J Am Acad Dermatol* 44(2 Suppl):351–353

## **Id Reaction**

Type of immune-mediated skin reaction caused by various infections or infestations that is characterized by symmetric erythematous papules, vesicles, or eczematous changes in areas distant to the site of initial triggering infection (Fig. 6.53)

## **Subtypes**

- Eczematous
- Erythema annulare centrifugum
- Erythema multiforme-like
- Lichen trichophyticus
- Pompholyx-like



**Fig. 6.53** Id reaction  
(Courtesy of  
K. Guidry)

- Psoriasiform
- Urticarial

### *Differential Diagnosis*

- Atopic dermatitis
- Autosensitization dermatitis
- Contact dermatitis
- Dermatophytosis
- Drug eruption
- Dyshidrotic eczema
- Erysipelas
- Erythema multiforme
- Folliculitis
- Gianotti–Crosti syndrome
- Pityriasis lichenoides et varioliformis acuta
- Scabies

- Seborrheic dermatitis
- Stasis dermatitis

### **Associations**

- Bacterial infection
- Dermatophyte infection
- Molluscum contagiosum
- Pediculosis capitis
- Scabies infestation
- Tick bite

### **Treatment Options**

- Treat underlying cause
- Systemic corticosteroids
- Topical corticosteroids

### **Further reading:**

- Atzori L, Pau M, Aste M (2003) Erythema multiforme ID reaction in atypical dermatophytosis: a case report. *J Eur Acad Dermatol Venereol* 17(6):699–701

## **IFAP Syndrome (Ichthyosis Follicularis, Alopecia, and Photophobia)**

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X-linked recessive disorder of unknown cause that is characterized by diffuse, congenital nonscarring alopecia, ichthyosis, spiny keratotic follicular papules, photophobia, facial dysmorphism, mental retardation, and a variety of other systemic features

### **Differential Diagnosis**

- Atrichia with papules
- Cardiofaciocutaneous syndrome

- Down syndrome
- Graham–Little–Piccardi–Lasseur syndrome
- Keratitis follicularis spinulosa decalvans
- KID syndrome
- Monilethrix
- Noonan syndrome

**Further reading:**

- Alfadley A, Al Hawsawi K, Al Aboud K (2003) Ichthyosis follicularis: a case report and review of the literature. *Pediatr Dermatol* 20(1):48–51

## **Immersion Foot, Warm Water, and Tropical**

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Dermatosis predominantly affecting soldiers that results from immersion of the feet in warm water or mud (paddy foot) for several days and is characterized by wrinkling, maceration, pruritus, and burning of the soles of the feet (warm water) or swelling and pain of the dorsal feet (tropical) that persists for several days after the exposure

### ***Differential Diagnosis***

- Aquagenic acrosyringeal keratoderma
- Cellulitis
- Chilblains
- Dermatophyte infection
- Erosio interdigitalis blastomycetica
- Erythrasma
- Erythromelalgia
- Frostbite
- Gram-negative toe-web infections
- Pitted keratolysis
- Plantar hyperhidrosis
- Raynaud phenomenon

**Further reading:**

- Oumeish OY, Parish LC (2002) Marching in the army: common cutaneous disorders of the feet. *Clin Dermatol* 20(4):445–451

**Impetigo Contagiosa**

Superficial streptococcal or staphylococcal infection of the epidermis characterized by honey-crusted lesions (nonbullous) or flaccid vesiculobullous lesions and erosions (bullous) most commonly seen on the face but can occur anywhere the skin barrier is damaged

***Differential Diagnosis*****Bullous**

- Acropustulosis of infancy
- Bullous arthropod-bite reaction
- Bullous dermatophyte infection
- Bullous erythema multiforme
- Bullous fixed drug eruption
- Bullous pemphigoid
- Bullous scabies
- Burn
- Candidiasis
- Contact dermatitis
- Dermatitis herpetiformis
- Herpes simplex infection
- Incontinentia pigmenti, stage I
- Pemphigus foliaceus
- Pemphigus vulgaris
- Staphylococcal scalded-skin syndrome
- Stevens–Johnson syndrome
- Subcorneal pustular dermatosis
- Thermal burns
- Varicella

## Nonbullous

- Candidiasis
- Eczema
- Herpes simplex infection
- Insect-bite reaction
- Pediculosis
- Pemphigus foliaceus
- Rhus dermatitis
- Scabies
- Tinea corporis
- Varicella

## Associations

- Glomerulonephritis

## Treatment Options

- Topical antibiotics
- Systemic antibiotics

## Further reading:

- Stanley JR, Amagai M (2006) Pemphigus, bullous impetigo, and the staphylococcal scalded-skin syndrome. *N Engl J Med* 355(17):1800–1810

## Incontinentia Pigmenti (Bloch–Sulzberger Syndrome)

Inherited disorder (XLD) caused by a defect in the gene encoding the nuclear factor kappa beta essential modulator (NEMO) that is characterized by a neonatal-onset skin eruption along Blaschko's lines that progresses through stages, in addition to scarring alopecia at the vertex of the scalp, nail dystrophy, pegged-shaped teeth or partial anodontia, strabismus, and seizures

## Stages

- Stage I – vesiculobullous
- Stage II – verrucous
- Stage III – hyperpigmented
- Stage IV – hypopigmented

## Differential Diagnosis

### Stage I

- Bullous impetigo
- Bullous mastocytosis
- Congenital erosive and vesicular dermatosis
- Congenital syphilis
- Contact dermatitis
- Epidermolysis bullosa
- Epidermolytic hyperkeratosis
- Erythema toxicum neonatorum
- Focal dermal hypoplasia (Goltz)
- Herpes simplex virus infection
- Infantile acropustulosis
- Langerhans cell histiocytosis
- Linear IgA bullous dermatosis
- Miliaria
- Scabies
- Transient neonatal pustular melanosis
- Varicella
- Zoster

### Stage II

- Congenital ichthyosiform erythroderma
- Conradi–Hunermann syndrome
- Ichthyosis hystrix
- Ichthyosis hystrix, Curth–Macklin type
- Inflammatory linear verrucous epidermal nevus



- Lichen striatus
- Linear Darier's disease
- Linear verrucous epidermal nevus
- Linear porokeratosis
- Verruca vulgaris

### Stage III

- Dermatopathia pigmentosa reticularis
- Linear and whorled nevoid hypermelanosis
- Naegeli–Franceschetti–Jadassohn syndrome
- Pallister–Killian syndrome
- Progressive cribriform and zosteriform hyperpigmentation
- XLD chondrodysplasia punctata
- X-linked reticulate pigmentary disorder

### Stage IV

- Focal dermal hypoplasia
- Hypomelanosis of Ito
- Nevus depigmentosus
- Pallister–Killian syndrome
- Phylloid hypomelanosis
- Segmental vitiligo
- XLD chondrodysplasia punctata

### **Diagnostic Criteria**

- Major criteria, no family history (one necessary)
  - Typical neonatal vesicular rash with eosinophilia
  - Typical blaschkoid hyperpigmentation on the trunk, fading in adolescence
  - Linear, atrophic hairless lesions
- Major criteria, positive family history (any suggests diagnosis)
  - Suggestive history or evidence of typical rash, hyperpigmentation, or atrophic hairless lesions
  - Vertex alopecia

- Dental anomalies
- Retinal disease
- Multiple male miscarriages
- Minor criteria (supports diagnosis)
  - Dental anomalies
  - Alopecia
  - Woolly hair
  - Abnormal nails

### **Evaluation**

- Ophthalmologic exam
- CT/MRI scan of the brain
- Electroencephalogram
- Panoramic radiograph of the mandible

### **Treatment Options (Vesiculobullous Phase)**

- Topical corticosteroids
- Tacrolimus ointment

### **Further reading:**

- Lands SJ, Donnai D (1993) Incontinentia pigmenti (Bloch–Sulzberger syndrome). *J Med Genet* 30(1):53–59

### **Infantile Digital Fibromatosis (Reye Tumor)**

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Type of fibrous proliferation that is characterized by fibrous, flesh-colored nodules on the fingers and toes, with sparing of the thumb and great toe and a tendency to recur after excision

### **Differential Diagnosis**

- Acral fibrokeratoma
- Angiofibroma

- Calcifying aponeurotic fibroma
- Dermatofibroma
- Fibrosarcoma
- Granuloma annulare
- Juvenile hyaline fibromatosis
- Keloid
- Knuckle pad
- Multicentric reticulohistiocytosis
- Neurilemmoma
- Pachydermodactyly
- Periungual fibromas
- Sarcoidosis
- Supernumerary digits
- Wart
- Xanthoma

### ***Treatment Options***

- Observation and reassurance
- Intralesional corticosteroids
- Surgical excision
- Mohs micrographic

### **Further reading:**

- Niamba P, Leaute-Labreze C, Boralevi F et al (2007) Further documentation of spontaneous regression of infantile digital fibromatosis. *Pediatr Dermatol* 24(3):280–284

## **Infantile Myofibromatosis (Congenital Generalized Fibromatosis)**

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Type of infantile fibromatosis that is often present at birth and characterized by a solitary fibrous nodule or plaque on the head and neck or, less commonly, generalized dermal and subcutaneous nodules with skeletal and, uncommonly, visceral (particularly the lung) involvement (that can be associated with a poor prognosis, depending on the organs involved)

## ***Differential Diagnosis***

- Connective tissue nevus
- Cutaneous metastases
- Fibrous hamartoma of infancy
- Hemangioma
- Hemangiopericytoma
- Juvenile xanthogranuloma
- Leiomyoma
- Leukemia cutis
- Mastocytoma
- Neuroblastoma
- Neurofibroma
- Rhabdomyosarcoma
- Solitary histiocytoma
- Subcutaneous fat necrosis
- Urticaria pigmentosa

## ***Evaluation***

- CT/MRI scan of chest, abdomen, and pelvis
- Skeletal radiographs

## ***Treatment Options***

- Chemotherapy
- Surgical excision
- Radiation therapy

## **Further reading:**

- Stanford D, Rogers M (2000) Dermatological presentations of infantile myofibromatosis: a review of 27 cases. *Australas J Dermatol* 41(3):156–161

## **Infectious Eczematoid Dermatitis (Engman's Disease)**

---

Eczematous eruption and form of autosensitization that is localized around a draining focus of purulent infectious material

### ***Differential Diagnosis***

- Allergic contact dermatitis (especially topical antibiotics or bandage)
- Arthropod-bite reaction
- Id reaction
- Eczema herpeticum
- Impetigo
- Perioral dermatitis
- Seborrheic dermatitis

### ***Associations***

- Mastoiditis
- Nasal discharge
- Osteomyelitis
- Otitis externa
- Toe-web infection

### ***Treatment Options***

- Topical antibiotics
- Topical corticosteroids
- Systemic antibiotics

## **Infective Dermatitis**

Childhood manifestation of HTLV-1 infection that is characterized by chronic, recalcitrant eczema with persistent staphylococcal or streptococcal infection, involvement of scalp and retroauricular area,

dermatopathic lymphadenopathy, and predilection for the development of lymphoma and tropical paraparesis.

### ***Differential Diagnosis***

- Atopic dermatitis
- Childhood mycosis fungoides
- Impetigo
- Seborrheic dermatitis
- Psoriasis
- Tinea

### ***Diagnostic Criteria (Four Major Required)***

- Major criteria
  - Dermatitis involving two or more sites including the scalp, axillae, groin, external ear, retroauricular areas, eyelid margins, paranasal skin, and/or neck
  - Chronic rhinorrhea without other signs of rhinitis and/or crusting of the anterior nares
  - Chronic relapsing dermatitis with prompt response to antibiotics but prompt recurrence upon withdrawal
  - Onset in early childhood
  - Human T-lymphotropic virus type 1 seropositivity
- Minor criteria
  - Positive cultures for *Staphylococcus aureus* and/or  $\beta$ -hemolytic streptococci from the skin or anterior nares
  - Generalized papular rash
  - Generalized lymphadenopathy with dermatopathic lymphadenitis
  - Anemia
  - Increased erythrocyte sedimentation rate
  - Elevated immunoglobulin levels (IgD and IgE)
  - Raised CD4 count, CD8 count, and CD4/CD8 ratio

**Further reading:**

- Lee R, Schwartz RA (2011) Human T-lymphotrophic virus type 1-associated infective dermatitis: a comprehensive review. *J Am Acad Dermatol* 64(1):152–160

**Inflammatory Linear Verrucous Epidermal Nevus (ILVEN)**

Type of verrucous epidermal nevus that appears in infancy or early childhood and that is characterized by chronic, pruritic and erythematous, verrucous, or psoriasiform plaques along Blaschko's lines (Fig. 6.54)

***Differential Diagnosis***

- Basaloid follicular hamartoma syndrome
- Ichthyosiform nevus of CHILD syndrome
- Incontinentia pigmenti, stage II
- Linear Darier's disease
- Linear lichen planus
- Linear lichen nitidus
- Linear lichen simplex chronicus



**Fig. 6.54** Inflammatory linear verrucous epidermal nevus

- Linear porokeratosis
- Linear verrucous epidermal nevus
- Linear warts
- Nevoid psoriasis

### ***Treatment Options***

- Topical corticosteroids
- Topical vitamin D analogues
- Topical retinoids
- CO<sub>2</sub> laser
- Surgical excision

### **Further reading:**

- Lee SH, Rogers M (2001) Inflammatory linear verrucous epidermal naevi: a review of 23 cases. *Australas J Dermatol* 42(4):252–256

## **Ingrown Toenail (Onychocryptosis, Unguis Incarnatus)**

Common nail problem predominantly affecting the great toes that is caused by ingrowth of the nail under the lateral nail fold and is characterized by pain, erythema, swelling, and exuberant granulation tissue

### ***Differential Diagnosis***

- Amelanotic melanoma
- Metastatic lesion
- Paronychia
- Pyogenic granuloma

### ***Association***

- Congenital malalignment of the great toenails
- Isotretinoin



### ***Treatment Options***

- Partial nail avulsion with or without chemical ablation
- Topical antibiotics
- Systemic antibiotics

#### **Further reading:**

- Daniel CR III, Iorizzo M, Tosti A, Piraccini BM (2006) Ingrown toenails. *Cutis* 78(6):407–408

### **Interstitial Granulomatous Dermatitis with Arthritis**

Idiopathic granulomatous disease that occurs predominantly in female patients with autoimmune disease, especially severe rheumatoid arthritis, and some infectious diseases (e.g., coccidioidomycosis) and is characterized by linear, erythematous subcutaneous cords (rope sign) distributed on the abdomen or flank as well as tender or burning, erythematous to violaceous indurated papules, nodules, and plaques

### ***Differential Diagnosis***

- Blau syndrome
- Churg–Strauss syndrome
- Granuloma annulare
- Granulomatous drug reaction
- Granulomatous mycosis fungoides
- Juvenile rheumatoid arthritis
- Leukemia cutis
- Lyme disease
- Lymphocytic infiltrate of Jessner
- Lymphoma
- Mondor's disease
- Morphea
- Necrobiosis lipoidica

- Palisaded neutrophilic and granulomatous dermatitis
- Rheumatoid nodule
- Sarcoidosis
- Superficial thrombophlebitis
- Tumid lupus erythematosus
- Urticarial vasculitis
- Wegener's granulomatosis

### ***Associations***

- Coccidioidomycosis
- Hemolytic anemia
- Rheumatoid arthritis
- Systemic lupus erythematosus
- Thyroiditis
- TNF inhibitor therapy

### ***Evaluation***

- Antinuclear antibodies
- Complete blood count
- Rheumatoid factor level
- Search for underlying infection

### ***Treatment Options***

- Treat the underlying cause
- Topical corticosteroids
- Systemic corticosteroids
- Infliximab

### **Further reading:**

- Sayah A, English JC (2005) Rheumatoid arthritis: a review of the cutaneous manifestations. *J Am Acad Dermatol* 53(2):191–209

## **Intertrigo**

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Dermatosis affecting the intertriginous areas that is caused by a combination of occlusion, friction, heat, and moisture and is characterized by pruritus, erythema, scale, and maceration

### ***Differential Diagnosis***

- Acanthosis nigricans
- Acrodermatitis enteropathica
- Baboon syndrome
- Biotin deficiency
- Bowen's disease
- Candidiasis
- Contact dermatitis
- Dermatophytosis
- Erythrasma
- Extramammary Paget's disease
- Hailey–Hailey disease
- Granuloma gluteale infantum
- Langerhans cell histiocytosis
- Inverse psoriasis
- Necrolytic migratory erythema
- Pemphigus
- Seborrheic dermatitis
- Staphylococcal infection
- Streptococcal infection

### ***Evaluation***

- Gram stain and bacterial culture
- Potassium hydroxide examination and fungal culture

### ***Treatment Options***

- Topical corticosteroids
- Zinc oxide
- Nystatin cream
- Ketoconazole
- Protopic ointment
- Petrolatum
- Absorbent powders

### **Further reading:**

- Farage MA, Miller KW, Berardesca E, Maibach HI (2007) Incontinence in the aged: contact dermatitis and other cutaneous consequences. *Contact dermatitis* 57(4):211–217

### **Inverted Follicular Keratosis (Helwig's Disease)**

Benign neoplasm that affects older adults and is characterized by a hyperkeratotic, pink papule most commonly located on the face

### ***Differential Diagnosis***

- Actinic keratosis
- Basal cell carcinoma
- Bowen's disease
- Keratoacanthoma
- Melanoma
- Poroma
- Squamous cell carcinoma
- Seborrheic keratosis
- Trichilemmoma
- Verruca

### **Further reading:**

- Ko CJ, Shintaku P, Binder SW (2005) Comparison of benign keratoses using p53, bcl-1, and bcl-2. *J Cutan Pathol* 32(5):356–359

## **IPEX Syndrome (Immune Dysregulation, Polyendocrinopathy, Enteropathy, and X-Linked Syndrome)**

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X-linked recessive syndrome that is caused by mutation of the gene-encoding FOXP3, which is required for the development of regulatory T cells, and is characterized by dermatitis, urticaria, alopecia universalis, pemphigoid, enteropathy, type I diabetes, thyroiditis, hemolytic anemia, and thrombocytopenia

### ***Differential Diagnosis***

- APECED syndrome
- Autoimmune polyendocrine syndrome, type II (Schmidt syndrome)
- Dermatitis herpetiformis
- Severe combined immune deficiency
- Systemic lupus erythematosus
- Wiskott–Aldrich syndrome

### **Further reading:**

- Nieves DS, Phipps RP, Pollock SJ et al (2004) Dermatologic and immunologic findings in the immune dysregulation, polyendocrinopathy, enteropathy, X-linked syndrome. Arch Dermatol 140(4):466–472

## **Jellyfish Sting**

Painful and pruritic eruption caused by aquatic contact with a variety of jellyfish and characterized by flagellate, streaky urticarial and vesicular plaques at the exposed site

### ***Differential Diagnosis***

- Herpes zoster
- Larva migrans
- Mushroom dermatitis

- Phytophotodermatitis
- Rhus dermatitis
- Zoster

### **Associations**

- Allergic contact dermatitis
- Deep venous thrombosis
- Erythema nodosum
- Gangrene
- Granuloma annulare
- Keloids
- Mondor's disease
- Papular urticaria
- Postinflammatory hyperpigmentation
- Toxin-mediated eruption

### **Treatment Options**

- Vinegar rinse
- Antivenom (box jellyfish)
- Removal of nematocysts
- Pain control

### **Further reading:**

- Ulrich H, Landthaler M, Vogt T (2007) Granulomatous jellyfish dermatitis. *J Dtsch Dermatol Ges* 5(6):493–495

### **Jessner's Lymphocytic Infiltrate**

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Idiopathic disease caused by benign lymphocytic infiltration of the skin that is characterized by erythematous, nonscaly papules and plaques either solitary or grouped in circinate, annular, or semicircular arrays which are most commonly located on the face (especially the cheeks), neck, and back

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Contact dermatitis, especially lymphomatoid type
- Cutaneous lymphoid hyperplasia
- Cutaneous lymphoma
- Erythema annulare centrifugum (especially deep variant)
- Fixed drug eruption
- Granuloma annulare
- Granuloma faciale
- Metastasis
- Polymorphous light eruption
- Reticular erythematous mucinosis
- Rosacea
- Sarcoidosis
- Sjögren syndrome
- Sweet's syndrome
- Tumid lupus erythematosus
- Urticarial dermatitis

### ***Evaluation***

- Antinuclear antibodies (including SS-A and SS-B)

### ***Treatment Options***

- Sunscreen
- Topical corticosteroids
- Hydroxychloroquine
- Systemic corticosteroids
- Methotrexate

**Further reading:**

- Lipsker D, Mitschler A, Grosshans E et al (2006) Could Jessner's lymphocytic infiltrate of the skin be a dermal variant of lupus erythematosus? An analysis of 210 cases. *Dermatology* 213(1):15–22

**Juvenile Hyaline Fibromatosis**

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Autosomal-recessive disorder caused by mutation of the gene-encoding capillary morphogenesis protein 2 that is characterized by onset in early childhood of nodular skin lesions containing hyaline material on the hands, scalp, ears, and face, as well as gingival hypertrophy, and, later in childhood, joint contractures and osteopenia

***Differential Diagnosis***

- Farber lipogranulomatosis
- Gingival fibromatosis
- Infantile digital fibromatosis
- Infantile myofibromatosis
- Lipoid proteinosis
- Nodular amyloidosis
- Winchester syndrome

***Evaluation***

- Skeletal survey

**Further reading:**

- Thomas JE, Moossavi M, Mehregan DR et al (2004) Juvenile hyaline fibromatosis: a case report and review of the literature. *Int J Dermatol* 43(11):785–789





**Fig. 6.55** Juvenile plantar dermatitis

### Juvenile Plantar Dermatitis

Cutaneous eruption that affects children and is characterized by erythema, fissuring, and peeling on the anterior aspect of the sole, but not the toe-web spaces, and is exacerbated by sweating in occlusive footwear (Fig. 6.55)

#### *Differential Diagnosis*

- Dyshidrotic eczema
- Palmoplantar hyperhidrosis

- Palmoplantar psoriasis
- Pitted keratolysis
- Pityriasis rubra pilaris
- Pseudomonal hot-foot syndrome
- Shoe allergy
- Tinea pedis

### ***Evaluation***

- Potassium hydroxide examination of scale

### ***Treatment Options***

- Observation
- Emollients at night
- Drying measures during day
- Topical corticosteroids
- Topical calcineurin inhibitors

### **Further reading:**

- Gibbs NF (2004) Juvenile plantar dermatosis. Can sweat cause foot rash and peeling? *Postgrad Med* 115(6):73–75

## **Juvenile Rheumatoid Arthritis (Still's Disease)**

Arthritic disease with onset in childhood (and occasionally adulthood) that is associated with periodic episodes of spiking fever with a concomitant salmon-colored evanescent macular rash on the trunk and extremities

### ***Differential Diagnosis***

- Ankylosing spondylitis
- Blau syndrome
- Endocarditis
- Familial Mediterranean fever

- Farber lipogranulomatosis
- Hyper-IgD syndrome
- Kawasaki disease
- Leukemia
- Lyme disease
- Muckle–Wells syndrome
- Multicentric reticulohistiocytosis
- NOMID syndrome
- Reactive arthritis with urethritis and conjunctivitis
- Rheumatic fever
- Sarcoidosis
- Systemic lupus erythematosus
- Tumor necrosis factor receptor-associated periodic syndrome (TRAPS)
- Viral exanthem

### ***Evaluation***

- Antinuclear antibodies
- Complete blood count
- Echocardiography
- Immunoglobulin levels
- Joint-fluid examination
- Joint radiographs
- Liver function test
- Ophthalmologic exam
- Renal function test
- Rheumatoid factor
- Sedimentation rate
- Urinalysis

### **Further reading:**

- Sayah A, English JC III (2005) Rheumatoid arthritis: a review of the cutaneous manifestations. *J Am Acad Dermatol* 53(2):191–209

## **Juvenile Spring Eruption**

---

Variant of polymorphous light eruption affecting young boys in the spring that is characterized by erythematous, nonscarring papules and papulovesicles on the helices

### ***Differential Diagnosis***

- Actinic prurigo
- Herpes simplex virus infection
- Hydroa vacciniforme
- Impetigo
- Porphyria
- Pseudoporphyria
- Sunburn

### ***Treatment Options***

- Sunscreen
- Topical corticosteroids

### **Further reading:**

- Stratigos AJ, Antoniou C, Papadakis P et al (2004) Juvenile spring eruption: clinicopathologic features and phototesting results in 4 cases. *J Am Acad Dermatol* 50(2 Suppl):S57–S60

## **Juvenile Xanthogranuloma**

---

Histiocytic lesion of unknown cause that predominantly affects children and is characterized by a red-brown to yellow, solitary (less commonly, multiple) papule or nodule most commonly on the head or neck

### ***Differential Diagnosis***

- Benign cephalic histiocytosis
- Dermatofibroma
- Fibrous hamartoma of infancy
- Generalized eruptive histiocytoma
- Giant cell reticulohistiocytoma
- Idiopathic facial aseptic granuloma
- Indeterminate cell histiocytosis
- Infantile myofibromatosis
- Keloid
- Langerhans cell histiocytosis
- Melanocytic nevus
- Molluscum contagiosum
- Pyogenic granuloma
- Rhabdomyoma
- Self-healing reticulohistiocytosis
- Solitary mastocytoma
- Spitz nevus
- Xanthoma
- Xanthoma disseminatum

### ***Associations***

- Chronic myelogenous leukemia
- Neurofibromatosis
- Niemann–Pick disease
- Urticaria pigmentosa

### **Further reading:**

- Redbord KP, Sheth AP (2007) Multiple juvenile xanthogranulomas in a 13-year-old. *Pediatr Dermatol* 24(3):238–240

## **Kaposi's Sarcoma**

---

Mucocutaneous vascular malignancy affecting elderly patients of Mediterranean descent or profoundly immunocompromised AIDS patients that is caused by human herpes virus 8 (HHV-8) and is characterized by red to purple patches, plaques, and nodules that can occur anywhere, including the gastrointestinal tract and lungs, but most commonly occur on the distal lower extremities

### ***Subtypes***

- African endemic
- AIDS-related epidemic
- Classic
- Iatrogenic

### ***Differential Diagnosis***

- Acquired elastotic hemangioma
- Acquired progressive lymphangioma
- Acroangiokeratosis of Mali
- Aneurysmal fibrous histiocytoma
- Angiokeratoma
- Angiosarcoma
- Arteriovenous malformation
- Bacillary angiomatosis
- Blue nevus
- Blue rubber bleb nevus syndrome
- Dermatofibroma
- Ecchymosis
- Erythema elevatum diutinum
- Granuloma annulare

- Granuloma faciale
- Hemangiopericytoma
- Insect-bite reactions
- Kaposiform hemangioendothelioma
- Keloid
- Leiomyosarcoma
- Leishmaniasis (especially diffuse cutaneous)
- Lymphatic malformation
- Malignant fibrous histiocytoma
- Melanocytic nevus
- Melanoma
- Metastasis (especially renal cell carcinoma)
- Microvenular hemangioma
- Multinucleate cell angiohistiocytoma
- Myofibromatosis
- Nevus flammeus
- Polyarteritis nodosa
- Progressive lymphangioma
- Pyogenic granuloma
- Reactive angioendotheliomatosis
- Spindle cell hemangioendothelioma
- Stasis dermatitis
- Stewart–Bluefarb syndrome (pseudo-Kaposi’s sarcoma)
- Targetoid hemosiderotic (hobnail) hemangioma
- Tufted angioma
- Varix
- Venous malformation

### ***Evaluation***

- Chest radiograph
- Stool for occult blood
- Complete blood count

### ***Treatment Options***

- HAART therapy
- Cryotherapy
- Intralesional vinblastine
- Radiation
- Systemic chemotherapy
- Intralesional interferon
- Systemic interferon
- Thalidomide
- Pulsed dye laser
- Surgical excision

### **Further reading:**

- Jessop S (2006) HIV-associated Kaposi's sarcoma. *Dermatol Clin* 24(4):509–520

### **Kaposi's Varicelliform Eruption**

Term given for viral (usually HSV) infection superimposed on one of several chronic or inflammatory skin conditions, most commonly eczema, that is characterized by umbilicated vesicles and erosions typically on the neck but also on any area affected with the underlying dermatosis

### ***Differential Diagnosis***

- Acute exacerbation of underlying disease
- Bullous impetigo
- Hydroa vacciniforme
- Varicella infection
- Zoster



### ***Associations***

- Allergic contact dermatitis
- Atopic dermatitis
- Burns
- Congenital ichthyosiform erythroderma
- Hailey–Hailey disease
- Ichthyosis vulgaris
- Darier’s disease
- Mycosis fungoides
- Pemphigus
- Psoriasis
- Rosacea
- Seborrheic dermatitis
- Sézary’s syndrome
- Wiskott–Aldrich syndrome

### ***Treatment Options***

- Systemic antivirals
- Treat underlying cause

### **Further reading:**

- Santmyire-Rosenberger BR, Nigra TP (2005) Psoriasis herpeticum: three cases of Kaposi’s varicelliform eruption in psoriasis. *J Am Acad Dermatol* 53(1):52–56

### **Kawasaki Disease (Mucocutaneous Lymph Node Syndrome)**

Childhood vasculitis-like syndrome with a possible bacterial or viral etiology that is characterized by fever, a polymorphous skin eruption, desquamating rash on the acral areas, mucosal inflammation, lymphadenopathy, and the potential for coronary artery aneurysms

### ***Differential Diagnosis***

- Drug eruption
- Erythema multiforme
- Juvenile rheumatoid arthritis
- Kawasaki-like syndrome (HIV)
- Leptospirosis
- Lupus erythematosus
- Lyme disease
- Measles
- Mercury poisoning
- Parvovirus B19 infection
- Polyarteritis nodosa
- Rocky Mountain spotted fever
- Scarlet fever
- Serum sickness
- Staphylococcal scalded-skin syndrome
- Stevens–Johnson syndrome
- Toxic shock syndrome
- Viral exanthem

### ***Diagnostic Criteria***

- Fever for 5 or more days without other explanation *and*
- Four of the following five:
  - Bilateral nonexudative conjunctival injection
  - Injected or fissured lips, injected pharynx, or strawberry tongue
  - Erythema of the palms and soles, edema of hands and feet, or periungual desquamation
  - Polymorphous exanthem
  - Acute nonsuppurative cervical lymphadenopathy

### ***Evaluation***

- Complete blood count
- Echocardiography
- Electrocardiography
- Liver function test
- Renal function test
- Sedimentation rate
- Urinalysis

### ***Treatment Options***

- Aspirin
- Intravenous immunoglobulin
- Plasma exchange

### **Further reading:**

- Mizuno Y, Suga Y, Muramatsu S et al (2006) Psoriasiform and palmoplantar pustular lesions induced after Kawasaki disease. *Int J Dermatol* 45(9):1080–1082

## **Keloid**

Benign, exuberant proliferation of scar tissue that is characterized by nodules or plaques of fibrous tissue which extend beyond the boundary of the initial wound

### ***Differential Diagnosis***

- Carcinoma en cuirasse
- Connective tissue nevus
- Dermatofibroma
- Dermatofibrosarcoma protuberans
- Dermatomyofibroma
- Epidermal inclusion cyst

- Erythema elevatum diutinum
- Hypertrophic scar
- Keloidal basal cell carcinoma
- Keloidal Kaposi's sarcoma
- Kimura disease
- Lepromatous leprosy
- Lobomycosis (keloidal blastomycosis)
- Molluscum pseudotumors
- Morphea
- Neurofibroma
- Spitz nevus, keloid type
- Systemic sclerosis
- Xanthoma disseminatum

### ***Associations***

- Ehlers–Danlos syndrome
- Rubinstein–Taybi syndrome
- Turner syndrome

### ***Treatment Options***

- Intralesional corticosteroids
- Flurandrenolide tape
- Intralesional interferon
- Imiquimod cream
- Cryosurgery
- Radiation
- Verapamil
- Surgical excision

### **Further reading:**

- Robles DT, Berg D (2007) Abnormal wound healing: keloids. Clin Dermatol 25(1):26–32

## **Keratitis–Ichthyosis–Deafness (KID) Syndrome (Senter Syndrome)**

---

Sporadic genodermatosis associated with connexin 26 mutation that is characterized by vascularizing keratitis, ichthyosis, thick verrucous plaques on the face, perioral furrowing, palmoplantar keratoderma, and sensorineural deafness

### ***Differential Diagnosis***

- Bullous congenital ichthyosiform erythroderma
- Erythrokeratoderma variabilis
- HID syndrome
- Keratosis follicularis spinulosa decalvans
- Lamellar ichthyosis
- Netherton's syndrome
- Nonbullous congenital ichthyosiform erythroderma
- Progressive symmetric erythrokeratoderma
- Vohwinkel's syndrome with deafness

### **Further reading:**

- Mazereeuw-Hautier J, Bitoun E, Chevrant-Breton J et al (2007) Keratitis–ichthyosis–deafness syndrome: disease expression and spectrum of connexin 26 (GJB2) mutations in 14 patients. *Br J Dermatol* 156(5):1015–1019

## **Keratoacanthoma**

Low-grade type of squamous cell carcinoma with the potential to self-involute that is characterized by a circular dome-shaped erythematous papule or nodule with central ulceration most commonly on the sun-exposed areas

### ***Subtypes/Variants***

- Aggressive
- Eruptive keratoacanthomas of Grzybowski
- Giant type



**Fig. 6.56** Keratoacanthoma centrifugum marginatum (Courtesy of A. Zedlitz)

- Keratoacanthoma centrifugum marginatum (Fig. 6.56)
- Keratoacanthoma dyskeratoticum segregans
- Multinodular
- Multiple self-healing keratoacanthomas of Ferguson–Smith
- Solitary type
- Subungual type
- Witten and Zak syndrome

### ***Differential Diagnosis***

- Anaplastic large cell lymphoma
- Atypical fibroxanthoma

- Basal cell carcinoma
- Blastomycosis
- Coccidioidomycosis
- Halogenoderma
- Hypertrophic actinic keratosis
- Hypertrophic/verrucous cutaneous lupus erythematosus
- Inverted follicular keratosis
- Lupus vulgaris
- Merkel cell carcinoma
- Metastasis
- Molluscum contagiosum
- Orf/Milker's nodule
- Pilomatricoma
- Prurigo nodularis
- Sebaceous epithelioma
- Sporotrichosis
- Trichilemmoma
- Verruca

### ***Associations***

- Chronically inflamed area
- Immunosuppression
- Incontinentia pigmenti
- Muir–Torre syndrome
- Nevus sebaceus
- Stasis dermatitis
- Steel wool (periungual type)
- Trauma

### ***Treatment Options***

- Surgical excision
- Electrodesiccation and curettage
- Intralesional 5-FU

- Intralesional methotrexate
- Radiation
- Isotretinoin
- Acitretin

**Further reading:**

- Magalhães RE, Cruvinel GT, Cintra GF, Cintra ML, Ismael AP, de Moraes AM (2008) Diagnosis and follow-up of keratoacanthoma-like lesions: clinical-histologic study of 43 cases. *J Cutan Med Surg* 12(4):163–173

### **Keratoelastoidosis Marginalis (Degenerative Collagenous Plaques of the Hands)**

---

Rare acquired disorder associated with both chronic trauma and chronic actinic damage that affects the hands and is characterized by asymptomatic, translucent, crateriform plaques on the margins of the hands, especially the radial aspect of the index finger and the opposing aspect of the thumb

#### *Differential Diagnosis*

- Acrokeratoelastoidosis of Costa
- Acrokeratosis verruciformis of Hopf
- Colloid milium
- Erythropoietic protoporphyria
- Focal acral hyperkeratosis

**Further reading:**

- Abulafia J, Vignale RA (2000) Degenerative collagenous plaques of the hands and acrokeratoelastoidosis: pathogenesis and relationship with knuckle pads. *Int J Dermatol* 39(6):424–432

### **Keratolysis Exfoliativa (Recurrent Focal Palmar Peeling, Lamellar Dyshidrosis)**

---

Low-grade form of hand eczema characterized by small foci of dry peeling on the palms or soles



### ***Differential Diagnosis***

- Contact dermatitis
- Dyshidrotic eczema
- Kawasaki disease
- Psoriasis
- Secondary syphilis
- Tinea manuum or pedis
- Xerosis

### ***Treatment Options***

- Keratolytic moisturizers
- Topical corticosteroids

### **Further reading:**

- Lee HJ, Ha SJ, Ahn WK et al (2001) Clinical evaluation of atopic hand-foot dermatitis. *Pediatr Dermatol* 18(2):102–106

## **Keratosis Follicularis Spinulosa Decalvans**

X-linked recessive or dominant disorder characterized by generalized keratosis pilaris atrophicans, scarring alopecia of the scalp and eyebrows, palmoplantar keratoderma, photophobia, and, less consistently, deafness and mental retardation

### ***Differential Diagnosis***

- Atopic dermatitis
- Atrichia with papular lesions
- Graham–Little syndrome
- IFAP syndrome
- KID syndrome
- Lichen planopilaris

**Further reading:**

- Goh MS, Magee J, Chong AH (2005) Keratosis follicularis spinulosa decalvans and acne keloidalis nuchae. *Australas J Dermatol* 46(4):257–260

**Keratosis Lichenoides Chronica (Nekam's Disease)**

---

Rare, idiopathic disorder with onset in childhood that is characterized by linear or reticulate plaques of coalescent, hyperkeratotic, violaceous papules and nodules on the extremities and buttocks along with an erythematous, scaly, seborrheic dermatitis-like, or rosacea-like eruption on the face, oral ulcers, and nail dystrophy

***Differential Diagnosis***

- Graham–Little–Piccardi–Lasseur syndrome
- Haber syndrome
- Hypertrophic lichen planus
- Lichenoid drug eruption
- Lichen striatus
- Lupus erythematosus
- Mycosis fungoides
- Pityriasis lichenoides
- Porokeratosis of Mibelli
- Seborrheic dermatitis
- Secondary syphilis (especially verrucous type)

***Associations***

- Chronic lymphocytic leukemia
- Cutaneous amyloidosis
- Glomerulonephritis
- Hepatitis
- Multiple sclerosis
- Seborrheic dermatitis
- Toxoplasmosis

### ***Treatment Options***

- Tazarotene cream
- Acitretin
- Narrowband UVB phototherapy
- Topical vitamin D analogues

### **Further reading:**

- Boer A (2006) Keratosis lichenoides chronica: proposal of a concept. *Am J Dermatopathol* 28(3):260–275

### **Keratosis Pilaris**

Disorder of follicular hyperkeratosis affecting children and adults and characterized by keratotic papules with or without surrounding erythema located predominantly on the upper outer arms, anterior thighs, and buttocks and occasionally the cheeks (keratosis pilaris rubra faciei)

### ***Differential Diagnosis***

- Acne vulgaris
- Atrichia with papular lesions
- Darier's disease
- Disseminate and recurrent infundibulofolliculitis
- Familial dyskeratotic comedones
- Follicular eczema
- Folliculitis
- Gianotti–Crosti syndrome
- Graham–Little–Piccardi–Lasseur syndrome
- Infantile acne
- Keratosis pilaris atrophicans
- KID syndrome

- Lichen nitidus
- Lichen planus
- Lichen spinulosus
- Milia
- Phrynoderma
- Pityriasis rubra pilaris
- Trichostasis spinulosa

### ***Associations***

- Atopic dermatitis
- Cardiofaciocutaneous syndrome
- Carvajal syndrome
- Down syndrome
- Ichthyosis vulgaris
- Monilethrix
- Noonan syndrome

### ***Treatment Options***

- Ammonium lactate
- Urea
- Salicylic acid
- Glycolic acid
- Topical corticosteroids
- Topical retinoids
- Isotretinoin
- Systemic antibiotics

### **Further reading:**

- Lateef A, Schwartz RA (1999) Keratosis pilaris. *Cutis* 63(4):205–207

## **Keratosis Pilaris Atrophicans**

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Uncommon group of disorders of follicular keratinization that can occur as isolated findings or as part of a syndrome and that are characterized by inflammatory keratotic papules, most commonly on the face, that evolve to atrophic scars

### ***Subtypes/Variants***

- Atrophoderma vermiculatum
- Folliculitis spinulosa decalvans
- Keratosis follicularis spinulosa decalvans
- Ulerythema ophryogenes

### ***Differential Diagnosis***

- Acne vulgaris
- Atrophia maculosa varioliformis cutis
- Folliculitis
- Keratosis pilaris
- Milia
- Pityriasis rubra pilaris

### ***Associations***

- Cardiofaciocutaneous syndrome
- Cornelia de Lange syndrome
- Noonan's syndrome
- Rubinstein–Taybi syndrome
- Woolly hair

### **Further reading:**

- Callaway SR, Leshner JL Jr (2004) Keratosis pilaris atrophicans: case series and review. *Pediatr Dermatol* 21(1):14–17

## **Keratosis Punctata (Palmaris et Plantaris/of the Palmar Creases)**

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Two types of punctate keratoderma that are autosomal-dominantly inherited, that have onset in adulthood, that predominantly affect patients of African descent, and that are characterized by pruritic, keratotic papules or comedo-like pits diffusely over the palms and soles or confined to the creases

### ***Differential Diagnosis***

- Acrokeratoelastoidosis of Costa
- Arsenical keratoses
- Clavi
- Cowden's disease
- Darier's disease
- Focal acral hyperkeratosis
- Porokeratosis punctata
- Spiny keratoderma
- Verruca vulgaris

### ***Treatment Options***

- Paring, filing, and curettage
- Urea cream
- Salicylic acid
- Acitretin

### **Further reading:**

- Kong MS, Harford R, O'Neill JT (2004) Keratosis punctata palmoplantaris controlled with topical retinoids: a case report and review of the literature. *Cutis* 74(3):173–179

## Kikuchi–Fujimoto Disease (Histiocytic Necrotizing Lymphadenitis)

---

Acquired, uncommon, self-limited disorder that is possibly viral in etiology, predominantly affects women, and is characterized by cervical lymphadenopathy, fever, and, occasionally, a generalized, polymorphic skin eruption

### *Differential Diagnosis*

- Angioimmunoblastic dysproteinemia with lymphadenopathy
- Cat-scratch disease
- DRESS syndrome
- Hodgkin's disease
- Lymphoma
- Mononucleosis
- Polyarteritis nodosa
- Rosai–Dorfman disease
- Secondary syphilis
- Still's disease
- Systemic lupus erythematosus
- Toxoplasmosis
- Tuberculosis

### *Evaluation*

- Antinuclear antibodies
- Complete blood count
- EBV serologic tests
- Lymph node biopsy
- Sedimentation rate

### **Further reading:**

- Lee HW, Yun WJ, Chang SE et al (2006) Generalized maculopapules with fever and cervical lymphadenopathy. *Arch Dermatol* 142(5):641–646

## **Kimura's Disease**

---

Idiopathic inflammatory disorder that is possibly allergic in etiology and is characterized by an asymptomatic subcutaneous swelling or enlarged lymph node in the cervical area

### ***Differential Diagnosis***

- Angiolymphoid hyperplasia with eosinophilia
- Benign lymphadenopathy
- Cutaneous lymphoid hyperplasia
- Cylindroma
- Dermatofibrosarcoma protuberans
- Eosinophilic granuloma
- Kaposi's sarcoma
- Keloid
- Kikuchi's disease
- Langerhans cell histiocytosis
- Lymphoma
- Metastatic disease
- Mikulicz syndrome
- Parotid tumor
- Pyogenic granuloma
- Rosai-Dorfman disease
- Salivary gland tumor
- Sarcoidosis

### **Further reading:**

- Chong WS, Thomas A, Goh CL (2006) Kimura's disease and angiolymphoid hyperplasia with eosinophilia: two disease entities in the same patient: case report and review of the literature. *Int J Dermatol* 45(2):139-145



## **Klippel–Trenaunay (Parkes Weber) Syndrome**

---

Vascular malformation syndrome characterized by port-wine stain, varicose veins, bone and soft tissue hypertrophy, and, occasionally, an arteriovenous malformation (Parkes Weber syndrome)

### ***Differential Diagnosis***

- Bockenheimer syndrome
- Cutis marmorata telangiectatica congenita
- Extensive venous malformation
- Gorham syndrome
- Kaposiform hemangioendothelioma
- Maffucci syndrome
- Neurofibromatosis
- Proteus syndrome

### ***Associations***

- Sturge–Weber syndrome

### ***Evaluation***

- Venography
- Ultrasound
- Arteriography
- MRI studies

### ***Treatment Options***

- Pain control
- Compressive wraps
- Surgical excision
- Endovenous laser ablation

**Further reading:**

- Redondo P, Aguado L, Martínez-Cuesta A (2011) Diagnosis and management of extensive vascular malformations of the lower limb: part I. Clinical diagnosis. *J Am Acad Dermatol* 65(5):893–906; quiz 907–908

**Knuckle Pads**

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Benign, acquired or familial, asymptomatic, fibrous nodules occurring on the knuckles

***Differential Diagnosis***

- Acanthosis nigricans, acral type
- Callus
- Diabetic finger pebbles
- Erythema elevatum diutinum
- Foreign body reaction
- Gottron's papules
- Gouty tophus
- Granuloma annulare
- Heberden nodules
- Infantile digital fibromatosis
- Lichen simplex chronicus
- Pachydermodactyly
- Psoriasis
- Rheumatoid nodules
- Russell's sign of bulimia
- Wart
- Xanthomas

***Associations***

- Bart–Pumphrey syndrome
- Dupuytren's contracture

- Esophageal carcinoma
- Plantar fibromatosis
- Pseudoxanthoma elasticum

**Further reading:**

- Dickens R, Adams BB, Mutasim DF (2002) Sports-related pads. *Int J Dermatol* 41(5):291–293

## **Langerhans Cell Histiocytosis**

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Collective term for a group of disorders caused by the proliferation of Langerhans cells that is characterized by either an adult-onset type with localized bony or pulmonary infiltrates (chronic focal); a childhood-onset type with bony infiltrates, exophthalmos, and diabetes insipidus (chronic multifocal); or an infancy-onset type with a diffuse, seborrheic-dermatitis-like eruption in the intertriginous areas, hepatosplenomegaly, lymphadenopathy, and bone marrow involvement (acute disseminated)

### ***Subtypes/Variants***

- Acute disseminated (Letterer–Siwe disease)
- Chronic multifocal (Hand–Schuller–Christian disease)
- Chronic focal (eosinophilic granuloma)
- Congenital self-healing (Hashimoto–Pritzker disease)

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- Benign cephalic histiocytosis
- Candidiasis
- Darier's disease
- Dermatomyositis
- Eosinophilic pustular folliculitis
- Generalized eruptive histiocytosis

- Granuloma gluteale infantum
- Herpes simplex virus infection
- Incontinentia pigmenti
- Indeterminate cell histiocytosis
- Infantile acropustulosis
- Leukemia
- Lichen nitidus
- Listeriosis
- Lymphoma
- Mastocytosis
- Miliaria
- Multiple myeloma
- Mycosis fungoides
- Neonatal lupus
- Pseudoverrucous papules
- Rosai–Dorfman disease
- Scabies
- Seborrheic dermatitis
- Transient neonatal pustular melanosis
- Urticaria pigmentosa
- Varicella
- Wiskott–Aldrich syndrome
- Xanthoma disseminatum

### ***Associations***

- Smoking (eosinophilic granuloma)
- Leukemia

### ***Evaluation***

- Bone marrow biopsy
- Chest radiograph
- Complete blood count

- Liver function test
- MRI scan of the brain/pituitary
- Neurologic examination
- Panoramic radiograph of teeth
- Serum chemistry
- Skeletal survey
- Urinalysis and urine electrolytes
- Urine osmolality

### ***Treatment Options***

- Topical nitrogen mustard
- PUVA phototherapy
- Systemic chemotherapy
- Systemic corticosteroids
- Azathioprine
- Methotrexate

### **Further reading:**

- Querings K, Starz H, Balda BR (2006) Clinical spectrum of cutaneous Langerhans' cell histiocytosis mimicking various diseases. *Acta Derm Venereol* 86(1):39–43

## **Large Cell Acanthoma**

Benign epidermal neoplasm that is possibly related to the solar lentigo and is characterized by a sharply demarcated, tan, slightly scaly, plaque most commonly located on the sun-exposed areas

### ***Differential Diagnosis***

- Actinic keratosis
- Bowen's disease
- Clear cell acanthoma
- Lichen-planus-like keratosis

- Melanoma
- Seborrheic keratosis
- Solar lentigo

**Further reading:**

- Mehregan DR, Hamzavi F, Brown K (2003) Large cell acanthoma. *Int J Dermatol* 42(1):36–39

## **Larva Migrans/Larva Currens, Cutaneous (Creeping Eruption)**

Cutaneous infestation with the larvae of the hookworms *Ancylostoma braziliensis* or *Necator americanus* (migrans) or the roundworm *Strongyloides stercoralis* (currens) characterized by a migratory, erythematous, serpiginous eruption on the feet, buttocks, arms, hands, and back

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Arthropod-bite reaction
- Chemical burn
- Cutaneous pili migrans
- Dermatographism
- Dermatophytosis
- Dirofilariasis
- Erythema annulare centrifugum
- Erythema gyratum repens
- Erythema marginatum
- Erythema migrans
- Granuloma annulare
- Jellyfish sting
- Lichen striatus
- Lymphangitis
- Mondor disease
- Myiasis

- Paragonimiasis
- Photoallergic dermatitis
- Phytophotodermatitis
- Scabies
- Sparganosis
- Thrombophlebitis

### ***Treatment Options***

- Cryotherapy
- Topical thiabendazole
- Mebendazole
- Albendazole
- Ivermectin

### **Further reading:**

- Brenner MA, Patel MB (2003) Cutaneous larva migrans: the creeping eruption. *Cutis* 72(2):111–115

## **Laugier–Hunziker Syndrome**

Rare mucocutaneous pigmentary disorder of unknown cause that is characterized by hypermelanotic macules on the oral mucosa (especially lips and buccal mucosa) and longitudinal pigmented streaks of the nails

### ***Differential Diagnosis***

- Addison's disease
- Amalgam tattoo
- Chemotherapy-related hyperpigmentation
- Cronkhite–Canada syndrome
- Hemochromatosis
- Racial pigmentation
- Periungual melanoma

- Peutz–Jeghers syndrome
- Smoker
- Traumatic melanonychia

**Further reading:**

- Fisher D, Field EA, Welsh S (2004) Laugier–Hunziker syndrome. Clin Exp Dermatol 29(3):312–313

## Leiomyoma

Benign neoplasm derived from smooth muscle around blood vessels, the arrector pili muscle, or genital smooth muscle that is characterized by solitary or multiple, firm, occasionally painful, flesh-colored to red-brown papules or nodules

### *Subtypes/Variants*

- Angioleiomyoma
- Genital leiomyoma
- Piloleiomyoma

### *Differential Diagnosis*

- Adnexal tumors
- Angiofibroma
- Collagenoma
- Dermatofibroma
- Eccrine spiradenoma
- Glomus tumor
- Keloid
- Leiomyosarcoma
- Mastocytoma
- Metastases
- Neurofibroma



- Plasmacytoma
- Schwannoma

### ***Associations (Multiple)***

- Alport's syndrome (genital)
- Chronic lymphocytic leukemia
- HIV infection (angi leiomyomas)
- Renal cell carcinoma
- Uterine leiomyomas (Reed syndrome)

### ***Evaluation***

- Fumarate hydratase gene study
- Renal ultrasound or abdominal CT scan
- Pelvic examination

### **Further reading:**

- Holst VA, Junkins-Hopkins JM, Elenitsas R (2002) Cutaneous smooth muscle neoplasms: clinical features, histologic findings, and treatment options. *J Am Acad Dermatol* 46(4):477–479

## **Leiomyosarcoma, Superficial**

Malignant neoplasm of smooth muscle that can arise from the dermis (arrector pili muscles) or subcutaneous layer (blood vessels) and is characterized by a solitary nodule most commonly located on the head and neck (dermal) or hair-bearing area of the lower extremity (subcutaneous)

### ***Differential Diagnosis***

- Amelanotic melanoma
- Appendageal tumors
- Atypical fibroxanthoma

- Basal cell carcinoma
- Cyst
- Dermatofibromas
- Dermatofibrosarcoma protuberans
- Leiomyoma
- Merkel cell carcinoma
- Metastatic sarcoma
- Squamous cell carcinoma

**Further reading:**

- Annest NM, Grekin SJ, Stone MS, Messingham MJ (2007) Cutaneous leiomyosarcoma: a tumor of the head and neck. *Dermatol Surg* 33(5):628–633

**Leishmaniasis**

Infection of the skin or viscera caused by several species of the protozoa *Leishmania* that is transmitted by bite of the sandfly and characterized by an erythematous papule that evolves to a ulcerated nodule or plaque with a predilection for the exposed areas, especially the face, nose, ears, and extremities (Fig. 6.57)



**Fig. 6.57** Cutaneous leishmaniasis

### ***Subtypes/Variants***

- American mucocutaneous (espundia)
- Disseminated
- Leishmaniasis recidivans
- New World cutaneous (chiclero ulcer, uta, pian bois)
- Old World cutaneous (rural (moist) or urban (dry) types)
- Post-Kala-Azar dermal leishmaniasis
- Visceral leishmaniasis

### ***Differential Diagnosis***

- Angiocentric NK/T cell lymphomas
- Basal cell carcinoma
- Blastomycosis
- Chromoblastomycosis
- Granuloma inguinale
- Histoplasmosis
- Lepromatous leprosy
- Paracoccidioidomycosis
- Pyoderma gangrenosum
- Rhinoscleroma
- Sarcoidosis
- Squamous cell carcinoma
- Syphilis
- Tropical ulcer
- Tuberculosis
- Tularemia
- Wegener's granulomatosis

### ***Differential Diagnosis (Disseminated Cutaneous)***

- Histoplasmosis
- Lepromatous leprosy

- Lobomycosis
- Lymphoma
- Neurofibromatosis
- Paracoccidioidomycosis
- Verruga peruana
- Xanthoma tuberosum

### ***Evaluation***

- Culture on Novy–MacNeal–Nicolle medium
- ELISA for leishmanial antibodies
- PCR of lesional tissue
- Tissue examination with Giemsa stain

### ***Treatment Options***

- Cryotherapy
- Heat therapy
- Sodium stibogluconate
- Topical paromomycin
- Pentamidine
- Ketoconazole
- Surgical excision

### **Further reading:**

- Bailey MS, Lockwood DN (2007) Cutaneous leishmaniasis. Clin Dermatol 25(2):203–211

## **Lentiginosis, Centrofacial**

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Localized type of lentiginosis with onset in the first few years of life that is characterized by lentigines on the nose and cheeks

### ***Differential Diagnosis***

- Carney's complex
- Inherited patterned lentiginosis
- LEOPARD syndrome
- Peutz–Jeghers syndrome

### ***Associations***

- Epilepsy
- Hypothyroidism
- Mental retardation
- Skeletal abnormalities

### **Further reading:**

- Kaur TD, Kanwar AJ (2004) Giant nevus spilus and centrofacial lentiginosis. *Pediatr Dermatol* 21(4):516–517

## **Lentigo Maligna (Hutchinson Freckle)**

---

Slowly evolving type of melanoma in situ affecting patients with a long history of sun exposure that is characterized by an unevenly pigmented, irregularly bordered macule or patch on the face and other sun-exposed areas

### ***Differential Diagnosis***

- Large cell acanthoma
- Lentigo simplex
- Pigmented actinic keratosis
- Seborrheic keratosis
- Solar lentigo

### ***Treatment Options***

- Excisional surgery
- Mohs micrographic surgery
- Imiquimod cream
- Radiation therapy
- Cryotherapy

### **Further reading:**

- Mckenna JK, Florell SR, Goldman GD et al (2006) Lentigo maligna/lentigo maligna melanoma: current state of diagnosis and treatment. *Dermatol Surg* 32(4):493–504

### **Lentigo Simplex**

Benign proliferation of basal layer melanocytes that can be solitary and occur anywhere (lentigo simplex) or multiple as a part of a variety of syndromes

### ***Differential Diagnosis***

- Blue nevus
- Café-au-lait macule
- Ephelides
- Junctional melanocytic nevi
- Labial melanotic macule
- Large cell acanthoma
- Lentigo maligna
- Melanoma
- Pigmented actinic keratosis
- Seborrheic keratosis
- Traumatic tattoo

### **Associations (Multiple)**

- Arterial dissection
- Bandler syndrome
- Café-au-lait macules
- Cantu syndrome
- Carney complex (NAME/LAMB syndrome)
- Centrofacial lentiginosis
- Cowden's disease
- Cronkhite–Canada syndrome
- Eruptive lentiginosis
- Gastrocutaneous syndrome
- Generalized lentigines
- Inherited patterned lentiginosis
- Laugier–Hunziker syndrome
- LEOPARD syndrome
- Partial unilateral lentiginosis
- Peutz–Jeghers syndrome
- Tay's syndrome
- Xeroderma pigmentosum

### **Further reading:**

- Chong WS, Klanwarin W, Giam YC (2004) Generalized lentiginosis in two children lacking systemic associations: case report and review of the literature. *Pediatr Dermatol* 21(2):139–145

### **Lentigo, Solar (Senile Lentigo)**

Benign marker of chronic sun exposure that is characterized by multiple tan or brown macules on the sun-exposed areas, especially the face and dorsal hands

### **Differential Diagnosis**

- Actinic keratosis, pigmented type
- Exogenous ochronosis

- Large cell acanthoma
- Lentigo maligna
- Lentigo simplex
- Lichen-planus-like keratosis
- Seborrheic keratosis

**Further reading:**

- Moreno-Ramirez D, Ferrandiz L, Camacho FM (2005) Are the ABCD signs useful for the management of solar lentigo? Br J Dermatol 153(5):1083–1084

## **LEOPARD Syndrome (Moynahan Syndrome)**

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Familial (AD) or sporadic syndrome caused by a mutation in the PTPN11 gene and that is characterized by multiple lentiginos, ECG abnormalities, ocular hypertelorism, pulmonary stenosis, genital abnormalities, growth retardation, and deafness

### ***Differential Diagnosis***

- Arterial dissections with lentiginosis
- Carney complex
- Inherited pattern lentiginosis
- McCune–Albright syndrome
- Neurofibromatosis
- Noonan syndrome
- Peutz–Jeghers syndrome

### ***Evaluation***

- Electrocardiogram
- Echocardiogram
- Hearing test

**Further reading:**

- Dgilio MC, Sarkozy A, de Zorzi A et al (2006) LEOPARD syndrome: clinical diagnosis in the first year of life. Am J Med Genet A 140(7):740–746





**Fig. 6.58** Tuberculoid leprosy (Courtesy of K. Guidry)

## Leprosy (Hansen's Disease)

Chronic infection caused by the neurotropic *Mycobacterium leprae* and characterized by a spectrum of cutaneous lesions, determined by the patient's immunologic response, ranging from a few anesthetic and hypopigmented annular lesions (tuberculoid, good response) to many widespread infiltrated, nodular lesions (lepromatous, poor response)

### *Subtypes/Variants*

- Borderline
- Borderline lepromatous
- Borderline tuberculoid
- Histoid
- Indeterminate
- Lepromatous
- Neural
- Tuberculoid (Fig. 6.58)

## *Differential Diagnosis*

### Lepromatous

- Chronic lichenified atopic dermatitis
- Cutaneous tuberculosis
- Granuloma annulare
- Granuloma multiforme
- Granulomatous mycosis fungoides
- Jessner's lymphocytic infiltrate
- Leishmaniasis
- Leonine facies
- Lobomycosis
- Lymphoma
- Melkersson–Rosenthal syndrome
- Midline nasal destructive lesion
- Multicentric reticulohistiocytosis
- Myxedema
- Neurofibromatosis
- Sarcoidosis
- Syphilis

### Tuberculoid

- Annular lichenoid dermatitis of youth
- Granuloma annulare
- Lichen planus
- Lupus erythematosus
- Mycosis fungoides
- Pinta
- Pityriasis alba
- Pityriasis versicolor
- Postinflammatory pigmentary alteration
- Psoriasis
- Sarcoidosis
- Tinea corporis
- Vitiligo

### **Evaluation**

- Liver and renal function test
- Neurologic examination
- Ophthalmologic examination
- PCR of lesional skin
- Complete blood count

### **Treatment Options**

- Dapsone
- Rifampin
- Clofazimine
- Minocycline
- Ofloxacin
- Clarithromycin

### **Further reading:**

- Ramos-E-Silva M, Oliveira ML, Munhoz-da-Fontoura GH (2005) Leprosy: uncommon presentations. *Clin Dermatol* 23(5):509–514

## **Leptospirosis (Weil's Disease, Pretibial Fever)**

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Spirochetal infection acquired from animal urine-contaminated drinking water that is caused by *Leptospira interrogans* spp. icterohemorrhagiae (Weil's disease) or autumnalis (pretibial fever) and is characterized by fever, jaundice, purpura, renal failure, and death (Weil's) or fever, headache, conjunctival hemorrhage, photophobia, and a erythematous patchy eruption most prominent on the shins (pretibial fever)

### **Differential Diagnosis**

- Brucellosis
- Dengue fever

- Encephalitis
- Ehrlichiosis
- Hantavirus infection
- HIV infection
- Malaria
- Q fever
- Rickettsial disease
- Syphilis
- Tuberculosis
- Tularemia
- Typhoid fever
- Typhus
- Viral hepatitis
- Viral meningitis
- Yellow fever

### **Evaluation**

- Complete blood count
- Liver function test
- Prothrombin time and partial thromboplastin time
- Renal function test
- Serologic test for *Leptospira* antibodies

### **Further reading:**

- McBride AJ, Athanazio DA, Reis MG, Ko AI (2005) Leptospirosis. *Curr Opin Infect Dis* 18(5):376–386

### **Leukemia Cutis**

Cutaneous infiltration with leukemic cells that can precede a diagnosis of leukemia or occur during the course of the disease and is characterized by erythematous or violaceous papules and nodules, hemorrhage, chloroma, or gingival infiltration

### ***Differential Diagnosis***

- Blueberry muffin baby
- Chilblains
- Cutaneous lymphoid hyperplasia
- Cutaneous small vessel vasculitis
- Erythema annulare centrifugum
- Erythema nodosum
- Extramedullary hematopoiesis
- Gingival hypertrophy
- Guttate psoriasis
- Hypereosinophilic syndrome
- Jessner's lymphocytic infiltrate
- Kaposi's sarcoma
- Langerhans cell histiocytosis
- Leonine facies
- Lymphoma cutis
- Mastocytoma
- Metastatic disease
- Neutrophilic eccrine hidradenitis
- Plasmacytoma
- Pyoderma gangrenosum
- Sarcoidosis
- Sister Mary Joseph's nodule
- Stasis dermatitis
- Sweet's syndrome (including histiocytoid variant)
- Urticaria pigmentosum

### ***Associations***

- Ataxia–telangiectasia
- Bloom syndrome
- Down syndrome

- Fanconi syndrome
- Wiskott–Aldrich syndrome

### **Evaluation**

- Complete blood count
- Bone marrow biopsy

### **Further reading:**

- Watson KM, Mufti G, Salisbury JR et al (2006) Spectrum of clinical presentation, treatment and prognosis in a series of eight patients with leukaemia Cutis. *Clin Exp Dermatol* 31(2):218–221

## **Leukocyte Adhesion Deficiency**

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Inherited (AR) immunodeficiency syndrome caused by a CD18 gene defect (type 1) or SLC35C1 (type 2) that leads to impaired neutrophil rolling and opsonization and that is characterized by recurrent bacterial and fungal infections, pyoderma-gangrenosum-like lesions, periodontitis, poor wound healing, and delayed separation of the umbilical cord

### **Differential Diagnosis**

- Chediak–Higashi syndrome
- Chronic granulomatous disease
- Myelodysplastic syndrome
- Myeloperoxidase deficiency
- Pyoderma gangrenosum
- X-linked hypogammaglobulinemia

### **Further reading:**

- Movahedi M, Entezari N, Pourpak Z et al (2007) Clinical and laboratory findings in Iranian patients with leukocyte adhesion deficiency (study of 15 cases). *J Clin Immunol* 27(3):302–307

## **Leukoderma, Chemical (Occupational Vitiligo)**

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Hypopigmented or depigmented patches resulting from contact exposure to a chemical that is either toxic to melanocytes or causes decreased production to melanin

### ***Differential Diagnosis***

- Burns
- Cutaneous lupus erythematosus
- Leprosy
- Mycosis fungoides
- Postinflammatory hypopigmentation
- Scars
- Vitiligo

### ***Associations***

- Catechols
- Hydroquinones
- Mercaptoamines
- Phenols
- Paraphenylenediamine

### **Further reading:**

- Kumar A, Freeman S (1999) Leukoderma following occupational allergic contact dermatitis. *Contact Dermatitis* 41(2):94–98

## **Leukoplakia, Oral Hairy**

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Type of leukoplakia induced by EBV infection that occurs predominantly in patients with HIV and is characterized by white, verrucous plaques bilaterally on the sides of the tongue

### ***Differential Diagnosis***

- Black hairy tongue
- Geographic tongue
- Hypertrophic candidiasis
- Leukoedema
- Lichen planus
- Premalignant leukoplakia
- Smoker keratosis
- Squamous cell carcinoma
- Syphilis
- Traumatic leukoplakia
- Wart
- White sponge nevus

### ***Treatment Options***

- HAART therapy
- Acyclovir
- Valacyclovir
- Famciclovir
- Podophyllin
- Tretinoin gel

### **Further reading:**

- Ikediobi NI, Tyring SK (2002) Cutaneous manifestations of Epstein–Barr virus infection. *Dermatol Clin* 20(2):283–289

### **Lichen Myxedematosus (Papular Mucinosis)**

Idiopathic type of cutaneous mucinosis that can be associated with monoclonal gammopathy and is characterized by discrete, often grouped, dome-shaped, flesh-colored papules in a generalized or localized distribution



### ***Differential Diagnosis***

- Colloid milium
- Darier disease
- Dermatomyositis
- Eruptive collagenoma
- Follicular mucinosis
- Granuloma annulare
- Leprosy
- Lichen amyloidosis
- Lichen planus
- Lipoid proteinosis
- Lymphoma
- Malignant atrophic papulosis
- Molluscum contagiosum
- Multiple trichoepithelioma
- Nevus mucinosis
- Nodular amyloidosis
- Sarcoidosis
- Scleredema
- Scleroderma
- Xanthomas (especially eruptive or papular types)

### ***Evaluation***

- Antinuclear antibodies
- HIV test
- Serum/urinary protein electrophoresis
- Thyroid function tests
- Viral hepatitis panel

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids

- Acitretin
- Isotretinoin
- Melphalan
- Plasmapheresis
- Intravenous immunoglobulin
- Methotrexate
- Cyclosporine
- Radiation
- Extracorporeal photopheresis
- Thalidomide
- Cyclophosphamide
- Chlorambucil
- Dermabrasion
- CO<sub>2</sub> laser

**Further reading:**

- Rongioletti F (2006) Lichen myxedematosus (papular mucinosis): new concepts and perspectives for an old disease. *Semin Cutan Med Surg* 25(2):100–104

**Lichen Nitidus**

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Distinct eruption that most commonly affects children and is characterized by tiny, shiny, 1- to 2-mm flat-topped, occasionally pruritic papules associated with the Koebner phenomenon and clustered on the abdomen, extremities, and groin, including the penis (Fig. 6.59)

***Subtypes/Variants***

- Actinic (summertime actinic lichenoid eruption)
- Follicular
- Linear
- Hemorrhagic
- Keratodermic
- Mucous membrane
- Nail



**Fig. 6.59** Lichen nitidus

- Perforating
- Purpuric
- Vesicular

### ***Differential Diagnosis***

- Autoeczematization reaction
- Follicular prominence/lichen simplex
- Guttate lichen sclerosus
- Id reaction
- Keratosis pilaris
- Lichen planus
- Lichen scrofulosorum
- Lichen spinulosum
- Lichen striatus
- Lichenoid secondary syphilis
- Molluscum contagiosum
- Papular eczema
- Papular mucinosis

- Papular sarcoidosis
- Verruca plana

### **Associations**

- Crohn's disease
- Lichen planus

### **Treatment Options**

- Topical corticosteroids
- Tacrolimus ointment
- Cetirizine
- Systemic retinoids
- UVB phototherapy

### **Further reading:**

- Tilly JJ, Drolet BA, Esterly NB (2004) Lichenoid eruptions in children. *J Am Acad Dermatol* 51(4):606–624

## **Lichen Planopilaris**

Follicular variant of lichen planus that predominantly affects women and is characterized by follicular erythematous papules and scarring alopecia with or without classic lichen planus on the body or oral mucosa

### **Differential Diagnosis**

- Discoid lupus erythematosus
- Central centrifugal cicatricial alopecia
- Folliculitis decalvans
- Frontal fibrosing alopecia
- Graham–Little–Piccardi–Lasseur syndrome
- Keratosis follicularis spinulosa decalvans
- Tinea capitis

### **Associations**

- Dermatitis herpetiformis
- Lichen planus
- Gold
- Thyroiditis

### **Treatment Options**

- Topical corticosteroids
- Systemic corticosteroids
- Intralesional corticosteroids
- Isotretinoin
- Acitretin
- Hydroxychloroquine
- Mycophenolate mofetil
- Griseofulvin
- Cyclosporine

### **Further reading:**

- Cevasco NC, Bergfeld WF, Remzi BK et al (2007) A case-series of 29 patients with lichen planopilaris: the Cleveland Clinic Foundation experience on evaluation, diagnosis, and treatment. *J Am Acad Dermatol* 57(1):47–53

## **Lichen Planus**

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Immune-mediated cutaneous and mucosal eruption of uncertain cause that is characterized by localized or generalized grouped, pruritic, flat-topped violaceous papules with Koebner phenomenon and a white, reticulated surface (Wickham's striae) as well as streaky white changes with or without erosions on the oral mucosa

### **Subtypes/Variants**

- Acral erosive (Fig. 6.60)
- Actinic



**Fig. 6.60** Acral erosive lichen planus

- Annular
- Atrophic
- Bullous
- Classic
- Erosive
- Eruptive
- Follicular
- Genital
- Hypertrophic
- Lichen planus pigmentosus (pigmentosus–inversus)
- Linear (Fig. 6.61)
- Nail
- Oral
- Overlap with bullous pemphigoid (lichen planus pemphigoides)
- Overlap with lupus erythematosus
- Overlap with lichen sclerosis et atrophicus



**Fig. 6.61** Linear lichen planus

***Differential Diagnosis***

Actinic

- Actinic lichen nitidus
- Melasma

- Photoallergic contact dermatitis
- Photolichenoid drug eruption
- Photosensitive drug eruption
- Polymorphous light eruption

#### Annular

- Annular lichenoid dermatitis of youth
- Annular sarcoidosis
- Annular syphilis
- Erythema dyschromicum perstans
- Granuloma annulare
- Majocchi's granuloma
- Majocchi's pigmented purpuric dermatosis
- Morphea
- Porokeratosis
- Tinea

#### Classic

- Erythema dyschromicum perstans
- Graham–Little–Piccardi–Lasseur syndrome
- Guttate psoriasis
- Keratosis lichenoides chronica
- Lichen amyloidosis
- Lichen myxedematosus
- Lichen nitidus
- Lichen scrofulosorum
- Lichenoid contact dermatitis
- Lichenoid drug eruption
- Lichenoid graft-vs-host disease
- Lichenoid keratoses
- Lichenoid pigmented purpura of Gougerot and Blum
- Lupus erythematosus
- Paraneoplastic pemphigus
- Pityriasis lichenoides et varioliformis acuta
- Pityriasis rosea
- Scabies



- Secondary syphilis
- Syringomas

### Eruptive

- Guttate psoriasis
- Lichen nitidus
- Lichen scrofulosorum
- Lichenoid drug eruption
- Lichenoid sarcoidosis
- Pityriasis rosea
- Secondary syphilis
- Syringomas
- Viral exanthem

### Genital

- Behçet's disease
- Bowen's disease
- Cicatricial pemphigoid
- Condyloma acuminatum
- Extramammary Paget's disease
- Fixed drug eruption
- Lichen nitidus
- Lichen sclerosus et atrophicus
- Lichen simplex chronicus
- Vulvar eczema
- Zoon balanitis

### Hypertrophic

- Bowen's disease
- Deep fungal infection
- Keratoacanthoma
- Keratosis lichenoides chronica
- Hypertrophic lupus erythematosus
- Lichen amyloidosis

- Lichen simplex chronicus
- Pagetoid reticulosis
- Psoriasis
- Verrucous sarcoidosis

### Linear

- Inflammatory linear verrucous epidermal nevus
- Lichen striatus
- Linear Darier's disease
- Linear fixed drug eruption
- Linear graft-vs-host disease
- Linear porokeratosis
- Linear psoriasis

### Nail

- Alopecia areata
- Digital ischemia
- Graft-vs-host disease
- Lichen striatus
- Onychomycosis
- Psoriasis
- Systemic amyloidosis
- Yellow nail syndrome

### Oral

- Bite keratosis
- Candidiasis
- Cicatricial pemphigoid
- Gingivitis
- Graft-vs-host disease
- Leukoplakia
- Lichenoid contact stomatitis
- Linear IgA bullous dermatosis
- Lupus erythematosus

- Oral Crohn's disease
- Oral lichenoid drug reaction
- Pemphigus
- Squamous cell carcinoma
- Syphilis
- White sponge nevus

### ***Associations***

- Grinspan syndrome (oral)
- Hepatitis C infection (oral)
- Primary biliary cirrhosis
- Squamous cell carcinoma (oral, genital)

### ***Evaluation***

- Viral hepatitis panel (especially oral erosive type)

### ***Treatment Options***

- Topical corticosteroids
- Topical tacrolimus
- Intralesional corticosteroids
- Systemic corticosteroids
- Metronidazole
- Acitretin
- UVB phototherapy
- Griseofulvin
- Cyclosporine
- Azathioprine
- Mycophenolate mofetil
- Photodynamic therapy
- Low molecular weight heparin
- Methotrexate
- Thalidomide

**Further reading:**

- Reich HL, Nguyen JT, James WD (2004) Annular lichen planus: a case series of 20 patients. *J Am Acad Dermatol* 50(4):595–599

**Lichen Sclerosus et Atrophicus**

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Immune-mediated cutaneous and mucosal eruption of uncertain cause that is characterized by pruritic, white, sclerotic, and atrophic plaques with occasional follicular plugging or erosive changes that are localized most commonly on the labia majora or prepuce of the penis with the potential to obliterate normal anatomic structures and lead to vulvar stenosis or phimosis

***Differential Diagnosis*****Extragenital**

- Acrodermatitis chronica atrophicans
- Anetoderma
- Atrophic blanche
- Atrophoderma of Pasini and Pierini
- Bowen's disease
- Discoid lupus erythematosus
- Erythroplasia of Queyrat
- Excoriation scars
- Idiopathic guttate hypomelanosis
- Graft-vs-host disease
- Lichen planus
- Malignant atrophic papulosis
- Morphea
- Mycosis fungoides
- Postinflammatory hypopigmentation
- Sarcoidosis
- Scleroderma
- Tinea versicolor
- Vitiligo

## Genital

- Bowen's disease
- Cicatricial pemphigoid
- Contact dermatitis
- Erythroplasia of Queyrat
- Extramammary Paget's disease
- Lichen planus
- Lichen simplex
- Morphea
- Phimosis
- Postinflammatory hypopigmentation
- Sexual abuse
- Vitiligo
- Vulvar eczema

## Associations

- Alopecia areata
- Borreliosis
- Morphea
- Pernicious anemia
- Perianal pyramidal protrusion
- Scleroderma
- Thyroid disease
- Vitiligo

## Evaluation

- Lyme disease ELISA and Western blot
- Complete blood count
- Thyroid function test and antithyroid antibodies

### ***Treatment Options***

- Topical corticosteroids
- Topical tacrolimus
- Topical retinoids
- Intralesional corticosteroids
- Acitretin
- Topical estrogen
- Topical vitamin D analogues
- CO<sub>2</sub> laser

### **Further reading:**

- Funaro D (2004) Lichen sclerosus: a review and practical approach. *Dermatol Ther* 17(1):28–37

### **Lichen Scrofulosorum**

Type of tuberculid most often affecting children with active tuberculosis and characterized by asymptomatic lichenoid papules on the trunk

### ***Differential Diagnosis***

- Atopic dermatitis
- Dermatophytid reactions
- Lichenoid drug eruption
- Lichen nitidus
- Lichen planus
- Lichen spinulosus
- Sarcoidosis
- Secondary syphilis

### ***Treatment Options***

- Antituberculous therapy

#### **Further reading:**

- Vashist P, Sahoo B, Khurana N, Reddy BS (2007) Cutaneous tuberculosis in children and adolescents: a clinicohistological study. *J Eur Acad Dermatol Venereol* 21(1):40–47

### **Lichen Simplex Chronicus (Neurodermatitis Circumscripta)**

Localized cutaneous changes which result from chronically rubbing and scratching the skin in response to pruritus and that are characterized by lichenified, thickened circumscribed plaques on the manipulated body surfaces, most commonly the lower legs, arms, neck, scalp, and genitalia

#### ***Differential Diagnosis***

- Acanthosis nigricans
- Acne keloidalis nuchae
- Alopecia mucinosa
- Atopic dermatitis
- Berloque dermatitis
- Contact dermatitis
- Cutaneous T cell lymphoma
- Dermatitis herpetiformis
- Dermatophytosis
- Extramammary Paget's disease
- Hyperkeratosis of the nipple
- Insect-bite reaction
- Lichen amyloidosis
- Lichen nitidus
- Lichen planus

- Lichen striatus
- Lupus erythematosus
- Lupus vulgaris
- Macular amyloidosis
- Nummular eczema
- Phytophotodermatitis
- Pretibial myxedema
- Psoriasis
- Riehl melanosis
- Seborrheic dermatitis
- Stasis dermatitis

### ***Associations***

- Atopic dermatitis
- Dermatophytosis
- Contact dermatitis
- Insect bites
- Psoriasis
- Xerosis

### ***Treatment Options***

- Topical corticosteroids with or without occlusion
- Flurandrenolide tape
- Intralesional corticosteroids
- Doxepin cream
- Capsaicin cream
- Cryosurgery

### **Further reading:**

- Lynch PJ (2004) Lichen simplex chronicus (atopic/neurodermatitis) of the anogenital region. *Dermatol Ther* 17(1):8–19





**Fig. 6.62** Lichen spinulosus (Courtesy of K. Guidry)

## Lichen Spinulosus

Keratotic dermatosis of uncertain cause that affects children and young adults and is characterized by solitary or multiple, discrete circular or oval clusters of keratotic papules on the trunk or extensor extremities (Fig. 6.62)

### *Differential Diagnosis*

- Darier's disease
- Follicular mucinosis
- Frictional lichenoid dermatitis
- Hodgkin's disease
- Keratosis pilaris
- Keratotic spicules
- Lichen nitidus
- Lichen planopilaris
- Lichen scrofulosorum

- Lichen simplex chronicus
- Papular eczema
- Phrynoderma
- Pityriasis rubra pilaris, circumscribed variant
- Verruca plana

### **Associations**

- Atopic dermatitis
- Crohn's disease
- Drug reaction
- HIV infection

### **Treatment Options**

- Ammonium lactate
- Salicylic acid
- Urea
- Topical retinoids
- Topical corticosteroids
- Topical vitamin D analogues

### **Further reading:**

- Tilly JJ, Drolet BA, Esterly NB (2004) Lichenoid eruptions in children. *J Am Acad Dermatol* 51(4):606–624

## **Lichen Striatus**

Common childhood dermatosis that is probably viral in origin and is characterized by flesh-colored to hypopigmented lichenoid papules advancing in a linear pattern along Blaschko's lines that spontaneously resolve in about 1 year (Fig. 6.63)



**Fig. 6.63** Lichen striatus (Courtesy of K. Guidry)

### *Differential Diagnosis*

- Atopic dermatitis
- Blaschkitis
- Inflammatory linear verrucous epidermal nevus
- Lichen simplex chronicus
- Linear Darier's disease
- Linear graft-vs-host disease
- Linear lichen planus
- Linear lupus erythematosus
- Linear psoriasis
- Porokeratosis
- Verruca

### *Treatment Options*

- Observation and reassurance
- Topical corticosteroids
- Topical tacrolimus

### **Further reading:**

- Tilly JJ, Drolet BA, Esterly NB (2004) Lichenoid eruptions in children. *J Am Acad Dermatol* 51(4):606–624

## Lichenoid Drug Eruption

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Drug eruption that resembles lichen planus and is characterized by either violaceous lichenoid papules and plaques, exfoliative dermatitis, a photodistributed eruption or, least commonly, oral lesions

### *Subtypes/Variants*

- Bullous
- Eczematous
- Lichen planus-like
- Photodistributed
- Psoriasiform
- Ulcerative

### *Differential Diagnosis*

- Erythema dyschromicum perstans
- Guttate psoriasis
- Lichen planus, eruptive
- Lichen scrofulosorum
- Parapsoriasis
- Pityriasis lichenoides
- Pityriasis rosea
- Pityriasis-rosea-like drug eruption
- Secondary syphilis

### *Associated Medications*

#### Lichen Planus-Like

- Allopurinol
- Antimalarials
- Beta-blockers
- Calcium channel blockers
- Captopril

- Carbamazepine
- Chlorpromazine
- Dapsone
- Furosemide
- Gold
- Hydrochlorothiazide
- Hepatitis B vaccination
- Metformin
- NSAIDS
- Penicillamine
- Spironolactone
- Sulfonylureas

#### Oral

- ACE inhibitors
- Allopurinol
- Dental amalgam
- Gold
- Ketoconazole
- Methyldopa
- NSAIDs
- Penicillamine
- Sulfonylureas

#### Photo

- 5-Fluorouracil
- Carbamazepine
- Chlorpromazine
- Ethambutol
- Furosemide
- Quinine
- Tetracyclines
- Thiazides

### ***Treatment Options***

- Discontinue offending medication
- Systemic corticosteroids

#### **Further reading:**

- Nigen S, Knowles SR, Shear NH (2003) Drug eruptions: approaching the diagnosis of drug-induced skin diseases. *J Drugs Dermatol* 2(3):278–299

### **Lichenoid Keratosis, Benign (Lichen-Planus-Like Keratosis)**

Benign lesion that predominantly affects women, that evolves from a solar lentigo, is characterized by a keratotic erythematous or violaceous papule on the sun-exposed areas, and is histologically indistinguishable from lichen planus

### ***Differential Diagnosis***

- Actinic keratosis
- Basal cell carcinoma
- Bowen's disease
- Large cell acanthoma
- Solar lentigo
- Lichen planus
- Melanocytic nevus
- Melanoma
- Seborrheic keratosis
- Squamous cell carcinoma
- Wart

#### **Further reading:**

- Morgan MB, Stevens GL, Switlyk S (2005) Benign lichenoid keratosis: a clinical and pathologic reappraisal of 1040 cases. *Am J Dermatopathol* 27(5):387–392



**Fig. 6.64** Linear atrophoderma of Moulin

### **Linear Atrophoderma of Moulin**

Acquired, idiopathic connective tissue disorder that may be related to linear morphea or atrophoderma of Pasini and Pierini and is characterized by a linear, hyperpigmented band of atrophoderma along Blaschko's lines (Fig. 6.64)

#### ***Differential Diagnosis***

- Atrophoderma of Pasini and Pierini
- Blaschkitis
- Lichen sclerosus et atrophicus
- Lichen striatus
- Linear and whorled nevoid hypermelanosis
- Linear lichen planus
- Linear morphea
- Scar
- Striae atrophicans

**Further reading:**

- Miteva L, Nikolova K, Obreshkova E (2005) Linear atrophoderma of Moulin. *Int J Dermatol* 44(10):867–869

## **Linear and Whorled Nevoid Hypermelanosis**

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Sporadic disorder of epidermal hypermelanosis that develops in the first few weeks of life and is characterized by linear and whorled streaks of hyperpigmentation along Blaschko's lines without preceding inflammation and with occasional, variable extracutaneous abnormalities

### ***Differential Diagnosis***

- Becker's nevus
- Café-au-lait macule
- Hypomelanosis of Ito
- Incontinentia pigmenti, stage III
- Linear atrophoderma of Moulin
- Linear lichen planus
- Progressive cribriform and zosteriform hyperpigmentation
- X-linked chondrodysplasia punctata
- X-linked reticulate pigmentary disorder

**Further reading:**

- Di Lernia V (2007) Linear and whorled hypermelanosis. *Pediatr Dermatol* 24(3):205–210

## **Linear Focal Elastosis**

---

Uncommon disorder of elastic tissue that predominantly affects older men and is characterized by linear, palpable, yellow bands on the middle to lower back (Fig. 6.65)





**Fig. 6.65** Linear focal elastosis

### *Differential Diagnosis*

- Cutaneous larva migrans
- Dermatofibrosis lenticularis disseminata
- Elastofibroma dorsi
- Interstitial granulomatous dermatitis (rope sign)
- Striae atrophicans

### **Further reading:**

- Arroyo MP, Soter NA (2001) Linear focal elastosis. *Dermatol Online J* 7(2):18

### **Linear IgA Bullous Dermatitis**

Autoimmune subepidermal blistering disorder affecting children and adults that is caused by IgA autoantibodies directed against a portion of BPAg2 and is characterized by discrete bullae and bullae in annular configurations that are located on the trunk, extremities, intertriginous areas, and occasionally the oral and ocular mucosa

### ***Differential Diagnosis***

- Bullous impetigo
- Bullous lupus erythematosus
- Bullous mastocytosis
- Bullous pemphigoid
- Bullous scabies
- Dermatitis herpetiformis
- Drug-induced pemphigus
- Erythema multiforme
- Epidermolysis bullosa acquisita
- Herpes simplex virus infection
- Pemphigus foliaceus
- Pemphigus vulgaris
- Stevens–Johnson syndrome/toxic epidermal necrolysis
- Zoster

### ***Associations***

- Internal malignancy
- Medications

### ***Associated Medications***

- Amiodarone
- Angiotensin receptor blockers
- Captopril
- Diclofenac
- Il-2
- Interferon gamma
- Furosemide
- Lithium
- Oxaprozin
- Penicillin
- Phenytoin

- PUVA
- Statins
- Tea tree oil
- Vancomycin

### ***Evaluation***

- Direct and indirect immunofluorescence
- Ophthalmologic examination

### ***Treatment Options***

- Dapsone
- Systemic corticosteroids
- Colchicine
- Tetracycline nicotinamide
- Sulfasalazine
- Methotrexate
- Mycophenolate mofetil
- Azathioprine
- Cyclosporine
- Intravenous immunoglobulins

### **Further reading:**

- Guide SV, Marinkovich MP (2001) Linear IgA bullous dermatosis. Clin Dermatol 19(6):719–727

## **Lipodermatosclerosis (Sclerosing Panniculitis)**

Type of panniculitis associated with chronic venous insufficiency that is characterized by woody induration of the bilateral lower extremities with an “inverted champagne bottle” appearance and with or without preceding cellulitis-like erythematous plaques

### ***Differential Diagnosis***

- Cellulitis
- Eosinophilic cellulitis
- Eosinophilic fasciitis
- Erythema induratum
- Erythema nodosum
- Lymphedema
- Morphea
- Nephrogenic fibrosing dermopathy
- Pretibial myxedema
- Sarcoidosis
- Scleromyxedema

### ***Evaluation***

- Venous ultrasound of the lower extremities

### ***Treatment Options***

- Compression
- Pentoxifylline
- Stanozolol
- Niacin
- Tetracycline antibiotics

### **Further reading:**

- Huang TM, Lee JY (2009) Lipodermatosclerosis: a clinicopathologic study of 17 cases and differential diagnosis from erythema nodosum. *J Cutan Pathol* 36(4):453–460

## **Lipodystrophy, Acquired**

---

Group of acquired disorders of fat distribution that are characterized by absence of fat in a localized or generalized distribution and that may be associated with insulin resistance, diabetes mellitus, hypertriglyceridemia, renal failure, and liver failure in some patients

### ***Subtypes/Variants***

- Acquired generalized (Lawrence syndrome)
- Acquired partial (Barraquer–Simons syndrome)
- HIV associated
- Injection related (insulin, corticosteroids)
- Lipoatrophia semicircularis
- Lipodystrophia centrifugalis abdominalis infantilis

### ***Differential Diagnosis***

- Anorexia
- Atrophoderma of Pasini and Pierini
- Cachexia
- Congenital lipodystrophy
- Cushing syndrome
- Lupus panniculitis
- Malnutrition
- Parry–Romberg syndrome
- Subcutaneous T cell lymphoma

### ***Associations***

- Connective tissue disease (especially dermatomyositis)
- Febrile illness
- Glomerulonephritis
- Hypocomplementemia

**Further reading:**

- Pope E, Janson A, Khambalia A, Feldman B (2006) Childhood acquired lipodystrophy: a retrospective study. *J Am Acad Dermatol* 55(6):947–950

**Lipodystrophy, Congenital**

---

Group of congenital disorders of fat distribution that are characterized by localized or generalized absence of fat and that may be associated with insulin resistance, diabetes mellitus, hypertriglyceridemia, pancreatitis, cardiomyopathy, renal failure, and liver failure in some patients

***Subtypes/Variants***

- Congenital generalized (Berardinelli–Seip syndrome)
- Familial partial (Kobberling–Dunnigan syndrome)

***Differential Diagnosis***

- Acquired lipodystrophy
- Cushing syndrome
- Donahue syndrome
- Malnutrition
- SHORT syndrome

**Further reading:**

- Helm TN, Bisker E, Bergfeld WF (2001) Lipodystrophy. *Cutis* 67(2):163–164

**Lipoid Proteinosis (Hyalinosis Cutis et Mucosae, Urbach–Wiethe Syndrome)**

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Rare AR disease that is caused by a mutation in the ECM1 gene encoding extracellular matrix protein 1 which causes the deposition of hyaline material in the skin and mucous membranes and is characterized by

infiltrated waxy papules, nodules, and plaques on the vocal cords (hoarseness), tongue, lips (cobblestone appearance), face, eyelids (beaded appearance), and elbows and knees (verrucous appearance), as well as bilateral intracranial bean-shaped calcifications of the temporal lobe

### ***Differential Diagnosis***

- Acanthosis nigricans, oral
- Colloid milium, juvenile
- Cowden's disease
- Erythropoietic protoporphyria
- Infantile systemic hyalinosis
- Familial amyloidosis syndromes
- Leprosy
- Ligneous gingival hyperplasia
- Juvenile hyaline fibromatosis
- Myxedema
- Papular mucinosis
- Primary systemic amyloidosis
- Pseudoxanthoma elasticum
- Scleromyxedema
- Xanthoma disseminatum
- Xanthomas

### ***Evaluation***

- Otorhinolaryngologic examination
- CT or MRI scan of the brain

### **Further reading:**

- Ringpfeil F (2005) Selected disorders of connective tissue: pseudoxanthoma elasticum, cutis laxa, and lipoid proteinosis. *Clin Dermatol* 23(1):41–46

## Lipoma

---

Common benign tumor of adipose tissue with several histologic variants that is associated with numerous disorders or clinical presentations and is characterized by a large circumscribed soft subcutaneous mass most commonly located anywhere on the body

### *Subtypes/Variants*

- Angiolipoleiomyoma
- Angiolipoma
- Chondroid lipoma
- Hibernoma
- Lipoblastoma
- Multiple
- Neural fibrolipoma
- Pleomorphic lipoma
- Segmental
- Spindle cell lipoma

### *Differential Diagnosis*

#### Lipoma

- Desmoid tumor
- Elastofibroma dorsi
- Epidermoid cyst
- Glomus tumor
- Hibernoma
- Leiomyoma
- Liposarcoma
- Malignant fibrous histiocytoma
- Nevus lipomatosus superficialis



- Neurofibroma (especially plexiform)
- Nodular fasciitis
- Panniculitis
- Sarcoma
- Schwannoma
- Spiradenoma
- Traumatic arteriovenous fistula

### Angiolipoma

- Dercum's disease
- Eccrine spiradenoma
- Glomus tumor
- Hibernoma
- Kaposiform hemangioendothelioma
- Leiomyoma
- Lipoma
- Liposarcoma
- Neuroma

### Multiple

- Cysticercosis
- Epidermal cysts
- Hemangiomas
- Metastatic disease
- Neurofibromatosis
- Steatocystoma multiplex
- Subcutaneous granuloma annulare
- Subcutaneous sarcoidosis

### Associations

#### Multiple

- Adiposis dolorosa (Dercum's disease)
- Bannayan–Riley–Ruvalcaba syndrome

- Diffuse lipomatosis
- Encephalocraniocutaneous lipomatosis
- Familial multiple lipomatosis
- Gardner's syndrome
- Madelung's disease (benign symmetric lipomatosis, Launois–Bensaude disease)
- Multiple endocrine neoplasia, type I
- Protease inhibitor therapy
- Proteus syndrome

#### Angiolipoma

- Antiretroviral therapy
- Diabetes mellitus

#### Further reading:

- Mentzel T (2001) Cutaneous lipomatous neoplasms. *Semin Diagn Pathol* 18(4):250–257

### **Lipomatosis, Benign Symmetric (Madelung's Disease, Launois–Bensaude Syndrome)**

---

Type of lipomatosis predominantly affecting middle-aged men that is characterized by asymptomatic lipomas in a horse collar-like distribution around the neck

#### *Differential Diagnosis*

- Dercum's disease
- Goiter
- Lymphadenopathy
- Obesity
- Sialadenitis
- Soft tissue neoplasia

## **Associations**

- Alcoholism
- Diabetes
- Gout

### **Further reading:**

- Fernandez-Vozmediano J, Armario-Hita J (2005) Benign symmetric lipomatosis (Launois–Bensaude syndrome). *Int J Dermatol* 44(3):236–237

## **Liposarcoma**

Uncommon malignant tumor of adipose tissue that affects older patients and is characterized by a circumscribed, often large, subcutaneous mass that grows slowly and is most commonly located on the thigh

### ***Differential Diagnosis***

- Dermatofibrosarcoma protuberans
- Leiomyosarcoma
- Lipoblastoma
- Lipoma
- Metastases
- Malignant fibrous histiocytoma
- Malignant schwannoma
- Neurofibroma (especially plexiform)
- Pleomorphic lipoma
- Plexiform neurofibroma
- Rhabdomyosarcoma
- Soft tissue sarcoma
- Spindle cell lipoma
- Tropical pyomyositis

### **Further reading:**

- Dei Tos AP, Mentzel T, Fletcher CD (1998) Primary liposarcoma of the skin: a rare neoplasm with unusual high grade features. *Am J Dermatopathol* 20(4):332–338



**Fig. 6.66** Livedo racemosa

### **Livedo Reticularis/Racemosa**

Vascular disorder that is caused by cutaneous hypoperfusion most often in the setting of hypercoagulability related to a variety of underlying diseases and is characterized by a net-like pattern of reddish to cyanotic discoloration of the extremities, especially the legs, that is accentuated with cold exposure and that may (reticularis) or may not (racemosa) improve with rewarming (Fig. 6.66)

#### ***Subtypes/Variants***

- Without systemic associations
  - Congenital (physiologic cutis marmorata)
  - Idiopathic
  - Primary

- With systemic associations
  - Congenital (cutis marmorata telangiectatica congenita)
  - Hematologic/hypercoagulable
  - Autoimmune
  - Embolic
  - Medication induced
  - Infectious related
  - Neurologic

### ***Differential Diagnosis***

- Acrocyanosis
- Angioma serpiginosum
- Bier spots
- Cutis marmorata
- Cutis marmorata telangiectatica congenita
- Drug reactions
- Erythema ab igne
- Erythema infectiosum
- Livedo vasculopathy
- Poikilodermatous diseases
- Reticulated erythematous mucinosis
- Retiform purpura
- Viral exanthem

### ***Associations***

- Amantadine therapy
- Antiphospholipid antibody syndrome
- Antithrombin III deficiency
- Apoplexy
- Arteriosclerosis
- Calciphylaxis
- Carcinoid syndrome

- Cholesterol emboli
- Churg–Strauss syndrome
- CNS disease or injury
- Cocaine-associated vasculopathy
- Cold agglutinins
- Cryoglobulinemia/cryofibrinogenemia
- Cushing's syndrome
- Dermatomyositis
- Encephalitis
- Endocarditis
- Factor V Leiden mutation
- Fat emboli
- Felty syndrome
- Hemolytic uremic syndrome/thrombotic thrombocytopenic purpura
- Homocystinuria
- Hyperoxaluria
- Hypothyroidism
- Intravascular B cell lymphoma
- Leukemia
- Livedoid vasculopathy
- Lupus erythematosus
- Microscopic polyangiitis
- Moyamoya disease
- Multiple sclerosis
- Neurofibromatosis
- Pancreatitis
- Paraproteinemia
- Parkinson's disease
- Pellagra
- Pheochromocytoma
- Poliomyelitis
- Polyarteritis nodosa
- Polycythemia vera
- Protein-S, protein-C deficiency

- Quinine
- Rheumatoid arthritis
- Sepsis
- Septic vasculitis
- Sharp syndrome
- Sjögren syndrome
- Sneddon syndrome
- Still's disease
- Syphilis
- Systemic sclerosis
- Takayasu's disease
- Temporal arteritis
- Thromboangiitis obliterans
- Thrombocytosis
- Tuberculosis
- Wegener's granulomatosis

### ***Evaluation***

- Anticardiolipin antibodies
- Antineutrophilic cytoplasmic antibodies
- Antinuclear antibodies
- Antithrombin III level
- Factor V Leiden assay
- Homocysteine levels
- Lupus anticoagulant test
- Protein-C and protein-S level
- Renal function test
- Rheumatoid factor
- Serum/urinary protein electrophoresis
- Serum cryoglobulins and cryofibrinogens
- Viral hepatitis panel

### ***Treatment Options***

- Treat underlying cause
- Aspirin
- Pentoxifylline
- Dipyridamole

### **Further reading:**

- Gibbs M et al (2005) Livedo reticularis: an update. *J Am Acad Dermatol* 52:1009–1019

### **Livedoid Vasculopathy**

Distinct vascular disorder caused by thrombosis that is characterized by livedo reticularis and painful ulcerations around the ankles which heal to small atrophic white scars (atrophie blanche)

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- Arterial ulcer
- Cholesterol emboli
- Malignant atrophic papulosis
- Hydroxyurea-related ulceration
- Hypersensitivity vasculitis
- Hypertensive ulcer
- Lupus erythematosus
- Lichen sclerosus
- Lipodermatosclerosis
- Livedo reticularis
- Polyarteritis nodosa
- Scleroderma
- Septic emboli



- Sickle cell anemia
- Trauma
- Ulcerative necrobiosis lipoidica
- Venous stasis ulcer
- Vasculitis

### ***Associations***

- Antiphospholipid antibody syndrome
- Livedo reticularis
- Raynaud phenomenon
- Stasis dermatitis (can occur as a secondary phenomenon)

### ***Evaluation***

- Anticardiolipin antibodies
- Antineutrophilic cytoplasmic antibodies
- Antinuclear antibodies
- Antithrombin III level
- Beta-2 glycoprotein-1 antibodies
- Factor V Leiden assay
- Homocysteine levels
- Lupus anticoagulant test
- Protein-C and protein-S level
- Renal function test
- Rheumatoid factor
- Serum/urinary protein electrophoresis
- Serum cryoglobulins and cryofibrinogens
- Viral hepatitis panel

### ***Treatment Options***

- Aspirin
- Dipyridamole

- Pentoxifylline
- Danazol
- Heparin
- Warfarin
- Dapsone
- Niacin

**Further reading:**

- Hairston BR, Davis MD, Pittelkow MR et al (2006) Livedoid vasculopathy: further evidence for procoagulant pathogenesis. *Arch Dermatol* 142(11):1413–1418

## **Lobomycosis (Keloidal Blastomycosis)**

Chronic fungal infection affecting patients in South and Central America that is caused by *Lacazia loboi* and is characterized by keloid-like papules, nodules, and plaques on the ears, trunk, and extremities

### ***Differential Diagnosis***

- Chromoblastomycosis
- Dermatofibrosarcoma protuberans
- Leishmaniasis
- Leprosy
- Kaposi's sarcoma
- Keloid
- Paracoccidioidomycosis
- Xanthoma

**Further reading:**

- Paniz-Mondolfi AE, Reyes Jaimes O, Davila Jones L (2007) Lobomycosis in Venezuela. *Int J Dermatol* 46(2):180–185

## **Loose Anagen Hair**

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Hair disorder possibly caused by defective keratinization of the inner root sheath that affects blonde-haired girls and is characterized by diffuse thinning or patchy alopecia with easily and painlessly plucked hairs that demonstrate a ruffled cuticle on hair mount

### ***Differential Diagnosis***

- Alopecia areata
- Anagen effluvium
- Iron deficiency
- Nutritional deficiency
- Telogen effluvium
- Thyroid disease
- Tinea capitis
- Traction alopecia
- Trichorrhexis invaginata
- Trichorrhexis nodosa
- Trichotillomania
- Uncombable hair syndrome

### ***Associations***

- Coloboma
- Hypohidrotic ectodermal dysplasia
- Noonan's syndrome

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Tosti A, Piraccini BM (2002) Loose anagen hair syndrome and loose anagen hair. Arch Dermatol 138(4):521–522

## **Lupus Erythematosus, Cutaneous**

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Term encompassing a spectrum of autoimmune disease of the skin that may or may not be associated with systemic lupus and is characterized by a prominent erythema and photosensitivity (acute), papulosquamous, or annular lesions (subacute) or scarred, hypopigmented plaques (chronic), along with several other less common subtypes

### ***Subtypes/Variants***

- Acute
  - Exfoliative erythroderma-like
  - Malar erythema
  - Photodistributed
  - TEN-like eruption (ASAP syndrome)
- Chronic
  - Chilblains
  - Discoid
  - Hypertrophic
  - Lichen planus – lupus erythematosus overlap
  - Lupus panniculitis (Kaposi–Irgand syndrome)
  - Mucosal
  - Rowell's syndrome
  - Tumid
- Subacute
  - Annular
  - Exfoliative erythroderma-like
  - Papulosquamous
- Other Types of Lupus
  - Acute syndrome of apoptotic pan-epidermolysis
  - Bullous
  - Complement deficiency related
  - Neonatal
  - Systemic

## *Differential Diagnosis*

### Acute

- Dermatomyositis
- Eczema
- Erythema multiforme
- Pemphigus erythematosus
- Photoallergic contact dermatitis
- Photosensitive drug eruption
- Polymorphous light eruption
- Porphyria cutanea tarda
- Pseudoporphyria
- Rosacea
- Seborrheic dermatitis
- Solar urticaria
- Sunburn
- Tinea faciei
- Toxic epidermal necrolysis

### Bullous

- Bullosis diabeticorum
- Bullous pemphigoid
- Dermatitis herpetiformis
- Epidermolysis bullosa acquisita
- Linear IgA bullous dermatosis
- Pemphigus
- Toxic epidermal necrolysis

### Discoid

- Actinic keratosis
- Actinic prurigo
- Angiolymphoid hyperplasia with eosinophilia
- Bowen's disease
- Cicatricial pemphigoid
- Dermatomyositis

- Graham–Little–Piccardi–Lasseur syndrome
- Granuloma annulare
- Granuloma faciale
- Jessner's lymphocytic infiltrate
- Keratoacanthoma
- Leprosy
- Lichen planopilaris
- Lichen planus (especially atrophic type)
- Lichen sclerosus et atrophicus
- Lupus vulgaris
- Lymphocytoma cutis
- Lymphoma cutis
- Polymorphous light eruption
- Psoriasis
- Reticular erythematous mucinosis
- Rosacea
- Sarcoidosis
- Squamous cell carcinoma
- Sporotrichosis
- Tertiary syphilis
- Tinea faciei

#### Hypertrophic/Verrucous

- Deep fungal infection
- Hypertrophic lichen planus
- Keratoacanthomas
- Lichen simplex chronicus
- Prurigo nodularis
- Psoriasis
- Warts

#### Lupus Panniculitis

- Atrophoderma of Pasini and Pierini
- Carcinoma en cuirasse
- Erythema induratum

- Erythema nodosum
- Epidermal inclusion cyst
- Lipoatrophy
- Morphea profunda
- Pancreatic panniculitis
- Rheumatoid nodule
- Steroid lipoatrophy
- Subcutaneous T cell lymphoma
- Superficial thrombophlebitis
- Thrombophlebitis

### Neonatal

- Acute hemorrhagic edema of infancy
- Annular erythema of infancy
- Bloom syndrome
- Congenital rubella
- Congenital syphilis
- Cutaneous lymphoid hyperplasia
- Cutis marmorata telangiectatica congenita
- Erythema toxicum neonatorum
- Langerhans cell histiocytosis
- Lymphangioma circumscriptum
- Rothmund–Thomson syndrome
- Serum-sickness-like reaction
- Urticaria

### Subacute

- Actinic prurigo
- Dermatomyositis
- Disseminated superficial actinic porokeratosis
- Erythema annulare centrifugum
- Erythema gyratum repens
- Erythema multiforme
- Granuloma annulare
- Leprosy

- Lichen planus
- Lyme disease
- Mycosis fungoides
- Nummular eczema
- Pemphigus erythematosus
- Photosensitive drug eruption
- Photosensitive eczema
- Pityriasis rubra pilaris
- Polymorphous light eruption
- Psoriasis
- Rowell's syndrome
- Sarcoidosis
- Seborrheic dermatitis
- Sjögren's syndrome
- Tinea corporis

#### Tumid

- Arthropod-bite reaction
- Cutaneous lymphoid hyperplasia
- Erythema annulare centrifugum (especially deep type)
- Granuloma annulare
- Granuloma faciale
- Jessner's lymphocytic infiltrate
- Lupus panniculitis
- Lymphoma cutis
- Polymorphous light eruption
- Reticular erythematous mucinosis
- Sarcoidosis
- Wells syndrome

#### **Diagnostic Criteria**

##### Bullous (4/4)

- Fulfillment of the ARA criteria for SLE
- Vesicles and/or bullae



- Subepidermal blistering with leukocyte infiltrates in the dermis
- Linear or granular deposition of IgG (with or without IgA and/or IgM antibodies) at the dermal–epidermal junction of normal and/or affected skin sample

#### Rowell's Syndrome

- Major criteria (3/3)
  - Lupus erythematosus (LE): systemic LE, discoid LE, or subacute cutaneous LE
  - Erythema-multiforme-like lesions (with/without involvement of the mucous membranes)
  - Speckled pattern of antinuclear antibody
- Minor (1/3)
  - Chilblains
  - Anti-Ro antibody or anti-La antibody
  - Positive rheumatoid factor

#### *Associated Medications (Subacute)*

- ACE inhibitors
- Anticonvulsants
- Calcium channel blockers
- Glyburide
- Gold
- Griseofulvin
- Hydrochlorothiazide
- Penicillamine
- Piroxicam
- Procainamide
- PUVA
- Ranitidine
- Spironolactone
- Sulfonylureas
- Terbinafine

## **Evaluation**

- Complete blood count
- Antinuclear antibodies (including SS-A and SS-B)
- Renal function test
- Lupus band test

## **Treatment Options**

- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Topical tacrolimus
- Sunscreen
- Hydroxychloroquine
- Chloroquine
- Quinacrine
- Dapsone
- Mycophenolate mofetil
- Methotrexate
- Acitretin
- Thalidomide
- Cyclophosphamide
- Sulfasalazine

## **Further reading:**

- Crowson AN, Magro C (2001) The cutaneous pathology of lupus erythematosus: a review. *J Cutaneous Pathol* 28:1–23
- Yell JA, Allen J, Wojnarowska F, Kirtschig G et al (1995) Bullous systemic lupus erythematosus: revised criteria for diagnosis. *Br J Dermatol* 132(6):921–928
- Zeitouni NC, Funaro D, Cloutier RA et al (2000) Redefining Rowell's syndrome. *Br J Dermatol* 142(2):343–346

## **Lupus Erythematosus, Systemic**

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Autoimmune disorder with variable cutaneous and systemic features that is characterized by autoantibody production and immune complex deposition which affects a variety of organs including the kidneys, CNS, joints, serosal surfaces, and skin

### ***Diagnostic Criteria (4/11)***

- Anti-DNA antibodies, anti-Smith antibodies, or false-positive VDRL
- Antinuclear antibodies
- Discoid lesions
- Hemolytic anemia, leukopenia, lymphopenia, or thrombocytopenia
- Malar rash
- Neurologic disorder: seizures
- Nonerosive arthritis
- Oral ulcers (observed by a physician)
- Photosensitivity
- Proteinuria or cellular casts in the urine
- Serositis: pleuritis or pericarditis

### ***Associations***

- Acanthosis nigricans
- Benign hypergammaglobulinemic purpura of Waldenström
- Complement deficiency
- Dermatitis herpetiformis
- Eosinophilic fasciitis
- Pemphigus
- Porphyria cutanea tarda
- Rheumatoid arthritis
- Scleroderma
- Sjögren's syndrome
- Sweet's syndrome

- Ulcerative colitis
- Toxic-epidermal-necrolysis-like presentation

### ***Associated Medications (Drug-Induced LE)***

- Anticonvulsants
- Captopril
- Ciprofloxacin
- Etanercept
- Hydralazine
- Hydroxyurea
- Infliximab
- Isoniazid
- Minocycline
- Oral contraceptives
- Penicillin
- Penicillamine
- Procainamide
- Rifampin
- Spironolactone
- Sulfonamides

### ***Evaluation***

- Antinuclear antibodies and extractable nuclear antigen panel
- Antiphospholipid antibodies
- Chest radiograph
- Complete blood count
- Complement levels
- Direct immunofluorescence
- Echocardiography
- Electrocardiogram
- Renal function test
- Rheumatoid factor

- Serum protein electrophoresis
- Urinalysis

**Further reading:**

- Rothfield N, Sontheimer RD, Bernstein M (2006) Lupus erythematosus: systemic and cutaneous manifestations. *Clin Dermatol* 24(5):348–362

## **Lupus Miliaris Disseminata Faciei (Acne Agminata)**

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Chronic skin disorder of unknown cause that is characterized by multiple small, red-brown papules on the face, most commonly in a periocular distribution

### ***Differential Diagnosis***

- Acne vulgaris
- Cutaneous lymphoid hyperplasia
- Demodicosis
- Granuloma faciale
- Granulomatous periorificial dermatitis
- Granulomatous rosacea
- Histiocytoses
- Lupus vulgaris
- Multicentric reticulohistiocytosis
- Papular xanthoma
- Perioral dermatitis
- Sarcoidosis
- Syringoma
- Trichoepithelioma
- Verruca plana

### ***Treatment Options***

- Tetracycline antibiotics
- Dapsone

- Systemic corticosteroids
- Antimalarials

**Further reading:**

- Nino M, Barberio E, Delfino M (2003) Lupus miliaris disseminatus faciei and its debated link to tuberculosis. *J Eur Acad Dermatol Venereol* 17(1):97

## Lyme Disease

Spirochetal disease that is caused by several subspecies of *Borrelia burgdorferi*, is transmitted by *Ixodes* ticks, and is characterized by an initial stage associated with erythema migrans; a second stage associated with neuropathy, meningitis, cardiac inflammation, and cutaneous lymphoid hyperplasia; and a third-stage characterized by arthritis, CNS disturbance, and acrodermatitis chronica atrophicans

### ***Differential Diagnosis***

- Arbovirus encephalitis
- Ehrlichiosis
- Guillain–Barre syndrome
- HIV infection
- Juvenile rheumatoid arthritis
- Leptospirosis
- Lupus erythematosus
- Ramsay Hunt syndrome
- Rat-bite fever
- Rheumatoid arthritis
- Rocky Mountain spotted fever
- Southern tick-associated rash illness
- Syphilis
- Tick paralysis

### ***Evaluation***

- Complete blood count
- Electrocardiogram
- Joint-fluid analysis
- Liver function test
- Lumbar puncture
- Lyme disease ELISA and Western blot
- Polymerase chain reaction for borrelial antigen
- Renal function test

### ***Treatment Options***

- Doxycycline
- Amoxicillin
- Cefuroxime

### **Further reading:**

- Wormser GP, Dattwyler RJ, Shapiro ED et al (2006) The clinical assessment, treatment, and prevention of Lyme disease, human granulocytic anaplasmosis, and babesiosis: clinical practice guidelines by the Infectious Diseases Society of America. *Clin Infect Dis* 43(9):1089–1134

### **Lymphadenoma, Cutaneous**

Rare, benign neoplasm that contains both basaloid epithelial islands and a lymphocytic infiltrate and is characterized as a solitary, erythematous nodule on the head and neck, often in the preauricular area or cheek

### ***Differential Diagnosis***

- Accessory tragus
- Angiolymphoid hyperplasia with eosinophilia
- Basal cell carcinoma

- Clear cell syringoma
- Cutaneous lymphoid hyperplasia
- Follicular neoplasms
- Lymphoepithelioma-like carcinoma
- Lymphoma cutis
- Intradermal melanocytic nevus
- Sebaceous adenoma
- Trichoblastoma

**Further reading:**

- Alsadhan A, Taher M, Shokravi M (2003) Cutaneous lymphadenoma. J Am Acad Dermatol 49(6):1115–1116

## Lymphangioma

Term referring to either a congenital lymphatic malformation or an acquired postsurgical or postinflammatory lymphatic lesion that is characterized by verrucous clusters of hyperkeratotic superficial vesicle-like papules (congenital microcystic or acquired) or deeper subcutaneous cystic dilatations that are most commonly located on the head and neck (congenital macrocystic)

### *Subtypes/Variants*

- Congenital macrocystic (cavernous/cystic hygroma)
- Congenital microcystic (lymphangioma circumscriptum)
- Acquired

### *Differential Diagnosis*

- Amyloidosis
- Angiokeratoma circumscriptum
- Branchiogenic cyst
- Condyloma acuminatum



- Deep hemangioma
- Epidermal inclusion cyst
- Epidermal nevus
- Hemangioma
- Herpes simplex virus infection
- Kaposi's sarcoma
- Lipoma
- Melanoma
- Mucocele
- Neurofibroma
- Ranula
- Soft tissue tumor
- Telangiectatic cutaneous metastasis
- Thyroglossal cyst
- Warts

### ***Associations***

#### Macrocystic/Cystic Hygroma

- Achondroplasia
- Down syndrome
- Klinefelter syndrome
- Multiple pterygium syndrome
- Noonan syndrome
- Turner syndrome

#### Acquired

- Esthiomene
- Hidradenitis suppurativa
- Lymph node dissection
- Radiation

#### **Further reading:**

- Gupta S, Radotra BD, Javaheri SM et al (2003) Lymphangioma circumscriptum of the penis mimicking venereal lesions. *J Eur Acad Dermatol Venereol* 17(5):598–600

## **Lymphogranuloma Venereum (Nicolas–Favre Disease)**

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Sexually transmitted disease caused by L serotypes of *Chlamydia trachomatis* that is characterized by an often unrecognized, asymptomatic genital ulcer, followed by painful inguinal lymphadenopathy that is bisected by Poupart's ligament (groove sign), and, if untreated, elephantiasis resulting from lymphatic obstruction with markedly enlarged and distorted genitalia (esthiomene)

### ***Differential Diagnosis***

- Brucellosis
- Bubonic plague
- Cat-scratch disease
- Chancroid
- Crohn's disease
- Elephantiasis
- Filariasis
- Granuloma inguinale
- Hidradenitis suppurativa
- Hodgkin's disease
- Infectious mononucleosis
- Lymphoma
- Metastasis
- Scrofuloderma
- Syphilis
- Tuberculosis
- Tularemia

### ***Evaluation***

- Complement fixation serologic test
- HIV test
- Lymph node aspiration, Gram stain, and culture
- Syphilis serologic tests

**Further reading:**

- Lupi O, Madkan V, Tyring SK (2006) Tropical dermatology: bacterial tropical diseases. *J Am Acad Dermatol* 54(4):559–578

**Lymphoid Hyperplasia, Cutaneous  
(Lymphocytoma Cutis, Pseudolymphoma, Spiegler–Fendt Sarcoid)**

Term for several different types of benign lymphocytic infiltration (with a mix of T cells and B cells; Fig. 6.67) that clinically and histologically mimic cutaneous lymphoma occur in response to a variety of antigenic stimuli and are characterized most commonly by plum-colored papules or nodules on the head and neck (B cell lymphoma-like) or erythematous scaly patches and plaques (T cell lymphoma-like)



**Fig. 6.67** Cutaneous lymphoid hyperplasia

### ***Subtypes/Variants***

- Acral pseudolymphomatous angiokeratoma of children (APACHE)
- Angioimmunoblastic lymphadenopathy
- Angiolymphoid hyperplasia with eosinophils
- Castleman's disease
- Kimura's disease
- Lymphocytic infiltrates
- Lymphomatoid contact dermatitis
- Lymphomatoid drug reaction
- Lymphomatoid keratosis
- Lymphomatoid papulosis
- Pseudolymphomatous folliculitis
- Pseudomycosis fungoides
- Syringolymphoid hyperplasia

### ***Differential Diagnosis***

- Adnexal tumor
- Basal cell carcinoma
- Cutaneous metastasis
- Cylindroma
- Foreign body granuloma
- Granuloma annulare
- Granuloma faciale
- Granulomatous rosacea
- Inflamed epidermal cyst
- Insect-bite reactions
- Lepromatous leprosy
- Lymphadenoma
- Lymphocytic infiltrate of Jessner
- Lymphoma cutis
- Merkel cell carcinoma
- Sarcoidosis

- Squamous cell carcinoma
- Tumid lupus erythematosus

### ***Associations***

- Acupuncture
- Arthropod bite
- Borreliosis
- Contact dermatitis
- Gold jewelry
- Idiopathic
- Medications
- Scabies
- Tattoo
- Trauma
- Vaccinations
- Zoster

### ***Associated Medications***

#### **B Cell**

- Amitriptyline
- Fluoxetine

#### **T Cell**

- ACE Inhibitors
- Allopurinol
- Anticonvulsants
- Antipsychotics
- Beta-blockers
- Calcium channel blockers
- Cyclosporine
- Diuretics

- Dapsone
- NSAIDs
- Phenobarbital
- Sulfa Drugs

### ***Evaluation***

- Immunophenotyping
- T or B cell gene rearrangement

### ***Treatment Options***

- Removal of underlying cause
- Intralesional corticosteroids
- Radiation
- Surgical excision

### **Further reading:**

- Bergman R (2010) Pseudolymphoma and cutaneous lymphoma: facts and controversies. *Clin Dermatol* 28(5):568–574

## **Lymphoma, Primary Cutaneous CD30+ Anaplastic Large Cell**

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Uncommon type of T cell lymphoma that affects adults and is characterized by a solitary firm and violaceous tumor with or without ulceration that can occur anywhere and is associated with a good prognosis

### ***Differential Diagnosis***

- Basal cell carcinoma
- Granuloma faciale
- Granulocytic sarcoma
- Hodgkin's disease

- Jessner's benign lymphocytic infiltrate
- Leukemia cutis
- Lymphomatoid papulosis
- Keratoacanthomas
- Melanoma
- Merkel cell carcinoma
- Metastatic disease
- Orf
- Squamous cell carcinoma

### ***Treatment Options***

- Radiation therapy
- Surgical excision
- Methotrexate
- Chemotherapy

### **Further reading:**

- Kempf W (2006) CD30+ lymphoproliferative disorders: histopathology, differential diagnosis, new variants, and simulators. *J Cutan Pathol* 33(Suppl 1):58–70

## **Lymphoma, Primary Cutaneous B Cell**

Type of B cell lymphoma arising in the skin that is characterized by solitary or multiple red to plum-colored papules, nodules, or plaques most commonly on the trunk or head and neck and that carries a relatively good prognosis, except for the diffuse type which occurs on the leg

### ***Subtypes/Variants***

- Intravascular large B cell lymphoma
- Lymphomatoid granulomatosis
- Posttransplant lymphoproliferative disorder
- Primary cutaneous follicle center-cell lymphoma



**Fig. 6.68** Diffuse large B cell lymphoma, leg type

- Primary cutaneous immunocytoma/marginal zone lymphoma
- Primary cutaneous large B cell lymphoma of the leg (Fig. 6.68)
- Primary cutaneous plasmacytoma

### *Differential Diagnosis*

- Acute myelogenous leukemia
- Amelanotic melanoma
- Basal cell carcinoma
- Chronic lymphocytic leukemia/lymphoma
- Cutaneous lymphoid hyperplasia
- Granulocytic sarcoma
- Lymphocytic infiltration of Jessner
- Merkel cell carcinoma
- Metastatic disease
- Secondary cutaneous lymphoma

### *Evaluation*

- Calcium level
- Chest radiograph
- Complete blood count with smear
- CT scan of chest, abdomen, and pelvis



- Immunoglobulin gene rearrangement
- Immunophenotyping
- Lactate dehydrogenase level
- Lymph node exam and biopsy
- Serum/urinary protein electrophoresis
- Serum chemistry

### ***Treatment Options***

- Radiation
- Surgical excision
- Doxycycline
- Intralesional corticosteroids
- Rituximab
- Chemotherapy

### **Further reading:**

- Bogle MA, Riddle CC, Triana EM, Jones D, Duvic M (2005) Primary cutaneous B-cell lymphoma. *J Am Acad Dermatol* 53(3):479–484

## **Lymphoma, Cutaneous T Cell**

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Type of T cell lymphoma arising in the skin that has several different subtypes and numerous different morphologies, some of which are indolent with a good prognosis, while others are more rapidly progressive and carry a poor prognosis

### ***Subtypes/Variants***

- Cutaneous T cell lymphoma, large cell, and CD30 negative
- Cutaneous T cell lymphoma, large cell, and CD30 positive
- Cutaneous T cell lymphoma, pleomorphic, and small/medium cell
- Granulomatous slack skin
- Lymphomatoid papulosis

- Mycosis fungoides and variants
- Pagetoid reticulosis
- Sézary's syndrome
- Subcutaneous panniculitis-like T cell lymphoma

### ***Differential Diagnosis***

- See individual subtypes.

### ***TMN Classification***

- $T_1$ : Limited patch/plaque (involving <10% of total skin surface)
- $T_2$ : Generalized patch/plaque (involving =10% of total skin surface)
- $T_3$ : Tumor(s)
- $T_4$ : Erythroderma
- $N_0$ : No enlarged lymph nodes
- $N_1$ : Enlarged lymph nodes, histologically uninvolved
- $N_2$ : No enlarged lymph nodes, histologically involved
- $N_3$ : Enlarged lymph nodes, histologically involved
- $M_0$ : No visceral involvement
- $M_1$ : Visceral involvement
- $B_0$ : No circulating atypical (Sézary) cells (or <5% of lymphocytes)
- $B_1$ : Circulating atypical (Sézary) cells (=5 of lymphocytes)

### ***Staging***

- IA:  $T_1N_0M_0$
- IB:  $T_2N_0M_0$
- IIA:  $T_{1-2}N_1M_0$
- IIB:  $T_3N_{0-1}M_0$
- III:  $T_4N_{0-1}M_0$
- IVA:  $T_{1-4}N_{2-3}M_0$
- IVB:  $T_{1-4}N_{0-3}M_1$

### ***Evaluation***

- Calcium level
- Chest radiography
- Complete blood count
- HTLV-1 serologic test
- Immunophenotyping
- Lactate dehydrogenase level
- Liver function test
- Lymph node exam and biopsy
- PET scan
- Renal function test
- Sézary cell preparation
- T cell gene rearrangement

### ***Treatment Options***

- Topical corticosteroids
- UVB phototherapy
- Topical nitrogen mustard
- Total skin electron beam therapy
- Methotrexate
- Interferon alpha-2a
- Topical bexarotene
- Oral bexarotene
- Denileukin diftitox
- Alemtuzumab
- Vorinostat
- Romidepsin
- Chemotherapy

### **Further reading:**

- Kinney MC, Jones D (2007) Cutaneous T-cell and NK-cell lymphomas: the WHO–EORTC classification and the increasing recognition of specialized tumor types. *Am J Clin Pathol* 127(5):670–686

- Olsen E, Vonderheid E, Pimpinelli N et al (2007) Revisions to the staging and classification of mycosis fungoides and Sezary syndrome: a proposal of the International Society for Cutaneous Lymphomas (ISCL) and the cutaneous Lymphoma task force of the European organization of Research and Treatment of cancer (EORTC). *Blood* 110(6):1713–1722

## **Lymphoma, Intravascular (Angiotropic) B Cell Lymphoma (Malignant Angioendotheliomatosis)**

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Type of B cell lymphoma affecting older patients that arises within blood vessels and is characterized by a variable clinical presentation, including vascular papules and nodules and livedo-like lesions, along with CNS disturbance due to presumed neoplastic cell-mediated infarctions, giving rise to stroke symptoms and seizures, and a poor prognosis

### ***Differential Diagnosis***

- Acroangiodermatitis
- Angiosarcoma
- Antiphospholipid antibody syndrome
- Bacillary angiomatosis
- Cryoglobulinemia
- Erythema nodosum
- Kaposi's sarcoma
- Lymphomatoid granulomatosis
- Malignant atrophic papulosis
- Panniculitis
- Perniosis (chilblains)
- Thrombophlebitis
- Phlebitis
- Reactive angioendotheliomatosis
- Sarcoidosis
- Sneddon syndrome
- Squamous cell carcinoma
- Tufted angioma
- Vasculitis

### ***Treatment Options***

- Chemotherapy
- Rituximab

#### **Further reading:**

- Ferreri AJ, Campo E, Seymour JF et al (2004) Intravascular lymphoma: clinical presentation, natural history, management and prognostic factors in a series of 38 cases, with special emphasis on the “cutaneous variant”. *Br J Haematol* 127(2):173–183

### **Lymphoma, Natural Killer Cell (CD56+ Lymphoma)**

Type of T cell lymphoma with variable clinical presentation that is associated with EBV infection; is characterized by an angiocentric, ulcerative tumor, or tumors arising most commonly in the nasal passages or on the extremities; or may resemble hydroa vacciniforme when it occurs in children

#### ***Differential Diagnosis***

- Cutaneous lymphoid hyperplasia
- Hydroa vacciniforme
- Leishmaniasis
- Leprosy
- Lymphomatoid granulomatosis
- Nasopharyngeal carcinoma
- Paracoccidioidomycosis
- Sarcoidosis
- Subcutaneous panniculitis-like T cell lymphoma
- Syphilis
- Wegener’s granulomatosis

#### ***Evaluation/Treatment Options***

- Chemotherapy
- Radiation

**Further reading:**

- Kinney MC, Jones D (2007) Cutaneous T-cell and NK-cell lymphomas: the WHO–EORTC classification and the increasing recognition of specialized tumor types. *Am J Clin Pathol* 127(5):670–686

**Lymphoma, Subcutaneous Panniculitis-Like T Cell Lymphoma**

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Type of T cell lymphoma that arises in the subcutaneous layer, resembles panniculitis clinically, and is characterized by erythematous subcutaneous nodules, constitutional symptoms, and a rapidly progressive hemophagocytic syndrome

***Differential Diagnosis***

- Angiocentric NK/T cell lymphoma
- Cellulitis
- Dermatomyositis panniculitis
- Erythema nodosum
- Lipodermatosclerosis
- Lupus panniculitis
- Pyoderma gangrenosum
- Scleroderma panniculitis
- Venous insufficiency ulcer

**Further reading:**

- Weenig RH, Ng CS, Perniciaro C (2001) Subcutaneous panniculitis-like T-cell lymphoma: an elusive case presenting as lipomembranous panniculitis and a review of 72 cases in the literature. *Am J Dermatopathol* 23(3):206–215

**Lymphomatoid Granulomatosis**

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Poorly understood idiopathic lymphoma-like systemic disease with vasculitis-like features that is associated with EBV infection, affects older patients, and is characterized by pulmonary and CNS infiltration, constitutional symptoms, and erythematous papules or nodules that occasionally resemble erythema nodosum

### ***Differential Diagnosis***

- Angiocentric (NK type) lymphoma
- Churg–Strauss syndrome
- Erythema nodosum
- Hodgkin's disease
- Intravascular lymphoma
- Malignant atrophic papulosis
- Mycosis fungoides
- Sarcoidosis
- Tuberculosis
- Wegener's granulomatosis

### ***Evaluation***

- Complete blood count
- Chest radiograph
- CT/MRI scan of the brain
- Complement levels
- Renal function test
- Liver function test

### **Further reading:**

- Muller FM, Lewis-Jones S, Morley S et al (2007) Lymphomatoid granulomatosis complicating other haematological malignancies. *Br J Dermatol* 157(2):426–429

### **Lymphomatoid Papulosis (Macaulay's Disease)**

Type of CD30+ lymphoproliferative disease that predominantly affects middle-aged adults, is characterized by crops of erythematous papules with overlying pustules or vesicles which eventually necrose and heal to a small circular scar, and that has the potential to progress to CTCL or Hodgkin's disease in a small percentage of patients

### ***Differential Diagnosis***

- Aggressive epidermotropic CD8+ lymphoma
- Anaplastic CD30 + large cell lymphoma
- Angiocentric lymphoma
- Arthropod bites
- Cutaneous B cell lymphoma
- Drug eruption
- Folliculitis
- Hodgkin's disease
- Hydroa vacciniforme
- Langerhans cell histiocytosis
- Leukemia cutis
- Malignant atrophic papulosis
- Miliaria
- Papular urticaria
- Pityriasis lichenoides et varioliformis acuta
- Cutaneous lymphoid hyperplasia
- Scabies
- Varicella

### ***Associations***

- Anaplastic large cell lymphoma
- Hodgkin's disease
- Mycosis fungoides
- Thyroid disease

### ***Evaluation***

- Lymph node exam and biopsy
- Complete blood count
- T cell gene rearrangement



### ***Treatment Options***

- Observation
- Tetracycline antibiotics
- Topical corticosteroids
- Topical nitrogen mustard
- Narrowband UVB
- Methotrexate
- Oral bexarotene
- Radiation

### **Further reading:**

- El Shabrawi-Caelen L, Kerl H, Cerroni L (2004) Lymphomatoid papulosis: reappraisal of clinicopathologic presentation and classification into subtypes A, B, and C. *Arch Dermatol* 140(4):441–447

### **Maffucci Syndrome**

Sporadic syndrome of unknown cause characterized by venous malformations on the distal extremities and other parts of the body and enchondromas on the digits and long bones that have a potential to degenerate into chondrosarcoma

### ***Differential Diagnosis***

- Blue rubber bleb nevus syndrome
- Bockenheimer syndrome
- Gorham syndrome
- Kaposi's sarcoma
- Klippel–Trenaunay syndrome
- Ollier syndrome
- Proteus syndrome

### **Further reading:**

- Shepherd V, Godbolt A, Casey T (2005) Maffucci's syndrome with extensive gastrointestinal involvement. *Australas J Dermatol* 46(1):33–37



**Fig. 6.69** Majocchi granuloma

## **Majocchi Granuloma**

Refers to a deep dermatophyte folliculitis predominantly caused by *Trichophyton rubrum* that is characterized by an erythematous plaque studded with follicular papulopustules most commonly on the face or extremities (Fig. 6.69)

### ***Differential Diagnosis***

- Acne keloidalis
- Acquired perforating dermatosis
- Bacterial folliculitis
- Blastomycosis-like pyoderma
- Botryomycosis
- Coccidioidomycosis
- Cutaneous lymphoid hyperplasia
- Ecthyma
- Eosinophilic folliculitis
- Follicular mucinosis
- Herpes simplex virus infection
- Kaposi's sarcoma

- Kerion
- Lichen simplex chronicus
- Lupus erythematosus
- Pseudofolliculitis barbae
- Psoriasis
- Rosacea
- Scabies

### ***Treatment Options***

- Terbinafine
- Itraconazole
- Fluconazole
- Griseofulvin

### **Further reading:**

- Brod C, Benedix F, Rocken M et al (2007) Trichophytic Majocchi granuloma mimicking Kaposi sarcoma. J Dtsch Dermatol Ges 5(7):591–593

## **Malakoplakia**

Chronic inflammatory dermatosis affecting immunocompromised patients that is caused by inadequate phagolysosomal activity in the immune response to bacteria (especially *E. coli*) and is characterized by an ulcerated plaque with or without draining sinus tracts in the genital, perineal, or anal areas

### ***Differential Diagnosis***

- Actinomycosis
- Botryomycosis
- Furunculosis
- Granular cell tumor
- Granuloma inguinale

- Hidradenitis suppurativa
- Langerhans cell histiocytosis
- Lymphogranuloma venereum
- Lymphoma
- Mycetoma
- Sarcoidosis
- Squamous cell carcinoma
- Tuberculosis

### **Associations**

- Diabetes
- Immunosuppression
- Internal malignancy
- Leukemia
- Lymphoma
- Rheumatoid arthritis
- Systemic lupus erythematosus
- Transplantation

### **Evaluation**

- Bacterial, mycobacterial, and fungal cultures of draining material

### **Further reading:**

- Savant SR, Amladi ST, Kangle SD et al (2007) Cutaneous malakoplakia in an HIV-positive patient. Int J STD AIDS 18(6):435–436

## **Malignant Atrophic Papulosis (Degos Disease)**

Vascular disorder of unknown cause that is associated with cutaneous infarcts with or without visceral infarcts (especially GI and CNS) and is characterized by erythematous papules on the trunk and extremities that heal to a porcelain white scar with peripheral erythema and telangiectasia

### ***Differential Diagnosis***

- Angiocentric lymphoma
- Cryoglobulinemia
- Embolic phenomenon
- Idiopathic guttate hypomelanosis
- Lichen planus, atrophic
- Lichen sclerosus et atrophicus
- Livedoid vasculopathy
- Lymphomatoid granulomatosis
- Lymphomatoid papulosis
- Polyarteritis nodosa
- Sneddon syndrome
- Thromboangiitis obliterans

### ***Associations***

- Antiphospholipid antibody syndrome
- Crohn's disease
- Dermatomyositis
- Familial
- Lupus erythematosus
- Rheumatoid arthritis
- Systemic sclerosis

### ***Evaluation***

- Anticardiolipin antibody
- Antinuclear antibodies
- Antithrombin-III level
- Beta-2 glycoprotein 1
- Chest radiograph
- Complete blood count
- Factor V Leiden mutation
- Lupus anticoagulant

- MRI scan of the brain
- Protein-C and protein-S levels
- Rheumatoid factor
- Stool for occult blood
- Upper and lower endoscopy

### ***Treatment Options***

- Aspirin
- Dipyridamole
- Heparin
- Warfarin
- Cyclosporine
- Azathioprine
- Cyclophosphamide

### **Further reading:**

- Scheinfeld N (2007) Malignant atrophic papulosis. Clin Exp Dermatol 32(5):483–487

## **Malignant Fibrous Histiocytoma**

Type of malignant soft tissue sarcoma that presents in older adults and is characterized as a deep mass arising from the fascia of the lower extremity, especially the thigh and buttocks, but rarely arising as a primary dermal or subcutaneous tumor

### ***Differential Diagnosis***

- Atypical fibroxanthoma
- Clear cell sarcoma
- Dermatofibrosarcoma protuberans
- Desmoid tumor
- Epithelioid sarcoma
- Leiomyosarcoma

- Liposarcoma
- Melanoma
- Morphea profunda

**Further reading:**

- Blatiere V, De Boever CM, Jacot W et al (2007) Cutaneous malignant fibrous histiocytoma in an HIV-positive patient. *J Eur Acad Dermatol Venerol* 21(1):106–107

## Marfan Syndrome

Inherited disorder of connective tissue (AD) that is caused by mutation of the fibrillin-1 gene and is characterized by tall stature, arachnodactyly, aortic aneurysm, mitral valve prolapse, ectopia lentis, spontaneous pneumothorax, and elastosis perforans serpiginosa

### *Differential Diagnosis*

- Congenital contractural arachnodactyly
- Ehlers–Danlos syndrome
- Fragile X syndrome
- Haim–Munk syndrome
- Homocystinuria
- Klinefelter’s syndrome
- Multiple endocrine neoplasia, type IIb

### *Evaluation*

- Echocardiography
- Aortography
- Chest radiography
- Ophthalmologic exam

**Further reading:**

- Judge DP, Dietz HC (2005) Marfan’s syndrome. *Lancet* 366(9501):1965–1976



**Fig 6.70** Diffuse cutaneous mastocytosis (Courtesy of A. Mistretta)

## Mastocytosis

Refers to several different presentations of cutaneous and/or systemic mast cell proliferation that is most commonly characterized in children by numerous oval, erythematous to brown macules and papules on the trunk and extremities (urticaria pigmentosa) that wheal upon stroking (Darier's sign) and in adults by diffuse telangiectasias on the trunk (telangiectasia macularis eruptiva perstans) or, less commonly, by bullous lesions, diffuse cutaneous induration, erythroderma, or mast cell tumors (mastocytoma)

### *Subtypes/Variants*

- Diffuse cutaneous mastocytosis (Fig. 6.70)
- Mast cell leukemia
- Mast cell sarcoma
- Solitary mastocytoma
- Systemic mastocytosis (indolent and aggressive types)
- Telangiectasia macularis eruptiva perstans (Fig. 6.71)
- Urticaria pigmentosa





**Fig. 6.71** Telangiectasia macularis eruptiva perstans

### *Differential Diagnosis (Urticaria Pigmentosa)*

- Amyloidosis
- Arthropod bites
- Becker's nevus
- Berloque dermatitis
- Bullous pemphigoid
- Burns
- Café-au-lait macules
- Child abuse
- Congenital nevus
- Dermatographism
- Erythroderma
- Fixed drug eruption
- Generalized eruptive histiocytosis
- Granuloma annulare
- Impetigo
- Jessner's lymphocytic infiltrate
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis
- Leiomyoma
- Lentigo
- Lichen planus

- Lymphoma
- Nevi
- Cutaneous lymphoid hyperplasia
- Scabies
- Secondary syphilis
- Smooth muscle hamartoma
- Spitz nevi
- Urticaria

### ***Evaluation***

- 24-h urine histamine
- Bone marrow biopsy
- Bone scan or skeletal survey
- Complete blood count
- GI tract biopsy
- Lymph node exam
- Serum tryptase level
- Urinary PGD2 level

### ***Treatment Options***

- Antihistamines
- Cromolyn sodium
- Topical corticosteroids
- Leukotriene inhibitors
- Cyclosporine
- Nifedipine
- Interferon alpha
- Imatinib

### **Further reading:**

- Hannaford R, Rogers M (2001) Presentation of cutaneous mastocytosis in 173 children. *Australas J Dermatol* 42(1):15–21

## McCune–Albright Syndrome

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Sporadic syndrome that results from an activating mutation in the *GNAS* gene which encodes the hormone-regulating Gs alpha subunit and that is characterized by large café-au-lait macules with a “Coast of Maine” border, precocious puberty, and polyostotic fibrous dysplasia – a bony abnormality that leads to lytic lesions and subsequent fractures

### *Differential Diagnosis*

- Ataxia–telangiectasia
- Bloom syndrome
- Congenital adrenal hyperplasia
- Fanconi anemia
- Jaffe–Campanacci syndrome
- HPA axis tumor
- Neurofibromatosis 1
- Russell–Silver syndrome
- Tuberous sclerosis

### **Further reading:**

- Volkl TM, Dorr HG (2006) McCune–Albright syndrome: clinical picture and natural history in children and adolescents. *J Pediatr Endocrinol Metab* 19(Suppl 2):551–559

## Measles (Rubeola)

---

Uncommon childhood disease of 5–7 days duration caused by a paramyxovirus and characterized by an enanthem (Koplik’s spots) and later a morbilliform exanthem that starts on the forehead and neck and later generalizes in a caudal direction

### *Differential Diagnosis*

- Enterovirus infection
- Epstein–Barr virus

- Gianotti–Crosti syndrome
- Kawasaki disease
- Morbilliform drug eruption
- Primary HIV infection
- Rubella
- Syphilis
- Toxoplasmosis
- Urticaria
- Vasculitis

**Further reading:**

- Carneiro SC, Cestari T, Allen SH et al (2007) Viral exanthems in the tropics. *Clin Dermatol* 25(2):212–220

### Medallion-Like Dermal Dendrocyte Hamartoma

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Hamartoma of dermal dendrocytes that is present at birth, is characterized by a circumscribed, brown plaque with a wrinkled, translucent surface, and visible vessels, and is typically located on the neck or chest (Fig. 6.72)



**Fig. 6.72** Medallion-like dermal dendrocyte hamartoma

### ***Differential Diagnosis***

- Anetoderma
- Aplasia cutis
- Atrophic dermatofibroma
- Atrophic dermatofibrosarcoma protuberans
- Atrophoderma of Pasini–Pierini
- Lichen sclerosus et atrophicus
- Neurothekeoma
- Scar
- Smooth muscle hamartoma

### **Further reading:**

- Rodriguez-Jurado R, Palacios C, Duran-Mckinster C et al (2004) Medallion-like dermal dendrocyte hamartoma: a new clinically and histopathologically distinct lesion. *J Am Acad Dermatol* 51(3):359–363

### **Median Nail Dystrophy (of Heller)**

Type of nail dystrophy caused by trauma or various tumors around the nail matrix that is characterized by longitudinal splitting of the nail plate with a “fir tree” appearance

### ***Differential Diagnosis***

- Digital mucous cyst
- Habit tic deformity
- Lichen striatus
- Nail–patella syndrome
- Pterygium
- Raynaud disease
- Trachyonychia
- Trauma

### **Associations**

- Exostosis
- Isotretinoin
- Lichen planus
- Melanoma
- Mucous cyst
- Onychomatricoma
- Onychomycosis
- Psoriasis
- Squamous cell carcinoma
- Trauma
- Wart

### **Further reading:**

- Sweeney SA, Cohen PR, Schulze KE et al (2005) Familial median canaliform nail dystrophy. *Cutis* 75(3):161–165

### **Median Raphe Cyst**

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Type of columnar cyst that occurs along the midline between the anus and the urethra and is characterized by a small dermal cyst most commonly located on the glans penis near the urethral meatus

### **Differential Diagnosis**

- Apocrine cystadenoma
- Dermoid cyst
- Epidermal inclusion cyst
- Glomus tumor
- Hidradenoma papilliferum
- Metastatic lesion
- Pilonidal cyst
- Steatocystoma
- Urethral diverticulum

**Further reading:**

- Park CO, Chun EY, Lee JH (2006) Median raphe cyst on the scrotum and perineum. *J Am Acad Dermatol* 55(5 Suppl):S114–S115

**Median Rhomboid Glossitis (Brocq–Pautrier Syndrome)**

---

Peculiar manifestation of oral candidiasis that is characterized by a rhomboid-shaped, smooth erythematous plaque on the dorsal midline tongue anterior to the circumvallate papillae and with or without erythema on the opposing aspect of the palate

***Differential Diagnosis***

- Fixed drug eruption
- Geographic tongue
- Granular cell tumor
- Histoplasmosis
- Lingual thyroid
- Squamous cell carcinoma
- Tertiary syphilis
- Tuberculosis

**Further reading:**

- Terai H, Shimahara M (2007) Partial atrophic tongue other than median rhomboid glossitis. *Clin Exp Dermatol* 32(4):381–384

**Mediterranean Spotted Fever (Boutonneuse Fever, Tick Typhus)**

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Tick-borne rickettsial disease caused by *Rickettsia conorii*; transmitted by the dog tick, *Rhipicephalus sanguineus*; and characterized by “tache noir” at the site of the bite, fever, headache, and an erythematous, papular skin eruption predominantly on the lower extremities

## ***Differential Diagnosis***

- Anthrax
- Dengue fever
- Ehrlichiosis
- Infectious mononucleosis
- Kawasaki disease
- Leptospirosis
- Leukocytoclastic vasculitis
- Lyme disease
- Malaria
- Meningococemia
- Relapsing fever
- Rocky Mountain spotted fever
- Roseola
- Rubella
- Rubeola
- Scarlet fever
- Toxic shock syndrome
- Tularemia
- Typhoid fever
- Viral exanthem

### **Further reading:**

- Mert A, Ozaras R, Tabak F et al (2006) Mediterranean spotted fever: a review of fifteen cases. *J Dermatol* 33(2):103–107

## **Mees Lines**

Type of true leukonychia with a variety of causes that is characterized by parallel white, transverse bands that grow outward with the nail plate



### ***Differential Diagnosis***

- Beau's lines
- Leukonychia
- Muehrcke's lines
- Onycholysis
- Onychomycosis
- Psoriasis

### ***Associations***

- Arsenic ingestion
- Breast cancer
- Chemotherapy
- Carbon monoxide poisoning
- Heart failure
- Hodgkin's disease
- Lead poisoning
- Leprosy
- Malaria
- Parasitic infection
- Pneumonia
- Psoriasis
- Sickle cell
- Systemic lupus erythematosus
- Transplant rejection

### **Further reading:**

- Uede K, Furukawa F (2003) Skin manifestations in acute arsenic poisoning from the Wakayama curry-poisoning incident. *Br J Dermatol* 149(4):757–762

### **Melanoacanthoma**

Refers to a benign lesion containing an increased number of both keratinocytes and melanocytes that presents as either a variant of seborrheic keratosis in older men (cutaneous melanoacanthoma) or a reactive lesion

on the buccal mucosa of predominantly young women of African descent (oral melanoacanthoma)

### ***Differential Diagnosis***

- Actinic keratosis
- Amalgam tattoo
- Lentigo
- Melanocytic nevus
- Melanoma
- Mucosal melanosis
- Pigmented basal cell carcinoma
- Seborrheic keratosis
- Wart

### **Further reading:**

- Fornatora ML, Reich RF, Haber S et al (2003) Oral melanoacanthoma: a report of 10 cases, review of the literature, and immunohistochemical analysis for HMB-45 reactivity. *Am J Dermatopathol* 25(1):12–15

## **Melanoma, Malignant**

Malignant proliferation of melanocytes with a strong tendency for metastasis that is characterized by an irregularly hyperpigmented (less commonly, amelanotic) asymmetric papule, nodule, or plaque with or without ulceration that can occur anywhere

### ***Subtypes/Variants***

- Acral lentiginous (Fig. 6.73)
- Amelanotic (Fig. 6.74)
- Animal
- Balloon cell
- Clear cell sarcoma
- Desmoplastic (spindled, neurotropic)



**Fig. 6.73** Acral melanoma



**Fig. 6.74** Amelanotic melanoma

- Lentigo maligna
- Malignant blue nevus
- Mucosal
- Nevoid
- Nodular
- Ocular
- Polypoid
- Small cell
- Spitzoid
- Superficial spreading
- Verrucous

### ***Differential Diagnosis***

#### All Types

- Angiokeratoma
- Benign melanocytic nevus
- Black heel
- Blue nevus (especially cellular type)
- Bowen's disease
- Combined nevus
- Congenital nevus
- Cutaneous lymphoid hyperplasia
- Deep penetrating nevus
- Dermatofibroma
- Dysplastic nevus
- Exogenous ochronosis
- Extramammary Paget's disease
- Halo nevus
- Ink-spot lentigo
- Kaposi's sarcoma
- Lentigo simplex
- Longitudinal melanonychia
- Lymphoma

- Malignant schwannoma
- Merkel cell tumor
- Metastasis
- Oral mucosal melanosis
- Paget's disease
- Pigmented actinic keratosis
- Pigmented basal cell carcinoma
- Pigmented spindle cell nevus
- Pyogenic granuloma
- Recurrent nevus
- Seborrheic keratosis
- Spitz nevus
- Subungual hematoma
- Thrombosed or traumatized hemangioma
- Traumatic tattoo
- Tinea nigra
- Venous lake

#### Acral Lentiginous

- Acral nevus
- Chronic paronychia
- Kaposi's sarcoma
- Lentigo
- Melanonychia striata
- Poroma
- Pyogenic granuloma
- Subungual hematoma
- Talon noir
- Tinea nigra
- Traumatic tattoo
- Verruca plantaris

#### Amelanotic

- Actinic keratosis
- Adnexal neoplasm

- Basal cell carcinoma
- Bowen's disease
- Cutaneous lymphoid hyperplasia
- Dermatofibroma
- Keratoacanthoma
- Lymphoma cutis
- Merkel cell carcinoma
- Metastatic lesion
- Metastatic melanoma
- Poroma
- Pyogenic granuloma
- Spitz nevus
- Squamous cell carcinoma
- Verruca vulgaris

#### Desmoplastic

- Atypical fibroxanthoma
- Basal cell carcinoma
- Dermatofibroma
- Dermatofibrosarcoma protuberans
- Desmoplastic Spitz nevus
- Keloid
- Malignant schwannoma
- Neurofibroma
- Neurotized nevus
- Spindle cell squamous cell carcinoma

#### Oral

- Amalgam tattoo
- Blue nevus
- Drug-induced pigmentation
- Fixed drug eruption
- Foreign body granuloma
- Kaposi's sarcoma
- Laugier-Hunziker syndrome

- Melanoacanthoma
- Oral melanocytic nevus
- Oral melanotic macule
- Peutz–Jeghers syndrome
- Pyogenic granuloma
- Racial pigmentation
- Squamous cell carcinoma
- Venous lake

### **Associations**

- Diffuse hyperpigmentation
- Melanuria
- Vitiligo-like depigmentation
- Erysipelas melanomatosum

### **TNM Classification**

- T1: =1.0 mm (A: without ulceration and mitosis <1/mm<sup>2</sup>; B: with ulceration and mitosis =1/mm<sup>2</sup>)
- T2: 1.01–2.0 mm (A: without ulceration; B: with ulceration)
- T3: 2.01–4.0 mm (A: without ulceration; B: with ulceration)
- T4: >4.0 mm (A: without ulceration; B: with ulceration)
- N1: one node (A: micrometastasis; B: macrometastasis)
- N2: two to three nodes (A: micrometastasis; B: macrometastasis; C: in-transit met(s)/satellite(s) without metastatic node(s))
- N3: four or more metastatic nodes or matted nodes or in-transit met(s)/satellite(s) with metastatic node(s)
- M1a: distant skin, subcutaneous, or nodal mets, normal lactate dehydrogenase level
- M1b: lung metastases, normal lactate dehydrogenase level
- M1c: all other visceral metastases with normal lactate dehydrogenase level or any distant metastasis with elevated lactate dehydrogenase level

## Staging

- Stage 0: melanoma in situ
- Stage IA: T1A
- Stage IB: T1B or T2A
- Stage IIA: T2B or T3A
- Stage IIB: T3B or T4A
- Stage IIC: T4B
- Stage IIIA: T(1–4)A/N(1–2)A
- Stage IIIB: T(1–4)B/N(1–2)A or T(1–4)A/N(1–2)(B–C)
- Stage IIIC: T(1–4)B/N(1–2)B or N3
- Stage IV: M1

## Treatment Options

- Wide local excision with or without sentinel node biopsy
- Elective lymphadenectomy
- Therapeutic lymphadenectomy
- Interferon-alpha 2b
- Isolated limb perfusion
- Dacarbazine
- Ipilimumab
- Vemurafenib

## Further reading:

- Balch CM, Gershenwald JE, Soong SJ, Thompson JF (2011) Update on the melanoma staging system: the importance of sentinel node staging and primary tumor mitotic rate. *J Surg Oncol* 104(4):379–385
- Beyeler M, Dummer R (2005) Cutaneous melanoma: uncommon presentations. *Clin Dermatol* 23(6):587–592
- Grant-Kels JM, Bason ET, Grin CM (1999) The misdiagnosis of malignant melanoma. *J Am Acad Dermatol* 40(4):539–548



## **Melasma (Chloasma)**

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Pigmentary disorder induced by sun exposure that predominantly affects women, may arise during pregnancy, and is characterized by tan-brown macular hyperpigmentation on the central face or around the mandible

### ***Differential Diagnosis***

- Acquired bilateral nevus of Ota-like macules
- Argyria
- Addison's disease
- Atopic dermatitis
- Berloque dermatitis
- Chronic actinic dermatitis
- Chrysiasis
- Contact dermatitis
- Cutaneous lupus erythematosus
- Drug-induced hyperpigmentation
- Erythema dyschromicum perstans
- Erythromelanosis follicularis faciei et colli
- Exogenous ochronosis
- Facial erythema ab igne
- Lentigo
- Lichen planus, actinic type
- Mastocytosis
- Minocycline pigmentation
- Photosensitive drug reaction
- Polymorphous light eruption
- Poikiloderma of Civatte
- Postinflammatory hyperpigmentation
- Riehl's melanosis

### **Associations**

- Anticonvulsants
- Oral contraception
- Phototoxic drugs
- Pregnancy
- Retinoids, systemic
- Sun exposure

### **Treatment Options**

- Sunscreen
- Hydroquinone
- Tretinoin
- Adapalene
- Azelaic
- Kojic acid
- Topical corticosteroids
- Glycolic acid
- Laser treatments

### **Further reading:**

- Rigopoulos D, Gregoriou S et al (2007) Hyperpigmentation and melasma. *J Cosmet Dermatol* 6(3):195–202

### **Melkersson–Rosenthal Syndrome**

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Rare syndrome arising in childhood or adolescence that is characterized by facial nerve palsy, granulomatous infiltration of the face, especially the upper lip, and scrotal tongue

### ***Differential Diagnosis***

- Angioedema
- Bell's palsy
- Crohn's disease
- Intralymphatic histiocytosis
- Leprosy
- Sarcoidosis
- Solid facial edema

### ***Treatment Options***

- Intralesional corticosteroids
- Methotrexate
- Dapsone
- Systemic corticosteroids
- Infliximab
- Clofazimine
- Metronidazole
- Tetracycline antibiotics
- Azathioprine

### **Further reading:**

- Zeng W, Geng S, Niu X, Yuan J (2010) Complete Melkersson-Rosenthal syndrome with multiple cranial nerve palsies. *Clin Exp Dermatol* 35(3):272–274

## **Meningocele, Rudimentary (Heterotopic Meningeal Tissue, Primary Cutaneous Meningioma)**

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Developmental anomaly containing heterotopic meningeal tissue (but no brain tissue) that usually, but not always, has intact bone underneath, is most commonly diagnosed in the first year of life, and is characterized as a small, firm subcutaneous nodule with or without a hair collar sign which occurs most commonly on the scalp, but also on the spine or the forehead

## ***Differential Diagnosis***

- Adnexal tumors
- Aplasia cutis congenita
- Dermoid cysts
- Encephalocele
- Fibroma
- Hemangioma
- Melanocytic nevi
- Metastatic neuroblastoma
- Metastatic tumors
- Neurofibroma
- Nevus sebaceus
- Pigmented neuroectodermal tumor of infancy
- Pilar cyst
- Primary primitive neuroectodermal tumor
- Sinus pericranii

## ***Evaluation***

- CT/MRI scan of skull

## **Further reading:**

- El Shabrawi-Caelen L, White WL, Soyer HP et al (2001) Rudimentary meningocele: remnant of a neural tube defect? Arch Dermatol 137(1):45–50

## **Meningococemia**

Blood-borne infection with *Neisseria meningitidis* that typically affects children and adolescents and is associated with meningitis, disseminated intravascular coagulation, purpura fulminans, and a high mortality (in the acute form), or with hemorrhagic lesions on the extremities and arthritis and fever (in the chronic form)

## **Differential Diagnosis**

### Acute

- Bacteremia/sepsis due to a variety of bacteria
- Dengue fever
- Disseminated intravascular coagulation to other causes
- Endocarditis
- Enteroviral infections
- Henoch–Schonlein purpura
- Lupus erythematosus
- Leptospirosis
- Polyarteritis nodosa
- Rocky Mountain spotted fever
- Toxic shock syndrome
- *Vibrio vulnificus* infection

### Chronic

- Erythema multiforme
- Gonococcemia
- Henoch–Schonlein purpura
- Purpura
- Rat-bite fever
- Rheumatic fever
- Rickettsial infection
- Subacute bacterial endocarditis
- Sweet's syndrome
- Vasculitis
- Typhus

### **Associations**

- Complement deficiency

### **Evaluation**

- Blood and cerebrospinal fluid Gram stain and culture

**Further reading:**

- Ploysangam T, Sheth AP (1996) Chronic meningococemia in childhood: case report and review of the literature. *Pediatr Dermatol* 13(6):483–487

**Menkes Kinky-Hair Syndrome**

Genetic disorder (XLR) of copper metabolism that is caused by a defect in the ATP7A gene, which encodes an intestinal copper transporter, and leads to low serum copper, pili torti, diffuse hypopigmentation, seizures and mental retardation, wormian bones, and death in early childhood

***Differential Diagnosis***

- Arginosuccinic aciduria
- Bazex syndrome
- Bjornstad syndrome
- Child abuse
- Conradi–Hunerman syndrome
- Crandall's syndrome
- Ectodermal dysplasias
- Monilethrix
- Netherton syndrome
- Phenylketonuria
- Trichothiodystrophy

**Further reading:**

- Gerard-Blanluet M, Birk-Moller L, Caubel I et al (2004) Early development of occipital horns in a classical Menkes patient. *Am J Med Genet A* 130(2):211–213

**Merkel Cell Carcinoma (Primary Cutaneous Neuroendocrine Carcinoma, Trabecular Carcinoma)**

Primary cutaneous malignancy of uncertain derivation that may be associated with polyoma virus infection and that has a strong tendency for metastasis and local recurrence, affects the elderly, and is characterized



**Fig. 6.75** Merkel cell carcinoma  
(Courtesy of A. Record)

by a solitary erythematous or violaceous nodule on the head and neck (Fig. 6.75)

### ***Differential Diagnosis***

- Abscess
- Angiosarcoma
- Atypical fibroxanthoma
- Basal cell carcinoma
- Cutaneous lymphoid hyperplasia
- Cutaneous metastasis
- Dermatofibroma
- Eccrine carcinoma
- Ewing's sarcoma
- Hemangioma

- Kaposi's sarcoma
- Lymphoma
- Malignant melanoma (especially small cell type)
- Metastatic neuroblastoma
- Metastatic neuroendocrine carcinoma (small cell)
- Squamous cell carcinoma

### ***Diagnostic Criteria***

- A – Asymptomatic
- E – Enlarging rapidly
- I – Immune suppression
- O – Older than 50
- U – UV-exposed fair skin

### ***Associations***

- Breast cancer
- Cushing's syndrome
- HIV infection
- Lambert–Eaton syndrome
- Organ transplantation
- Ovarian cancer

### ***Treatment Options***

- Wide local excision
- Radiation

### **Further reading:**

- Heath M, Jaimes N, Lemos B, Mostaghimi A, Wang LC, Peñas PF, Nghiem P (2008) Clinical characteristics of Merkel cell carcinoma at diagnosis in 195 patients: the AEIOU features. *J Am Acad Dermatol* 58(3):375–381





**Fig. 6.76** Metastatic breast cancer

### **Metastasis, Cutaneous**

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Cutaneous manifestation of internal malignancy that is caused by distant spread of malignant cells to the skin through blood or lymphatic vessels or by direct extension from an underlying focus and that is characterized by solitary or multiple, firm, erythematous nodules with or without ulceration that are located anywhere on the skin surface

#### ***Subtypes/Variants***

- Alopecia neoplastica
- Carcinoma en cuirasse
- Carcinoma erysipelatoides (inflammatory metastasis)
- Carcinoma telangiectaticum
- Incisional
- Nodular (Fig. 6.76)
- Sister Mary Joseph's nodule
- Zosteriform (Fig. 6.77)



**Fig. 6.77** Zosteriform melanoma metastases

### *Differential Diagnosis*

- Aggressive digital papillary adenocarcinoma
- Alopecia areata
- Amelanotic melanoma
- Angiosarcoma
- Atypical fibroxanthoma
- Basal cell carcinoma
- Blueberry muffin baby
- Blue nevus
- Cellulitis
- Chancre
- Condyloma acuminatum
- Cutaneous lymphoid hyperplasia
- Cylindroma
- Dermatofibroma
- Endometriosis
- Epidermoid cyst
- Erysipelas
- Extramammary Paget's disease

- Furunculosis
- Granular cell tumor
- Hemangioma
- Hidradenitis suppurativa
- Kaposi's sarcoma
- Keratoacanthoma
- Kerion
- Lipoma
- Lymphedema
- Lymphangioma circumscriptum
- Merkel cell carcinoma
- Morphea/scleroderma
- Mucinous carcinoma
- Omphalomesenteric duct remnant
- Panniculitis
- Pilar cyst
- Primary cutaneous lymphoma
- Pyogenic granuloma
- Scar
- Squamous cell carcinoma
- Vasculitis
- Zoster

### ***Evaluation***

- Breast/mammography
- Chest radiography
- CT scan of chest, abdomen, and pelvis
- Stool for occult blood/colonoscopy
- Total body skin exam (for melanoma)

### **Further reading:**

- Sariya D, Ruth K, Adams–McDonnell R et al (2007) Clinicopathologic correlation of cutaneous metastases: experience from a cancer center. *Arch Dermatol* 143(5):613–620

## Microcystic Adnexal Carcinoma (Sclerosing Sweat Duct Carcinoma)

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Uncommon malignant neoplasm of possible eccrine derivation that most commonly affects middle-aged patients; is characterized by a slow-growing, typically asymptomatic yellow-red papule, nodule, or plaque on the head and neck, especially around the nasolabial folds; and that has a high risk of local recurrence but not metastasis

### *Differential Diagnosis*

- Adenosquamous carcinoma
- Chalazion
- Desmoplastic squamous cell carcinoma
- Desmoplastic trichoepithelioma
- Metastatic disease
- Morpheaform basal cell carcinoma
- Sebaceous carcinoma
- Seborrheic dermatitis
- Syringoma
- Trichoadenoma

### **Further reading:**

- Snow S, Madjar DD, Hardy S et al (2001) Microcystic adnexal carcinoma: report of 13 cases and review of the literature. *Dermatol Surg* 27(4):401–408

## Microscopic Polyangiitis

---

Systemic vasculitis syndrome associated with p-ANCA antibodies that is characterized by glomerulonephritis, pulmonary hemorrhage, neuropathy, inflammatory purpura, livedo reticularis, and ulcers

### *Differential Diagnosis*

- Churg–Strauss syndrome
- Goodpasture syndrome

- Henoch–Schonlein purpura
- Polyarteritis nodosa
- Wegener's granulomatosis

### ***Evaluation***

- Antineutrophilic cytoplasmic antibodies
- Chest radiography
- Complete blood count
- Neurologic examination
- Renal biopsy
- Renal function test
- Sedimentation rate
- Serum chemistry
- Urinalysis

### **Further reading:**

- Kawakami T, Soma Y, Saito C et al (2006) Cutaneous manifestations in patients with microscopic polyangiitis: two case reports and a minireview. *Acta Derm Venereol* 86(2):144–147

### **Mid-dermal Elastolysis**

Acquired disorder that predominantly affects women, is caused by loss of elastic tissue in the middle dermis possibly related to ultraviolet-light exposure or tobacco smoking, and is characterized by finely wrinkled patches on the neck, trunk, and arms

### ***Differential Diagnosis***

- Anetoderma
- Cutis laxa
- Perifollicular elastolysis (acne scars)

- Pseudoxanthoma elasticum
- PXE-like papillary dermal elastolysis
- Solar elastosis
- Striae distensae

**Further reading:**

- Patroi I, Annessi G, Girolomoni G (2003) Mid-dermal elastolysis: a clinical, histologic, and immunohistochemical study of 11 patients. *J Am Acad Dermatol* 48(6):846–851

## **Milia**

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Solitary, multiple (eruptive), or clustered (milia en plaque) tiny keratinous cysts that spontaneously develop on the head and neck or in areas previously affected by blistering

### ***Differential Diagnosis***

#### Milia

- Acne
- Follicular mucinosis
- Molluscum contagiosum
- Sebaceous hyperplasia
- Syringoma
- Trichodiscoma
- Trichoepithelioma
- Xanthoma
- Verruca plana

#### Milia en Plaque

- Favre–Racouchot disease
- Follicular mucinosis
- Nevus comedonicus

## **Associations**

### **Milia**

- 5FU
- Acne
- Allergic contact dermatitis
- Basal cell carcinoma
- Bazex–Dupre–Christol syndrome
- Bullous lichen planus
- Burn
- Dermabrasion
- Epidermolysis bullosa
- Follicular mucinosis
- Gorlin's syndrome
- Leishmaniasis
- Lichen sclerosus
- Marie Unna hypotrichosis
- Naegeli–Franceschetti–Jadassohn
- Oral–facial–digital syndrome, type I
- Porphyria cutanea tarda
- Rombo syndrome
- Scar
- Topical steroids
- Zoster

### **Milia en Plaque**

- Discoid lupus erythematosus
- Pseudoxanthoma elasticum

### **Further reading:**

- Dogra S, Kanwar AJ (2005) Milia en plaque. *J Eur Acad Dermatol Venereol* 19(2):263–264

## **Miliaria**

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Dermatosis related to eccrine sweat duct obstruction at various levels that is triggered by environmental or endogenous conditions that promote sweating and that is characterized by papules, papulovesicles, pustules, or fine vesicles with a predilection for the face, trunk, and intertriginous areas

### ***Subtypes/Variants***

- Miliaria crystallina
- Miliaria profunda
- Miliaria pustulosa
- Miliaria rubra (prickly heat)

### ***Differential Diagnosis***

- Amyloidosis
- Candidiasis
- Cholinergic urticaria
- Contact dermatitis
- Drug eruption
- Erythema toxicum neonatorum
- Folliculitis
- Insect bites
- Milia
- Neonatal herpes simplex virus infection
- Papular mucinosis
- Papular sarcoidosis
- Scabies
- Syphilis
- Varicella
- Viral exanthem



### **Associations**

- Granulosis rubra nasi
- Isotretinoin
- Pseudohypoaldosteronism

### **Treatment Options**

- Cooling measures
- Topical corticosteroids
- Antistaphylococcal antibiotics

### **Further reading:**

- Akcakus M, Koklu E, Poyrazoglu H et al (2006) Newborn with pseudohypoaldosteronism and miliaria rubra. *Int J Dermatol* 45(12):1432–1434

## **Mixed Connective Tissue Disease (Sharp's Syndrome)**

---

Type of connective tissue that combines features of systemic lupus erythematosus, dermatomyositis, and systemic sclerosis, is associated with anti-U1RNP antibodies in all cases, and is characterized most commonly by Raynaud's phenomenon, digital swelling, arthritis, and myositis

### **Differential Diagnosis**

- Dermatomyositis
- CREST syndrome
- Rheumatoid arthritis
- Systemic lupus erythematosus
- Systemic sclerosis

### **Evaluation**

- Antinuclear antibodies
- Barium swallow

- Cardiac troponins
- Chest radiograph
- Complete blood count
- Creatine kinase and aldolase levels
- Echocardiography
- Electrocardiogram
- Pulmonary function test
- Renal function test
- Rheumatoid factor
- Urinalysis

**Further reading:**

- Venables PJ (2006) Mixed connective tissue disease. *Lupus* 15(3):132–137

**Molluscum Contagiosum (Bateman's Disease)**

---

Common viral cutaneous infection caused by the molluscum pox virus that predominantly affects children (or adults as a sexually transmitted disease) and is characterized by discrete, shiny, flesh-colored, umbilicated papules on the trunk, face, or genital area

***Differential Diagnosis***

- Acantholytic acanthoma
- Basal cell carcinoma
- Benign cephalic histiocytosis
- Child abuse
- Condylomata acuminata
- Cryptococcosis
- Dermatofibroma
- Elastosis perforans serpiginosa
- Fibrous papule
- Generalized eruptive histiocytosis
- Granuloma annulare

- Histoplasmosis
- Intradermal nevus
- Juvenile xanthogranuloma
- Lepromatous leprosy
- Lichen nitidus
- Lichen planus
- Lymphangioma circumscriptum
- Melanocytic nevi
- Milia
- Neurilemmomas
- Nodular basal cell carcinoma
- Papular eczema
- Penicilliosis
- Pneumocystosis
- Pyoderma
- Pyogenic granuloma
- Reactive perforating collagenosis
- Sebaceous hyperplasia
- Spitz nevus
- Subepidermal calcified nodule
- Syringoma
- Trichoepithelioma
- Verruca
- Xanthoma

### ***Associations***

- Atopic dermatitis
- HIV infection
- Immunosuppression

### ***Treatment Options***

- Observation
- Cryotherapy

- Curettage
- Cantharidin
- Podophyllin
- Salicylic acid
- Potassium hydroxide
- Imiquimod
- Electrodesiccation
- Tretinoin
- Tazarotene
- Cimetidine
- Griseofulvin

**Further reading:**

- Rogers NE (2006) The many faces of molluscum contagiosum: the fool factor. *Skinmed* 5(6):267–268

## **Mondor's Disease**

---

Type of superficial thrombophlebitis associated with various triggers that affects the upper chest or breast of women and is characterized by a firm, tender, erythematous cord

### ***Differential Diagnosis***

- Breast abscess
- Breast cancer metastasis
- Cutaneous larva migrans
- Early zoster
- Erysipelas/cellulitis
- Interstitial granulomatous dermatitis with arthritis

### ***Associations***

- Antiphospholipid antibodies
- Breast cancer

- Filariasis
- Intravenous drug use
- Mastitis
- Oral contraception
- Pendulous breasts
- Pregnancy
- Protein-C deficiency
- Rheumatoid arthritis
- Surgical procedure
- Trauma

**Further reading:**

- Dirschka T, Winter K, Bierhoff E (2003) Mondor's disease: a rare cause of anterior chest pain. *J Am Acad Dermatol* 49(5):905–906

## **Mongolian Spots**

---

Type of dermal melanocytosis that results from failure of migrating melanoblasts to reach the epidermis and is characterized by blue to black macular pigmentation typically localized to the lower back and buttocks which usually fades during the first few years of life

### ***Differential Diagnosis***

- Argyria
- Blue nevus
- Child abuse
- Contusion
- Deep hemangioma
- Dermal melanocyte hamartoma
- Drug-induced pigmentation
- Fixed drug eruption
- Nevus of Ito
- Nevus of Ota

- Ochronosis
- Port-wine stain

### **Associations**

- Hurler and Hunter syndromes
- Phakomatosis pigmentovascularis, types II and IV

### **Further reading:**

- Ochiai T, Suzuki Y, Kato T et al (2007) Natural history of extensive Mongolian spots in mucopolysaccharidosis type II (Hunter syndrome): a survey among 52 Japanese patients. *J Eur Acad Dermatol Venereol* 21(8):1082–1085

## **Monilethrix (Beaded Hair)**

---

Inherited (AD or AR) hair-shaft disorder caused by defects in the genes encoding either hair keratins 1 and 6 (AD) or desmoglein 4 (AR) that is characterized by fragile periodic constrictions alternating with elliptical nodes that give the hair shaft a beaded appearance and cause variable alopecia most noticeable on the occipital scalp

### **Differential Diagnosis**

- Pili torti
- Trichorrhexis invaginata
- Trichorrhexis nodosa

### **Associations**

- Keratosis pilaris
- Koilonychia

### **Further reading:**

- Schweizer J (2006) More than one gene involved in monilethrix: intracellular but also extracellular players. *J Invest Dermatol* 126(6):1216–1219

## Monkey Pox

---

Self-limited, zoonotic disease predominantly found in Africa that is caused by the double-stranded DNA monkeypox virus; is acquired by contact with rodents and monkeys; is characterized by fever, headache, and a generalized vesiculopustular eruption with lesions in variable stages of evolution; and is different from smallpox in that it is milder and associated with lymphadenopathy

### *Differential Diagnosis*

- Acute generalized exanthematous pustulosis
- Eczema herpeticum
- Pustular psoriasis
- Rickettsialpox
- Smallpox
- Tularemia
- Varicella

### **Further reading:**

- Sale TA, Melski JW, Stratman EJ (2006) Monkey Pox: an epidemiologic and clinical comparison of African and US disease. *J Am Acad Dermatol* 55(3):478–481

## Morphea

---

Localized form of scleroderma that is characterized by oval, linear, or guttate plaques of sclerosis which are localized to the trunk or face or in a more generalized distribution

### *Subtypes/Variants*

- Atrophic (atrophoderma of Pasini and Pierini)
- Bullous
- Deep (morphea profunda)
- Generalized



**Fig. 6.78** Linear morphea



**Fig. 6.79** En coup de sabre

- Guttate
- Linear (including en coup de sabre; Figs. 6.78 and 6.79)
- Nodular/keloidal
- Pansclerotic morphea of childhood
- Parry–Romberg syndrome
- Plaque (Fig. 6.80)





**Fig. 6.80** Plaque type morphea

### *Differential Diagnosis*

- Annular lichenoid dermatitis of youth
- Bleomycin therapy
- Carcinoma en cuirasse
- Dermatofibrosarcoma protuberans
- Dupuytren's contracture
- Eosinophilic fasciitis
- Erythema migrans (early)
- Fixed drug eruption (early)
- Graft-vs-host disease
- Granuloma annulare (patch type)
- Keloids
- Lichen sclerosus et atrophicus
- Linear atrophoderma of Moulin
- Lipodermatosclerosis
- Lupus profundus
- Paraffin or silicone injection
- Polyvinyl chloride exposure
- Porphyria cutanea tarda
- Progeria

- Radiation fibrosis
- Scleredema
- Scleromyxedema
- Silicosis
- Systemic sclerosis
- Toxic oil syndrome
- Vitamin B12 injection
- Vitamin K injection
- Waxy skin and stiff joints

### ***Associations***

- Lichen sclerosus et atrophicus
- Primary biliary cirrhosis

### ***Evaluation***

- Antinuclear antibodies (including anti-ssDNA, anti-superoxide dismutase)
- Complete blood count
- CT/MRI scan of the brain (especially Parry–Romberg syndrome)
- Lyme disease ELISA and Western blot
- Radiography of bones in the affected area (melorheostosis)
- Rheumatoid factor

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Topical vitamin D analogues
- Topical tacrolimus
- UVA1 phototherapy
- Methotrexate
- Systemic corticosteroids
- Cyclosporine

**Further reading:**

- Laxer RM, Zulian F (2006) Localized scleroderma. *Curr Opin Rheumatol* 18(6):606–613

**Mucinosis, Acral Persistent Papular**

Uncommon type of mucinosis that predominantly affects women and is characterized by flesh-colored to ivory-colored papules on the dorsal hands or extensor forearms

***Differential Diagnosis***

- Colloid milium
- Cutaneous focal mucinosis
- Cutaneous myxoma
- Digital mucous cyst
- Erythropoietic protoporphyria
- Granuloma annulare
- Lupus erythematosus
- Molluscum contagiosum
- Reticular erythematous mucinosis
- Urticarial follicular mucinosis

***Diagnostic Criteria***

- 2–5 mm, few to multiple, ivory- to flesh-colored papules
- Focal, well-circumscribed mucin
- Exclusively located on back of hands, wrists, occasionally
- Distal aspect of forearms
- Persist without spontaneous resolution, may increase in number
- Predominately female patients
- No systemic disease overlap
- No associated gammopathy

## **Evaluation**

- Antinuclear antibodies
- HIV test
- Serum/urinary protein electrophoresis

### **Further reading:**

- Rongioletti F, Rebora A, Crovato F (1986) Acral persistent papular mucinosis: a new entity? Arch Dermatol 122:1237–1239

## **Mucinosis, Follicular (Alopecia Mucinosa, Pinkus Disease)**

---

Refers to both an idiopathic, usually benign dermatosis affecting children or a potentially lymphoma-related dermatosis in older adults that is caused by deposition of hyaluronic acid in the hair follicles and is characterized by erythematous, edematous plaques with follicular accentuation on the scalp (giving rise to alopecia), face, and neck

### **Subtypes/Variants**

- Lymphoma-related follicular mucinosis
- Benign idiopathic
- Urticarial-like follicular mucinosis

### **Differential Diagnosis**

- Alopecia areata
- Alopecia neoplastica
- Androgenetic alopecia
- Eosinophilic folliculitis
- Granuloma faciale
- Keratosis pilaris
- Lichen planopilaris
- Lichen spinulosus

- Milia
- Pityriasis rubra pilaris, circumscribed type
- Sarcoidosis
- Telogen effluvium

### **Associations**

- Cutaneous T cell lymphoma
- Eosinophilic folliculitis
- Hodgkin's disease
- Lupus erythematosus
- Pityrosporum folliculitis

### **Evaluation**

- Complete blood count
- CT scan of chest, abdomen, and pelvis (if overt lymphoma is suspected)
- Lymph node exam
- T cell gene rearrangement and immunophenotyping

### **Treatment Options**

- Topical corticosteroids
- Intralesional corticosteroids
- Hydroxychloroquine
- Isotretinoin
- Systemic corticosteroids
- Phototherapy
- Dapsone
- Minocycline
- Indomethacin
- Total skin electron beam therapy

**Further reading:**

- Cerroni L, Fink-Puches R, Back B, Kerl H (2002) Follicular mucinosis: a critical reappraisal of clinicopathologic features and association with mycosis fungoides and Sezary syndrome. Arch Dermatol 138(2):182–189

## **Mucinous Eccrine Carcinoma**

---

Type of eccrine carcinoma that most commonly arises in the periorbital area of older adults and is characterized by an erythematous painless nodule with a tendency to be locally aggressive

### ***Differential Diagnosis***

- Angioma
- Basal cell carcinoma
- Chalazion
- Epidermal inclusion cyst
- Kaposi's sarcoma
- Lipoma
- Melanoma
- Metastatic adenocarcinoma (especially mucinous)
- Microcystic adnexal carcinoma
- Myxoma
- Pilomatrixoma
- Sebaceous carcinoma
- Squamous cell carcinoma

### ***Evaluation***

- Appropriate cancer screening (rule out metastatic visceral mucinous adenocarcinoma)

**Further reading:**

- Qureshi HS, Salama ME, Chitale D et al (2004) Primary cutaneous mucinous carcinoma: presence of myoepithelial cells as a clue to the cutaneous origin. *Am J Dermatopathol* 26(5):353–358

**Mucocele**

---

Cyst-like lesion on the oral mucosa that results from injury to or occlusion of the minor salivary ducts and is characterized by a solitary translucent vesicle most commonly located on the lower lip

***Differential Diagnosis***

- Abscess
- Adenocarcinoma of the salivary glands
- Aphthous ulcer
- Bullous lichen planus
- Cicatricial pemphigoid
- Fibroepithelial polyp
- Gingival cysts
- Hemangioma
- Irritation fibroma
- Lipoma
- Lymphangioma
- Oral lymphoepithelial cyst
- Pyogenic granuloma
- Salivary gland neoplasm
- Squamous papilloma
- Venous lake

**Further reading:**

- Baurmash H (2002) The etiology of superficial oral mucoceles. *J Oral Maxillofac Surg* 60(2):237–238

## **Mucosal Neuroma Syndrome (Multiple Endocrine Neoplasia, Type IIb)**

---

Autosomal-dominant disorder caused by a defect in the RET proto-oncogene that is characterized by numerous small neuromas of the lips, tongue, and oral mucosa; medullary thyroid cancer; pheochromocytomas; and marfanoid body habitus

### ***Differential Diagnosis***

- Cowden disease
- Fibroma
- Gardner syndrome
- Granular cell tumor
- Marfan syndrome
- Neurofibromatosis
- Squamous cell carcinoma
- Tuberous sclerosis

### ***Evaluation***

- Calcitonin level
- CT/MRI scan of abdomen
- Thyroid function test
- Thyroid ultrasound
- Urine catecholamines

### **Further reading:**

- Baykal C, Buyukbabani N, Boztepe H et al (2007) Multiple cutaneous neuromas and macular amyloidosis associated with medullary thyroid carcinoma. *J Am Acad Dermatol* 56(2 Suppl):S33–S37



## **Muehrcke's Lines**

---

Type of apparent leukonychia that is caused by hypoalbuminemia-related edema of the nail bed and is characterized by two transverse and parallel white bands that fade upon pressure on the nail plate

### ***Differential Diagnosis***

- Beau's lines
- Half-and-half nails
- Mees lines
- Onycholysis
- Onychomycosis
- Terry's nails

### ***Associations***

- Liver disease
- Malnutrition
- Nephrotic syndrome

### ***Evaluation***

- 24-h urine protein
- Albumin level
- Liver function test
- Renal function test
- Urinalysis

### **Further reading:**

- Alam M, Scher RK, Bickers DR (2001) Muehrcke's lines in a heart transplant recipient. *J Am Acad Dermatol* 44(2):316–317

## **Muir–Torre Syndrome**

---

Inherited disorder (AD) that is caused by a defect in the MSH2 or MLH1 mismatch repair genes and is characterized by sebaceous adenomas, sebaceous carcinoma, keratoacanthomas, and tendency to develop visceral malignancies (most commonly colon cancer)

### ***Differential Diagnosis***

- Bannayan–Riley–Ruvulcaba syndrome
- Cowden disease
- Gardner syndrome
- Hereditary nonpolyposis colorectal cancer
- Multiple keratoacanthomas of Ferguson–Smith
- Multiple trichoepitheliomas
- Nevoid basal cell carcinoma syndrome
- Sebaceous hyperplasia
- Tuberous sclerosis

### ***Evaluation***

- Complete blood count
- Other appropriate cancer screening
- Stool for occult blood/colonoscopy

### **Further reading:**

- Navi D, Wadhera A, Fung MA et al (2006) Muir–Torre syndrome. *Dermatol Online J* 12(5):4

## **Multicentric Reticulohistiocytosis**

---

Idiopathic disorder of histiocytic proliferation that is characterized by red-brown papules and nodules on the face and dorsal hands and phalanges (especially on the proximal and lateral nail folds), along with

potentially mutilating polyarthritis, and in a minority of patients, internal malignancy

### ***Differential Diagnosis***

- Cutaneous Rosai–Dorfman disease
- Dermatofibromas
- Dermatomyositis
- Erythema elevatum diutinum
- Farber’s lipogranulomatosis
- Fibroblastic rheumatism
- Generalized eruptive histiocytosis
- Gouty tophi
- Granuloma annulare
- Jessner’s lymphocytic infiltrate
- Juvenile xanthogranuloma
- Langerhans cell histiocytosis
- Leprosy
- Lipoid proteinosis
- Lupus miliaris disseminata faciei
- Lymphocytoma
- Osteoarthritis
- Progressive nodular histiocytosis
- Psoriatic arthritis
- Rheumatoid arthritis
- Sarcoidosis
- Xanthomas

### ***Associations***

- Hypercholesterolemia
- Hypothyroidism
- Internal malignancy
- Sjögren’s syndrome

### **Evaluation**

- Antinuclear antibodies
- Appropriate cancer screening
- Complete blood count
- Lipid panel
- Radiographs of the affected joints
- Rheumatoid factor
- Sedimentation rate
- Serum protein electrophoresis
- Thyroid function test

### **Treatment Options**

- NSAIDs
- Systemic corticosteroids
- Methotrexate
- Cyclophosphamide
- TNF inhibitors
- Antimalarials

### **Further reading:**

- Tajirian AL, Malik MK, Robinson-Bostom L et al (2006) Multicentric reticulohistiocytosis. Clin Dermatol 24(6):486–492

## **Multinucleate Cell Angiohistiocytoma**

---

Uncommon, benign, reactive lesion that is characterized by multiple red-dish-brown papules on the lower legs or dorsal hands of middle-aged to elderly women

### **Differential Diagnosis**

- Acroangiodermatitis of Mali
- Angiofibroma

- Arthropod-bite reaction
- Cutaneous lymphoid hyperplasia
- Dermatofibroma
- Granuloma annulare
- Lichen planus
- Kaposi's sarcoma
- Reactive angioendotheliomatosis

#### Further reading:

- Perez LP, Zulaica A, Rodriguez L et al (2006) Multinucleate cell angiohistiocytoma. Report of five cases. J Cutan Pathol 33(5):349–352

## Mycetoma

Chronic infection most commonly located on the distal lower extremity that is usually induced by traumatic implantation of a filamentous bacteria (actinomycetoma, most commonly *Nocardia braziliensis*) or fungus (eumycetoma, most commonly *Pseudallescheria boydii*) and is characterized by tumefaction, draining sinuses, and the diagnostic finding of grains (granular collections of the organism)

### *Differential Diagnosis*

- Actinomycetoma
- Atypical mycobacterial infection
- Blastomycosis
- Botryomycosis
- Chromoblastomycosis
- Chronic bacterial osteomyelitis
- Coccidioidomycosis
- Elephantiasis
- Factitial disease
- Hidradenitis suppurativa
- Kaposi's sarcoma

- Leishmaniasis
- Leprosy
- Squamous cell carcinoma
- Sporotrichosis
- Syphilis
- Tuberculosis
- Yaws

### **Evaluation**

- Bacterial and fungal cultures of grains and exudate
- Potassium hydroxide examination and Gram stain of grains

### **Further reading:**

- Welsh O, Vera-Cabrera L, Salinas-Carmona MC (2007) Mycetoma. Clin Dermatol 25(2):195–202

## ***Mycobacterium fortuitum/Mycobacterium chelonae* Infection**

---

Infection with rapidly growing mycobacteria that is capable of causing disease in immunocompetent patients and is characterized by tender, subcutaneous abscesses and cellulitis typically on the lower extremity, usually after a procedure such as injection, pedicure, implantation of a prosthetic device, or liposuction

### **Differential Diagnosis**

- Bacterial cellulitis
- Factitial disease
- Furunculosis
- Glanders
- Mycetoma
- Nocardiosis
- Osteomyelitis

- Sporotrichosis
- Tuberculosis

### **Evaluation**

- Bacterial, mycobacterial, and fungal cultures

### **Further reading:**

- Uslan DZ, Kowalski TJ, Wengenack NL et al (2006) Skin and soft tissue infections due to rapidly growing mycobacteria: comparison of clinical features, treatment, and susceptibility. *Arch Dermatol* 142(10):1287–1292

## **Mycobacterium marinum Infection**

Cutaneous infection with *Mycobacterium marinum* that is most often acquired via contact with fish tanks or swimming pools and is characterized by a slowly evolving, violaceous hyperkeratotic plaque on the hands or feet (Fig. 6.81)



**Fig. 6.81** *Mycobacterium marinum* infection

### ***Differential Diagnosis***

- Anthrax
- Bacterial pyoderma
- Botryomycosis
- Coccidioidomycosis
- Erysipeloid
- Foreign body granuloma
- Granuloma annulare
- Herpetic whitlow
- Leishmaniasis
- Milker's nodule
- Nocardiosis
- Orf
- Protothecosis
- Squamous cell carcinoma
- Sporotrichosis
- Tuberculosis verrucosa cutis
- Tularemia

### ***Evaluation***

- Mycobacterial culture at 30°C
- Radiograph/MRI of the affected area

### ***Treatment Options***

- Minocycline
- Ciprofloxacin
- Sulfomethoxazole–trimethoprim
- Rifampin
- Ethambutol

### **Further reading:**

- Johnson RP, Xia Y, Cho S et al (2007) *Mycobacterium marinum* infection: a case report and review of the literature. *Cutis* 79(1):33–36





**Fig. 6.82** Mycosis fungoides (Courtesy of A. Record)

## **Mycosis Fungoides**

---

Type of cutaneous T cell lymphoma that predominantly affects older men; is characterized by chronic, pruritic, erythematous, scaly patches and plaques, often on the covered areas of the body such as the trunk and buttocks; and that has the potential to evolve into a tumoral or erythrodermic stage (Fig. 6.82)

### ***Variants***

- Adnexotropic
- Alopecia mucinosa
- Erythrodermic
- Follicular
- Granulomatous
- Granulomatous slack skin
- Hypopigmented
- Ichthyosiform
- Invisible



**Fig. 6.83** Palmo-plantar mycosis fungoides

- Mucosal
- Palmoplantar (Fig. 6.83)
- Patch
- Pigmented-purpura-like
- Plaque
- Poikilodermatous
- Pustular
- Solitary
- Syringotropic
- Tumoral
- Vegetating/papillomatous
- Verrucous/hyperkeratotic
- Vesiculobullous

## ***Differential Diagnosis***

### **Mycosis Fungoides**

- Atopic dermatitis
- Drug reaction
- Erythroderma
- Granuloma annulare
- Granulomatous slack skin
- Idiopathic follicular mucinosis
- Large plaque parapsoriasis
- Lichen planus
- Lichen sclerosus et atrophicus
- Lichenoid drug eruption
- Lupus erythematosus
- Lymphomatoid contact dermatitis
- Lymphomatoid drug reaction
- Lymphomatoid papulosis
- Necrobiosis lipoidica
- Nummular eczema
- Progressive macular hypomelanosis
- Pseudomycosis fungoides
- Psoriasis
- Radiodermatitis
- Reticular erythematous mucinosis
- Sarcoidosis
- Seborrheic dermatitis
- Secondary syphilis
- Small plaque parapsoriasis
- Tinea corporis
- Vitiligo

### **Poikiloderma Atrophicans Vasculare**

- Acrodermatitis chronicum atrophicans
- Dermatoheliosis
- Dermatomyositis

- Erythema ab igne
- Lichen sclerosus et atrophicus
- Lupus erythematosus
- Mycosis fungoides
- Poikiloderma-like amyloidosis
- Radiation dermatitis
- Topical steroid overuse

### ***Diagnostic Criteria (Early Mycosis Fungoides)***

- Clinical
  - Persistent and/or progressive patches/thin plaques
  - Non-sun-exposed location
  - Size/shape variation
  - Poikiloderma
- Histopathologic
  - Superficial lymphoid infiltrate
  - Epidermotropism without spongiosis
  - Lymphoid atypia
- Clonal TCR gene rearrangement
- Immunopathologic
  - <50% CD2+, CD3+, and/or CD5+ T cells
  - <10% CD7+ T cells
  - Epidermal/dermal discordance of CD2, CD3, CD5, or CD7

### ***Evaluation***

- See “[Lymphoma, Cutaneous T Cell](#)”

### ***Treatment Options***

- Topical corticosteroids
- UVB phototherapy
- Topical nitrogen mustard

- Total skin electron beam therapy
- Methotrexate
- Interferon alpha-2a
- Topical bexarotene
- Oral bexarotene
- Denileukin diftitox
- Alemtuzumab
- Vorinostat
- Romidepsin
- Chemotherapy

**Further reading:**

- Pimpinelli N et al (2005) International Society for Cutaneous Lymphoma. Defining early mycosis fungoides. *J Am Acad Dermatol* 53(6):1053–1063
- Kazakov DV, Burg G, Kempf W (2004) Clinicopathological spectrum of mycosis fungoides. *J Eur Acad Dermatol Venereol* 18(4):397–415

**Myiasis, Furuncular**

Cutaneous infestation most commonly caused by larva of the botfly *Dermatobia hominis* or the tumbu fly *Cordylobia anthropophaga* that is characterized by a solitary, pruritic, furuncular nodule with serosanguinous drainage that does not respond to conventional therapy

***Differential Diagnosis***

- Abscess
- Anthrax
- Cellulitis
- Cysticercosis
- Exaggerated arthropod reaction
- Foreign body granuloma
- Furunculosis
- Leishmaniasis

- Lymphadenopathy
- Kerion
- Mycobacterial infection
- Nocardiosis
- Onchocerciasis
- Ruptured epidermoid cyst
- Tungiasis

### ***Treatment Options***

- Surgical excision
- Suffocation
- Ivermectin

### **Further reading:**

- Cestari TF, Pessato S, Ramos-e-Silva M (2007) Tungiasis and myiasis. *Clin Dermatol* 25(2):158–164

## **Myxedema, Generalized**

Systemic mucinosis associated with profound hypothyroidism that is characterized by xerotic, yellowish, edematous skin with periorbital infiltration, madarosis, and brittle hair

### ***Differential Diagnosis***

- Anasarca
- Angioedema
- Carotenoderma
- Cutaneous focal mucinosis
- Cutaneous lupus mucinosis
- Primary systemic amyloidosis
- Scleredema
- Scleromyxedema

### ***Evaluation***

- Thyroid function tests
- Serum/urinary protein electrophoresis

### **Further reading:**

- Jackson EM, English JC III (2002) Diffuse cutaneous mucinoses. *Dermatol Clin* 20(3):493–501

## **Myxoma, Cutaneous (Superficial Angiomyxoma)**

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Uncommon, cutaneous stromal tumor that is either solitary or multiple (when a part of the Carney complex) and is characterized by a soft, flesh-colored cutaneous nodule on trunk, leg, or head and neck

### ***Differential Diagnosis***

- Amelanotic melanoma
- Focal cutaneous mucinosis
- Myxoid dermatofibroma
- Myxoid liposarcoma
- Myxoid malignant fibrous histiocytoma
- Neurofibroma
- Neurothekeoma
- Nodular fasciitis
- Schwannoma

### ***Evaluation***

- Echocardiography (atrial myxoma)

### **Further reading:**

- Choi HJ, Kim YJ, Yim JH et al (2007) Unusual presentation of solitary cutaneous myxoma. *J Eur Acad Dermatol Venereol* 21(3):403–404

## **Naegeli–Franceschetti–Jadassohn Syndrome**

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Rare inherited (AD) ectodermal dysplasia of unknown genetic cause that is characterized by anhidrosis, absent dermatoglyphics, reticulated hyperpigmentation on the neck and trunk, palmoplantar keratoderma, and normal life expectancy, health, and intelligence

### ***Differential Diagnosis***

- Anhidrotic ectodermal dysplasia
- Confluent and reticulated papillomatosis
- Dermatopathia pigmentosa reticularis
- Dowling–Degos disease
- Dyschromatosis universalis hereditaria
- Dyskeratosis congenita
- Incontinentia pigmenti
- Macular amyloidosis
- Weary–Kindler syndrome
- Reticulate acropigmentation of Kitamura

### **Further reading:**

- Lugassy J, Itin P, Ishida-Yamamoto A et al (2006) Naegeli–Franceschetti–Jadassohn syndrome and dermatopathia pigmentosa reticularis: two allelic ectodermal dysplasias caused by dominant mutations in KRT14. *Am J Hum Genet* 79(4):724–730

## **Nail–Patella Syndrome (Fong Syndrome)**

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Inherited syndrome (AD) caused by a defect in the LMX1B gene that is characterized by hypoplastic patella, nail dystrophy with triangular lunula, posterior iliac horns, pigmentation of the margin of the pupils (Lester iris), and glomerulonephropathy



### ***Differential Diagnosis***

- Coffin–Siris syndrome
- Ectodermal dysplasias
- Pachyonychia congenita
- Psoriasis

### ***Evaluation***

- Renal function test
- Radiography of the pelvis and knees
- Ophthalmologic examination
- Urinalysis

### **Further reading:**

- Schulz-Butulis BA, Welch MD, Norton SA (2003) Nail–patella syndrome. *J Am Acad Dermatol* 49(6):1086–1087

### **Nasal Glioma (Heterotopic Brain Tissue)**

Developmental anomaly that presents at birth or in early childhood, contains heterotopic CNS tissue which has lost its connection with the subarachnoid space, and is characterized by a intranasal or extranasal, noncompressible, nontransilluminating mass on the midline face near the nasal root

### ***Differential Diagnosis***

- Arteriovenous malformation
- Dermoid cyst
- Encephalocele
- Hemangioma
- Juvenile xanthogranuloma
- Nasal polyp
- Rhabdomyoma
- Venous malformation

## **Evaluation**

- CT/MRI scan of cranium

### **Further reading:**

- Dasgupta NR, Bentz ML (2003) Nasal gliomas: identification and differentiation from hemangiomas. *J Craniofac Surg* 14(5):736–738

## **Necrobiosis Lipoidica (Urbach–Oppenheimer Disease)**

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Idiopathic dermatosis that is possibly vasculopathic in etiology and is characterized by yellow, firm atrophic plaques with telangiectasias and occasional ulceration that are most commonly located on the anterior lower extremities (Fig. 6.84)

### **Differential Diagnosis**

- Actinic granuloma
- Annular elastolytic giant cell granuloma
- Diabetic dermopathy
- Epithelioid sarcoma
- Erythema induratum
- Erythema nodosum
- Factitial disease
- Granuloma annulare
- Granulomatous infections
- Granulomatous mycosis fungoides
- Lichen sclerosus
- Lymphomatoid granulomatosis
- Immunodeficiency-related noninfectious granuloma
- Morphea
- Necrobiotic xanthogranuloma
- Palisaded neutrophilic and granulomatous dermatitis
- Plane xanthoma
- Rheumatoid neutrophilic dermatitis



**Fig. 6.84** Necrobiosis lipoidica

- Sarcoidosis
- Sclerosing lipogranuloma
- Stasis dermatitis

### ***Associations***

- Diabetes mellitus
- Granuloma annulare

### ***Evaluation***

- Fasting blood glucose

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Aspirin
- Dipyridamole
- Pentoxifylline
- Nicotinamide
- Tretinoin
- Cyclosporine
- Heparin
- Hydroxychloroquine
- Mycophenolate mofetil
- Infliximab

### **Further reading:**

- Wee SA, Possick P (2004) Necrobiosis lipoidica. *Dermatol Online J* 10(3):18

### **Necrobiotic Xanthogranuloma**

Chronic, progressive dermatologic manifestation of monoclonal gammopathy (IgG kappa) with unknown pathogenesis that predominantly affects older adults and is characterized by bilateral, symmetric, indurated, yellow-brown, telangiectatic, occasionally ulcerated plaques on the periorbital area, and less commonly, the trunk and extremities

### ***Differential Diagnosis***

- Annular elastolytic giant cell granuloma
- Atypical fibroxanthoma
- Granuloma annulare
- Juvenile xanthogranuloma
- Multicentric reticulohistiocytosis
- Necrobiosis lipoidica

- Normolipemic plane xanthoma
- Sarcoidosis
- Squamous cell carcinoma
- Xanthelasma
- Xanthoma disseminatum

### ***Evaluation***

- Complement levels
- Complete blood count
- Ophthalmologic examination
- Sedimentation rate
- Serum/urinary protein electrophoresis

### ***Treatment Options***

- Systemic corticosteroids
- Intralesional corticosteroids
- Chlorambucil
- Melfalan
- Intravenous immunoglobulin
- Hydroxychloroquine
- Plasmapheresis

### **Further reading:**

- Flann S, Wain EM, Halpern S, Andrews V et al (2006) Necrobiotic xanthogranuloma with paraproteinaemia. Clin Exp Dermatol 31(2):248–251

## **Necrolytic Acral Erythema**

Cutaneous manifestation of hepatitis C infection that is characterized by burning or pruritic erythematous, hyperkeratotic plaques on the dorsal aspects of the feet and toes, and less commonly, the hands, with sparing of the palms and soles

### ***Differential Diagnosis***

- Acrokeratosis paraneoplastica
- Allergic contact dermatitis (especially shoes)
- Lichen planus
- Necrolytic migratory erythema
- Psoriasis
- Zinc deficiency

### ***Evaluation***

- CT scan of abdomen
- Liver function test
- Serum glucagon level
- Serum zinc level
- Viral hepatitis panel

### ***Treatment Options***

- Zinc supplementation
- Treatment of hepatitis C

### **Further reading:**

- Abdallah M et al (2005) Necrolytic acral erythema: a cutaneous sign of hepatitis C virus infection. *J Am Acad Dermatol* 53:247–251

### **Necrolytic Migratory Erythema**

Eruption associated with glucagonoma syndrome that is possibly caused by acquired amino acid deficiency and is characterized by recurrent annular, scaly, vesicular, eroded plaques most commonly located in the periorificial, intertriginous, and acral areas

### ***Differential Diagnosis***

- Candidiasis
- Darier disease
- Hailey–Hailey disease
- Kwashiorkor
- Necrolytic acral erythema
- Pemphigus
- Pellagra
- Psoriasis
- Seborrheic dermatitis
- Subcorneal pustular dermatosis
- Zinc deficiency

### ***Associations***

- Celiac disease
- Cirrhosis
- Crohn's disease
- Chronic pancreatitis
- Cystic fibrosis
- Glucagon-secreting bronchial carcinoma
- Glucagon-secreting tumor of the pancreas
- Multiple endocrine neoplasia
- Ulcerative colitis

### ***Evaluation***

- Complete blood count
- CT scan of abdomen
- Fasting plasma glucagon
- Fasting plasma glucose
- Sedimentation rate
- Serum zinc level

### ***Treatment Options***

- Treat underlying cause
- Octreotide
- Supplementation of amino acids, essential fatty acids, and zinc

### **Further reading:**

- Remes-Troche JM, Garcia-de-Acevedo B, Zuniga-Varga J et al (2004) Necrolytic migratory erythema: a cutaneous clue to glucagonoma syndrome. *J Eur Acad Dermatol Venereol* 18(5):591–595

### **Necrotizing Fasciitis**

Life- or limb-threatening toxin-mediated deep soft tissue bacterial infection that spreads along fascial planes and is characterized by pain out of proportion to the physical exam, rapidly advancing violaceous erythema with bullae formation, occasional crepitus, and severe sepsis or septic shock

### ***Differential Diagnosis***

- Calciphylaxis
- Cellulitis
- Compartment syndrome
- Disseminated intravascular coagulation
- Hematoma
- Factitial disease
- Insect-bite reaction
- Ischemic necrosis
- Polyarteritis nodosa
- Postsurgical amebiasis
- Pressure ulcer
- Pyoderma gangrenosum
- Pyomyositis
- Spider bite



- Sweet's syndrome
- Warfarin skin necrosis

### ***Evaluation***

- Bacterial culture of affected tissue
- Complete blood count
- CT/MRI scan of affected area
- Renal function
- Serum chemistry
- Surgical consultation

### ***Treatment Options***

- Incision, drainage, debridement, and irrigation
- Systemic antibiotics
- Amputation

### **Further reading:**

- Kihiczak GG, Schwartz RA, Kapila R (2006) Necrotizing fasciitis: a deadly infection. *J Eur Acad Dermatol Venereol* 20(4):365–369

## **Nephrogenic Fibrosing Dermopathy (Nephrogenic Systemic Fibrosis)**

Sclerotic dermatosis that most commonly affects patients on hemodialysis for chronic renal failure, may be triggered by accumulation of gadolinium in affected tissues, and is characterized by diffuse cutaneous induration involving the extremities and trunk but sparing the face

### ***Differential Diagnosis***

- Amyloidosis (especially beta-2 microglobulin type)
- Anasarca

- Eosinophilia–myalgia syndrome
- Eosinophilic fasciitis
- Calciphylaxis
- Capillary leak syndrome
- Chronic graft-vs-host disease
- Cellulitis
- Diabetic stiff skin
- Generalized myxedema
- Lipodermatosclerosis
- Morphea
- Pretibial myxedema
- Porphyria cutanea tarda
- Scleredema adutorum
- Scleroderma
- Scleromyxedema
- Toxic oil syndrome

### ***Associations***

- Antiphospholipid antibody
- Gadolinium-based MRI scans
- Hemodialysis
- Renal failure
- Renal transplantation

### ***Evaluation***

- Anticardiolipin antibodies
- Beta-2 glycoprotein-1 antibodies
- Lupus anticoagulant test
- Renal function
- Serum/urinary protein electrophoresis

### ***Treatment Options***

- Extracorporeal photopheresis
- UVA1 phototherapy
- Photodynamic therapy
- Plasmapheresis

### **Further reading:**

- Chen AY, Zirwas MJ, Heffernan MP (2010) Nephrogenic systemic fibrosis: a review. *J Drugs Dermatol* 9(7):829–834

## **Netherton Syndrome**

Inherited syndrome (AR) associated with mutation of the SPINK5 gene encoding the epidermal protein LEKTI that is characterized by neonatal erythroderma, the pathognomonic skin eruption known as ichthyosis linearis circumflexa (which is identified by its double-edged scale), sparse hair due to trichorrhexis invaginata, and atopic dermatitis

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- Atopic dermatitis
- Chronic mucocutaneous candidiasis
- Congenital ichthyosiform erythroderma
- Ectodermal dysplasias
- Erythrodermic psoriasis
- Erythrokeratoderma variabilis
- Hyper-IgE syndrome
- Lamellar ichthyosis
- Omenn syndrome
- Peeling skin syndrome
- Seborrheic dermatitis
- Wiskott–Aldrich syndrome

**Further reading:**

- Sun JD, Linden KG (2006) Netherton syndrome: a case report and review of the literature. *Int J Dermatol* 45(6):693–697

**Neurilemmoma (Schwannoma)**

Benign tumor of Schwann cell derivation that can be solitary or multiple (in the setting of neurofibromatosis) and is characterized by an insidious, occasionally painful subcutaneous nodule most commonly localized on the head and neck or extremities

***Differential Diagnosis***

- Adnexal tumors
- Angiolipoma
- Dermatofibroma
- Dermoid
- Epidermoid cyst
- Ganglion cyst
- Leiomyoma
- Lipoma
- Melanocytic nevus
- Myoblastoma
- Neurofibroma
- Neuroma
- Pilar cyst
- Spiradenoma

***Associations***

- Carney complex (psammomatous type)
- Neurofibromatosis I
- Neurofibromatosis II
- Schwannomatosis

**Further reading:**

- Moon SE, Cho YJ, Kwon OS (2005) Subungual schwannoma: a rare location. *Dermatol Surg* 31(5):592–594

**Neuroblastoma, Metastatic**

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Childhood neuroectodermal tumor that causes increased levels of serum and urinary catecholamines, has a propensity for metastasis to the skin, and is characterized by multiple blue dermal nodules giving the child a “blueberry muffin” appearance

***Differential Diagnosis***

- Adnexal tumors
- Angiolipomas
- Blueberry muffin baby
- Leukemia cutis
- Lymphoma
- Cutaneous metastasis (especially small cell)
- Mastocytoma
- Melanoma
- Merkel cell carcinoma
- Rhabdomyosarcoma

***Evaluation***

- Abdominal ultrasound/CT scan
- MIBG scan (metaiodobenzylguanidine)
- Skeletal surgery
- Urinary catecholamines

**Further reading:**

- Holland KE, Galbraith SS, Drolet BA (2005) Neonatal violaceous skin lesions: expanding the differential of the “blueberry muffin baby”. *Adv Dermatol* 21:153–192

## Neurofibroma

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Benign neural tumor containing a mixture of peripheral nerve components that is characterized by a soft, button-holing, flesh-colored dermal or subcutaneous nodule or a larger, pendulous mass that feels like a “bag of worms” upon palpation (plexiform type), with the latter type being congenital, pathognomonic for neurofibromatosis, and potentially degenerative into a malignant peripheral nerve sheath tumor

### *Differential Diagnosis*

#### Dermal/Subcutaneous

- Dermal nevus
- Dermatofibroma
- Fibroepithelial polyp
- Leiomyoma
- Neuroma
- Neurothekeoma
- Neurotized nevus
- Nevus lipomatosus superficialis
- Schwannoma
- Skin tag
- Soft fibroma
- Trichodiscoma

#### Plexiform

- Deep hemangioma
- Dermatofibrosarcoma protuberans
- Neurofibrosarcoma
- Plexiform fibrohistiocytic tumor of infancy
- Plexiform schwannoma
- Rhabdomyosarcoma

**Further reading:**

- Barbarot S, Nicol C, Volteau C et al (2007) Cutaneous lesions in neurofibromatosis 1: confused terminology. *Br J Dermatol* 157(1):183–184

**Neurofibromatosis**

Autosomal-dominant disorder caused by a defect in the tumor suppressor gene, neurofibromin, that is characterized by café-au-lait macules, Lisch nodules, axillary freckling, optic gliomas, and cutaneous neurofibromas, along with a variety of other tumors and internal organ disease

**Subtypes/Variants**

- Type I: von Recklinghausen disease (Fig. 6.85)
- Type II: acoustic schwannoma



**Fig. 6.85** Neurofibromatosis (Courtesy of A. Record)

- Type III: mixed
- Type IV: variant
- Type V: segmental café-au-lait macules, neurofibromas, or both
- Type VI: café-au-lait macules only
- Type VII: late onset
- Type NOS: not otherwise specified

### ***Differential Diagnosis***

- Carney's syndrome
- Cowden disease
- Cylindromatosis
- Jaffe–Campanacci syndrome
- Legius syndrome
- McCune–Albright syndrome
- Multiple endocrine neoplasia, types I and IIB
- Noonan syndrome
- Proteus syndrome
- Russell–Silver syndrome
- Tuberous sclerosis
- Watson syndrome

### ***Diagnostic Criteria (2/7)***

- Six or more café-au-lait macules over 5 mm (prepubertal) or over 15 mm (postpubertal)
- Two or more neurofibromas or one plexiform neurofibroma
- Axillary or inguinal freckling
- Optic glioma
- Two or more Lisch nodules
- Sphenoid wing dysplasia or thinning of long bone cortex (pseudoarthrosis)
- First-degree relative with NF1



### ***Evaluation***

- 24-h urine catecholamines
- Audiography
- Blood pressure
- Complete blood count
- CT/MRI scan of cranium
- Electroencephalogram
- Intelligence testing
- Psychological evaluation
- Skeletal survey
- Slit-lamp examination

### **Further reading:**

- Mulvihill JJ, Parry DM, Sherman JL et al (1990) Neurofibromatosis 1 (Recklinghausen disease) and neurofibromatosis 2 (bilateral acoustic neurofibromatosis). An update. *Ann Intern Med* 113(1):39–52

## **Neuroma, Palisaded Encapsulated**

Benign neural tumor that is characterized by a flesh-colored dome-shaped papule most commonly located on the face, especially around the nose

### ***Differential Diagnosis***

- Angiofibroma
- Basal cell carcinoma
- Fibrous papule
- Intradermal nevus
- Leiomyoma
- Myxoma
- Neurilemmoma
- Neurofibroma
- Neurothekeoma

- Traumatic neuroma
- Trichodiscoma
- Trichoepithelioma
- Tricholemmoma

**Further reading:**

- Golod O, Soriano T, Craft N (2005) Palisaded encapsulated neuroma: a classic presentation of a commonly misdiagnosed neural tumor. *J Drugs Dermatol* 4(1):92–94

## **Neuroma, Traumatic**

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Benign proliferation of nerves that arises in areas of trauma, prior surgery, or amputation (of an supernumerary digit) and is characterized by a flesh-colored painful papule on the hands or feet

### *Differential Diagnosis*

- Acquired digital fibrokeratoma
- Dermatofibroma
- Foreign body granuloma
- Hypertrophic scar
- Leiomyoma
- Supernumerary digit
- Wart

**Further reading:**

- Cesinaro AM, Sighinolfi P, Monari P et al (2006) Penile condylomata? Traumatic neuromas! *J Am Acad Dermatol* 54(2 Suppl):S54–S55

## **Neurothekeoma (Nerve Sheath Myxoma)**

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Benign tumor of the nerve sheath that is characterized by an asymptomatic or painful, flesh-colored dermal nodule on the head and neck, trunk, or extremities and that often arises in young females

### ***Differential Diagnosis***

- Clear cell sarcoma (especially cellular type)
- Dermatofibroma
- Foreign body granuloma
- Hemangioma
- Keloid
- Leiomyoma
- Melanocytic nevi
- Melanoma
- Myxoid neurofibroma
- Myxoma
- Neural nevus
- Neurofibroma
- Schwannoma

#### **Further reading:**

- Fetsch JE, Laskin WB, Hallman JR et al (2007) Neurothekeoma: an analysis of 178 tumors with detailed immunohistochemical data and long-term patient follow-up information. *Am J Surg Pathol* 31(7):1103–1114

### **Neutral Lipid Storage Disease (Chanarin–Dorfman Syndrome)**

Inherited (AR) disorder that is caused by a defect in the CGI-58 lipid metabolism gene and is characterized by ichthyosis, cataracts, sensorineural deafness, myopathy, lipid deposition in the liver leading to cirrhosis, and lipid vacuoles in leukocytes (Jordan's anomaly)

### ***Differential Diagnosis***

- Chondrodysplasia punctata
- Congenital ichthyosiform erythroderma
- Erythrokeratoderma variabilis
- KID syndrome
- Refsum disease

- Sjögren–Larsson syndrome
- X-linked ichthyosis

**Further reading:**

- Pujol RM, Gilaberte M, Toll A et al (2005) Erythrokeratoderma variabilis-like ichthyosis in Chanarin–Dorfman syndrome. *Br J Dermatol* 153(4):838–841

**Neutrophilic Eccrine Hidradenitis**

Neutrophilic dermatosis that is most often diagnosed in the setting of chemotherapy for leukemia (especially AML) or bacterial infection (*Serratia*, *Enterobacter*, *Nocardia*) and is characterized by self-limited, occasionally tender erythematous papules and plaques affecting the trunk or extremities

***Differential Diagnosis***

- Atypical pyoderma gangrenosum
- Cellulitis
- Cutaneous small vessel vasculitis
- Eccrine syringosquamous metaplasia
- Epidermal growth factor receptor inhibitor acneiform rash
- Erythema elevatum diutinum
- Erythema multiforme
- Erythema nodosum
- Folliculitis
- Graft-vs-host disease
- Idiopathic palmoplantar hidradenitis
- Leukemia cutis
- Miliaria
- Septic emboli
- Sweet's syndrome
- Urticaria
- Urticarial vasculitis

### ***Associated Medications***

- Bleomycin
- Chlorambucil
- Cisplatin
- Cyclophosphamide
- Cytarabine
- Doxorubicin
- Vincristine
- Topotecan
- 5-FU

### ***Treatment Options***

- Observation and reassurance
- NSAIDs
- Topical corticosteroids
- Systemic corticosteroids

### **Further reading:**

- Oono T, Matsuura H, Morizane S et al (2006) A case of infectious eccrine hidradenitis. *J Dermatol* 33(2):142–145

## **Nevoid Basal Cell Carcinoma Syndrome (Gorlin's Syndrome)**

Inherited syndrome (AD) that is caused by mutation of the PTCH gene and is characterized by basal cell carcinoma in childhood, palmar pits, jaw cysts, a variety of bony abnormalities, and a tendency to develop medulloblastoma

### ***Differential Diagnosis***

- Bazex–Dupre–Christol syndrome
- Basaloid follicular hamartoma
- Basal cell carcinoma with myotonic dystrophy

- Multiple hereditary infundibulocystic basal cell carcinomas
- Rasmussen syndrome
- Rombo syndrome
- Xeroderma pigmentosum

### ***Diagnostic Criteria (Two Major or One Minor+Two Minor)***

- Major
  - More than two BCC or one at age less than 20 years
  - Odontogenic keratocysts of jaw
  - Three or more palmar and/or plantar pits
  - Bilamellar calcification of falx
  - Fused, bifid, or splayed ribs
  - First-degree relative with Gorlin's syndrome
  - PTC gene mutation in normal tissue
- Minor
  - Macrocephaly
  - Cleft lip/palate, frontal bossing, coarse face, and hypertelorism
  - Pectus deformity or syndactyly
  - Bridging of sella turcica, rib abnormalities, vertebral anomalies, and flame-shaped lucencies of hands/feet
  - Ovarian fibroma
  - Medulloblastoma

### ***Evaluation***

- CT/MRI scan of the brain
- Panoramic radiograph of the teeth
- Pelvic ultrasound
- Radiograph of the ribs and spine

### ***Treatment Options***

- Surgical excision
- Mohs micrographic surgery

- Electrodesiccation and curettage
- Imiquimod
- 5FU
- Photodynamic therapy
- Acitretin
- CO<sub>2</sub> laser

**Further reading:**

- Pastorino L, Cusano R, Baldo C et al (2005) Nevoid basal cell carcinoma syndrome in infants: improving diagnosis. *Child Care Health Dev* 31(3):351–354

## **Nevoid Hypertrichosis**

Congenital anomaly characterized by increased growth of terminal hairs in an abnormal area

### ***Subtypes/Variants***

- Anterior cervical hypertrichosis
- Auricular hypertrichosis
- Glabellar hypertrichosis
- Hairy polythelia
- Hypertrichosis cubiti

### ***Differential Diagnosis***

- Becker's nevus
- Cornelia de Lange syndrome
- Hair follicle nevus (congenital vellus hamartoma)
- Hypertrichosis lanuginosa

**Further reading:**

- Lopez-Barrantes O, Torrelo A, Mediero IG et al (2002) Nevoid hypertrichosis and hypomelanosis. *Eur J Dermatol* 12(6):583–585



**Fig. 6.86** Nevus anemicus

### **Nevus Anemicus (Vorner Nevus)**

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Congenital vascular anomaly caused by hypersensitivity to catecholamines that is characterized by localized persistently blanched macules and patches that are most commonly localized to the upper trunk (Fig. 6.86)

#### ***Differential Diagnosis***

- Bier spots
- Early infantile hemangioma
- Hypomelanosis of Ito
- Leprosy
- Nevus depigmentosus
- Postinflammatory hypopigmentation
- Segmental vitiligo
- Tinea versicolor
- Tuberous sclerosis
- Vitiligo

#### ***Associations***

- Lymphedema
- Neurofibromatosis



- Nevus spilus
- Phakomatosis pigmentovascularis
- Port-wine stains

**Further reading:**

- Sarifakioglu E, Erdal E (2006) Multiple anaemic macules of the arms: a variant of Bier's spots or naevus anemicus? J Eur Acad Dermatol Venereol 20(7):892–893

**Nevus, Atypical Melanocytic (Dysplastic Nevus, Clark Nevus)**

Melanocytic neoplasm with atypical clinical or histologic features that has a tendency to be familial and to be a risk factor for melanoma and is characterized by asymmetry, border irregularity, variability in color, and larger size compared with benign melanocytic nevi

***Differential Diagnosis***

- Basal cell carcinoma
- Irritated melanocytic nevus
- Lichenoid keratosis
- Malignant melanoma
- Myerson's nevus
- Nevus spilus
- Pigmented actinic keratoses
- Pigmented Bowen's disease
- Pigmented seborrheic keratoses
- Pigmented spindle cell nevus
- Small congenital nevi
- Solar lentigines

**Further reading:**

- Wick MR, Patterson JW (2005) Cutaneous melanocytic lesions: selected problem areas. Am J Clin Pathol 124(Suppl):S52–S83

## **Nevus, Benign Melanocytic**

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Very common benign neoplasm of nevus cells (melanocytes that lack dendrites and form nests) that evolve over the course of a person's life from a flat hyperpigmented macule (junctional nevus) to a dome-shaped, hyperpigmented papule (compound nevus) to a dome-shaped flesh-colored papule (intradermal nevus)

### ***Subtypes***

- Acral
- Angiomatous
- Balloon cell
- Clonal
- Cockarde
- Combined
- Compound
- Halo
- Intradermal
- Junctional
- Meyerson's nevus
- Neurotized
- Recurrent
- Verrucous

### ***Differential Diagnosis***

- Adnexal neoplasm
- Atypical nevus
- Basal cell carcinoma
- Blue nevus
- Dermatofibromas
- Fibroepithelial polyps

- Lentigo
- Melanoma
- Neurofibromas
- Neurothekeoma
- Seborrheic keratosis
- Traumatic tattoo

### ***Associations (Multiple Eruptive)***

- Bullous diseases
- Immunosuppression
- Sunburn

### **Further reading:**

- Strungs I (2004) Common and uncommon variants of melanocytic naevi. *Pathology* 36(5):396–403

## **Nevus Comedonicus**

Type of epidermal nevus that is characterized by localized group of open and closed comedones that are distributed linearly, segmentally, or along Blaschko's lines and most commonly located on the head and neck, trunk, or upper extremities

### ***Differential Diagnosis***

- Acne vulgaris
- Chloracne
- Favre–Racouchot syndrome
- Keratosis pilaris
- Lichen striatus
- Linear Darier's disease
- Milia en plaque

- Nevus lipomatosus superficialis
- Porokeratotic eccrine ostial and dermal duct nevus

### **Associations**

- Cataracts
- Seizures
- Skeletal abnormalities

### **Further reading:**

- Guldbakke KK, Khachemoune A, Deng A et al (2007) Naevus comedonicus: a spectrum of body involvement. Clin Exp Dermatol 32(5):488–492

## **Nevus, Congenital Melanocytic**

Melanocytic nevus that is present at birth and characterized as a small (<1.5 cm), medium (>1.5 to <20 cm), or large (>20 cm) hyperpigmented papillomatous plaque occurring anywhere on the body

### ***Differential Diagnosis***

- Atypical nevus
- Becker's nevus
- Café-au-lait macule
- Epidermal nevus
- Large seborrheic keratosis
- Melanoma
- Nevus sebaceus
- Nevus spilus
- Neurofibromatosis
- Paget's disease
- Pigmented squamous cell carcinoma

## **Associations**

- Melanoma
- Neurocutaneous melanosis

### **Further reading:**

- Tannous ZS, Mihm MC Jr, Sober AJ et al (2005) Congenital melanocytic nevi: clinical and histopathologic features, risk of melanoma, and clinical management. *J Am Acad Dermatol* 52(2):197–203

## **Nevus Depigmentosus**

Nevoid type of hypomelanosis with onset at birth or in the first few years of life that is characterized by a circumscribed patch of hypopigmentation in a segmental or isolated distribution, is most commonly located on the trunk, and persists for life

### ***Differential Diagnosis***

- Hypomelanosis of Ito
- Leprosy
- Nevus anemicus
- Phylloid hypomelanosis
- Postinflammatory hypopigmentation
- Segmental vitiligo
- Tinea versicolor
- Tuberous sclerosis
- Vitiligo

### ***Diagnostic Criteria***

- Leukoderma present at birth or onset early in life
- No alteration in distribution of leukoderma throughout life
- No alteration in texture, or change of sensation, in the affected area
- No hyperpigmented border around the achromic area

**Further reading:**

- Coupe RL (1976) Unilateral systematized achromic nevus. *Dermatologica* 134:19–35
- Kim SK, Kang HY, Lee ES, Kim YC (2006) Clinical and histopathologic characteristics of Nevus depigmentosus. *J Am Acad Dermatol* 55(3):423–428

## **Nevus Flammeus/Nevus Simplex (Capillary Malformation, Port-Wine Stain)**

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Congenital capillary malformation with variable presentation and several associated diseases that is characterized by a fading pink-to-red (nevus simplex) or a persistent red-to-purple patch (nevus flammeus) most commonly located on the occiput (stork bite), glabella (salmon patch), or unilateral face (port-wine stain), with the lateral initially smooth but becoming more pebbly or verrucous over the course of the patient's life

### ***Differential Diagnosis (Nevus Flammeus)***

- Child abuse
- Early infantile hemangioma
- Forceps injury
- Insect-bite reaction
- Telangiectatic hemangioma
- Unilateral nevoid telangiectasia

### ***Associations***

- Bannayan–Riley–Ruvulcaba syndrome
- Beckwith–Wiedemann syndrome
- Coats disease
- Cobb syndrome
- Glaucoma
- Klippel–Trenaunay syndrome
- Nevus anemicus
- Parkes Weber syndrome

- Phakomatosis pigmentovascularis
- Roberts syndrome
- Rubinstein–Taybi syndrome
- Sturge–Weber syndrome
- TAR syndrome
- von Hippel–Lindau syndrome
- Wyburn–Mason syndrome

### ***Treatment Options***

- Pulsed dye laser

### **Further reading:**

- Garzon MC, Huang JT, Enjolras O et al (2007) Vascular malformations: part I. J Am Acad Dermatol 56(3):353–370

## **Nevus Lipomatosus Superficialis (Of Hoffman and Zurhelle)**

Fat hamartoma that arises within the first two decades of life and is characterized by one or more soft, wrinkled, pedunculated, fleshy papules most commonly located on the buttock, hip, or thigh

### ***Differential Diagnosis***

- Agminated neurofibromas
- Angiolipoma
- Connective tissue nevus
- Cyndroma
- Epidermal nevus
- Fibroepithelial polyp
- Focal dermal hypoplasia (Goltz's syndrome)
- Melanocytic nevus
- Nevus sebaceus
- Trichoepithelioma

## Associations

- Michelin tire baby appearance

### Further reading:

- Lane JE, Clark E, Marzec T (2003) Nevus lipomatosus cutaneous superficialis. *Pediatr Dermatol* 20(4):313–314

## Nevus of Ota/Nevus of Ito

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Type of dermal melanocytosis that is caused by failure of melanoblasts to migrate to the epidermis and is characterized by blue-, gray-, or black-pigmented macules and patches affecting the zygomatic area of the face and sclera (Ota) or shoulder area (Ito)

### Differential Diagnosis

- Acquired nevus of Ota-like macules (Sun's nevus (unilateral) or Hori's nevus (bilateral))
- Alkaptonuria
- Argyria
- Blue nevus
- Café-au-lait macule
- Congenital melanocytic nevus
- Contusion
- Drug-induced pigmentation
- Exogenous ochronosis
- Facial acanthosis nigricans
- Fixed drug eruption
- Lentigo maligna
- Melanoma
- Melasma
- Mongolian spot
- Nevus spilus



- Photosensitive drug eruption
- Riehl's melanosis

### ***Associations***

- Glaucoma
- Melanoma
- Neurofibromatosis
- Nevus flammeus
- Phacomatosis pigmentovasularis

### ***Treatment Options***

- Q-switched lasers (Ruby, Nd:YAG, Alexandrite)

### **Further reading:**

- Lee CS, Lim HW (2003) Cutaneous diseases in Asians. *Dermatol Clin* 21(4):669–677

## **Nevus Sebaceus (of Jadassohn)**

Type of epidermal nevus that has the potential to sprout several different adnexal neoplasms (most commonly syringocystadenoma papilliferum) later in life and is characterized by a solitary yellow, tan, or brown linear hairless plaque most commonly on the scalp or forehead (Fig. 6.87)

### ***Differential Diagnosis***

- Aplasia cutis congenita
- Congenital melanocytic nevus
- Congenital triangular alopecia
- Linear verrucous epidermal nevus
- Juvenile xanthogranuloma
- Mastocytoma
- Seborrheic keratosis



**Fig. 6.87** Nevus sebaceus

### ***Associations (Tumors Arising Within)***

- Basal cell carcinoma
- Chondroid syringoma
- Hidradenoma
- Sebaceous epithelioma
- Squamous cell carcinoma
- Syringocystadenoma papilliferum
- Syringoma
- Trichilemmoma
- Trichoblastoma

### ***Associations***

- Epidermal nevus syndrome
- Nevus spilus
- Phacomatosis pigmentokeratotic

### ***Treatment Options***

- Observation
- Surgical excision

- Electrodesiccation and curettage
- CO<sub>2</sub> laser
- Photodynamic therapy

**Further reading:**

- Davison SP, Khachemoune A, Yu D et al (2005) Nevus sebaceus of Jadassohn revisited with reconstruction options. *Int J Dermatol* 44(2):145–150

**Nevus Spilus (Speckled Lentiginous Nevus)**

Melanocytic hamartoma of uncertain cause that is characterized by a large patch of light hyperpigmentation interspersed with more darkly pigmented macules

***Differential Diagnosis***

- Agminated junctional melanocytic nevi
- Agminated Spitz nevi
- Becker's nevus
- Café-au-lait macule
- Congenital nevus
- Linear and whorled nevoid hypermelanosis
- Nevus of Ito
- Partial unilateral/segmental lentiginosis

***Associations***

- Epidermal nevi
- FACES syndrome
- Melanoma
- Nevus sebaceus
- Phakomatosis pigmentovascularis, types III or IV

**Further reading:**

- Happle R (2007) Nevus spilus maculosus vs partial unilateral lentiginosis. J Eur Acad Dermatol Venereol 21(5):713

**Nocardiosis**

Bacterial infection with the ubiquitous and partially acid-fast *Nocardia* that has a variable presentation, including disseminated disease from an initial pulmonary focus (in immunocompromised patients, *N. asteroides*), primary cutaneous infection with sporotrichoid spread of infection (in immunocompetent patients, *N. braziliensis*), and mycetoma

***Differential Diagnosis***

- Acanthamebiasis
- Actinomycosis
- Atypical mycobacterium infection
- Blastomycosis
- Coccidioidomycosis
- Eumycetoma
- Glanders
- Histoplasmosis
- Leishmaniasis
- Sporotrichosis
- Tularemia
- Tuberculosis

***Evaluation***

- Bacterial, mycobacterial, and fungal cultures
- Chest radiography
- Complete blood count
- Gram stain of exudate

**Further reading:**

- Inamadar AC, Palit A (2003) Primary cutaneous nocardiosis: a case study and review. *Indian J Dermatol Venereol Leprol* 69(6):386–391

**Nodular Fasciitis**

Benign, pseudosarcomatous condition that is associated with trauma, affects predominantly young adults, and is characterized by a firm, sub-cutaneous nodule predominantly located on the upper extremity, or around the cranium in young children (cranial fasciitis) (Fig. 6.88)

***Differential Diagnosis***

- Dermatofibrosarcoma protuberans
- Desmoid tumor
- Enchondroma
- Epidermal inclusion cyst
- Epithelioid sarcoma
- Fibrosarcoma
- Leiomyoma



**Fig. 6.88** Nodular fasciitis

- Leiomyosarcoma
- Lipoma
- Malignant fibrous histiocytoma
- Myxoma
- Neurilemmoma
- Neurothekeoma

**Further reading:**

- Nishi SP, Brey NV, Sanchez RL (2006) Dermal nodular fasciitis: three case reports of the head and neck and literature review. *J Cutan Pathol* 33(5):378–382

**Nodular Vasculitis (Erythema Induratum of Whitfield)**

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Idiopathic type of panniculitis with predilection for young females that is characterized by erythematous tender nodules that occasionally ulcerate, drain, and scar and that are most commonly located on the posterior aspect of the lower extremity

***Differential Diagnosis***

- Antitrypsin deficiency panniculitis
- Chilblains
- Erythema nodosum leprosum
- Erythema nodosum
- Factitial panniculitis
- Infectious panniculitis
- Lupus panniculitis
- Pancreatic panniculitis
- Perniosis
- Polyarteritis nodosa
- Subcutaneous lymphoma
- Subcutaneous sarcoidosis
- Thrombophlebitis

### ***Evaluation***

- Bacterial, mycobacterial, and fungal cultures of blood and lesional tissue
- Chest radiograph
- Complete blood count
- PCR of lesional skin
- Sedimentation rate
- Tuberculin skin test

### ***Treatment Options***

- Antituberculosis therapy
- Potassium iodide
- Dapsone
- Colchicine
- Hydroxychloroquine
- Mycophenolate mofetil
- Systemic corticosteroids
- NSAIDs

### **Further reading:**

- Requena L, Sanchez Yus E (2001) Panniculitis. Part II. Mostly lobular panniculitis. *J Am Acad Dermatol* 45(3):325–361

### **Noonan Syndrome**

Autosomal-dominant or sporadic syndrome that resembles Turner syndrome but can affect males, is caused by a defect in the PTPN11 gene, and is characterized by many features, including keratosis pilaris atrophicans faciei, short stature, cryptorchidism, pulmonic stenosis, cubitus valgus, and lymphedema

### ***Differential Diagnosis***

- Cardiofaciocutaneous syndrome
- Costello syndrome
- Fetal alcohol syndrome
- Legius syndrome
- LEOPARD syndrome
- Neurofibromatosis
- Turner syndrome
- Watson syndrome

### ***Evaluation***

- Echocardiography

### **Further reading:**

- Fox LP, Geyer AS, Anyane-Yeboah K et al (2005) Cutis verticis gyrata in a patient with Noonan syndrome. *Pediatr Dermatol* 22(2):142–146

### **Notalgia Paresthetica**

Neurocutaneous disorder that may be caused by nerve root irritation of thoracic nerves and is characterized by the sensation of burning pain or itch on one side of the back, inferior to the scapula, with or without hyperpigmentation in the affected area and possible associated macular amyloidosis

### ***Differential Diagnosis***

- Atopic dermatitis
- Contact dermatitis
- Elastofibroma dorsi
- Fixed drug eruption
- Intercostal neuralgia



- Leprosy
- Lichen amyloidosis
- Lichen simplex chronicus
- Macular amyloidosis
- Postherpetic neuralgia
- Thoracic outlet syndrome
- Tinea incognito
- Xerosis
- Zoster

### ***Treatment Options***

- Lidocaine patches
- Capsaicin cream
- Doxepin cream
- Pramoxine cream
- Gabapentin
- Amitriptyline
- Topiramate
- Carbamazepine
- Physical therapy
- Transcutaneous electric nerve stimulation
- Spinal surgery

### **Further reading:**

- Savk O, Savk E (2005) Investigation of spinal pathology in notalgia paresthetica. *J Am Acad Dermatol* 52(6):1085–1087

## **Nummular Eczema**

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Idiopathic type of eczema that predominantly affects adults and is characterized by coin-shaped, pruritic eczematous plaques with a predilection for the dorsal extremities, shoulders, breasts, and buttocks

## ***Differential Diagnosis***

- Asteatotic eczema
- Atopic dermatitis
- Autosensitization dermatitis
- Bowen's disease
- Contact dermatitis
- Dermatitis herpetiformis
- Lichen simplex chronicus
- Mycosis fungoides
- Nummular-eczema-like drug eruption
- Parapsoriasis
- Pityriasis rosea
- Psoriasis
- Scabies
- Tinea corporis

## ***Treatment Options***

- Emollients
- Topical corticosteroids
- Systemic antibiotics
- Systemic corticosteroids
- Cyclosporine
- Tar
- Tacrolimus ointment
- Narrowband UVB phototherapy
- Methotrexate

## **Further reading:**

- Krupa Shankar DS, Shrestha S (2005) Relevance of patch testing in patients with nummular dermatitis. *Indian J Dermatol Venereol Leprol* 71(6):406–408

## Ochronosis, Exogenous

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Localized pigmentary disturbance caused by application of various chemicals, such as hydroquinone, with subsequent inhibition of homogentisic acid oxidase that is characterized by blue-black patches on the exposed area, most commonly the face

### *Differential Diagnosis*

- Acanthosis nigricans
- Alkaptonuria
- Argyria
- Drug-induced hyperpigmentation
- Fixed drug eruption
- Melasma
- Nevus of Ota
- Photosensitive drug reaction
- Pigmented contact dermatitis
- Postinflammatory hyperpigmentation
- Riehl's melanosis
- Sarcoidosis

### **Further reading:**

- Huerta Brogeras M, Sanchez-Viera M (2006) Exogenous ochronosis. *J Drugs Dermatol* 5(1):80–81

## Oculocutaneous Albinism

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Refers to several different pigmentary disorders (oculocutaneous albinism, types I–IV) that are characterized by failure to produce or distribute melanin in the skin and eyes and are characterized by variable pigmentary dilution of the skin, hair, and eyes, increased sensitivity to ultraviolet radiation with skin cancers early in life, visual defects, and numerous other defects

### *Differential Diagnosis*

- Chediak–Higashi syndrome
- Griscelli syndrome
- Hermansky–Pudlak syndrome
- Homocystinuria
- Menkes syndrome
- Phenylketonuria
- Tietze syndrome

### *Associations*

- Angelman syndrome
- Prader–Willi syndrome

### **Further reading:**

- Okulicz JF, Shah RS, Schwartz RA, Janniger CK (2003) Oculocutaneous albinism. *J Eur Acad Dermatol Venereol* 17(3):251–256

## **Olmsted Syndrome**

Keratinization disorder with uncertain inheritance pattern and cause that is characterized by a severe, mutilating, and painful type of palmoplantar keratoderma with pseudoainhum, nail dystrophy, and periorificial hyperkeratotic plaques

### *Differential Diagnosis*

- Acrodermatitis enteropathica
- Chronic mucocutaneous candidiasis
- Giant verruca
- Keratitis–ichthyosis–deafness syndrome
- Mal de Meleda
- Pachyonychia congenita

- Psoriasis
- Verrucous carcinoma
- Vohwinkel syndrome

**Further reading:**

- Mevorah B, Goldberg I, Sprecher E et al (2005) Olmsted syndrome: mutilating palmoplantar keratoderma with periorificial keratotic plaques. *J Am Acad Dermatol* 53(5 Suppl 1):S266–S272

**Onchocerciasis (Robles Disease)**

Tropical infestation that is caused by the microfilarial form of *Onchocerca volvulus*, is transmitted by the *Simulium* blackfly, and is characterized by cutaneous nodules, lichenification (sowda), atrophy (lizard skin), ichthyosis, a papular eruption, lymphedema, pruritus, and hypopigmentation (leopard skin)

***Differential Diagnosis***

- Acquired ichthyosis
- Allergic contact dermatitis
- Atopic dermatitis
- Chemical leukoderma
- Chronic eczema
- Dermatophytosis
- Insect bites
- Leprosy
- Leukoderma of scleroderma
- Lichen planus
- Lichen sclerosus et atrophicus
- Loiasis
- Pityriasis lichenoides
- Postinflammatory hypopigmentation
- Scabies

- Syphilitic leukoderma
- Vitiligo

**Further reading:**

- Udall DN (2007) Recent updates on onchocerciasis: diagnosis and treatment. Clin Infect Dis 44(1):53–60

## Onychomatricoma

Benign filiform tumor of the nail matrix that causes thickening of the nail plate, longitudinal ridging, transverse overcurvature, splinter hemorrhages, yellow discoloration, and longitudinal cavities within the nail plate

### *Differential Diagnosis*

- Acral fibrokeratoma
- Bowen's disease
- Onychomycosis
- Osteochondroma
- Porocarcinoma
- Squamous cell carcinoma
- Subungual exostosis
- Subungual keratoacanthoma
- Wart

**Further reading:**

- Piraccini BM, Antonucci A, Rech G et al (2007) Onychomatricoma: first description in a child. Pediatr Dermatol 24(1):46–48

## Oral Florid Papillomatosis (Ackerman Tumor)

Type of verrucous carcinoma that affects the oral cavity of older patients, is caused most commonly by HPV types VI and XI, and is characterized by a white verrucous plaque on the buccal mucosa or gums

### ***Differential Diagnosis***

- Darier's disease
- Granular cell tumor
- Fibromas
- Focal epithelial hyperplasia (Heck's disease)
- Leukoplakia
- Lymphangioma
- Malignant acanthosis nigricans
- Proliferative verrucous leukoplakia
- Squamous cell carcinoma
- White sponge nevus

### **Further reading:**

- Wenzel K, Saka B, Zimmermann R et al (2003) Malignant conversion of florid oral and labial papillomatosis during topical immunotherapy with imiquimod. *Med Microbiol Immunol* 192(3):161–164

## **Orf (Ecthyma Contagiosum)/Milker's Nodule**

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Two zoonotic viral infections with similar clinical features that are caused by parapoxviruses, occur after contact with a sheep's or goat's mouth (orf), or a cow's udder (milker's nodule), and are characterized by a evolving, solitary hemorrhagic and purulent nodule on the digits or hands

### ***Differential Diagnosis***

- Anthrax
- Cowpox
- Erysipeloid
- Herpetic whitlow
- Keratoacanthoma
- Leishmaniasis
- Milker's nodule

- Molluscum contagiosum
- Mycobacterial infection
- Nocardiosis
- Pyoderma gangrenosum
- Pyogenic granuloma
- Squamous cell carcinoma
- Sporotrichosis
- Sweet's syndrome
- Syphilitic chancre, extragenital
- Tuberculosis
- Tularemia
- *Vibrio vulnificus* infection

### **Stages**

- I: Maculopapular
- II: Targetoid
- III: Acute
- IV: Regenerative
- V: Papillomatous
- VI: Regressive

### **Associations**

- Erythema multiforme
- Erythema nodosum

### **Treatment Options**

- Observation and wound care
- Surgical excision
- Cryotherapy
- Cidofovir



**Further reading:**

- Ballanger F, Barbarot S, Mollat C et al (2006) Two giant orf lesions in a heart/lung transplant patient. *Eur J Dermatol* 16(3):284–286

**Osteoma Cutis**

Deposition of bone within the skin that can occur as a primary or secondary process and is characterized by a hard nodule or plaque anywhere on the body

***Differential Diagnosis***

- Calcinosis cutis
- Cartilaginous tumors
- Foreign body reaction
- Gouty tophus
- Metastatic lesion
- Pilomatricoma
- Rheumatoid nodule

***Associations***

- Acne (miliary osteomas)
- Albright's hereditary osteodystrophy
- Fibrodysplasia ossificans progressiva
- Plate-like osteoma cutis
- Progressive osseous heteroplasia

**Further reading:**

- Thielen AM, Stucki L, Braun RP et al (2006) Multiple cutaneous osteomas of the face associated with chronic inflammatory acne. *J Eur Acad Dermatol Venereol* 20(3):321–326

## **Oxalosis, Cutaneous**

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Cutaneous manifestation of primary hyperoxaluria that is characterized by Raynaud's phenomenon, acral necrosis and gangrene, livedo reticularis, and erythematous subcutaneous nodules in a patient with a history of recurrent kidney stones

### ***Differential Diagnosis***

- Antiphospholipid antibody syndrome
- Calciphylaxis
- Cholesterol emboli syndrome
- Cryoglobulinemia
- Disseminated intravascular coagulation
- Warfarin necrosis
- Scleroderma

### ***Associations (Secondary Oxalosis)***

- Crohn's disease
- Ethylene glycol poisoning
- Excessive ascorbic acid
- Glycerol infusion
- Hemodialysis
- Methoxyflurane anesthesia
- Pyridoxine deficiency

### ***Evaluation***

- 24-h urine studies for oxalate
- Renal function

**Further reading:**

- Blackmon JA, Jeffy BG, Malone JC, Knable AL Jr (2011) Oxalosis involving the skin: case report and literature review. *Arch Dermatol* 147(11):1302–1305

## **Pachydermodactyly**

Rare, benign, idiopathic digital fibromatosis arising predominantly in younger males that is characterized by symmetric swelling of soft tissue on the lateral aspects of the second through fifth proximal interphalangeal joints

### ***Differential Diagnosis***

- Gout
- Juvenile fibromatosis
- Juvenile rheumatoid arthritis
- Knuckle pads
- Pachydermoperiostosis
- Rheumatoid arthritis
- Sarcoidosis
- Xanthomas

**Further reading:**

- Sandobal C, Kuznietz A, Varizat A, Roverano S, Paira S (2007) Pachydermodactyly: four additional cases. *Clin Rheumatol* 26(6):962–964

## **Pachydermoperiostosis (Primary Hypertrophic Osteoarthropathy, Touraine–Solente–Gole Syndrome)**

Inherited disorder (AD) of unknown cause that is characterized by cutis verticis gyrata and thickening of the skin (pachyderma), clubbing and periosteal swelling, hyperhidrosis, and acromegalic features

### ***Differential Diagnosis***

- Acromegaly
- Clubbing
- Pachydermodactyly
- Psoriatic arthritis
- Scleromyxedema
- Secondary hypertrophic osteoarthropathy
- Thyroid acropachy

### ***Associations***

- Crohn's disease
- Myelofibrosis
- Protein-losing enteropathy

### **Further reading:**

- Seyhan T, Ozerdem OR, Aliagaoglu C (2005) Severe complete pachydermoperiostosis (Touraine–Solente–Gole syndrome). *Dermatol Surg* 31(11 Pt 1):1465–1467

## **Pachyonychia Congenita**

Inherited disorder (AD) that is caused by gene defects in keratin 6a and keratin 16 (type I, Jadassohn–Lewandowski type) and keratin 6b and keratin 17 (type II, Jackson–Lawler) and that is characterized by markedly thickened nails with subungual hyperkeratosis, palmoplantar keratoderma, follicular keratotic papules on the face and extensors, oral leukokeratosis, and steatocystoma multiplex (type II)

### ***Differential Diagnosis***

- Chronic mucocutaneous candidiasis
- Dyskeratosis congenita

- Hidrotic ectodermal dysplasia
- Lichen planus
- Onychomycosis
- Palmoplantar keratodermas, hereditary
- Psoriasis
- Weber–Cockayne syndrome
- White sponge nevus

**Further reading:**

- Leachman SA, Kaspar RL, Fleckman P et al (2005) Clinical and pathological features of pachyonychia congenita. *J Investig Dermatol Symp Proc* 10(1):3–17

**Paget’s Disease of Breast**

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Cutaneous eruption overlying an intraductal breast carcinoma that is possibly caused by metastasis of malignant cells through the lactiferous or lymphatic ducts to the epidermis and is characterized by a unilateral, recalcitrant, scaly, and eczematous eruption on the nipple and areola

***Differential Diagnosis***

- Allergic contact dermatitis
- Atopic dermatitis
- Bowen’s disease
- Clear cell papulosis
- Erosive adenomatosis
- Fixed drug eruption
- Irritant dermatitis
- Melanoma
- Mycosis fungoides
- Nipple adenoma
- Nipple eczema
- Parapsoriasis
- Psoriasis

- Seborrheic dermatitis
- Tinea mammae

### ***Treatment Options***

- Surgical excision
- Radiation
- Chemotherapy

### **Further reading:**

- Kanitakis J (2007) Mammary and extramammary Paget's disease. *J Eur Acad Dermatol Venereol* 21(5):581–590

## **Pagetoid Reticulosis (Woringer–Kolopp Disease)**

Uncommon localized lymphoproliferative disorder with uncertain relationship to mycosis fungoides (unlike classic mycosis fungoides, infiltrates can be predominantly CD8+ and the disease more often arises in younger patients) that is characterized by a solitary, indolent, hyperkeratotic, erythematous plaque on the extremities, especially the palms or soles, or less commonly, multiple disseminated lesions (Ketrion–Goodman variant)

### ***Differential Diagnosis***

- CD8± epidermotropic cutaneous T cell lymphoma
- Cutaneous lymphoid hyperplasia
- Erythema annulare centrifugum
- Hand eczemas
- Lichen planus
- Lichen simplex chronicus
- Lymphomatoid papulosis, type B
- Mycosis fungoides palmaris et plantaris
- Psoriasis
- Stasis dermatitis

- Tinea corporis
- Unilesional mycosis fungoides

### ***Treatment Options***

- Topical corticosteroids
- Topical nitrogen mustard
- Phototherapy
- Surgical excision
- Radiation

### **Further reading:**

- Steffen C (2005) Ketrion-Goodman disease, Woringer-Kolopp disease, and pagetoid reticulosis. *Am J Dermatopathol* 27(1):68–85

## **Palisaded Neutrophilic and Granulomatous Dermatitis (Rheumatoid Papules)**

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Poorly defined, probably vasculitic dermatosis that is associated with autoimmunity, may be related to interstitial granulomatous dermatitis, and is characterized by symmetric, umbilicated, or eroded papules, nodules, and plaques predominantly on the extensor surface of the extremities (Fig. 6.89)

### ***Differential Diagnosis***

- Churg–Strauss syndrome
- Granuloma annulare
- Granulomatous drug reaction
- Interstitial granulomatous dermatitis with arthritis
- Methotrexate-induced papular eruption
- Necrobiosis lipoidica
- Perforating disorder
- Rheumatic fever nodule



**Fig. 6.89** Palisaded neutrophilic and granulomatous dermatitis

- Rheumatoid neutrophilic dermatosis
- Rheumatoid nodules
- Wegener's granulomatosis
- Vasculitis

### ***Associations***

- HUS/TTP
- Inflammatory bowel disease
- Myelodysplastic syndrome



- Raynaud's disease
- Rheumatoid arthritis
- Sulfa drugs
- Systemic lupus erythematosus
- Thyroiditis
- Vasculitis syndromes

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Hydroxychloroquine
- Methotrexate
- Dapsone
- Colchicine
- Cyclosporine
- Infliximab

### **Further reading:**

- Sayah A, English JC (2005) Rheumatoid arthritis: a review of the cutaneous manifestations. *J Am Acad Dermatol* 53(2):191–209

## **Palmoplantar Pustulosis**

Chronic dermatosis of the palms and soles that predominantly affects smokers and is characterized by erythematous plaques with dry, keratotic pustules in various stages of evolution

### ***Differential Diagnosis***

- Acrodermatitis continua of Hallopeau
- Allergic contact dermatitis
- Dyshidrotic eczema
- Keratoderma blennorrhagicum

- Mycosis fungoides palmaris et plantaris
- Orf/milker's nodules
- Secondary syphilis
- Tinea manuum/pedis

### **Associations**

- Psoriasis
- SAPHO syndrome
- Smoking
- Thyroiditis

### **Treatment Options**

- Topical corticosteroids
- Tetracycline antibiotics
- Acitretin
- Methotrexate
- Cyclosporine
- Sulfasalazine
- Colchicine
- TNF inhibitors
- Ustekinumab

### **Further reading:**

- Yamamoto T, Yokozeki H, Tsuboi R (2007) Koebner's phenomenon associated with palmoplantar pustulosis. *J Eur Acad Dermatol Venereol* 21(7):990–992

## **Pancreatic Panniculitis**

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Type of panniculitis associated with both pancreatitis and pancreatic cancer that is caused by lipase-induced liquefactive necrosis of the subcutaneous layer and is characterized by tender, erythematous nodules on the lower extremity that occasionally break down and discharge an oily exudate

### ***Differential Diagnosis***

- Antitrypsin deficiency panniculitis
- Erythema induratum
- Erythema nodosum
- Factitial panniculitis
- Infectious panniculitis
- Lipodermatosclerosis
- Lupus panniculitis
- Mucormycosis
- Mycetoma
- Subcutaneous lymphoma
- Traumatic panniculitis

### ***Evaluation***

- Abdominal CT scan
- Amylase level
- Calcium level
- Chest radiograph
- Complete blood count
- Joint-fluid examination
- Lipase level
- Liver function test
- Renal function test

### ***Treatment Options***

- Treat the underlying cause

### **Further reading:**

- Requena L, Sanchez Yus E (2001) Panniculitis. Part II. Mostly lobular panniculitis. *J Am Acad Dermatol* 45(3):325–361

## **Panniculitis, Poststeroid**

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Uncommon type of panniculitis that predominantly affects children shortly after rapid withdrawal of systemic glucocorticosteroids and is characterized by indurated erythematous subcutaneous nodules on the adipose-rich areas of the body, especially the cheeks

### ***Differential Diagnosis***

- Atopic dermatitis
- Cellulitis/erysipelas
- Cold panniculitis
- Erythema infectiosum
- Erythema nodosum
- Lupus erythematosus
- Periapical dental abscess
- Sclerema neonatorum
- Subcutaneous fat necrosis of the newborn

### **Further reading:**

- Requena L, Sanchez Yus E (2001) Panniculitis. Part II. Mostly lobular panniculitis. *J Am Acad Dermatol* 45(3):325–361

## **Papular and Purpuric Gloves and Stockings Syndrome**

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Cutaneous manifestation of viral infection, especially parvovirus infection, that typically affects young, healthy adults and is characterized by a sharply marginated eruption of edema, erythematous papules, and petechiae on the hands and feet

### ***Differential Diagnosis***

- Contact dermatitis
- Erythema multiforme

- Erythromelalgia
- Gianotti–Crosti syndrome
- Kawasaki disease
- Hand–foot–mouth syndrome
- Lichen planus
- Psoriasis
- Rocky Mountain spotted fever

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Carlesimo M, Palese E, Mari E et al (2006) Gloves and socks syndrome caused by parvovirus B19 infection. *Dermatol Online J* 12(6):19

## **Papular Elastorrhexis**

Uncommon, idiopathic disorder of elastic tissue that is characterized by the development in adolescence of multiple, white, firm, nonfollicular papules on the trunk and extremities (a variant of papular elastorrhexis that is localized to the trunk is called nevus anelasticus)

### ***Differential Diagnosis***

- Anetoderma
- Collagenomas
- Idiopathic guttate hypomelanosis
- Middermal elastolysis
- Papular acne scars (perifollicular elastolysis)

### **Further reading:**

- Choi Y, Jin SY, Lee JH et al (2011) Papular elastorrhexis: a case and differential diagnosis. *Ann Dermatol* 23 Suppl 1:S53–S56

## **Papular Urticaria**

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Pruritic hypersensitivity reaction to arthropod bites that predominantly affects atopic children and is characterized by erythematous, excoriated, and impetiginized papules and nodules that are most commonly located on the lower extremity

### ***Differential Diagnosis***

- Atopic dermatitis
- Autosensitization dermatitis
- Dermatitis herpetiformis
- Drug eruption
- Furunculosis
- Gianotti–Crosti syndrome
- Grover’s disease
- Id reaction
- Impetigo
- Lymphomatoid papulosis
- Mastocytosis
- Pityriasis lichenoides et varioliformis acuta
- Prurigo nodularis
- Pruritic papular eruption of HIV
- Scabies
- Urticaria
- Varicella

### ***Treatment Options***

- Topical corticosteroids
- Tacrolimus ointment
- Antihistamines
- Menthol, camphor, and pramoxine lotions
- Insect repellants

**Further reading:**

- Stibich AS, Schwartz RA (2001) Papular urticaria. *Cutis* 68(2):89–91

**Papuloerythroderma of Ofuji**

Rare disease affecting older men, especially those of Asian descent, that is possibly a precursor to cutaneous T cell lymphoma and that is characterized by widespread pruritic, erythematous papules and plaques with sparing the folds of the trunk (deck-chair sign)

***Differential Diagnosis***

- Atopic dermatitis
- Bullous pemphigoid
- Contact dermatitis
- Cutaneous lymphoid hyperplasia
- Cutaneous T cell lymphoma
- Dermatitis herpetiformis
- Drug eruption
- Grover's disease
- Hypereosinophilic syndrome
- Idiopathic erythroderma
- Pityriasis rubra pilaris
- Prurigo
- Psoriasis
- Scabies
- Urticarial dermatitis

***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Acitretin

- Phototherapy
- Cyclosporine

**Further reading:**

- Martinez-Barranca ML, Munoz-Perez MA, Garcia-Morales I et al (2005) Ofuji papuloerythroderma evolving to cutaneous T-cell lymphoma. *J Eur Acad Dermatol Venereol* 19(1):104–106

## **Papulonecrotic Tuberculid**

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Type of tuberculid affecting patients with active tuberculosis that is characterized by recurrent crops of asymptomatic, erythematous, necrotic papules affecting the extensor extremities and resolving to varioliform scars

### ***Differential Diagnosis***

- Churg–Strauss granuloma
- Drug reaction
- Endocarditis
- Erythema multiforme
- Leukocytoclastic vasculitis
- Lymphomatoid papulosis
- Miliary tuberculosis
- Papular eczema
- Papular urticaria
- Perforating granuloma annulare
- Pityriasis lichenoides et varioliformis acuta
- Prurigo nodularis
- Reactive perforating collagenosis
- Secondary syphilis

**Further reading:**

- Akhras V, McCarthy G (2007) Papulonecrotic tuberculid in an HIV-positive patient. *Int J STD AIDS* 18(9):643–644



## Paracoccidioidomycosis (South American Blastomycosis, Lutz Disease)

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Respiratory mycosis with secondary dissemination to the skin that predominantly affects men, is caused by *Paracoccidioides brasiliensis*, and is characterized by lymphadenopathy and erythematous ulcerated papules and nodules on mucocutaneous surfaces, especially on the gingiva, tongue, lips, and nose

### *Differential Diagnosis*

- Actinomycosis
- Blastomycosis
- Coccidioidomycosis
- Histoplasmosis
- Hodgkin's disease
- Mucocutaneous leishmaniasis
- NK cell lymphoma
- Oral squamous cell carcinoma
- Rhinoscleroma
- Rhinosporidiosis
- Sporotrichosis
- Syphilis
- Tuberculosis
- Wegener's granulomatosis

### *Evaluation*

- Chest radiograph
- Fungal culture
- Potassium hydroxide examination of lesional tissue
- Serologic immunodiffusion assay for antibodies

### **Further reading:**

- Lupi O, Tyring SK, McGinnis MR (2005) Tropical dermatology: fungal tropical diseases. *J Am Acad Dermatol* 53(6):931-951

## **Parakeratosis Pustulosa**

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Nail disorder with uncertain association to psoriasis, eczema, and other inflammatory skin diseases that predominantly affects one or multiple digits of the hands and feet of young children and is characterized by nontender, erythematous, periungual changes with fine scale, onycholysis, and onychorrhexis

### ***Differential Diagnosis***

- Acrodermatitis continua
- Acrodermatitis enteropathica
- Atopic dermatitis
- Blistering distal dactylitis
- Chronic mucocutaneous candidiasis
- Dermatophytosis
- Ectodermal dysplasia
- Epidermolysis bullosa
- Herpetic whitlow
- Kawasaki disease
- Langerhans cell histiocytosis
- Lichen nitidus
- Lichen planus
- Lichen striatus
- Onychophagia
- Paronychia
- Psoriasis

### ***Treatment Options***

- Topical corticosteroids
- Topical retinoids
- Topical vitamin D analogues
- Tacrolimus ointment

**Further reading:**

- Pandhi D, Chowdhry S, Grover C et al (2003) Parakeratosis pustulosa: a distinct but less familiar disease. *Indian J Dermatol Venereol Leprol* 69(1):48–50

**Paraneoplastic Pemphigus  
(Paraneoplastic Autoimmune Multiorgan Syndrome)**

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Paraneoplastic autoimmune blistering disease that is caused by autoantibodies directed against several different epidermal and basement membrane zone antigens and is characterized by intractable stomatitis and a polymorphous lichenoid, bullous, or erythrodermatous eruption

***Differential Diagnosis***

- Bullous pemphigoid
- Candidiasis
- Chemotherapy-related stomatitis
- Cicatricial pemphigoid
- Epidermolysis bullosa acquisita
- Erythema multiforme
- Graft-vs-host disease
- Lichen planus
- Lichenoid drug eruption
- Pemphigus vulgaris
- Persistent herpes simplex virus infection
- Stevens–Johnson syndrome

***Diagnostic Criteria***

- Painful progressive stomatitis with preferential tongue involvement
- Histologic features of acantholysis, lichenoid, or interface dermatitis

- Demonstration of antiplakin antibodies
- Demonstration of underlying lymphoproliferative disorder

### ***Associations***

- Bronchogenic squamous cell carcinoma
- Castleman's disease
- Chronic lymphocytic leukemia
- Liposarcoma
- Non-Hodgkin's lymphoma
- Sarcoma
- Thymoma
- Waldenstrom's macroglobulinemia

### ***Evaluation***

- Appropriate cancer screening
- Chemistry panel
- Complete blood count
- CT scan of chest, abdomen, and pelvis
- Direct immunofluorescence
- Indirect immunofluorescence on monkey esophagus and rat bladder
- Lymph node exam
- Serum protein electrophoresis

### ***Treatment Options***

- Treat the underlying cause

### **Further reading:**

- Park GT, Lee JH, Yun SJ et al (2007) Paraneoplastic pemphigus without an underlying neoplasm. *Br J Dermatol* 156(3):563–566



**Fig. 6.90** Large plaque parapsoriasis

### **Parapsoriasis, Large Plaque**

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Chronic inflammatory skin disease affecting older adults that may represent a precursor to cutaneous T cell lymphoma and is characterized by large scaly, atrophic, or poikilodermatous plaques on the lower trunk, buttocks, and proximal lower extremities (Fig. 6.90)

#### ***Differential Diagnosis***

- Chronic radiation dermatitis
- Contact dermatitis
- Dermatomyositis
- Dermatophytosis
- Lupus erythematosus
- Lichen planus
- Mycosis fungoides
- Nummular eczema
- Poikilodermatous genodermatoses
- Pityriasis rosea

- Psoriasis
- Seborrheic dermatitis
- Small plaque parapsoriasis
- Syphilis
- Topical steroid atrophy

### ***Treatment Options***

- Topical corticosteroids
- Narrowband UVB
- Topical nitrogen mustard

### **Further reading:**

- Vakeva L, Sarna S, Vaalasti A et al (2005) A retrospective study of the probability of the evolution of parapsoriasis en plaques into mycosis fungoides. *Acta Derm Venereol* 85(4):318–323

## **Parapsoriasis, Small Plaque**

Idiopathic, benign inflammatory skin disease with no potential to progress to cutaneous T cell lymphoma that is characterized by pink, often digitate, finely scaly plaques on the trunk (especially the flanks) and extremities

### ***Differential Diagnosis***

- Contact dermatitis
- Leprosy
- Lichen planus
- Lupus erythematosus
- Mycosis fungoides
- Nummular eczema
- Pityriasis alba
- Pityriasis rosea

- Pityriasis-rosea-like drug eruption
- Psoriasis
- Secondary syphilis
- Tinea versicolor
- Xerosis

### ***Treatment Options***

- Topical corticosteroids
- Narrowband UVB

### **Further reading:**

- Aydoğan K, Karadogan SK, Tunali S et al (2006) Narrowband UVB phototherapy for small plaque parapsoriasis. *J Eur Acad Dermatol Venereol* 20(5):573–577

## **Paronychia**

Acute or chronic inflammatory process affecting the proximal and/or lateral nail folds that is most often caused by an acute staphylococcal infection or a chronic *Candida* superinfection (after cuticular separation from the nail plate) and is characterized by pain, swelling, purulent material, and thickening of the nail fold

### ***Differential Diagnosis***

- Acrodermatitis continua
- Acrodermatitis enteropathica
- Acrokeratosis paraneoplastica
- Aggressive digital papillary adenocarcinoma
- Bowen's disease
- Herpetic whitlow
- Hypoparathyroidism
- Indinavir therapy
- Irritant contact dermatitis

- Keratoacanthoma
- Leukemia cutis
- Onychomycosis
- Parakeratosis pustulosa
- Pemphigus vulgaris
- Periungual melanoma
- Periungual metastasis
- Psoriatic nail disease
- Reiter syndrome
- Retinoid therapy
- Squamous cell carcinoma
- Syphilitic chancre
- Tuberculosis
- Verrucous carcinoma

### ***Treatment Options***

- Incision and drainage (acute)
- Topical antibiotics
- Systemic antibiotics
- Topical corticosteroids (chronic)
- Nystatin
- Fluconazole (chronic)
- Thymol in chloroform

### **Further reading:**

- Luther J, Glesby MJ (2007) Dermatologic adverse effects of antiretroviral therapy: recognition and management. *Am J Clin Dermatol* 8(4):221–233

## **Paroxysmal Nocturnal Hemoglobinuria**

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Rare stem-cell disorder associated with hemolytic anemia, hypercoagulability, and bone marrow failure that has uncommon cutaneous manifestations, including pyoderma-gangrenosum-like lesions and hemorrhagic bullae



### ***Differential Diagnosis***

- Cryoglobulinemia
- Felty syndrome
- Leukemia cutis
- Lymphoma
- Polyarteritis nodosa
- Purpura fulminans
- Pyoderma gangrenosum
- Septic vasculitis
- Sweet's syndrome
- Wegener's granulomatosis

#### **Further reading:**

- White JM, Watson K, Arya R et al (2003) Haemorrhagic bullae in a case of paroxysmal nocturnal haemoglobinuria. *Clin Exp Dermatol* 28(5):504–505

### **Pearly Penile Papules**

Benign penile angiofibromas that are characterized by a row of pearly, smooth dome-shaped papules on the coronal sulcus of the penis

### ***Differential Diagnosis***

- Condyloma acuminata
- Lichen nitidus
- Lichen planus
- Molluscum contagiosum
- Papular mucinosis
- Scabies

#### **Further reading:**

- Agrawal SK, Bhattacharya SN, Singh N (2004) Pearly penile papules: a review. *Int J Dermatol* 43(3):199–201

## **Pediculosis Capitis**

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Infestation of scalp hair that predominantly affects children, is caused by *Pediculus humanus* var. *capitis*, and is characterized by nits attached to the hair follicles, scalp pruritus, and, occasionally, an associated id reaction

### ***Differential Diagnosis***

- Acne keloidalis
- Delusions of parasitosis
- Folliculitis decalvans
- Hair casts
- Impetigo
- Piedra
- Pityriasis amiantacea
- Plica polonica
- Psoriasis
- Scalp dysesthesia
- Seborrheic dermatitis
- Tinea capitis

### ***Treatment Options***

- Topical permethrin 1% and 5%
- Malathion lotion
- Lindane shampoo
- Ivermectin
- Sulfamethoxazole–trimethoprim
- Benzyl alcohol 5% lotion
- Carbaryl shampoo
- Spinosad

### **Further reading:**

- Ko CJ, Elston DM (2004) Pediculosis. *J Am Acad Dermatol* 50(1):1–12

## **Pediculosis Corporis/Pubis**

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Infestation of the body or pubic area caused by *Pediculus humanus var corporis* or the sexually transmitted *Phthirus pubis*, respectively, that is characterized by macula cerulea, excoriations, nits on the pubic hair, eye-lashes, clothing, and bedding

### ***Differential Diagnosis***

- Delusions of parasitosis
- Drug reaction
- Ephelid
- Formication
- Hair casts
- Irritant dermatitis
- Neurodermatitis
- Pigmented purpuric dermatosis
- Scabies
- Trichomycosis axillaris

### ***Associations***

- Epidemic typhus
- Id reaction
- Relapsing fever
- Trench fever

### ***Treatment Options***

- Laundrying of all clothing and bedsheets (body lice)
- Topical permethrin 1% and 5%
- Malathion lotion
- Lindane shampoo

- Ivermectin
- Sulfamethoxazole–trimethoprim
- Benzyl alcohol 5% lotion
- Carbaryl shampoo
- Spinosad

**Further reading:**

- Ko CJ, Elston DM (2004) Pediculosis. *J Am Acad Dermatol* 50(1):1–12

## **Peeling Skin Syndrome**

Rare, life-long keratinization disorder (probably AR) with onset at birth or early childhood that is characterized by asymptomatic, spontaneous intracorneal or subcorneal, nonvesicular peeling without inflammation (type A) or with inflammation (type B) in a generalized distribution or, less commonly, in an acral or facial distribution

### ***Differential Diagnosis***

- Bullous mastocytosis
- Collodion baby
- Nonbullous congenital ichthyosiform erythroderma
- Epidermolysis bullosa simplex (especially superficialis type)
- Kawasaki disease
- Ichthyosis bullosa of Siemens
- Viral infections
- Netherton syndrome
- Scarlet fever
- Staphylococcal scalded-skin syndrome
- Sunburn

**Further reading:**

- Janjua SA, Hussain I, Khachemoune A (2007) Facial peeling skin syndrome: a case report and a brief review. *Int J Dermatol* 46(3):287–289

## **Pellagra**

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Potentially fatal disorder associated with a variety of causes of niacin deficiency that is characterized by a photodistributed, hyperpigmented, scaly eruption around the neck (Casal's necklace), face, and arms along with dementia and diarrhea

### ***Differential Diagnosis***

- Chronic actinic dermatitis
- Contact dermatitis
- Erythropoietic protoporphyria
- Hartnup syndrome
- Kwashiorkor
- Lupus erythematosus
- Pemphigus erythematosus
- Porphyria cutanea tarda
- Photosensitive drug reaction
- Polymorphous light eruption
- Seborrheic dermatitis
- Variegate porphyria

### ***Associations***

- 6MP/Azathioprine
- Alcoholism
- Anorexia nervosa
- Carcinoid syndrome
- Corn-rich diet
- Niacin deficiency
- Gastrointestinal diseases
- Hartnup disease
- Isoniazid

- Pyridoxine deficiency
- Total parenteral nutrition

### **Evaluation**

- Complete blood count
- Liver function test
- Serum niacin and tryptophan levels
- Urinary 5-HIAA

### **Further reading:**

- Hegyi J, Schwartz RA, Hegyi V (2004) Pellagra: dermatitis, dementia, and diarrhea. *Int J Dermatol* 43(1):1–5

## **Pemphigoid, Bullous**

Subepidermal autoimmune blistering disorder caused by the production of antibodies against BPAgs1 and 2 that affects the elderly most commonly and is characterized by pruritic urticarial skin lesions and tense inflammatory bullae located on the lower trunk, flexures, and proximal extremities

### **Subtypes/Variants**

- Childhood
- Cicatricial
- Dyshidrosiform
- Erythrodermic
- Gestational
- Nonbullous
- Pemphigoid nodularis
- Pemphigoid vegetans
- Polymorphic
- Pretibial
- Seborrhic
- Vulvar

### ***Differential Diagnosis***

- Arthropod-bite reaction
- Bullous drug reaction
- Bullous impetigo
- Bullous mastocytosis
- Cicatricial pemphigoid
- Contact dermatitis
- Drug reaction
- Epidermolysis bullosa acquisita
- Erythema multiforme
- Linear IgA bullous dermatosis
- Pemphigoid gestationis
- Porphyria cutanea tarda
- Pompholyx
- Prurigo simplex
- Pseudoporphyria
- Scabies
- Urticaria
- Urticarial vasculitis
- Vasculitis

### ***Associated Medications***

- ACE inhibitors
- Amiodarone
- Benzodiazepines
- Furosemide
- Influenza vaccine
- Nalidixic Acid
- NSAIDs
- Penicillin
- Penicillamine
- Sulfasalazine

## **Evaluation**

- Direct immunofluorescence

## **Treatment Options**

- Topical corticosteroids
- Systemic corticosteroids
- Tetracycline
- Nicotinamide
- Dapsone
- Azathioprine
- Mycophenolate mofetil
- Methotrexate
- Cyclophosphamide
- Cyclosporine
- Plasmapheresis
- Intravenous immunoglobulin

## **Further reading:**

- Lamb PM, Abell E, Tharp M et al (2006) Prodromal bullous pemphigoid. *Int J Dermatol* 45(3):209–214

## **Pemphigoid, Cicatricial (Mucosal Pemphigoid, Lortat–Jacob Disease)**

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Scarring type of autoimmune blistering disease affecting predominantly the elderly that is caused by the production of autoantibodies against one of several basement membrane proteins and that is characterized by sub-epidermal blister formation involving mostly mucosal surfaces, which leads to oral or genital erosions, desquamative gingivitis, synechiae, and symblepharon



### ***Subtypes/Variants***

- Ocular type
- Localized (Brunsting–Perry) type
- Antiepilegrin (antilaminin 5, malignancy-associated) type

### ***Differential Diagnosis***

- Angina bullosa hemorrhagica
- Bullous pemphigoid
- Infectious conjunctivitis
- Epidermolysis bullosa acquisita
- Erosive lichen planus
- Erythema multiforme
- Linear IgA bullous dermatosis
- Ocular pseudopemphigoid (drug-induced)
- Ophthalmic zoster
- Paraneoplastic pemphigus
- Pemphigus vulgaris
- Stevens–Johnson syndrome

### ***Associated Medications***

- Timolol

### ***Evaluation***

- Direct immunofluorescence
- Indirect immunofluorescence (with salt split skin)
- Appropriate cancer screening (especially if antiepilegrin)

### ***Treatment Options***

- Systemic corticosteroids
- Dapsone

- Azathioprine
- Mycophenolate mofetil
- Cyclophosphamide
- Rituximab
- Plasmapheresis
- Intravenous immunoglobulin

**Further reading:**

- Chan LS, Ahmed AR, Anhalt GJ (2002) The first international consensus on mucous membrane pemphigoid: definition, diagnostic criteria, pathogenic factors, medical treatment, and prognostic indicators. *Arch Dermatol* 138(3):370–379

## **Pemphigoid Gestationis**

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Subepidermal autoimmune blistering disease associated with pregnancy that is caused by autoantibodies directed against BPAg2 and is characterized by pruritic urticarial plaques and tense bullae most commonly located on the abdomen (including the umbilicus)

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Autoimmune progesterone dermatitis
- Bullous scabies
- Cholestasis of pregnancy
- Dermatitis herpetiformis
- Drug eruption
- Erythema multiforme
- Herpes simplex virus infection
- Impetigo herpetiformis
- Linear IgA bullous dermatosis
- Prurigo of pregnancy
- Pruritic urticarial papules and plaques of pregnancy
- Urticaria

### **Associations**

- Graves' disease

### **Evaluation**

- Complete blood count
- Direct immunofluorescence
- Indirect immunofluorescence
- Thyroid function tests

### **Treatment Options**

- Topical corticosteroids
- Systemic corticosteroids
- Antihistamines
- Dapsone
- Cyclophosphamide
- Cyclosporine
- Plasmapheresis
- Intravenous immunoglobulin

### **Further reading:**

- Al-Fouzan AW, Galadari I, Oumeish I et al (2006) Herpes gestationis (pemphigoid gestationis). Clin Dermatol 24(2):109–112

## **Pemphigus**

Family of intraepidermal autoimmune blistering diseases of which there are several different types with variable clinical features depending on the epidermal antigen targeted

### **Subtypes/Variants**

- Drug-induced pemphigus
- IgA pemphigus

- Paraneoplastic pemphigus
- Pemphigus erythematosus
- Pemphigus foliaceus
- Pemphigus herpetiformis
- Pemphigus vegetans
- Pemphigus vulgaris

### ***Associations***

- Foods
- Hormones
- Infectious agents
- Malignancy
- Medications
- Pesticides
- Stress
- Thymoma
- Ultraviolet light

### ***Associated Medications***

- ACE inhibitors (especially captopril)
- Beta-blockers
- Heroin
- IL-2
- Penicillamine
- Penicillin
- Progesterone
- Rifampin
- Sulfa drugs

### ***Evaluation***

- Direct immunofluorescence
- Indirect immunofluorescence

- Antidesmoglein antibody titers
- Chest radiograph

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Azathioprine
- Mycophenolate mofetil
- Methotrexate
- Cyclophosphamide
- Rituximab
- Plasmapheresis
- Intravenous immunoglobulin

### **Further reading:**

- Brenner S, Mashiah J, Tamir E et al (2003) PEMPHIGUS: an acronym for a disease with multiple etiologies. *Skinmed* 2(3):163–167
- Grando SA (2006) Pemphigus in the XXI century: new life to an old story. *Autoimmunity* 39(7):521–530

## **Pemphigus Erythematosus (Senear–Usher Syndrome)**

Type of sunlight-associated pemphigus that is caused by IgG autoantibodies directed against desmoglein 1 and is characterized by flaccid vesiculobullous lesions and crusts on the malar portion of the face, the chest, and the back (Fig. 6.91)

### ***Differential Diagnosis***

- Acute lupus erythematosus
- Chronic actinic dermatitis
- Pellagra
- Pemphigus foliaceus



**Fig. 6.91** Pemphigus erythematosus (Courtesy of K. Guidry)

- Photocontact dermatitis
- Photosensitive drug reaction
- Rosacea
- Subacute lupus erythematosus
- Seborrheic dermatitis

### *Evaluation/Treatment Options*

- See “[Pemphigus](#)”

#### **Further reading:**

- Scheinfeld NS, Howe KL, di Costanzo DP et al (2003) Pemphigus erythematosus associated with anti-DNA antibodies and multiple anti-ENA antibodies: a case report. *Cutis* 71(4):303–306

### **Pemphigus Foliaceus (Cazenave’s Disease)**

Type of pemphigus that is caused by IgG autoantibodies against desmoglein 1 and is characterized by flaccid vesiculobullous lesions and crusts primarily on the scalp, face, upper chest, and upper back

### ***Differential Diagnosis***

- Bullous impetigo
- Contact dermatitis
- Darier's disease
- Dermatitis herpetiformis
- Dermatophytosis
- Erythema multiforme
- Exfoliative erythroderma
- Friction blister
- Fogo selvagem
- Grover's disease
- Hailey–Hailey disease
- IgA pemphigus
- Impetiginized dermatitis
- Lupus erythematosus
- Linear IgA dermatosis
- Necrolytic migratory erythema
- Nummular eczema
- Pemphigus erythematosus
- Pemphigus vulgaris
- Seborrheic dermatitis
- Subcorneal pustular dermatosis
- Staphylococcal scalded-skin syndrome

### ***Evaluation/Treatment Options***

- See “[Pemphigus](#)”

### **Further reading:**

- Zaraq I, Mokni M, Hsairi M et al (2007) Pemphigus vulgaris and pemphigus foliaceus: similar prognosis? *Int J Dermatol* 46(9):923–926

## **Pemphigus, IgA**

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Type of pemphigus that is caused by IgA autoantibodies directed against desmocollin 1 (SPD type) or desmoglein 1 or 3 (IEN type) and is characterized by flaccid vesiculopustules [occasionally in a sunflower configuration (IEN type)] on the scalp, trunk, and extremities

### ***Subtypes/Variants***

- Intraepidermal neutrophilic (IEN) type
- Subcorneal pustular dermatosis (SPD) type

### ***Differential Diagnosis***

- Acute generalized exanthematous pustulosis
- Bullous impetigo
- Paraneoplastic pemphigus
- Pemphigus foliaceus
- Pemphigus herpetiformis
- Pemphigus vulgaris
- Pustular psoriasis
- Subcorneal pustular dermatosis

### ***Associations***

- IgA monoclonal gammopathy
- Pyoderma gangrenosum

### ***Evaluation/Treatment Options***

- See “[Pemphigus](#)”
- Serum protein electrophoresis
- Immunoglobulin levels



**Further reading:**

- Aste N, Fumo G, Pinna AL et al (2003) IgA pemphigus of the subcorneal pustular dermatosis type associated with monoclonal iga gammopathy. *J Eur Acad Dermatol Venereol* 17(6):725–727

## **Pemphigus Vegetans**

Type of pemphigus caused by IgG autoantibodies directed against desmoglein 3 that is characterized by moist, vegetating, eroded plaques most commonly in the flexural areas

### ***Differential Diagnosis***

- Acute generalized exanthematous pustulosis
- Axillary granular parakeratosis
- Blastomycosis
- Botryomycosis
- Chromoblastomycosis
- Condyloma lata
- Darier's disease
- Granuloma inguinale
- Hailey–Hailey disease
- Halogenoderma
- Subcorneal pustular dermatosis

### ***Evaluation/Treatment Options***

- See “[Pemphigus](#)”

**Further reading:**

- Markopoulos AK, Antoniadis DZ, Zaraboukas T (2006) Pemphigus vegetans of the oral cavity. *Int J Dermatol* 45(4):425–428



**Fig. 6.92** Pemphigus vulgaris  
(Courtesy of K. Guidry)

## Pemphigus Vulgaris

Type of pemphigus caused by IgG autoantibodies directed against desmogleins 1 and 3 that is characterized by erosions arising in the mucosal areas with or without skin involvement; when the skin is involved, flaccid vesiculobullous lesions occur on the scalp, trunk, and intertriginous areas (Fig. 6.92)

### *Differential Diagnosis*

- Acute herpetic stomatitis
- Aphthous stomatitis
- Bullous pemphigoid
- Cicatricial pemphigoid
- Drug-induced pemphigus

- Erythema multiforme
- Grover's disease
- Hailey–Hailey disease
- Linear IgA dermatosis
- Oral erosive lichen planus
- Paraneoplastic pemphigus
- Pemphigus foliaceus
- Stevens–Johnson syndrome

### ***Associations***

- Myasthenia gravis
- Thymoma

### ***Evaluation/Treatment Options***

- See “Pemphigus”

### **Further reading:**

- Espana A, Fernandez S, del Olmo J et al (2007) Ear, nose and throat manifestations in pemphigus vulgaris. *Br J Dermatol* 156(4):733–737

## **Perforating Calcific Elastosis (Periumbilical Pseudoxanthoma Elasticum)**

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Acquired elastic tissue disorder affecting primarily obese, multiparous women that is characterized by periumbilical, yellow, reticulated, keratotic papules that can be confluent in cobblestone-like plaques

### ***Differential Diagnosis***

- Acquired perforating dermatosis
- Calcinosis cutis
- Elastosis perforans serpiginosa

- Eruptive xanthomas
- Nodular scabies
- Perforating granuloma annulare
- Prurigo nodularis
- Pseudoxanthoma elasticum
- Reactive perforating collagenosis

**Further reading:**

- Lopes LC, Lobo L, Bajanca R (2003) Perforating calcific elastosis. J Eur Acad Dermatol Venereol 17(2):206–207

## **Perforating Dermatitis, Acquired**

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Collective term that refers to a group of perforating disorders that are characterized by folliculocentric, hyperkeratotic papules or nodules with a predilection for extensor surfaces that are possibly self-induced in the setting of pruritus of chronic renal failure

### ***Differential Diagnosis***

- Acne
- Elastosis perforans serpiginosa
- Familial dyskeratotic comedones
- Folliculitis
- Insect-bite reaction
- Perforating granuloma annulare
- Perforating pseudoxanthoma elasticum
- Pseudofolliculitis barbae
- Prurigo nodularis
- Reactive perforating collagenosis

### ***Associations***

- Herpes zoster healed areas
- HIV infection

- Hyperparathyroidism
- Hypothyroidism
- Liver disease
- Laser hair removal
- Renal failure
- Sclerosing cholangitis
- Xerosis

### ***Evaluation***

- Calcium and phosphorus level
- Fasting blood glucose
- Liver function test
- Parathyroid hormone level
- Renal function test
- Thyroid function test

### ***Treatment Options***

- Antihistamines and itch control
- Narrowband UVB
- Topical retinoids
- Systemic retinoids
- Cryosurgery
- Tetracycline antibiotics

### **Further reading:**

- Saray Y, Seckin D, Bilezikci B (2006) Acquired perforating dermatosis: clinicopathological features in twenty-two cases. *J Eur Acad Dermatol Venereol* 20(6):679–688

## **Perioral Dermatitis**

Idiopathic eruption and possible variant of rosacea that affects the face of women and occasionally children, may arise after application of topical steroids to the affected area, and is characterized by erythematous

papules and pustules in a perioral (with an area of sparing around the lips) and/or periocular distribution and characteristic involvement of the nasolabial fold

### ***Differential Diagnosis***

- Acne vulgaris
- Allergic dermatitis
- Atopic dermatitis
- Contact dermatitis
- Demodicosis
- Haber syndrome
- Histoplasmosis
- Lupus erythematosus
- Lip-licker dermatitis
- Lupus miliaris disseminata faciei
- Lymphocytoma cutis
- Molluscum
- Granulomatous periorificial dermatitis
- Rosacea
- Sarcoidosis
- Seborrheic dermatitis
- Tinea faciei
- Verruca plana

### ***Treatment Options***

- Emollients
- Topical metronidazole
- Topical calcineurin inhibitors
- Topical clindamycin
- Topical erythromycin
- Oral tetracycline antibiotics
- Azithromycin

**Further reading:**

- Hafeez ZH (2003) Perioral dermatitis: an update. *Int J Dermatol* 42(7):514–517

**Perniosis (Chilblains)**

Vascular disorder affecting acral areas of the body that is triggered by cold exposure and characterized by tender or pruritic, erythematous papules and nodules most commonly on the fingers and toes

***Differential Diagnosis***

- Achenbach syndrome
- Acrocyanosis
- Acrokeratosis paraneoplastica
- Chilblains lupus erythematosus
- Cold urticaria
- Contact urticaria
- Coumadin blue-toe syndrome
- Crack-cocaine abuse
- Cryofibrinogenemia
- Cryoglobulinemia
- Endocarditis
- Erythema multiforme
- Erythema nodosum
- Erythromelalgia
- Granuloma annulare
- Hemolytic anemia
- Leukemia cutis
- Lupus pernio
- Monoclonal gammopathy
- Nodular vasculitis
- Paronychia
- Polycythemia vera
- Raynaud's phenomenon

- Sarcoidosis
- Septic emboli
- Vasculitis

### ***Associations***

- Anorexia nervosa
- Antiphospholipid antibody syndrome
- Crack-cocaine abuse
- Leukemia
- Lupus erythematosus
- Oral contraceptive pills
- Paraproteinemia

### ***Evaluation***

- Antinuclear antibodies
- Anticardiolipin antibody test
- Lupus anticoagulant antibody
- Complete blood count
- Serum protein electrophoresis

### ***Treatment Options***

- Warming measures, such as gloves
- Nifedipine
- Topical corticosteroids
- Systemic corticosteroids
- Aspirin
- Pentoxifylline

### **Further reading:**

- McCleskey PE, Winter KJ, Devillez RL (2006) Tender papules on the hands. Idiopathic chilblains (perniosis). Arch Dermatol 142(11):1501–1506



- Payne-James JJ, Munro MH, Rowland Payne CM (2007) Pseudosclerodermatous triad of perniosis, pulp atrophy and “parrot-beaked” clawing of the nails: a newly recognized syndrome of chronic crack cocaine use. *J Forensic Leg Med* 14(2):65–71

## **Peutz–Jeghers Syndrome**

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Inherited syndrome (AD) that is caused by mutation of the STK11 tumor suppressor gene and is characterized by perioral and intraoral hyperpigmented macules, hamartomatous polyps of the small intestine with intussusception and gastrointestinal bleeding, and an increased risk of colon cancer, pancreatic cancer, breast cancer, and several other visceral cancers

### ***Differential Diagnosis***

- Addison’s disease
- Bannayan–Riley–Ruvulcaba syndrome
- Cowden syndrome
- Cronkhite–Canada syndrome
- Inherited patterned lentiginosis
- Juvenile polyposis syndrome
- Laugier–Hunziker syndrome
- Smoker’s melanosis
- Turcot syndrome

### ***Evaluation***

- Breast exam/mammography
- Colonoscopy
- Complete blood count
- Contrast endoscopy with small bowel follow-through
- CT scan of abdomen and pelvis
- Iron studies

### **Further reading:**

- Heymann WR (2007) Peutz–Jeghers syndrome. *J Am Acad Dermatol* 57(3):513–514

## **Peyronie's Disease**

Fibrosing disorder of the penile shaft that affects middle-aged men, is possibly traumatic in etiology, and is characterized by erection-related pain, curvature of the penis, and a midline firm, fibrous plaque

### ***Differential Diagnosis***

- Balanitis xerotica obliterans
- Congenital penile curvature
- Dorsal vein thrombosis
- Leukemia cutis
- Lymphogranuloma venereum
- Penile fracture
- Scleroderma/morphea
- Sclerosing lymphangiitis
- Syphilis

### ***Associations***

- Diabetes mellitus
- Dupuytren's contracture
- Erectile dysfunction
- Knuckle pads
- Plantar fibromatosis
- Scleroderma

### ***Treatment Options***

- Surgery
- Colchicine
- Pentoxifylline
- NSAIDs
- Vitamin E

- Potaba
- L-carnitine
- Intralesional verapamil
- Intralesional interferon
- Tamoxifen

**Further reading:**

- Briganti A, Salonia A, Deho F et al (2003) Peyronie's disease: a review. *Curr Opin Urol* 13(5):417–422

## **Phaeohyphomycosis**

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Term for mycotic infection caused by one of several dematiaceous fungi (including *Exophiala jeanselmei*, *Alternaria*, *Bipolaris*, and *Curvularia*) that is most commonly characterized by a cyst-like trauma-related subcutaneous abscess in immunocompetent patients and CNS or disseminated disease in immunocompromised patients

### ***Differential Diagnosis***

- Atypical mycobacterial infection
- Chromoblastomycosis
- Cutaneous leishmaniasis
- Epidermal cyst
- Foreign body granuloma
- Invasive aspergillosis
- Lipoma
- Mycetoma
- Nodular fasciitis

### ***Treatment Options***

- Surgical excision

**Further reading:**

- Revankar SG (2006) Phaeohyphomycosis. *Infect Dis Clin North Am* 20(3):609–620

**Phakomatosis Pigmentovascularis**

Group of hamartomatous disorders associated with twin spotting that are characterized by the combination of a vascular lesion (either a port-wine stain (flammea), rose-colored vascular stain (rosea), or cutis marmorata telangiectatica congenita (marmorata)) and a pigmented lesion either mongolian spots (cesio = blue spot) or nevus spilus (spilo) and several other less consistent features

**Differential Diagnosis**

- Adams–Oliver syndrome
- Bannayan–Riley–Ruvulcaba syndrome
- Klippel–Trenaunay syndrome
- Phakomatosis pigmentokeratotic
- Proteus syndrome
- Sturge–Weber syndrome

**Subtypes****New Classification**

- Phakomatosis cesioflammea
- Phacomatosis spilorosa
- Phacomatosis cesiomarmorata

**Old Classification**

- Type I: nevus flammeus+epidermal nevus
- Type II: nevus flammeus+mongolian spots
- Type III: nevus flammeus+nevus spilus
- Type IV: nevus flammeus+nevus spilus+mongolian spots
- Type V: nevus flammeus+mongolian spots+cutis marmorata telangiectatica congenita

### **Associations**

- Granular cell tumors (spilorosa)
- Klippel–Trenaunay syndrome
- Ocular anomalies
- Renal anomalies
- Scoliosis
- Seizures
- Sturge–Weber syndrome

### **Further reading:**

- Happle R (2005) Phacomatosis pigmentovascularis revisited and reclassified. Arch Dermatol 141(3):385–388

### **Photosensitive Drug Reaction**

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Type of drug reaction induced by ultraviolet light that is caused by either phototoxicity (the drug or a metabolite is directly toxic after photoactivation) or photoallergy (type IV hypersensitivity reaction to a photoactivated hapten) that is characterized by a severe sunburn-like reaction (phototoxicity) or eczematous plaques on the sun-exposed areas (photoallergy)

### **Differential Diagnosis**

- Airborne contact dermatitis
- Chronic actinic dermatitis
- Lichenoid drug eruption
- Lupus erythematosus
- Pellagra
- Photoallergic contact dermatitis
- Polymorphous light eruption
- Porphyria

## ***Associated Medications***

### Photoallergy

- Antimalarials
- Chlorpromazine
- Enoxacin
- Gold
- Griseofulvin
- Ketoprofen
- NSAIDs
- Phenothiazines
- Promethazine
- Pyridoxine
- Quinidine
- Sulfonamides
- Tricyclic antidepressants

### Phototoxicity

- Amiodarone
- Fluoroquinolones
- Furocoumarins
- Furosemide
- NSAIDS
- Phenothiazines
- Psoralens
- Tetracyclines

### **Further reading:**

- Stein KR, Scheinfeld NS (2007) Drug-induced photoallergic and phototoxic reactions. *Expert Opin Drug Saf* 6(4):431–443

## **Phrynoderma**

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Cutaneous eruption that is now considered a nonspecific eruption of a variety of malnutrition-related deficiencies and is characterized by widespread xerosis along with numerous papules containing central keratin-filled plugs on the extensor aspects of the extremities, shoulders, and buttocks

### ***Differential Diagnosis***

- Acquired perforating dermatosis
- Darier's disease
- Familial dyskeratotic comedones
- Keratosis pilaris
- Lichen nitidus
- Lichen spinulosus
- Pityriasis rubra pilaris
- Scurvy

### ***Associations***

- Alcoholism
- Cholestasis
- Crohn's disease
- Cystic fibrosis
- Fat malabsorption
- Liver disease
- Measles
- Nutritional deficiency

### **Further reading:**

- Heath ML, Sidbury R (2006) Cutaneous manifestations of nutritional deficiency. *Curr Opin Pediatr* 18(4):417–422

## **Piebaldism**

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Inherited pigmentary disorder (AD) that is caused by absence of melanocytes due to mutation of the c-kit proto-oncogene and is characterized by a white forelock, depigmentation on the central chest and the middle portion of the arms and legs, with sparing of the back, and hyperpigmented macules within the areas of depigmentation

### ***Differential Diagnosis***

- Albinism
- Chemical leukoderma
- Hypomelanosis of Ito
- Leprosy
- Nevus depigmentosus
- Onchocerciasis
- Pinta
- Pityriasis alba
- Tinea versicolor
- Vitiligo
- Vogt–Koyanagi–Harada syndrome
- Waardenburg syndrome
- Zippkowsky–Margolis syndrome

### ***Evaluation***

- Hearing test
- Ophthalmologic examination

### **Further reading:**

- Hazan C (2005) Piebaldism. *Dermatol Online J* 11(4):18



## **Piedra (Beigel's Disease)**

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Fungal infection of the external portion of hair shaft that is caused by *Piedra hortae* (black piedra) or *Trichosporon asahii* (white piedra) that is characterized by black, hard, fixed nodules on the hair shafts of the scalp (black) or soft, white, less adherent nodules on the hair shafts of the axillary or pubic areas (white)

### ***Differential Diagnosis***

- Hair casts
- Monilethrix
- Pediculosis
- Psoriasis
- Seborrheic dermatitis
- Tinea capitis/corporis
- Trichomycosis axillaris
- Trichorrhexis nodosa

### ***Treatment Options***

- Removal of hair
- Terbinafine
- Selenium sulfide
- Itraconazole
- Ciclopirox

### **Further reading:**

- Kiken DA, Sekaran A, Antaya RJ et al (2006) White piedra in children. J Am Acad Dermatol 55(6):956–961

## **Piezogenic Pedal Papules**

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Term for pressure-related fat herniations on the lateral aspects of the feet that are only noticeable while standing and characterized by occasionally tender, fleshy protuberant papules

### ***Differential Diagnosis***

- Cerebriform plantar collagenoma
- Fascial herniation
- Infantile pedal papules
- Nevus lipomatosus superficialis
- Plantar lipomas

### ***Associations***

- Ehlers–Danlos syndrome
- Obesity
- Pseudoxanthoma elasticum

### **Further reading:**

- Redbord KP, Adams BB (2006) Piezogenic pedal papules in a marathon runner. Clin J Sport Med 16(1):81–83

## **Pigmented Purpuric Dermatoses (Benign Pigmented Purpura)**

Group of purpuric disorders that are associated with capillaritis and that are characterized by purpuric lesions on the lower extremities with variable features, including occasional pruritus, eczematous changes, or cayenne pepper-like petechiae

### ***Subtypes/Variants***

- Eczematid-like purpura of Doucas and Kapetanakis (itchy purpura, disseminated pruriginous angioidermatitis)
- Granulomatous pigmented purpura
- Lichen aureus (Fig. 6.93)
- Pigmented purpuric lichenoid dermatosis of Gougerot and Blum
- Progressive pigmentary dermatosis (Schamberg's disease)
- Purpura annularis telangiectodes (Majocchi's disease)
- Unilateral linear capillaritis



**Fig. 6.93** Lichen aureus

### *Differential Diagnosis*

- Acroangiodermatitis of Mali
- Angioma serpiginosum
- Benign hypergammaglobulinemic purpura of Waldenstrom
- Clotting disorders
- Cryoglobulinemia
- Exercise-related purpura
- Henoch–Schonlein purpura
- Kaposi's sarcoma
- Leukocytoclastic vasculitis
- Pigmented-purpuric-dermatosis-like mycosis fungoides
- Scurvy
- Stasis pigmentation
- Thrombocytopenia
- Purpuric contact dermatitis

### ***Associations***

- Drugs
- Exercise
- Venous stasis

### ***Associated Medications***

- Acetaminophen
- Captopril
- Carbamazepine
- Carbromal
- Carbutamide
- Chlordiazepoxide
- Furosemide
- Glipizide
- Medroxyprogesterone
- Nitroglycerin
- Thiamine

### ***Treatment Options***

- Rest
- Vitamin C
- Rutoside
- Topical corticosteroids
- Antihistamines
- Griseofulvin
- Narrowband UVB

### **Further reading:**

- Magro CM, Schaefer JT, Crowson AN et al (2007) Pigmented purpuric dermatosis: classification by phenotypic and molecular profiles. *Am J Clin Pathol* 128(2):218–229

## **Pilar Cyst (Trichilemmal Cyst)**

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Common benign cyst that is derived from the outer root sheath and is characterized by an asymptomatic, firm subcutaneous nodule predominantly on the scalp

### ***Differential Diagnosis***

- Adnexal neoplasm
- Arteriovenous malformation
- Dermoid cyst
- Epidermal inclusion cyst
- Hematoma
- Lipoma
- Lymphadenopathy
- Metastatic lesion
- Osteoma
- Pilomatrixoma
- Subcutaneous neurofibroma
- Subcutaneous schwannoma

### **Further reading:**

- Golden BA, Zide MF (2005) Cutaneous cysts of the head and neck. J Oral Maxillofac Surg 63(11):1613–1619

## **Pilar Tumor, Proliferating**

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Rare neoplasm derived from the outer root sheath that arises in a pilar cyst, is controversial with regard to its malignant potential, and is characterized by a rapidly growing, ulcerated nodule on the scalp

### *Differential Diagnosis*

- Adnexal neoplasm
- Angiosarcoma
- Basal cell carcinoma
- Cylindroma
- Dermatofibrosarcoma protuberans
- Epidermoid cyst
- Lipoma
- Merkel cell carcinoma
- Metastasis
- Pilar cyst
- Squamous cell carcinoma

#### **Further reading:**

- Satyaprakash AK, Sheehan DJ, Sanguenza OP (2007) Proliferating trichilemmal tumors: a review of the literature. *Dermatol Surg* 33(9):1102–1108

### **Pili Bifurcati**

Hair-shaft abnormality characterized by the bifurcation of the hair shaft into two parts, each with its own cuticle, which rejoin into one shaft distally

### *Differential Diagnosis*

- Pili multigemini
- Trichoptilosis

#### **Further reading:**

- Camacho FM, Happle R, Tosti A et al (2000) The different faces of pili bifurcati. A review. *Eur J Dermatol* 10(5):337–340

## **Pili Multigemini**

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Hair-shaft abnormality predominantly identified on the beard in men or on the scalp in children that is characterized by a matrix which is divided and gives rise to multiple hair shafts within a single follicle

### ***Differential Diagnosis***

- Ingrown hair
- Pili bifurcati
- Pseudofolliculitis barbae
- Trichofolliculoma
- Trichoptilosis
- Trichostasis spinulosa
- Tufted folliculitis

### **Further reading:**

- Lester L, Venditti C (2007) The prevalence of pili multigemini. *Br J Dermatol* 156(6):1362–1363

## **Pili Torti**

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Hair-shaft abnormality associated with a variety of syndromes that is caused by twisting of the hair shaft on its own axis and is characterized by sparse, fragile hair and alopecia

### ***Differential Diagnosis***

- Menke's kinky-hair syndrome
- Monilethrix
- Uncombable hair syndrome
- Woolly hair

## **Associations**

- Anorexia
- Bazex–Dupre–Christol syndrome
- Bjornstad’s syndrome
- Citrullinemia
- Crandall’s syndrome
- EEC syndrome
- Menkes syndrome
- Netherton’s syndrome
- Pachyonychia congenita, type II
- Rapp–Hodgkin syndrome
- Retinoid therapy
- Trichothiodystrophy

## **Further reading:**

- Richards KA, Mancini AJ (2002) Three members of a family with pili torti and sensorineural hearing loss: the Bjornstad syndrome. *J Am Acad Dermatol* 46(2):301–303

## **Pilomatricoma (Calcifying Epithelioma of Malherbe)**

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Benign neoplasm that predominantly affects children, is derived from the matrix of the hair follicle, and is characterized by a hard, calcified subcutaneous nodule most commonly on the face that reveals “tenting” upon stretching of the overlying skin

## **Differential Diagnosis**

- Basal cell carcinoma
- Branchial cleft cyst
- Calcinosis cutis
- Cutaneous tuberculosis



- Dermatofibroma
- Dermatofibrosarcoma protuberans
- Epidermal inclusion cyst
- Foreign body granuloma
- Granuloma annulare
- Idiopathic facial aseptic granuloma
- Keratoacanthoma
- Merkel cell carcinoma
- Metastasis
- Osteoma cutis
- Sarcoidosis
- Schwannoma
- Subepidermal calcified nodule
- Trichilemmoma
- Trichoepithelioma

### **Associations**

- Gardner syndrome
- Myotonic dystrophy
- Rubinstein–Taybi syndrome
- Turner syndrome

### **Further reading:**

- Kumaran N, Azmy A, Carachi R et al (2006) Pilomatrixoma: accuracy of clinical diagnosis. *J Pediatr Surg* 41(10):1755–1758

### **Pilonidal Sinus/Cyst**

Acquired cyst or sinus that is associated with the follicular occlusion triad, most commonly arises in the sacrococcygeal area, and is possibly caused by entry of hair shafts into the skin with subsequent foreign body reaction, deep abscess formation, and chronic sinus tract

### ***Differential Diagnosis***

- Bacterial abscess
- Crohn's disease
- Decubitus ulcer
- Dermoid cyst
- Epidermal inclusion cyst
- Fissure
- Hidradenitis suppurativa
- Pyogenic granuloma

#### **Further reading:**

- Hull TL, Wu J (2002) Pilonidal disease. *Surg Clin North Am* 82(6):1169–1185

### **Pinta**

Treponemal infection caused by *Treponema pallidum carateum* in which there is a primary stage characterized by a solitary scaly plaque on the lower extremity that slowly expands and does not ulcerate, a secondary stage with an eruption of highly infectious, scaly psoriasiform papules called pintids, and a tertiary stage characterized by vitiligo-like hypopigmentation on the extremities

### ***Differential Diagnosis***

- Atrophic lichen planus
- Eczema
- Endemic syphilis
- Leprosy
- Lupus erythematosus
- Onchocerciasis
- Pityriasis alba
- Psoriasis
- Sclerodermal dyschromia

- Tinea corporis
- Tinea versicolor
- Syphilis
- Vitiligo
- Yaws

**Further reading:**

- Farnsworth N, Rosen T (2006) Endemic treponematoses: review and update. Clin Dermatol 24(3):181–190

**Pitted Keratolysis**

Superficial bacterial infection of the soles of the feet caused by *Kytococcus sedentarius* and characterized by shallow discrete and coalescent pits, hyperhidrosis, and malodor (Fig. 6.94)

***Differential Diagnosis***

- Arsenical keratoses
- Basal cell nevus syndrome
- Dyshidrotic eczema
- Essential hyperhidrosis
- Focal acral hypokeratosis
- Juvenile plantar dermatosis
- Keratolysis exfoliativa



**Fig. 6.94** Pitted keratolysis (Courtesy of K. Guidry)

- Punctate palmoplantar keratoderma
- Tinea pedis

### ***Treatment Options***

- Topical clindamycin
- Topical gentamycin
- Aluminum chloride
- Mupirocin cream
- Benzoyl peroxide
- Oral erythromycin

### **Further reading:**

- Lee PL, Lemos B, O'Brien SH et al (2007) Cutaneous diphtheroid infection and review of other cutaneous Gram-positive *Bacillus* infections. *Cutis* 79(5):371–377

## **Pityriasis Alba**

Dermatosis affecting children, especially atopics, that is likely a low-grade form of eczema and manifests as patchy hypopigmentation with or without fine scale on the cheeks, trunk, or upper arms

### ***Differential Diagnosis***

- Chemical leukoderma
- Hypopigmented mycosis fungoides
- Leprosy
- Nummular eczema
- Pityriasis lichenoides chronica
- Progressive macular hypomelanosis
- Psoriasis
- Seborrheic dermatitis
- Tinea corporis

- Tinea versicolor
- Vitiligo

### ***Treatment Options***

- Emollients
- Topical corticosteroids
- Tacrolimus ointment
- Narrowband UVB phototherapy
- Sun exposure

### **Further reading:**

- Lin RL, Janniger CK (2005) Pityriasis alba. *Cutis* 76(1):21–24

## **Pityriasis Amiantacea (Tinea Amiantacea)**

Scalp finding that occasionally accompanies psoriasis, seborrheic dermatitis, or tinea capitis, is caused by secondary infection, and is characterized by yellow-white crusts and scales that have matted and encased hairs

### ***Differential Diagnosis***

- Erosive pustular dermatosis
- Hair casts
- Favus
- Folliculitis decalvans
- Impetigo
- Pediculosis capitis
- Plica polonica/plica neuropathica

### ***Evaluation***

- Fungal culture
- Bacterial culture

### ***Treatment Options***

- Salicylic acid
- Urea
- Topical corticosteroids
- Topical antibiotics
- Systemic antibiotics
- Ketoconazole shampoo
- Terbinafine
- Ciclopirox

### **Further reading:**

- Abdel-Hamid IA, Agha SA, Moustafa YM et al (2003) Pityriasis amiantacea: a clinical and etiopathologic study of 85 patients. *Int J Dermatol* 42(4):260–264

### **Pityriasis Lichenoides et Varioliformis Acuta (Mucha–Haberman Disease)**

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Acute form of pityriasis lichenoides that predominantly affects children and young adults; is characterized by crops of asymptomatic erythematous papules which evolve over a period of days to weeks to vesicular and hemorrhagic, crusted, scarring papules; and most commonly involves the trunk and extremities (Fig. 6.95)

### ***Differential Diagnosis***

- Arthropod-bite reactions
- Cutaneous small vessel vasculitis
- Dermatitis herpetiformis
- Drug eruption
- Erythema multiforme
- Folliculitis
- Gianotti–Crosti syndrome
- Hydroa vacciniforme



**Fig. 6.95** Pityriasis lichenoides et varioliformis acuta

- Lupus erythematosus
- Lymphomatoid papulosis
- Papulonecrotic tuberculid
- Pityriasis rosea
- Scabies
- Secondary syphilis
- Varicella
- Viral exanthem

### ***Associations***

- EBV infection
- HIV infection
- Toxoplasmosis

### ***Treatment Options***

- Oral tetracycline antibiotics
- Oral erythromycin
- UVB phototherapy
- Systemic corticosteroids
- Methotrexate
- Acitretin
- Pentoxifylline
- Dapsone
- Cyclosporine

### **Further reading:**

- Khachemoune A, Blyumin ML (2007) Pityriasis lichenoides: pathophysiology, classification, and treatment. *Am J Clin Dermatol* 8(1):29–36

## **Pityriasis Lichenoides Chronica**

Persistent, chronic form of pityriasis lichenoides that predominantly affects adults; is characterized by superficial, pink-brown or hypopigmented, mildly pruritic, scaly papules and small plaques; and predominantly involves the trunk and proximal extremities

### ***Differential Diagnosis***

- Arthropod bites
- Drug eruption
- Guttate psoriasis
- Lupus erythematosus
- Lichen planus
- Lymphomatoid papulosis
- Papular eczema
- Pityriasis rosea
- Secondary syphilis



- Small plaque parapsoriasis
- Tinea corporis
- Viral exanthem

### ***Treatment Options***

- UVB phototherapy
- Tetracycline antibiotics
- Methotrexate
- Acitretin
- Cyclosporine

### **Further reading:**

- Khachemoune A, Blyumin ML (2007) Pityriasis lichenoides: pathophysiology, classification, and treatment. *Am J Clin Dermatol* 8(1):29–36

## **Pityriasis Rosea (Gibert Disease)**

Self-limited papulosquamous eruption that is probably viral in origin, predominantly affects adolescents and young adults, and is characterized first by a large oval erythematous macule with a peripheral collarette of scale (herald patch) and then a generalized eruption of erythematous scaly papules and plaques on the trunk (following skin lines in a Christmas-tree-like distribution) and extremities but rarely the face

### ***Subtypes/Variants***

- Cervicocephalic
- Circinate and confluent
- Classic
- Gigantea
- Herald patch absent
- Herald patch only
- Inverse

- Oral
- Papular
- Persistent (HIV-related)
- Purpuric
- Pustular
- Unilateral
- Urticarial
- Vesicular

### *Differential Diagnosis*

- Disseminated contact dermatitis
- Drug eruption
- Erythema annulare centrifugum
- Erythema dyschromicum perstans
- Erythema multiforme
- Exfoliative dermatitis
- Gianotti–Crosti syndrome
- Guttate psoriasis
- Henoch–Schonlein purpura
- HIV exanthem
- Id reaction
- Leukemia (especially purpuric type)
- Lichen planus
- Lupus erythematosus
- Mycosis fungoides
- Nummular eczema
- Pityriasis lichenoides chronica
- Pityriasis-rosea-like drug eruption
- Purpura
- Scabies
- Seborrheic dermatitis
- Secondary syphilis
- Small plaque parapsoriasis

- Tinea corporis
- Tinea versicolor
- Viral exanthem

### ***Associated Medications (PR-Like Drug Reaction)***

- ACE inhibitors
- Barbiturates
- Beta-blockers
- Clonidine
- D-penicillamine
- Gold
- Griseofulvin
- Imatinib mesylate
- Isotretinoin
- Metronidazole
- Omeprazole

### ***Treatment Options***

- Observation and reassurance
- Topical corticosteroids
- Oral antihistamines
- UVB phototherapy
- Acyclovir
- Systemic corticosteroids

### **Further reading:**

- Atzori L, Pinna AL, Ferrelli C et al (2006) Pityriasis rosea-like adverse reaction: review of the literature and experience of an Italian drug-surveillance center. *Dermatol Online J* 12(1):1
- Bernardin RM, Ritter SE, Murchland MR (2002) Papular pityriasis rosea. *Cutis* 70(1):51–55
- Chuh A, Zawar V, Lee A (2005) Atypical presentations of pityriasis rosea: case presentations. *J Eur Acad Dermatol Venereol* 19(1):120–126

## **Pityriasis Rotunda (Toyama Syndrome)**

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Uncommon, idiopathic papulosquamous eruption that is occasionally familial or associated with systemic illness and is characterized by multiple, circular hyperpigmented or hypopigmented plaques with fine scale on the trunk or extremities

### ***Differential Diagnosis***

- Erythrasma
- Fixed drug eruption
- Ichthyosis vulgaris
- Large plaque parapsoriasis
- Leprosy
- Mycosis fungoides
- Pityriasis alba
- Porokeratosis of Mibelli
- Progressive macular hypomelanosis
- Tinea corporis
- Tinea versicolor

### ***Associations***

- Cirrhosis
- Hepatoma and other cancers
- Favism
- Leukemia
- Malnutrition
- Tuberculosis

### **Further reading:**

- Hasson I, Shah P (2003) Pityriasis rotunda. Indian J Dermatol Venereol Leprol 69(1):50–51

## **Pityriasis Rubra Pilaris (Devergie's Disease)**

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Chronic papulosquamous disorder of unknown cause that affects children and adults and is characterized first by scaly plaques on the scalp and neck followed by generalized “nutmeg-grater-like” keratotic papules that become confluent in large orange-red scaly plaques with islands of sparing and a waxy yellow-orange palmoplantar keratoderma

### ***Subtypes/Variants***

- Type I: classic adult
- Type II: atypical adult
- Type III: classic juvenile
- Type IV: circumscribed juvenile
- Type V: atypical juvenile
- Type VI: HIV associated

### ***Differential Diagnosis***

#### **Adult**

- Contact dermatitis
- Crusted scabies
- Cutaneous T cell lymphoma
- Darier's disease
- Dengue fever eruption
- Dermatomyositis (Wong-type PRP)
- Eczema
- Erythrokeratoderma variabilis
- Erythroderma
- Lichen spinulosus
- Peeling skin syndrome
- Phrynoderma
- Psoriasiform drug eruption
- Psoriasis

- Seborrheic dermatitis
- Subacute lupus erythematosus
- Tinea versicolor

### Child

- Eczema
- Erythroderma variabilis
- Kawasaki disease
- Lichen spinulosus
- Nummular eczema
- Peeling skin syndrome
- Phrynoderma
- Pityriasis lichenoides chronica
- Pityriasis rosea
- Pityriasis-rosea-like drug eruption
- Progressive symmetric erythrokeratoderma
- Psoriasis
- Seborrheic dermatitis
- Secondary syphilis

### ***Evaluation***

- Complete blood count
- Serum electrolyte studies
- Thyroid function test

### ***Treatment Options***

- Acitretin
- Isotretinoin
- Methotrexate
- Azathioprine
- Cyclosporine
- Infliximab

- Adalimumab
- Etanercept

**Further reading:**

- Sehgal VN, Srivastava G (2006) (Juvenile) Pityriasis rubra pilaris. *Int J Dermatol* 45(4):438–446

## **Pityrosporum Folliculitis**

Type of folliculitis that is characterized by pruritic follicular-based papules and pustules on the trunk and proximal upper extremities with absence of comedones and absence of response to acne treatments

### ***Differential Diagnosis***

- Acne mechanica
- Acne vulgaris
- Candidiasis
- Drug-induced acne
- Eosinophilic folliculitis
- Steroid acne
- Gram-negative folliculitis
- *Pseudomonas* folliculitis

### ***Associations***

- Antibiotics
- Cushing's syndrome
- Diabetes mellitus
- Down syndrome
- HIV infection
- Immunosuppression
- Seborrheic dermatitis
- Tinea versicolor

### **Treatment Options**

- Ketoconazole cream
- Oral ketoconazole
- Fluconazole

### **Further reading:**

- Gupta AK, Batra R, Bluhm R et al (2004) Skin diseases associated with *Malassezia* species. *J Am Acad Dermatol* 51(5):785–798

### **Plague, Bubonic**

---

Zoonotic bacterial infection caused by *Yersinia pestis* that is transmitted by the rat flea, *Xenopsylla cheopsis*, and is characterized by fever, shock, purpuric lesions, and painful lymphadenopathy (buboes) most commonly in the inguinal area

### **Differential Diagnosis**

- Atypical mycobacterial infection
- Cat-scratch disease
- Filariasis
- Lymphogranuloma venereum
- Primary inoculation tuberculosis
- Sporotrichosis
- Streptococcal cellulitis
- Suppurative lymphadenitis
- Syphilis
- Tularemia
- Typhus, Endemic

### **Evaluation**

- Chest radiography
- Complete blood count
- Direct fluorescent antibody for *Y. pestis*



- Gram stain and culture of blood, bubo aspirate, and cerebrospinal fluid
- Liver function test

**Further reading:**

- Prentice MB, Rahalison L (2007) Plague. *Lancet* 369(9568):1196–1207

**Plantar Fibromatosis (Ledderhose Disease)**

---

Idiopathic fibromatosis that affects the plantar surface of the foot of men and is characterized by bilateral firm subcutaneous nodules on the medial aspect of the sole of the foot

***Differential Diagnosis***

- Calcinosis cutis
- Cerebriform plantar collagenoma
- Desmoid tumor
- Dermatofibrosarcoma protuberans
- Gout
- Granuloma annulare
- Hypertrophic scar
- Keloid
- Melanoma
- Neurofibroma
- Neuroma, traumatic
- Osteoma
- Plantar fasciitis
- Plantar lipoma/fibrolipoma
- Sarcoma

***Associations***

- Dupuytren's contracture
- Knuckle pads
- Peyronie's disease

**Further reading:**

- Graells Estrada J, Garcia Fernandez D, Badia Torroella F et al (2003) Familial plantar fibromatosis. *Clin Exp Dermatol* 28(6):669–670

**Plasma Cell Balanitis (Zoon Balanitis, Balanitis Circumscripta Plasmacellularis)**

Uncommon benign, inflammatory dermatosis affecting uncircumcised, older men that is characterized by a solitary, circumscribed, brightly erythematous, occasionally erosive plaque on the prepuce and glans penis

***Differential Diagnosis***

- Candida balanitis
- Erosive lichen planus
- Erythroplasia of Queyrat
- Extramammary Paget's disease
- Fixed drug eruption
- Herpes simplex virus
- Lupus erythematosus
- Mucosal pemphigoid
- Plasmacytoma
- Primary syphilis
- Pseudoepitheliomatous keratotic and micaceous balanitis
- Psoriasis
- Squamous cell carcinoma

***Treatment Options***

- Tacrolimus ointment
- Topical corticosteroids
- Imiquimod cream

**Further reading:**

- Weyers W, Ende Y, Schalla W, Diaz-Cascajo C (2002) Balanitis of Zoon: a clinicopathologic study of 45 cases. *Am J Dermatopathol* 24(6):459–467

## **Pneumocystis, Cutaneous**

---

Rare manifestation of disseminated pulmonary *Pneumocystis jiroveci* infection that affects the profoundly immunocompromised patient and is characterized by erythematous to blue papules and nodules with or without ulceration that are mostly commonly located around the external auditory canal

### ***Differential Diagnosis***

- Acanthamebiasis
- Angiolymphoid hyperplasia with eosinophilia
- *Aspergillus* otomycosis
- Disseminated opportunistic fungal infection
- Kaposi sarcoma
- Mucormycosis
- Otitis externa (including malignant)
- Ramsay Hunt syndrome

### **Further reading:**

- Bundow DL, Aboulafia DM (1997) Skin involvement with pneumocystis despite dapson prophylaxis: a rare cause of skin nodules in a patient with AIDS. *Am J Med Sci* 313(3):182–186

## **Poikiloderma of Civatte**

---

Acquired changes in the skin of fair-skinned individuals that are caused by chronic sun exposure and characterized by reticular erythematous to brown patches with atrophy and telangiectasia on the central chest, sides of neck, and face with sparing of the anterior neck just inferior to the chin

### ***Differential Diagnosis***

- Berloque dermatitis
- Bloom syndrome

- Cutaneous T cell lymphoma
- Dermatomyositis (shawl sign)
- Erythromelanosis follicularis faciei et colli
- Large plaque parapsoriasis
- Lupus erythematosus
- Melasma
- Poikiloderma atrophicans vasculare
- Riehl's melanosis
- Rothmund–Thomson syndrome

### **Treatment Options**

- Topical retinoids
- Hydroquinone cream
- Pulsed dye laser
- Intense pulsed light

### **Further reading:**

- Katoulis AC, Stavrianeas NG, Georgala S et al (2005) Poikiloderma of Civatte: a clinical and epidemiological study. *J Eur Acad Dermatol Venereol* 19(4):444–448

## **Poison Ivy Dermatitis (Rhus Dermatitis)**

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Common type of allergic contact dermatitis that is caused by various species of the *Toxicodendron* family of urushiol-containing plants and is characterized by intensely pruritic, streaky, linear, vesicular plaques on the exposed areas

### **Differential Diagnosis**

- Allergic contact dermatitis (other types)
- Bullous pemphigoid
- Burn
- Dermatitis herpetiformis
- Phytophotodermatitis

- Scabies
- Zoster

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids

### **Further reading:**

- Mcgovern TW, Lawarre SR, Brunette C (2000) Is it, or isn't it? Poison ivy look-a-likes. *Am J Contact Dermat* 11(2):104–110

## **Polyarteritis Nodosa, Cutaneous**

Variant of polyarteritis nodosa (Kussmaul–Maier syndrome) that lacks systemic features of vasculitis and is characterized by erythematous subcutaneous nodules and ulcers with surrounding livedo reticularis and a predilection for the lower extremities

### ***Differential Diagnosis***

- Cryoglobulinemia
- Erythema nodosum
- Henoch–Schonlein purpura
- Infectious endocarditis
- Livedoid vasculopathy
- Lupus erythematosus
- Malignancy
- Microscopic polyangiitis
- Nodular vasculitis
- Panniculitis
- Rheumatoid vasculitis
- Sjögren's syndrome
- Subcutaneous T cell lymphoma

### ***Associations***

- Crohn's disease
- Hepatitis B infection
- Hepatitis C infection
- Lupus erythematosus
- Relapsing polychondritis
- Streptococcal infections
- Takayasu arteritis
- Tuberculosis

### ***Evaluation***

- Anticardiolipin antibodies
- Antineutrophilic cytoplasmic antibodies
- Chest radiograph
- Complement levels
- Lupus anticoagulant
- Neurologic examination
- Renal function test
- Stool for occult blood
- Urinalysis
- Viral hepatitis panel

### ***Treatment Options***

- Systemic corticosteroids
- Methotrexate
- Azathioprine
- Mycophenolate mofetil
- Intravenous immunoglobulin
- Pentoxifylline
- Infliximab
- Cyclophosphamide

**Further reading:**

- Diaz-Perez JL, De Lagran ZM, Luis Diaz-Ramon J et al (2007) Cutaneous polyarteritis nodosa. *Semin Cutan Med Surg* 26(2):77–86

**Polymorphous Light Eruption**

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Idiopathic photosensitivity disorder that predominantly affects young to middle-aged women and is characterized by a polymorphous eruption comprised of edematous erythematous papules, papulovesicles, and plaques on the sun-exposed portions of the face, chest, and arms

**Subtypes**

- Eczematous
- Erythematous
- Papular
- Papulovesicular
- Plaque-like

**Differential Diagnosis**

- Actinic lichen nitidus
- Actinic prurigo
- Airborne contact dermatitis
- Atopic dermatitis, photoexacerbated
- Chronic actinic dermatitis
- Erythema multiforme
- Erythropoietic protoporphyria
- Hydroa vacciniforme
- Jessner's lymphocytic infiltrate
- Lupus erythematosus
- Miliaria
- Photoallergic contact dermatitis

- Photosensitive drug eruption
- Psoriasis
- Rosacea
- Seborrheic dermatitis
- Solar urticaria

### **Associations**

- Lupus erythematosus
- Positive ANA

### **Evaluation**

- Antinuclear antibodies (including SS-A and SS-B)
- Phototesting

### **Treatment Options**

- Sun avoidance measures
- Narrowband UVB phototherapy
- Topical corticosteroids
- Systemic corticosteroids
- Tacrolimus ointment
- Hydroxychloroquine
- Nicotinamide
- Azathioprine
- Cyclosporine
- Mycophenolate mofetil

### **Further reading:**

- Naleway AL, Greenlee RT, Melski JW (2006) Characteristics of diagnosed polymorphous light eruption. *Photodermatol Photoimmunol Photomed* 22(4):205–207



## **Porocarcinoma, Eccrine**

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Malignant eccrine neoplasm that arises in the elderly and is characterized by a red, blue, or black ulcerated, vegetating nodule predominantly on the lower extremities but rarely on the palms and soles

### ***Differential Diagnosis***

- Basal cell carcinoma
- Bowen's disease
- Melanoma, amelanotic
- Leiomyosarcoma
- Merkel cell carcinoma
- Pyogenic granuloma
- Seborrheic keratosis
- Squamous cell carcinoma
- Verrucous carcinoma
- Verruca vulgaris

### **Further reading:**

- de Giorgi V, Sestini S, Massi D et al (2007) Eccrine porocarcinoma: a rare but sometimes fatal malignant neoplasm. *Dermatol Surg* 33(3):374–377

## **Porokeratosis**

---

Autosomal-dominant or sporadic disorder of keratinization affecting children and adults that is caused by an abnormal clone of keratinocytes which form a column of parakeratosis (cornoid lamella) and is characterized by discrete, circular, or linear atrophic plaques with a keratotic ridge

### ***Subtypes/Variants***

- Porokeratosis of Mibelli
- Linear porokeratosis



**Fig. 6.96** Disseminated superficial porokeratosis

- Disseminated superficial porokeratosis (Fig. 6.96)
- Disseminated superficial actinic porokeratosis
- Porokeratosis palmaris et plantaris et disseminata (Fig. 6.97)
- Porokeratosis ptychotropica (flexural)
- Punctate porokeratosis



**Fig. 6.97** Porokeratosis punctata palmaris et plantaris (Courtesy of K. Guidry)

### *Differential Diagnosis*

#### Disseminated Superficial

- Acrokeratosis verruciformis of Hopf
- Actinic keratoses
- Cutaneous T cell lymphoma
- Epidermodysplasia verruciformis
- Hyperkeratosis lenticularis perstans (Flegel's disease)
- Lichen sclerosus et atrophicus
- Stucco keratoses
- Verruca plana

#### Linear

- Incontinentia pigmenti (stage II)
- Inflammatory linear verrucous epidermal nevus
- Lichen striatus
- Linear Darier's disease
- Linear lichen planus
- Linear psoriasis

- Linear verruca
- Porokeratotic eccrine ostial and dermal duct nevus

### Mibelli

- Actinic keratosis
- Annular atrophic lichen planus
- Elastosis perforans serpiginosa
- Granuloma annulare
- Pityriasis rotunda
- Psoriasis
- Squamous cell carcinoma
- Superficial basal cell carcinoma

### Porokeratosis Punctata

- Arsenical keratoses
- Corns
- Palmar pits
- Pitted keratolysis
- Punctate keratoderma
- Spiny keratoderma
- Verruca

### *Treatment Options*

- Observation
- Cryotherapy
- 5FU cream
- Acitretin
- Imiquimod
- Vitamin D analogues
- Tazarotene

### **Further reading:**

- Kim C (2005) Linear porokeratosis. *Dermatol Online J* 11(4):22

## Porokeratotic Eccrine Ostial and Dermal Duct Nevus

---

Eccrine type of epidermal nevus that is present at birth or arises in early childhood and is characterized by multiple comedo-like keratotic papules in a linear pattern on the flexural aspects of one hand or foot

### *Differential Diagnosis*

- Eccrine syringofibroadenoma
- Ichthyosis hystrix
- Inflammatory linear verrucous epidermal nevus
- Lichen planus
- Lichen striatus
- Linear Darier's disease
- Linear epidermal nevus
- Linear porokeratosis
- Music-box spiny keratoderma
- Nevus comedonicus
- Punctate keratoderma

### **Further reading:**

- Cambiaghi S, Gianotti R, Caputo R (2007) Widespread porokeratotic eccrine ostial and dermal duct nevus along Blaschko lines. *Pediatr Dermatol* 24(2):162–167

## Poroma

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Benign neoplasm of eccrine or apocrine derivation that is characterized by a slow-growing, flesh-colored nodule that occasionally has a verrucous or ulcerated surface and is most commonly located on the palms or soles (Fig. 6.98)

### *Differential Diagnosis*

- Acrospiroma
- Callus



**Fig. 6.98** Poroma  
(Courtesy of  
K. Guidry)

- Eccrine syringofibroadenoma
- Foreign body reaction
- Hidradenoma
- Hydroacanthoma simplex
- Melanoma
- Porocarcinoma
- Pyogenic granuloma
- Squamous cell carcinoma
- Trichilemmoma
- Verruca

### **Associations**

- Hidrotic ectodermal dysplasia (multiple)

### **Further reading:**

- Altamura D, Piccolo D, Lozzi GP, Peris K (2005) Eccrine poroma in an unusual site: a clinical and dermoscopic simulator of amelanotic melanoma. *J Am Acad Dermatol* 53(3):539–541

## **Porphyria**

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Group of metabolic disorders that are caused by variety of inherited or acquired enzyme defects in the heme biosynthesis pathway and that are characterized by the accumulation of phototoxic or neurotoxic porphyrins, the building blocks of heme

### ***Subtypes (with Skin Findings)***

- Congenital erythropoietic porphyria
- Erythropoietic protoporphyria
- Hepatoerythropoietic porphyria
- Hereditary coproporphyria
- Porphyria cutanea tarda
- Variegate porphyria

### ***Differential Diagnosis***

- See “[Erythropoietic Protoporphyria](#)”
- See “[Porphyria Cutanea Tarda](#)”
- See “[Porphyria, Congenital Erythropoietic](#)”

### ***Evaluation***

- Urine, stool, erythrocyte, and plasma porphyrins
- Liver function test
- Ophthalmologic exam
- Renal function test

### **Further reading:**

- Norman RA (2005) Past and future: porphyria and porphyrins. *Skinmed* 4(5):287–292

## **Porphyria, Congenital Erythropoietic (Gunther's Disease)**

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Type of porphyria (AR) that is caused by deficiency of the enzyme, uroporphyrinogen III synthase, and is characterized by photosensitivity, vesiculobullous lesions in the sun-exposed areas, scarring, hypertrichosis, erythrodontia, pink urine, scleral and corneal disease, and hemolytic anemia

### ***Differential Diagnosis***

- Bloom syndrome
- Erythropoietic protoporphyria
- Hepatoerythropoietic porphyria
- Porphyria cutanea tarda
- Polymorphous light eruption
- Variegate porphyria
- Xeroderma pigmentosum

### **Further reading:**

- Bari AU (2007) Congenital erythropoietic porphyria in three siblings. Indian J Dermatol Venereol Leprol 73(5):340–342

## **Porphyria Cutanea Tarda**

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Familial or acquired (more common) type of porphyria caused by decreased activity of hepatic uroporphyrinogen decarboxylase that is characterized by skin fragility, bullae on the dorsal hands and face, facial hypertrichosis, photodistributed hyperpigmentation, and in chronic, untreated cases, scleroderma-like skin changes (Fig. 6.99)

### ***Differential Diagnosis***

- Bullous amyloidosis
- Bullous diabeticorum





**Fig. 6.99** Porphyria cutanea tarda

- Bullous lupus erythematosus
- Bullous pemphigoid
- Congenital erythropoietic porphyria
- Epidermolysis bullosa acquisita
- Hepatoerythropoietic porphyria
- Hydroa vacciniforme
- Melasma
- Photoallergic contact dermatitis
- Photoallergic drug eruption
- Phototoxic drug eruption
- Polymorphous light eruption
- Pseudoporphyria
- Variegate porphyria

**Associations**

- Alcoholism
- Chloracne
- CREST syndrome
- Cytomegalovirus
- Diabetes mellitus
- Dialysis
- Hematologic malignancy
- Hemochromatosis
- Hepatitis B
- Hepatitis C
- Hepatocellular carcinoma
- HIV infection
- Lupus erythematosus
- Myelofibrosis
- Renal failure
- Thalassemia
- Wilson's disease

**Exacerbating Medications**

- Alcohol
- Barbiturates
- Chlorinated hydrocarbons
- Estrogens
- Griseofulvin
- Iron
- Nalidixic Acid
- NSAIDs
- Phenytoin
- Pravastatin
- Rifampin
- Sulfa Drugs

- Tamoxifen
- Tetracyclines
- Vitamin B12

### ***Evaluation***

- 24-h urine porphyrins
- Complete blood count
- Fasting blood glucose
- HFE gene mutation analysis
- HIV test
- Iron studies
- Liver biopsy
- Liver function test
- Viral hepatitis panel

### ***Treatment Options***

- Phlebotomy
- Treat underlying cause
- Hydroxychloroquine
- Cimetidine

### **Further reading:**

- Sams H, Kiripolsky MG, Bhat L et al (2004) Porphyria cutanea tarda, hepatitis C, alcoholism, and hemochromatosis: a case report and review of the literature. *Cutis* 73(3):188–190

## **Postinflammatory Hyperpigmentation**

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Hyperpigmentation associated with a preceding inflammatory dermatosis that is caused by either increased melanin transfer to keratinocytes or melanin dropping into the dermis and is characterized by brown-to-black pigmented macules coalescent into patches that coincide with areas affected by the dermatosis

### ***Differential Diagnosis***

- Acanthosis nigricans
- Addison's disease
- Amyloidosis
- Black dermographism
- Bleomycin flagellate pigmentation
- Drug-induced hyperpigmentation
- Erythema dyschromicum perstans
- Lupus erythematosus
- Lichen planus pigmentosus
- Melasma
- Mushroom dermatitis
- Nevoid hypermelanosis
- Tinea versicolor
- Traumatic tattoo

### ***Associations***

- Acne vulgaris
- Atopic dermatitis
- Atrophoderma of Pasini and Perini
- Discoid lupus erythematosus
- Erythema dyschromicum perstans
- Erythroderma
- Fixed drug eruption
- Idiopathic eruptive macular pigmentation
- Impetigo
- Insect bites
- Interface dermatoses
- Lichen planus
- Lichen simplex chronicus
- Lichenoid drug eruption
- Morbilliform drug eruption
- Morphea

- Pityriasis rosea
- Psoriasis
- Transient neonatal pustular melanosis

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Ruiz-Maldonado R, Orozco-Covarrubias ML (1997) Postinflammatory hypopigmentation and hyperpigmentation. *Semin Cutan Med Surg* 16(1):36–43

## **Postinflammatory Hypopigmentation**

Hypopigmentation that results from either inflammatory disruption of melanin production or destruction of melanocytes and is characterized by hypopigmentation and, less commonly, depigmentation, in the area affected by the dermatosis, often an eczematous process

### ***Differential Diagnosis***

- Atopic dermatitis
- Bier spots
- Chemical leukoderma
- Lichen sclerosus
- Lichen striatus
- Lupus erythematosus
- Mycosis fungoides
- Pityriasis alba
- Pityriasis lichenoides chronica
- Progressive macular hypomelanosis
- Psoriasis
- Sarcoidosis

- Seborrheic dermatitis
- Steroid-induced hypopigmentation
- Vitiligo

### **Associations**

- Atopic dermatitis
- Blistering dermatoses
- Eczema
- Leprosy (especially tuberculoid)
- Pityriasis lichenoides
- Psoriasis
- Sarcoidosis
- Syphilis
- Tinea versicolor

### **Treatment Options**

- Observation and reassurance
- Address the underlying cause
- Narrowband UVB therapy

### **Further reading:**

- Vachiramon V, Thadanipon K (2011) Postinflammatory hypopigmentation. Clin Exp Dermatol 36(7):708–714

### **Preauricular Pit (Preauricular Sinus)**

Developmental anomaly caused by incomplete fusion of the hillocks derived from the first and second branchial arches that is characterized by a small depression anterior to the superior insertion of the helix

### ***Differential Diagnosis***

- Basal cell carcinoma
- Branchial cleft cyst
- Dermoid sinus
- Dilated pore
- Epidermal inclusion cyst
- Parotid tumor

### ***Associations***

- Branchio-otic syndrome
- Branchio-oto-renal syndrome
- Hemifacial microsomia syndrome
- Goldenhar's syndrome
- Renal dysplasia
- Treacher Collins–Franceschetti syndrome

### ***Evaluation***

- Hearing test
- Renal ultrasound

### **Further reading:**

- Huang XY, Tay GS, Wansaicheong GK, Low WK (2007) Preauricular sinus: clinical course and associations. *Arch Otolaryngol Head Neck Surg* 133(1):65–68

### **Pretibial Myxedema**

Idiopathic mucinosis affecting patients with thyroid disease (especially after definitive treatment for Graves' disease) that is caused by deposition of hyaluronic acid in the dermis and characterized by indurated, nonpitting plaques or nodules on the bilateral anterior lower extremities, or rarely, on the upper extremities (Fig. 6.100)



**Fig. 6.100** Pretibial myxedema

### ***Differential Diagnosis***

- Acral ichthyosiform mucinosis
- B cell lymphoma of the leg
- Dermatomyositis
- Elephantiasis verrucosa
- Erythema nodosum
- Hypertrophic lichen planus
- Lichen amyloidosis
- Lichen myxedematosus
- Lichen simplex chronicus
- Lipodermatosclerosis
- Lymphedema
- Nephrogenic fibrosing dermopathy
- Scleromyxedema
- Venous stasis changes

### ***Evaluation***

- Antithyroid antibodies
- Thyroid function test



- Thyroid-stimulating antibodies
- Thyroid ultrasound

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Pentoxifylline
- Systemic corticosteroids

### **Further reading:**

- Jabbour SA (2003) Cutaneous manifestations of endocrine disorders: a guide for dermatologists. *Am J Clin Dermatol* 4(5):315–331

## **Progeria (Hutchinson–Gilford Progeria)**

Rare premature aging syndrome (AD) that is caused by mutation of the lamin A gene and is characterized by death in the first two decades of life due to coronary atherosclerosis, dwarfism, paucity of subcutaneous fat, markedly enlarged head with characteristic facies, atrophic skin with prominent subcutaneous veins, and sclerodermatous changes on the extremities

### ***Differential Diagnosis***

- Acrogeria (Gottron syndrome)
- Ataxia–telangiectasia
- Berardinelli–Seip syndrome
- Cockayne syndrome
- Donahue syndrome
- Hallermann–Streiff syndrome
- Kindler syndrome
- Metageria
- Rothmund–Thomson syndrome

- Seckel syndrome
- Systemic sclerosis
- Werner syndrome

**Further reading:**

- Mazereeuw-Hautier J, Wilson LC, Mohammed S et al (2007) Hutchinson–Gilford progeria syndrome: clinical findings in three patients carrying the G608G mutation in LMNA and review of the literature. *Br J Dermatol* 156(6):1308–1314

## **Progesterone Dermatitis, Autoimmune**

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Rare cutaneous eruption with variable age of onset that is caused by an allergic reaction to endogenous progesterone and is characterized by a polymorphous recurrent eruption of erythema-multiforme-like plaques, urticaria-like plaques, or vesiculobullous lesions predominantly on the trunk

### ***Differential Diagnosis***

- Atopic dermatitis
- Bullous pemphigoid
- Contact dermatitis
- Erythema annulare centrifugum
- Erythema multiforme
- Dermatitis herpetiformis
- Dyshidrotic eczema
- Pemphigoid gestationis
- Pruritic urticarial papules and plaques of pregnancy
- Urticaria
- Urticarial dermatitis

### ***Evaluation***

- Progesterone intradermal skin test

### ***Treatment Options***

- Topical corticosteroids
- Antihistamines
- Systemic corticosteroids
- Danazol
- Stanazolol
- Tamoxifen

### **Further reading:**

- Rasi A, Khatami A (2004) Autoimmune progesterone dermatitis. *Int J Dermatol* 43(8):588–590

### **Progressive Macular Hypomelanosis**

Acquired dermatosis predominantly affecting young females of African descent or from tropical areas that is possibly caused by *Propionibacterium acnes* and is characterized by nummular, ill-defined nonscaly, asymptomatic hypopigmented macules and patches predominantly on the trunk, without preceding inflammation

### ***Differential Diagnosis***

- Hypopigmented mycosis fungoides
- Pityriasis alba
- Pityriasis lichenoides chronica
- Postinflammatory hypopigmentation
- Tinea versicolor
- Tuberculoid leprosy

### ***Treatment Options***

- Topical clindamycin
- Benzoyl peroxide wash

- Tetracycline antibiotics
- Narrowband UVB phototherapy

**Further reading:**

- Relyveld GN, Menke HE, Westerhof W (2007) Progressive macular hypomelanosis: an overview. *Am J Clin Dermatol* 8(1):13–19

## **Proliferative Verrucous Leukoplakia**

Distinct type of aggressive leukoplakia that arises in elderly patients that has a high recurrence rate after adequate therapy and a high incidence of evolving to squamous cell carcinoma and that is characterized by multifocal, white, verrucous plaques on any surface of the oral mucosa, but most commonly the buccal mucosa or tongue

### ***Differential Diagnosis***

- Candidiasis
- Cheek-bite keratosis
- Focal epithelial hyperplasia
- Leukoedema
- Lichen planus
- Oral leukoplakia
- Smoker's palate
- Squamous cell carcinoma
- Verrucous carcinoma
- White sponge nevus

**Further reading:**

- Cabay RJ, Morton TH Jr, Epstein JB (2007) Proliferative verrucous leukoplakia and its progression to oral carcinoma: a review of the literature. *J Oral Pathol Med* 36(5):255–261

## Proteus Syndrome

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Idiopathic sporadic syndrome with protean features that presents at birth or in the first year of life and is characterized by epidermal nevi, capillary malformations, lymphangiomas, plantar cerebriform collagenomas, lipomas, hemihypertrophy, and a variety of other cutaneous, ocular, skeletal, and CNS defects

### *Differential Diagnosis*

- Bannayan–Riley–Ruvulcaba syndrome
- Encephalocraniocutaneous lipomatosis
- Epidermal nevus syndrome
- Klippel–Trenaunay syndrome
- Maffucci syndrome
- Neurofibromatosis

### *Diagnostic Criteria*

- Mandatory general criteria
  - Mosaic distribution of lesions
  - Progressive course
  - Sporadic occurrence
- Specific criteria (A, or two from group B, or three from group C)
  - Group A
    - Connective tissue nevus
  - Group B
    - Epidermal nevus
    - Disproportionate overgrowth of limbs, skull, external auditory meatus, vertebra, or viscera (spleen and/or thymus)
    - Bilateral ovarian cystadenomas or parotid monomorphic adenoma before the end of the second decade

- Group C
  - Lipoma or regional absence of fat
  - Capillary, venous, and/or lymphatic malformation
  - Dolichocephaly, long face, minor downslanting of palpebral fissures, and/or minor ptosis, low nasal bridge, wide or anteverted nares, and open mouth at rest

**Further reading:**

- Biesecker LG, Happle R, Mulliken JB et al (1999) Proteus syndrome: diagnostic criteria, differential diagnosis, and patient evaluation. *Am J Med Genet* 84(5):389–395
- Nguyen D, Turner JT, Olsen C et al (2004) Cutaneous manifestations of proteus syndrome: correlations with general clinical severity. *Arch Dermatol* 140(8):947–953

**Protothecosis**

Trauma-related cutaneous infection caused by the algae, *Prototheca wickerhamii*, that is characterized by olecranon bursitis or a chronic verrucous nodule or plaque on the extremities

**Differential Diagnosis**

- Anthrax
- Blastomycosis-like pyoderma
- Deep fungal infection
- *Mycobacterium marinum* infection
- Nocardiosis
- Olecranon bursitis
- Orf
- Pyoderma
- Pyoderma gangrenosum
- Sporotrichosis

**Further reading:**

- Lass-Flörl C, Mayr A (2007) Human protothecosis. *Clin Microbiol Rev* 20(2):230–242

## **Prurigo Nodularis**

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Chronic neurodermatitis associated with pruritus with or without an underlying cause that leads to repeated rubbing, picking, and scratching of the itchy areas and is characterized by solitary or multiple hyperpigmented scaly nodules with overlying excoriation that are most commonly located on the extensor aspects of the extremities

### ***Differential Diagnosis***

- Actinic keratosis
- Arthropod bites
- Cutaneous metastasis
- Cutaneous T cell lymphoma
- Disseminated superficial porokeratosis
- Halogenoderma
- Hypertrophic lichen planus
- Lichen simplex chronicus
- Lymphomatoid papulosis
- Molluscum contagiosum
- Multiple dermatofibromas
- Multiple granular cell tumors
- Multiple keratoacanthomas
- Nodular amyloidosis
- Nodular scabies
- Pemphigoid nodularis
- Perforating diseases
- Pruriginous epidermolysis bullosa
- Sarcoidosis
- Trichotillomania
- Xanthoma

### ***Evaluation***

- Complete blood count
- HIV test

- Liver function test
- Renal function test
- Serum chemistry, including calcium level
- Thyroid function

### ***Treatment Options***

- Topical corticosteroids
- Antihistamines
- Intralesional corticosteroids
- Cryotherapy
- Gabapentin
- UVB phototherapy
- Cyclosporine
- Thalidomide

### **Further reading:**

- Lee MR, Shumack S (2005) Prurigo nodularis: a review. *Australas J Dermatol* 46(4):211–218

## **Prurigo Pigmentosa**

Idiopathic pruritic disorder most commonly described in young Japanese women that is characterized by a recurrent eruption of erythematous macules, papules, and papulovesicles that are symmetrically located on the upper back, chest, and sacral area and that heal to leave behind a reticulate pattern of hyperpigmentation

### ***Differential Diagnosis***

- Confluent and reticulated papillomatosis
- Contact dermatitis
- Dermatitis herpetiformis
- Excoriations
- Lupus erythematosus



- Macular amyloidosis
- Neurodermatitis
- Pityriasis lichenoides
- Subacute prurigo
- Terra firma–forme dermatosis
- Urticarial dermatitis

### ***Treatment Options***

- Minocycline
- Dapsone

### **Further reading:**

- Asgari M, Daneshpazhooch M, Chams Davatchi C et al (2006) Prurigo pigmentosa: an underdiagnosed disease in patients of Iranian descent? *J Am Acad Dermatol* 55(1):131–136

## **Prurigo Simplex (Subacute Prurigo, Papular Dermatitis, and Itchy Red Bump Disease)**

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Idiopathic chronic pruritic disorder that affects middle-aged to elderly individuals and that is characterized by erythematous dome-shaped papules with a central vesicle that is quickly excoriated

### ***Differential Diagnosis***

- Atopic dermatitis
- Bullous pemphigoid
- Contact dermatitis
- Dermatitis herpetiformis
- Dermatographism
- Galli–Galli disease
- Grover’s disease

- Hypereosinophilic syndrome
- Id reaction
- Insect-bite reactions
- Linear IgA disease
- Papular urticaria
- Papuloerythroderma of Ofuji
- Pityriasis lichenoides et varioliformis acuta
- Scabies
- Urticaria
- Urticarial dermatitis

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- UVB phototherapy
- Antihistamines
- Methotrexate
- Mycophenolate mofetil
- Gabapentin
- Cyclosporine
- Olanzapine

### **Further reading:**

- Wallengren J (2004) Prurigo: diagnosis and management. *Am J Clin Dermatol* 5(2):85–95

### **Pruritic Urticarial Papules and Plaques of Pregnancy**

Idiopathic, benign dermatosis of pregnancy that primarily affects primigravida patients in the third trimester and is characterized by erythematous, urticarial, papules and plaques predominantly on the abdomen,

with sparing of the periumbilical area and preferential involvement of abdominal striae

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Autoimmune progesterone dermatitis
- Cholestasis of pregnancy
- Drug eruptions
- Erythema multiforme
- Impetigo herpetiformis
- Insect bites
- Pemphigoid gestationis
- Scabies
- Urticaria
- Viral exanthem

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Antihistamines
- Induction of labor

### **Further reading:**

- Matz H, Orion E, Wolf R (2006) Pruritic urticarial papules and plaques of pregnancy: polymorphic eruption of pregnancy (PUPPP). *Clin Dermatol* 24(2):105–108

### **Pseudoatrophoderma Colli**

Uncommon dermatosis of unknown cause that is characterized by atrophic-like hyperpigmented or hypopigmented macules on the neck, shoulders, and upper trunk

### ***Differential Diagnosis***

- Acanthosis nigricans
- Anetoderma
- Confluent and reticulated papillomatosis
- Erythema dyschromicum perstans
- Lichen sclerosus et atrophicus
- Middermal elastolysis
- Poikiloderma of Civatte
- Small plaque parapsoriasis
- Tinea versicolor
- Vitiligo

### ***Associations***

- Acanthosis nigricans
- Confluent and reticulated papillomatosis

### **Further reading:**

- Kauh YC, Knepp ME, Luscombe HA (1980) *Pseudoatrophoderma colli*. A familial case. Arch Dermatol 116(10):1181–1182

### **Pseudocyst of the Auricle**

Idiopathic, possibly trauma-related, fluid-filled cyst-like dilatation between the two embryonic layers of auricular cartilage that is characterized by a unilateral, noninflammatory swelling of the ear (Fig. 6.101)

### ***Differential Diagnosis***

- Cutaneous B cell lymphoma
- Relapsing polychondritis
- Traumatic auricular hematoma



**Fig. 6.101** Pseudocyst of the auricle

**Further reading:**

- Ng W, Kikuchi Y, Chen X, Hira K et al (2007) Pseudocysts of the auricle in a young adult with facial and ear atopic dermatitis. *J Am Acad Dermatol* 56(5):858–861

### **Psuedoepitheliomatous Keratotic and Micaceous Balanitis**

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Premalignant disorder that may progress to verrucous carcinoma (but not associated with human papillomavirus) that affects older men and is characterized by a psoriasiform, micaceous, or verrucous plaque on the glans penis, with fissures and ulceration

***Differential Diagnosis***

- Bowenoid papulosis
- Condyloma acuminatum
- Deep fungal infection
- Erythroplasia of Queyrat

- Granular cell tumor
- Lichen planus
- Psoriasis
- Squamous cell carcinoma
- Verrucous carcinoma
- Zoon balanitis

**Further reading:**

- Child FJ, Kim BK, Ganesan R et al (2000) Verrucous carcinoma arising in pseudoepitheliomatous keratotic and micaceous balanitis, without evidence of human papillomavirus. *Br J Dermatol* 143(1):183–187

**Pseudofolliculitis Barbae**

Inflammatory disorder of the beard follicles that predominantly affects men of African descent, is caused by a inflammatory reaction to follicle-penetrating hair shafts after a close shave, and is characterized by numerous follicular papules and pustules, with a tendency for scarring or keloid formation

***Differential Diagnosis***

- Acne vulgaris
- Herpetic sycosis
- Rosacea
- Sarcoidosis
- Sycosis barbae
- Tinea barbae
- Trichostasis spinulosa

***Associations***

- Acne keloidalis nuchae

### ***Treatment Options***

- Education regarding shaving technique
- Topical clindamycin
- Topical corticosteroids
- Topical retinoids
- Glycolic acid peels, lotions, or cleansers
- Tetracycline antibiotics

#### **Further reading:**

- Perry PK, Cook-Bolden FE, Rahman Z et al (2002) Defining pseudofolliculitis barbae in 2001: a review of the literature and current trends. *J Am Acad Dermatol* 46:S113–S119

### ***Pseudomonas Hot-Foot Syndrome***

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Type of eccrine hidradenitis caused by *Pseudomonas aeruginosa* that is associated with community outbreaks among children exposed to high concentrations of *Pseudomonas* in swimming pools and is characterized by erythematous tender nodules on the plantar surfaces

### ***Differential Diagnosis***

- Contact urticaria
- Delayed pressure urticaria
- Erythema nodosum
- Infectious panniculitis
- Piezogenic pedal papules
- Recurrent idiopathic palmoplantar hidradenitis

#### **Further reading:**

- Fiorillo L, Zucker M, Sawyer D, Lin AN (2001) The pseudomonas hot-foot syndrome. *N Engl J Med* 345(5):335–338

## **Pseudoporphyria**

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Porphyria-cutanea-tarda-like eruption associated with medications, ultraviolet-light therapy, or hemodialysis that is probably an exaggerated phototoxic reaction and is characterized by fragile skin, scarring, and vesiculobullous lesions on the dorsal hands and forearms but without the hypertrichosis, hyperpigmentation, sclerodermatous skin changes, and elevated porphyrin levels seen in its namesake

### ***Differential Diagnosis***

- Bullous amyloidosis
- Cutaneous lupus erythematosus
- Epidermolysis bullosa acquisita
- Hydroa vacciniforme
- Pemphigus erythematosus
- Phototoxic drug reaction
- Polymorphous light eruption
- Porphyria cutanea tarda
- Toxic epidermal necrolysis

### ***Associated Medications***

- Acitretin
- Alcohol
- Amiodarone
- Barbiturates
- Cyclosporine
- Dapsone
- Dialysis
- Estrogen
- Furosemide
- Griseofulvin
- Imatinib



- Isotretinoin
- Naproxen
- NSAIDs
- Oral contraception
- Sulfonamides
- Tetracyclines
- Voriconazole

**Further reading:**

- Tolland JP, Mckeown PP, Corbett JR (2007) Voriconazole-induced pseudoporphyria. *Photodermatol Photoimmunol Photomed* 23(1):29–31

**Pseudoverrucous Papules and Nodules**

Uncommon manifestation of irritant contact dermatitis that occurs predominantly in the perianal area of infants and that is characterized by small erythematous, round, flat-topped papules

***Differential Diagnosis***

- Candidiasis
- Condyloma acuminatum
- Cutaneous Crohn's disease
- Granuloma gluteale infantum
- Jacquet's erosive diaper dermatitis
- Langerhans cell histiocytosis
- Lichen simplex chronicus

***Treatment Options***

- Management of incontinence
- Barrier creams
- Low potency topical corticosteroids

**Further reading:**

- Robson KJ, Maughan JA, Purcell SD et al (2006) Erosive papulonodular dermatosis associated with topical benzocaine: a report of two cases and evidence that granuloma gluteale, pseudo verrucous papules, and Jacquet's erosive dermatitis are a disease spectrum. *J Am Acad Dermatol* 55(5 Suppl):S74–S80

**Pseudoxanthoma Elasticum**

Autosomal-recessive disorder caused by a defect in the ABCC6 (ATP-binding cassette transporter C6) that leads to multisystem calcification and fragmentation of elastic fibers and is characterized by redundant, yellow pebbly skin folds of the flexures (plucked chicken skin), angioid streaks in the eye with possible blindness, hypertension, and gastrointestinal hemorrhage (Fig. 6.102)

**Differential Diagnosis**

- Actinic elastosis
- Amyloid elastosis



**Fig. 6.102** Pseudoxanthoma elasticum

- Buschke–Ollendorf syndrome
- Calcinosis cutis
- Cutis laxa
- D-Penicillamine therapy
- Ehlers–Danlos syndrome
- Eosinophilia–myalgia syndrome
- Fibroelastolytic papulosis of the neck
- Fox–Fordyce disease
- Granulomatous slack skin
- Juxtaclavicular beaded lines
- Late-onset focal dermal elastosis
- Lupus erythematosus, chronic cutaneous
- Marfan syndrome
- Normolipemic plane xanthomas
- Papular elastorrhesis
- Perforating calcific elastosis
- Saltpeter exposure
- Scleromyxedema
- Xanthoma disseminatum

### ***Diagnostic Criteria***

- Major criteria
  - Characteristic skin involvement
  - Characteristic histologic features in lesional skin
  - Characteristic ocular disease
- Minor criteria
  - Characteristic features in nonlesional skin
  - Family history of PXE in first-degree relatives

### ***Associations***

- Elastosis perforans serpiginosa
- Hereditary spherocytosis

- Sickle cell anemia
- Thalassemia

### **Evaluation**

- Cardiovascular evaluation
- CT/MRI of the brain
- Lipid panel
- Liver function test
- Ophthalmologic exam
- Renal function test
- Serum chemistry profile including calcium and phosphate
- Stool for occult blood
- Urinalysis

### **Further reading:**

- Lebwohl M, Neldner K, Pope FM et al (1994) Classification of pseudoxanthoma elasticum: report of a consensus conference. *J Am Acad Dermatol* 30:103–107
- Ringpfeil F (2005) Selected disorders of connective tissue: pseudoxanthoma elasticum, cutis laxa, and lipoid proteinosis. *Clin Dermatol* 23(1):41–46

## **Psoriasis**

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Common, immune-mediated disorder of epidermal proliferation that is characterized by variably sized pink to erythematous plaques with overlying silvery scale, has pinpoint bleeding with removal of scale (Auspitz sign), displays the Koebner phenomenon, has an occasional pustular or erythrodermic presentation, and typically affects the scalp, elbows, knees, and nails, with the potential to involve widespread areas of the body

### **Subtypes/Variants**

- Annular
- Discoid
- Erythrodermic

- Facial
- Figurate
- Follicular
- Genital
- Guttate
- Gyrate
- Inverse
- Nail
- Ostraceous
- Palmoplantar
- Plaque
- Pustular
- Rupial
- Scalp

### *Differential Diagnosis*

#### Erythrodermic

- Atopic dermatitis
- Drug reaction
- Erythrodermic mycosis fungoides
- Generalized contact dermatitis
- Pityriasis rubra pilaris
- Sezary syndrome

#### Facial

- Acrokeratosis paraneoplastica
- Allergic contact dermatitis
- Lupus erythematosus
- Seborrheic dermatitis
- Tinea faciei

#### Genital

- Candidiasis
- Contact dermatitis

- Erythroplasia of Queyrat
- Extramammary Paget's disease
- Fixed drug eruption
- Lichen planus
- Lichen simplex chronicus
- Psuedoepitheliomatous keratotic and micaceous balanitis
- Reiter syndrome
- Seborrheic dermatitis
- Tinea cruris

### Guttate

- Disseminated histoplasmosis
- Eruptive lichen planus
- Pityriasis lichenoides chronica
- Pityriasis rosea
- Psoriasiform drug eruption
- Scabies
- Scarlet fever
- Secondary syphilis
- Small plaque parapsoriasis
- Viral exanthem (especially resolving)

### Inverse

- Baboon syndrome
- Candidiasis
- Contact dermatitis
- Extramammary Paget's disease
- Intertrigo
- Langerhans cell histiocytosis
- Lichen planus pigmentosus–inversus
- Lichen simplex chronicus
- Pemphigus foliaceus
- Seborrheic dermatitis
- Tinea cruris

## Nail

- Acrokeratosis paraneoplastica
- Alopecia areata
- Contact dermatitis
- Idiopathic onycholysis
- Keratoderma blennorrhagicum
- Lichen planus
- Onychomycosis
- Parakeratosis pustulosa
- Pityriasis rubra pilaris
- Scabies
- Sezary syndrome
- Traumatic onycholysis

## Plaque, Including Palmoplantar

- Bowen's disease
- Crusted scabies
- Dermatomyositis
- Discoid lupus erythematosus
- Erythema annulare centrifugum
- Erythema gyratum repens
- Lichen planus
- Lichen simplex chronicus
- Mycosis fungoides
- Nummular eczema
- Pemphigus foliaceus
- Pityriasis rosea
- Porokeratosis of Mibelli
- Reiter's syndrome
- Sarcoidosis
- Seborrheic dermatitis
- Small plaque parapsoriasis
- Subacute cutaneous lupus

- Tertiary syphilis
- Tinea corporis

### Pustular

- Acute generalized exanthematous pustulosis
- Amicrobial pustulosis with autoimmunity
- Candidiasis
- Folliculitis
- IgA pemphigus
- Miliaria pustulosa
- Pemphigus foliaceus
- Reiter's syndrome
- Subcorneal pustular dermatosis

### Scalp

- Atopic dermatitis
- Dermatomyositis
- Lichen simplex chronicus
- Seborrheic dermatitis
- Tinea capitis

### **Associations**

- Alcohol abuse
- Arthritis (especially nail)
- Coronary artery disease
- Hypocalcemia (especially pustular)
- Medications
- Obesity
- SAPHO syndrome (especially pustular)
- Smoking
- Streptococcal infection (especially guttate)
- Stress
- Viral infection



### ***Exacerbating Medications***

- Antimalarials
- Beta-blockers
- Calcium channel blockers
- Captopril
- G-CSF
- Glyburide
- Interferons
- Lipid-lowering drugs
- Lithium
- NSAIDs
- Terbinafine

### ***Treatment Options***

- Topical corticosteroids
- Anthralin
- Tar
- Salicylic acid
- Vitamin D analogues
- Tacrolimus ointment
- UVB phototherapy
- Acitretin
- Methotrexate
- Sulfasalazine
- Etanercept
- Adalimumab
- Alefacept
- Infliximab
- Ustekinumab
- Hydroxyurea
- Cyclosporine
- Mycophenolate mofetil
- Azathioprine

**Further reading:**

- Griffiths CE, Barker JN (2007) Pathogenesis and clinical features of psoriasis. *Lancet* 370(9583):263–271

**Psoriatic Arthritis**

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Inflammatory type of arthritis that has several different subtypes and is associated with psoriasis

***Subtypes/Variants***

- Arthritis mutilans
- Ankylosing-spondylitis-like
- Asymmetric oligoarthritis
- Distal interphalangeal joint only
- Rheumatoid-arthritis-like

***Differential Diagnosis***

- Gouty arthritis
- Juvenile rheumatoid arthritis
- Multicentric reticulohistiocytosis
- Osteoarthritis
- Reactive arthritis with urethritis and conjunctivitis
- Rheumatoid arthritis

***Diagnostic Criteria***

- Inflammatory articular disease (joint, spine, or enthesal) with three points from the following five categories:
  - Evidence of current psoriasis, a personal history of psoriasis, or a family history of psoriasis
  - Typical psoriatic nail dystrophy including onycholysis, pitting, and hyperkeratosis

- A negative test result for the presence of rheumatoid factor by any method except latex
- Either current dactylitis, defined as swelling of an entire digit, or a history of dactylitis
- Radiographic evidence of juxtaarticular new bone formation on plain radiographs of the hand or foot

**Further reading:**

- Taylor W, Gladman D, Helliwell P et al (2006) Classification criteria for psoriatic arthritis: development of new criteria from a large international study. *Arthritis Rheum* 54(8):2665–2673

**Purpura, Actinic (Bateman's Purpura)**

Purpura on the extensor surface of the forearms that affects the elderly, is caused by blood vessel fragility related to photoaging, and is characterized by large purpura and ecchymoses with or without a history of trauma to the affected area

***Differential Diagnosis***

- AL amyloidosis
- Anticoagulant therapy
- Coagulation disorder
- Elder abuse
- Psychogenic purpura
- Steroid-induced purpura
- Trauma
- Vitamin K deficiency

**Further reading:**

- Carlson JA, Chen KR (2007) Cutaneous pseudovasculitis. *Am J Dermatopathol* 29(1):44–55

## **Pyoderma Faciale (Rosacea Fulminans)**

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Uncommon acneiform condition of the face of young women characterized by facial erythema, papulopustules, confluent nodules, and draining sinuses, but no comedones

### ***Differential Diagnosis***

- Acne conglobata
- Cutaneous Rosai–Dorfman disease
- Deep inflammatory tinea faciei
- Jessner’s lymphocytic infiltrate
- Lupus erythematosus tumidus
- Leukemia cutis
- Lymphoma
- Pyoderma gangrenosum
- Solid facial edema
- Staphylococcal furunculosis
- Sweet’s syndrome
- Wegener’s granulomatosis

### ***Associations***

- Erythema nodosum
- Inflammatory bowel disease

### ***Treatment Options***

- Systemic corticosteroids
- Isotretinoin
- Systemic tetracyclines
- Azithromycin
- Dapsone

**Further reading:**

- Akhyani M, Daneshpazhooh M, Ghandi N (2007) The association of pyoderma faciale and erythema nodosum. *Clin Exp Dermatol* 32(3):275–277

**Pyoderma Gangrenosum**

Idiopathic neutrophilic dermatosis associated with internal disease that is characterized by erythematous nodules on the lower extremity or elsewhere that rapidly ulcerate and expand outward with a violaceous undermined, overhanging border and central purulent, necrotic material

**Subtypes/Variants**

- Bullous
- Neutrophilic dermatosis of the dorsal hands (Fig. 6.103)



**Fig. 6.103** Neutrophilic dermatosis of the dorsal hands



**Fig. 6.104** Pyoderma gangrenosum (Courtesy of K. Guidry)

- Peristomal
- Pustular
- Ulcerative (classic; Fig. 6.104)
- Vegetative (superficial granulomatous)

### ***Differential Diagnosis***

- Amebiasis
- Anthrax
- Antiphospholipid antibody syndrome
- Arterial insufficiency ulcer
- Basal cell carcinoma
- Behçet's disease
- Bowel-associated dermatosis–arthritis syndrome
- Brown recluse spider bite
- Cellulitis
- Chancriform pyoderma
- Churg–Strauss syndrome
- Cutaneous polyarteritis nodosa
- Deep fungal infection (especially blastomycosis)
- Ecthyma

- Ecthyma gangrenosum
- Factitial disease
- Felty syndrome
- Follicular infections
- Gummatous treponemal ulcers
- Halogenoderma
- Hemoglobinopathies
- Herpes simplex virus infection
- Insect-bite reaction
- Leishmaniasis
- Lymphoma
- Mycobacterial infections
- Orf/milker's nodule
- Panniculitides
- Pemphigus vegetans
- Rheumatoid vasculitis
- Schistosomiasis
- Septic emboli
- Sporotrichosis
- Squamous cell carcinoma
- Streptococcal synergistic gangrene
- Sweet's syndrome
- Thrombosis
- Ulcerative necrobiosis lipoidica
- Venous stasis ulcer
- Wegener's granulomatosis

### ***Associations***

- Acne conglobata
- Acute myelogenous leukemia
- Ankylosing spondylitis
- Behçet's disease
- Chronic active hepatitis

- Connective tissue disease
- Diabetes mellitus
- Erythema elevatum diutinum
- Hairy-cell leukemia
- Hidradenitis suppurativa
- HIV infection
- Inflammatory bowel disease
- IgA gammopathy
- IgA pemphigus
- Myelofibrosis
- Myeloma
- Paroxysmal nocturnal hemoglobinuria
- Polycythemia vera
- Primary biliary cirrhosis
- Rheumatoid arthritis
- Sarcoidosis
- SAPHO syndrome
- Seronegative arthritis
- Spondylitis
- Subcorneal pustular dermatosis
- Sweet's syndrome
- Takayasu's disease
- Thyroid disease

### ***Evaluation***

- Antinuclear antibodies
- Immunoglobulin panel
- Antineutrophilic cytoplasmic antibodies
- Antiphospholipid antibodies
- Bone marrow examination
- Complete blood count with smear
- Colonoscopy with biopsy
- Chest radiography



- Liver function test
- Rheumatoid factor
- Serum/urinary protein electrophoresis
- Stool for occult blood
- Urinalysis

### ***Treatment Options***

- Topical corticosteroids
- Tacrolimus ointment
- Dapsone
- Minocycline
- Systemic corticosteroids
- Nicotine replacement
- Cyclosporine
- Azathioprine
- Mycophenolate mofetil
- Methotrexate
- Infliximab
- Sulfasalazine

### **Further reading:**

- Ahmadi S, Powell FC (2005) Pyoderma gangrenosum: uncommon presentations. Clin Dermatol 23(6):612–620

## **Pyogenic Granuloma**

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Reactive vascular neoplasm of uncertain pathogenesis that is often associated with trauma and is characterized by a small, solitary (or multiple, eruptive) friable vascular papule or nodule that bleeds easily, is often covered with a bandage by the patient (band-aid sign), and is located on the periungual area, the digits, the palms, or any other area, including the oral cavity (Fig. 6.105)



**Fig. 6.105** Pyogenic granuloma

### ***Differential Diagnosis***

- Adnexal carcinoma
- Atypical fibroxanthoma
- Amelanotic melanoma
- Angioendothelioma
- Angiolymphoid hyperplasia
- Angiosarcoma
- Atypical fibroxanthoma
- Bacillary angiomatosis
- Clear cell acanthoma
- Eccrine acrospiroma
- Epithelioid fibrous histiocytoma
- Glomus tumors
- Granulation tissue
- Hemangiomas
- Irritated nevi
- Kaposi's sarcoma
- Merkel cell carcinoma

- Metastatic lesion
- Orf
- Poroma
- Spitz nevus
- Traumatized angioma
- Wart

### ***Associations***

- Medications
- Pregnancy (granuloma gravidarum)
- Trauma

### ***Associated Medications***

- Capecitabine
- 5FU
- EGF receptor inhibitors
- Indinavir
- Isotretinoin
- Mitoxantrone
- Oral contraceptives

### **Further reading:**

- Scheinfeld NS (2008) Pyogenic granuloma. *Skinmed* 7(1):37–39

## **Pyostomatitis Vegetans**

Idiopathic, eosinophil-rich, inflammatory disorder of the oral cavity that is predominantly associated with inflammatory bowel disease, especially ulcerative colitis, but also liver disease, and is characterized by multiple pustules on the labial and buccal mucosa, which erode to form “snail-track” ulcers and vegetating lesions, along with peripheral eosinophilia

### ***Differential Diagnosis***

- Behçet's disease
- Bullous drug eruption
- Bullous pemphigoid
- Eosinophilic ulcer
- Epidermolysis bullosa acquisita
- Erythema multiforme
- Herpes simplex virus infection
- Pemphigus vegetans
- Syphilis

#### **Further reading:**

- Hegarty AM, Barrett AW, Scully C (2004) Pyostomatitis vegetans. Clin Exp Dermatol 29(1):1-7

### **Pyridoxine Deficiency**

Deficiency of vitamin B6 that is characterized by peripheral neuropathy, seizures, confusion, a seborrheic-dermatitis-like rash, a pellagra-like eruption (because of secondary niacin deficiency), glossitis, and cheilitis

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- Essential fatty acid deficiency
- B12 deficiency
- Necrolytic migratory erythema
- Pellagra
- Riboflavin deficiency
- Seborrheic dermatitis

### **Associations**

- Alcoholism
- Cirrhosis
- Hydralazine
- Isoniazid
- Malnutrition
- Oral contraception
- Penicillamine
- Uremia

### **Further reading:**

- Friedli A, Saurat JH (2004) Images in clinical medicine. Oculo-rogenital syndrome: a deficiency of vitamins B2 and B6. N Engl J Med 350(11):1130

### **Radiation Dermatitis**

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Acute or chronic cutaneous changes caused by exposure to ionizing radiation that is characterized by erythema, swelling, and blistering (acute, arises within the first month) or atrophic, scarring, hyperpigmentation, hypopigmentation, and telangiectasia (chronic, arises 6 months after radiation), with the latter having the potential to ulcerate or develop basal cell and squamous cell carcinomas, angiosarcomas, and other soft tissue sarcomas

### **Differential Diagnosis**

- Basal cell carcinoma
- Contact dermatitis
- Decubitus ulcer
- Erythema ab igne
- Lichen sclerosus et atrophicus
- Metastatic disease

- Morphea
- Poikiloderma vasculare atrophicans
- Resolved infantile hemangioma
- Squamous cell carcinoma
- Steroid atrophy
- Traumatic ulceration
- Unilateral nevoid telangiectasia

**Further reading:**

- Franchi A, Massi D, Gallo O et al (2006) Radiation-induced cutaneous carcinoma of the head and neck: is there an early role for p53 mutations? *Clin Exp Dermatol* 31(6):793–798

## **Ranula**

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Large type of mucocele that is caused by mucus extravasating out of a major salivary duct into the submucosal space and characterized by a blue, translucent submucosal swelling involving the floor of the mouth or neck

### ***Differential Diagnosis***

- Abscess
- Blue rubber bleb nevus
- Dermoid cyst
- Hemangioma
- Lipoma
- Lymphangioma
- Plexiform neurofibroma
- Salivary gland neoplasm
- Venous malformation

**Further reading:**

- Chidzonga MM, Mahomva L (2007) Ranula: experience with 83 cases in Zimbabwe. *J Oral Maxillofac Surg* 65(1):79–82

## Rat-Bite Fever (Haverhill Fever, Sodoku)

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Infectious disease that is acquired by rat bite, that is caused by either *Streptobacillus moniliformis* (Haverhill fever; major cause in the West) or *Spirillum minus* (Sodoku, major cause in the East), and is characterized by fever, arthralgias, and a morbilliform or petechial skin eruption (*S. moniliformis*), or fever, no arthralgias, lymphadenopathy, and an eruption of violaceous to erythematous indurated or urticarial plaques on the trunk (*S. minus*)

### *Differential Diagnosis*

- Brucellosis
- Ehrlichiosis
- Epstein–Barr virus infection
- Erythema multiforme
- Gonococcemia
- Leptospirosis
- Lyme disease
- Malaria
- Meningococcemia
- Relapsing fever
- Rheumatic fever
- Rocky Mountain spotted fever
- Secondary syphilis
- Serum sickness
- Sweet's syndrome
- Syphilis
- Systemic lupus erythematosus
- Typhoid fever
- Viral exanthem

### *Evaluation*

- Blood cultures

**Further reading:**

- Elliott SP (2007) Rat-bite fever and *Streptobacillus moniliformis*. Clin Microbiol Rev 20(1):13–22

**Raynaud's Phenomenon/Raynaud's Disease**

---

Multifactorial vascular disorder that can accompany a variety of connective tissue diseases (phenomenon) or occur as a solitary complaint (disease) and is characterized by recurrent, cold-induced episodes of peripheral vasoconstriction leading to pain, numbness, and color change cycling from white (pallor) to blue (cyanosis) to red (hyperemia) in one or more asymmetric digits and, if chronic, the digits suffer from complications such as tip necrosis, ulceration, and gangrene

**Differential Diagnosis**

- Achenbach syndrome
- Acrocyanosis
- Acrodynia
- Arteriosclerosis
- Bleomycin therapy
- Buerger's disease
- Carcinoid syndrome
- Carpal tunnel syndrome
- Chemotherapy induced
- Cholesterol emboli syndrome
- Cold agglutinin disease
- Cold injury
- Cryofibrinogenemia
- Cryoglobulinemia
- Dermatomyositis
- Erythromelalgia
- Frostbite
- Paraproteinemia
- Paroxysmal nocturnal hemoglobinuria



- Perniosis
- Pheochromocytoma
- Polycythemia vera
- Polyvinyl chloride exposure
- Peripheral vascular disease
- Scleroderma
- Systemic lupus erythematosus
- Takayasu's arteritis
- Thoracic outlet syndrome
- Vibration disease

### ***Diagnostic Criteria (For Primary Raynaud's Disease)***

- Absence of gangrene or gangrene limited to fingertips
- Bilateral extremity involvement
- Negative antinuclear antibodies
- Normal sedimentation rate
- Normal vascular exam with symmetric pulses and normal nail-fold capillary microscopy
- Symptoms for at least 2 years
- Vasospastic attacks precipitated by exposure to cold or emotional stimuli

### ***Associations***

- Arteriosclerosis
- Cryoglobulins and cryofibrinogens
- Idiopathic
- Lupus erythematosus
- Medications
- Nerve compression
- Nicotine
- Paraneoplastic acral vascular syndrome
- Polyarteritis nodosa

- Scleroderma
- Stenosis
- Thoracic outlet syndrome
- Thrombotic disorders
- Trauma
- Vasculitis
- Vibration white finger
- Vinyl chloride

### ***Associated Medications***

- Amphetamines
- Beta-blockers
- Bleomycin
- Bromocriptine
- Clonidine
- Cyclosporine
- Fluoxetine
- Interferon alpha
- Oral contraceptives
- Vinblastine

### ***Evaluation***

- Anticardiolipin antibodies
- Antinuclear antibodies
- Chest radiograph
- Complete blood count
- Cryoglobulins
- Lupus anticoagulant
- Rheumatoid factor
- Sedimentation rate
- Serum protein electrophoresis

### ***Treatment Options***

- Warming measures/gloves
- Nifedipine
- Diltiazem
- Topical nitroglycerin
- Aspirin
- Dipyridamole
- Fluoxetine
- Prostacyclin
- Sildenafil
- Sympathectomy

### **Further reading:**

- Pope JE (2007) The diagnosis and treatment of Raynaud's phenomenon: a practical approach. *Drugs* 67(4):517–525
- Leroy EC, Medsger TA Jr (1992) Raynaud's phenomenon: a proposal for classification. *Clin Exp Rheumatol* 10(5):485–488

## **Reactive Angioendotheliomatosis**

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Benign reactive disorder of endothelial proliferation that is associated with several vasoocclusive triggers and is characterized by erythematous or hemorrhagic papules and nodules on the trunk or lower extremities

### ***Differential Diagnosis***

- Bacillary angiomatosis
- Diffuse dermal angiomatosis
- Dabska's tumor
- Glomeruloid hemangioma
- Kaposi's sarcoma
- Intravascular large B cell lymphoma (malignant angioendotheliomatosis)
- Intravascular histiocytosis

- Intravascular papillary endothelial hyperplasia
- Intravascular pyogenic granuloma
- Livedo reticularis
- Multinucleate cell angiohistiocytoma
- Polyarteritis nodosa
- Vasculitis, cutaneous small vessel

### **Associations**

- Amyloidosis
- Antiphospholipid antibody syndrome
- Atherosclerosis
- Cirrhosis
- Cryoglobulinemia
- Endocarditis
- Paraproteinemia
- Rheumatoid arthritis
- Systemic infection
- Tuberculosis

### **Evaluation**

- Anticardiolipin antibodies
- Blood cultures
- Cryoglobulins
- Echocardiography
- Liver function test
- Lupus anticoagulant
- Renal function test
- Serum protein electrophoresis
- Tuberculin skin test

### **Further reading:**

- Kirke S, Angus B, Kesteven PJ, Calonje E, Simpson N (2007) Localized reactive angioendotheliomatosis. *Clin Exp Dermatol* 32(1):45–47

## Reactive Arthritis with Urethritis and Conjunctivitis (Reiter Syndrome)

---

Idiopathic syndrome predominantly affecting HLA-B27+ young men that is most commonly associated with *Chlamydia* infections (or dysentery in young children) and is characterized by hyperkeratotic pustular skin lesions on the palms and soles (keratoderma blennorrhagicum, Vidal–Jacquet syndrome), circinate balanitis, dystrophic nails, arthritis affecting the large joints, such as knees or sacroiliac joint, and urethritis and conjunctivitis

### *Differential Diagnosis*

- Acute generalized exanthematous pustulosis
- Ankylosing spondylitis
- Atopic dermatitis
- Behçet's disease
- Chronic mucocutaneous candidiasis
- Dermatomyositis
- Gonococemia
- Juvenile rheumatoid arthritis
- Kawasaki disease
- Lupus erythematosus
- Lichen planus
- Lyme disease
- Mycosis fungoides
- Pityriasis rubra pilaris
- Psoriasis
- Rheumatic fever
- Scabies
- Septic arthritis
- Serum sickness
- Subcorneal pustular dermatosis
- Trench fever

## **Evaluation**

- Antinuclear antibodies
- Blood cultures
- *Chlamydia* serologic test
- HIV test
- HLA-B27 assay
- Joint-fluid analysis
- Ophthalmologic examination
- Radiograph of affected joints
- Rheumatoid factor
- Sedimentation rate
- Stool cultures
- Urethral/cervical culture
- Urinalysis and culture

## **Treatment**

- Treat underlying cause
- Topical corticosteroids
- Tazarotene cream
- Acitretin
- Methotrexate
- Cyclosporine
- Infliximab

### **Further reading:**

- Schneider JM, Matthews JH, Graham BS (2003) Reiter's syndrome. *Cutis* 71(3):198–200

## **Reactive Perforating Collagenosis**

---

Hereditary perforating disorder with onset in childhood that is characterized by trauma-induced, erythematous papules with central keratotic plugs that are most commonly located on the extensor aspect of the extremities

### ***Differential Diagnosis***

- Acquired perforating dermatosis
- Arthropod bites
- Dermatofibromas
- Elastosis perforans serpiginosa
- Erythema elevatum diutinum
- Familial dyskeratotic comedones
- Folliculitis
- Molluscum contagiosum
- Multiple keratoacanthomas
- Perforating granuloma annulare
- Perforating pseudoxanthoma elasticum
- Prurigo nodularis

#### **Further reading:**

- Ramesh V, Sood N, Kubba A et al (2007) Familial reactive perforating collagenosis: a clinical, histopathological study of 10 cases. *J Eur Acad Dermatol Venereol* 21(6):766–770

### **Refsum Disease**

Inherited disorder (AR) caused by mutation of the phytanoyl-CoA hydroxylase gene that leads to excessive amounts of dietary plant or animal-derived phytanic acid and is characterized by ichthyosis, cerebellar ataxia, sensory and motor polyneuropathy, and retinitis pigmentosa

### ***Differential Diagnosis***

- Acute intermittent porphyria
- Guillain–Barre syndrome
- Hereditary motor neuropathies
- Ichthyosis vulgaris
- Lamellar ichthyosis
- Neonatal adrenal leukodystrophy

- Rhizomelic chondrodysplasia punctata
- Sjögren–Larsson syndrome
- X-linked ichthyosis
- Zellweger syndrome

**Further reading:**

- Horn MA, van den Brink DM, Wanders RJ et al (2007) Phenotype of adult Refsum disease due to a defect in peroxin 7. *Neurology* 68(9):698–700

## **Relapsing Fever**

Epidemic louse-borne (northeast Africa) or endemic tick-borne disease (United States) that is caused by either *Borrelia recurrentis* (louse only) or several other species of *Borrelia*, including *Borrelia hermsii* or *Borrelia duttonii* (tick); is transmitted either by the human body louse, *Pediculus humanus*, or the soft-bodied tick, *Ornithodoros*; and is characterized by recurrent febrile episodes with headaches, myalgias, and a morbilliform or petechial skin eruption

## ***Differential Diagnosis***

- Brucellosis
- Chronic meningococcemia
- Colorado tick fever
- Dengue fever
- Juvenile rheumatoid arthritis
- Leptospirosis
- Lyme disease
- Lymphocytic choriomeningitis
- Malaria
- Rat-bite fever
- Rocky Mountain spotted fever
- Trench fever
- Yellow fever



**Further reading:**

- McGinley-Smith DE, Tsao SS (2003) Dermatoses from ticks. *J Am Acad Dermatol* 49(3):363–392

**Relapsing Polychondritis**

Autoimmune disease caused by autoantibodies against type II collagen that is associated with inflamed cartilage in the ears, nose, or trachea and is characterized by auricular inflammation that spares the lobule, saddle-nose deformity, and a potential for airway compromise, along with an inflammatory arthritis and vasculitis affecting the skin and internal organs

***Differential Diagnosis***

- Alkaptonuria
- Cellulitis
- Chondrodermatitis nodularis helioides
- Chronic external otitis
- Cogan syndrome
- Congenital syphilis
- Erysipelas
- Erythromelalgia (otomelalgia)
- Infectious perichondritis
- Jessner's lymphocytic infiltrate
- Malignant otitis externa
- NK cell lymphoma
- Polyarteritis nodosa
- Polymorphous light eruption
- Postsurgical chondritis
- Pseudocyst of the auricle
- Rheumatoid arthritis
- Sarcoidosis

- Sjögren's syndrome
- Syphilis
- Traumatic auricular calcification
- Traumatic chondritis
- Wegener's granulomatosis

### ***Diagnostic Criteria (3/6)***

- Bilateral auricular chondritis
- Nonerosive seronegative inflammatory polyarthritis
- Nasal chondritis
- Ocular inflammation
- Respiratory tract chondritis
- Audiovestibular damage

### ***Associations***

- Behçet's disease (MAGIC syndrome)
- Dermatomyositis
- Erythema elevatum diutinum
- Erythema nodosum
- Goserelin therapy
- Inflammatory bowel disease
- Leukocytoclastic vasculitis
- Livedo reticularis
- Myelodysplastic syndrome
- Polyarteritis nodosa
- Pyoderma-gangrenosum-like lesions
- Sjögren's syndrome
- Systemic vasculitis syndromes
- Sweet's syndrome
- Thyroiditis

### ***Evaluation***

- Antinuclear antibodies
- Chest CT/MRI
- Complete blood count
- Echocardiogram
- Electrocardiogram
- Ophthalmologic examination
- Pulmonary function test
- Renal function
- Rheumatoid factor
- Urinalysis

### ***Treatment Options***

- Systemic corticosteroids
- NSAIDs
- Dapsone
- Azathioprine
- Cyclosporine
- Methotrexate
- Cyclophosphamide
- Colchicine
- Minocycline
- Pentoxifylline
- Plasmapheresis
- Infliximab

### **Further reading:**

- McAdam LP, O'Hanlan MA, Bluestone R, Pearson CM (1976) Relapsing polycondritis: prospective study of 23 patients and a review of the literature. *Medicine (Baltimore)* 55(3):193–215
- Rapini RP, Warner NB (2006) Relapsing polycondritis. *Clin Dermatol* 24(6):482–485

## Reticular Erythematous Mucinosis

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Idiopathic mucinosis that predominantly affects middle-aged women, may arise after sun exposure, and is characterized by erythematous macules or flat papules and plaques in a reticular pattern on the upper chest or upper back

### *Differential Diagnosis*

- Alopecia mucinosa
- Dermatomyositis
- Erythema annulare centrifugum (deep type)
- Focal mucinosis
- Jessner's lymphocytic infiltrate
- Lupus erythematosus (especially tumid type)
- Mycosis fungoides
- Myxedema
- Nevus mucinosis
- Papular mucinosis
- Polymorphous light eruption
- Scleredema
- Scleromyxedema
- Seborrheic dermatitis

### *Associations*

- Diabetes mellitus
- Graves' disease
- Hashimoto's thyroiditis
- Lupus erythematosus
- Thrombocytopenic purpura

### ***Treatment Options***

- Sunscreen
- Topical corticosteroids
- Hydroxychloroquine
- Tacrolimus ointment
- Systemic corticosteroids

#### **Further reading:**

- Adamski H, Le Gall F, Chevrant-Breton J (2004) Positive photobiological investigation in reticular erythematous mucinosis syndrome. *Photodermatol Photoimmunol Photomed* 20(5):235–238

### **Reticulate Acropigmentation of Kitamura**

Inherited pigmentary disorder of unknown cause that is characterized by hyperpigmented macules on both sides of the hands and feet and pits on the volar surface

#### ***Differential Diagnosis***

- Acropigmentation of Dohi (dyschromatosis symmetrica hereditaria)
- Dowling–Degos disease
- Dyschromatosis universalis hereditaria
- Solar lentigines
- Universal acquired melanosis

#### **Further reading:**

- Al Hawsawi K, Al Aboud K, Alfadley A et al (2002) Reticulate acropigmentation of Kitamura–Dowling Degos disease overlap: a case report. *Int J Dermatol* 41(8):518–520

## **Reticulohistiocytoma, Solitary (Epithelioid Histiocytoma)**

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Benign reactive histiocytic lesion arising in young adults, especially males, that is characterized by solitary, firm, dome-shaped, dermal nodule on any body area, but uncommonly on the face or hands, as in multicentric reticulohistiocytosis

### ***Differential Diagnosis***

- Adnexal tumor
- Atypical fibroxanthoma
- Dermatofibroma
- Epithelioid fibrous histiocytoma
- Epithelioid sarcoma
- Histiocytic sarcoma
- Infectious granulomas
- Juvenile xanthogranuloma
- Melanocytic nevus
- Rosai–Dorfman disease

### **Further reading:**

- Miettinen M, Fetsch JF (2006) Reticulohistiocytoma (solitary epithelioid histiocytoma): a clinicopathologic and immunohistochemical study of 44 cases. *Am J Surg Pathol* 30(4):521–528

## **Rhabdomyomatous Mesenchymal Hamartoma**

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Congenital striated muscle hamartoma in which striated muscle is ectopically located in the deep dermis and subcutaneous layers and is characterized by a flesh-colored, often mobile, pedunculated nodule or finger-like projection on the face

### ***Differential Diagnosis***

- Accessory tragus
- Acrochordon
- Fibrous hamartoma of infancy
- Infantile myofibromatosis
- Nasal glioma
- Nevus lipomatosus superficialis
- Rhabdomyoma
- Rhabdomyosarcoma
- Smooth muscle hamartoma

### ***Associations***

- Amniotic band syndrome
- Delleman syndrome

### **Further reading:**

- Rosenberg AS, Kirk J, Morgan MB (2002) Rhabdomyomatous mesenchymal hamartoma: an unusual dermal entity with a report of two cases and a review of the literature. *J Cutan Pathol* 29(4):238–243

## **Rhabdomyosarcoma**

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Malignant soft tissue neoplasm that is derived from the embryonal mesenchymal cells that give rise to striated muscle, arises in childhood, and is characterized by a subcutaneous, protruding, exophytic mass on the head and neck, often the face (or when congenital, as a blueberry muffin baby presentation)

### ***Differential Diagnosis***

- Ewing sarcoma
- Leiomyosarcoma

- Leukemia cutis
- Liposarcoma
- Lymphoma
- Malignant fibrous histiocytoma
- Neuroblastoma
- Rhabdomyoma
- Rhabdomyomatous mesenchymal hamartoma

**Further reading:**

- Brecher AR, Reyes-Mugica M, Kamino H et al (2003) Congenital primary cutaneous rhabdomyosarcoma in a neonate. *Pediatr Dermatol* 20(4):335–338

## **Rheumatoid Neutrophilic Dermatitis**

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Dermatitis that is associated with rheumatoid arthritis and characterized by erythematous papules, plaques, nodules, and urticarial wheals that occur over the extremities and trunk

### ***Differential Diagnosis***

- Atypical mycobacterium infection
- Behçet's disease
- Bullous lupus erythematosus
- Bowel bypass dermatosis–arthrosis syndrome
- Churg–Strauss syndrome
- Cutaneous Crohn's disease
- Dermatitis herpetiformis
- Erythema elevatum diutinum
- Granuloma annulare
- Interstitial granulomatous dermatitis with arthritis
- Methotrexate-induced papular eruption
- Palisaded neutrophilic and granulomatous dermatitis
- Pyoderma gangrenosum
- Sweet's syndrome



- Urticaria
- Vasculitis
- Wegener's granulomatosis

### ***Treatment Options***

- Treatment of rheumatoid arthritis
- Systemic corticosteroids
- Dapsone
- Methotrexate
- Infliximab

### **Further reading:**

- Bevin AA, Steger J, Mannino S (2006) Rheumatoid neutrophilic dermatitis. *Cutis* 78(2):133–136

## **Rheumatoid Nodule**

Cutaneous manifestation of rheumatoid arthritis that occurs in patients with severe disease and high rheumatoid factor levels and is characterized by subcutaneous nodules over the bony prominences and tendons, especially on the dorsal hands, around the olecranon, or over the Achilles tendon

### ***Differential Diagnosis***

- Epidermoid cyst
- Epithelioid sarcoma
- Ganglion cyst
- Gouty tophi
- Foreign body granuloma
- Necrobiosis lipoidica
- Necrobiotic xanthogranuloma
- Nodular amyloidosis
- Palisaded neutrophilic and granulomatous dermatosis

- Rheumatic fever nodule
- Sarcoidosis
- Subcutaneous granuloma annulare
- Synovial cyst
- Tumoral calcinosis
- Xanthoma (tuberous)

**Further reading:**

- Sayah A, English JC (2005) Rheumatoid arthritis: a review of the cutaneous manifestations. *J Am Acad Dermatol* 53(2):191–209

**Rhinophyma (Phymatous Rosacea)**

Deforming process of the nose caused by marked sebaceous overgrowth that arises predominantly in older men with or without a history of rosacea and is characterized by bulbous protrusion of the nose, with lumpy surface changes, sebaceous hyperplasia, and fibrosis

***Differential Diagnosis***

- Angiofibromas
- Angiosarcoma
- B cell lymphoma
- Basal cell carcinoma
- Chronic fibrosing vasculitis
- Cutaneous lymphoid hyperplasia
- Granuloma faciale
- Leishmaniasis
- Melanoma
- Metastatic disease
- Microcystic adnexal carcinoma
- Rhinoscleroma
- Sarcoidosis
- Sebaceous adenoma

### ***Treatment Options***

- Surgical excision
- Dermabrasion
- Electrosurgery
- CO<sub>2</sub> laser
- Isotretinoin

### **Further reading:**

- Powell FC (2005) Clinical practice. Rosacea. N Engl J Med 352(8):793–803

### **Rhinoscleroma**

Chronic infection of the nose and nasal passages that is caused by *Klebsiella rhinoscleromatis* and is characterized by chronic nasal inflammation with epistaxis, nasal obstruction, indurated nodules on the nasal mucosa, and eventual sclerosis and destruction of the nasal airway (Hebra nose)

### ***Differential Diagnosis***

- Actinomycosis
- Blastomycosis
- Coccidioidomycosis
- Histoplasmosis
- Keloid
- Langerhans cell histiocytosis
- Leprosy
- Lymphoma
- Mucocutaneous leishmaniasis
- Nasal tuberculosis
- Nasopalatine duct cyst
- Paracoccidioidomycosis
- Rhinopneumothoromycosis

- Rhinosporidiosis
- Rosai–Dorfman disease
- Sarcoidosis
- Tertiary syphilis
- Verrucous carcinoma
- Wegener's granulomatosis
- Yaws

### **Evaluation**

- Bacterial culture of affected tissue

### **Further reading:**

- Fernandez-Vozmediano JM, Armario Hita JC et al (2004) Rhinoscleroma in three siblings. *Pediatr Dermatol* 21(2):134–138

## **Rhinosporidiosis**

Chronic granulomatous infection of the nasal passages with the aquatic protistan parasite, *Rhinosporidia seeberi*, that is characterized by vascular, friable, nasal-polyp-like masses with resulting epistaxis and nasal obstruction, and accompanying polyps on the conjunctiva in some patients

### **Differential Diagnosis**

- Foreign body
- Mucocele
- Myospherulosis
- Nasal polyp
- Paracoccidioidomycosis
- Pyogenic granuloma
- Metastatic disease
- Rhinoscleroma
- Sarcoidosis

- Squamous cell carcinoma
- Verrucous carcinoma

### ***Evaluation***

- Potassium hydroxide examination of tissue

### **Further reading:**

- Ghorpade A (2006) Polymorphic cutaneous rhinosporidiosis. *Eur J Dermatol* 16(2):190–192

## **Riboflavin Deficiency (Oculo-Oro-Genital Syndrome, Jacobs Syndrome)**

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Deficiency of vitamin B2 that is most commonly caused by malnutrition in the setting of alcoholism and is characterized by angular cheilitis, atrophic glossitis, dermatitis of the face and groin, and blepharoconjunctivitis

### ***Differential Diagnosis***

- Acrodermatitis enteropathica
- Behçet's disease
- Candidiasis
- Necrolytic migratory erythema
- Pellagra
- Pyridoxine deficiency
- Seborrheic dermatitis

### ***Associations***

- Alcoholism
- Hypothyroidism

- Low-cereal diet
- Low-vegetable diet
- Neonatal hyperbilirubinemia

**Further reading:**

- Friedli A, Saurat JH (2004) Images in clinical medicine. Oculo-rogenital syndrome: a deficiency of vitamins B2 and B6. N Engl J Med 350(11):1130

## **Rickettsialpox**

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Febrile illness caused by *Rickettsia akari* that is transmitted by the mite of the house mouse and characterized by an initial tache noir and later a generalized vesiculopustular exanthem

### ***Differential Diagnosis***

- Aspergillosis
- Cutaneous anthrax
- Ecthyma gangrenosum
- Enterovirus infection
- Factitial dermatitis
- Hand, foot, and mouth disease
- Monkeypox
- Pityriasis lichenoides et varioliformis acuta
- Pustular drug eruption
- Scrub typhus
- Smallpox
- Spider bite
- Trauma
- Varicella

**Further reading:**

- Walker DH (2007) Rickettsiae and rickettsial infections: the current state of knowledge. Clin Infect Dis 45(Suppl 1):S39–S44

## Riehl's Melanosis (Pigmented Contact Dermatitis)

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Acquired pigmentary disorder predominantly affecting patients of Asian descent that is caused by a low-grade allergic contact dermatitis to fragrances and other cosmetic products and that is characterized by hyperpigmentation on the face in areas that came into contact with the triggering chemical

### *Differential Diagnosis*

- Acanthosis nigricans
- Acquired brachial cutaneous dyschromatosis
- Berloque dermatitis
- Drug-induced pigmentation
- Lupus erythematosus
- Lichen planus pigmentosus
- Melasma
- Nevus of Ota
- Phytophotodermatitis
- Poikiloderma of Civatte
- Polymorphous light eruption
- Postinflammatory hyperpigmentation
- Tar melanosis (melanodermatitis toxica)

### **Further reading:**

- Ebihara T, Nakayama H (1997) Pigmented contact dermatitis. *Clin Dermatol* 15(4):593–599

## Rocky Mountain Spotted Fever

Potentially fatal febrile illness caused by *Rickettsiae rickettsii*, transmitted by *Dermacentor* and *Amblyomma* ticks, and characterized by a petechial eruption that starts acrally and spreads in a centripetal pattern (sometimes with a spotless variant), fever and chills, severe headache, vasculitis, disseminated intravascular coagulation, and cardiovascular collapse

## ***Differential Diagnosis***

- Atypical measles
- Babesiosis
- Bacterial sepsis
- Dengue fever
- Drug reaction
- Ehrlichiosis
- Encephalitis
- Erythema multiforme
- Immune thrombocytopenic purpura
- Leptospirosis
- Lyme disease
- Malaria
- Measles
- Meningococemia
- Mononucleosis
- Rat-bite fever
- Rubella
- Secondary syphilis
- Small vessel leukocytoclastic vasculitis
- Thrombotic thrombocytopenic purpura
- Toxic shock syndrome
- Toxoplasmosis
- Tularemia
- Typhoid fever
- Viral infection

## ***Evaluation***

- Cerebrospinal fluid analysis
- Complete blood count
- CT/MRI scan of brain
- Indirect immunofluorescence antibody test
- Liver function test



- Renal function test
- Serum chemistry

**Further reading:**

- Lacz NL, Schwartz RA, Kapila R (2006) Rocky Mountain spotted fever. *J Eur Acad Dermatol Venereol* 20(4):411–417

## **Rosacea**

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Chronic acneiform condition of the central face characterized by erythema, telangiectasias, papules, and pustules, but no comedones

### ***Subtypes/Variants***

- Erythematotelangiectatic
- Granulomatous
- Ocular
- Papulopustular
- Perioral dermatitis
- Phymatous
- Pyoderma faciale
- Steroid-induced

### ***Differential Diagnosis***

- Acne vulgaris
- Acute cutaneous lupus erythematosus
- Angiosarcoma
- Carcinoid syndrome
- Cutaneous sinus histiocytosis (Rosai–Dorfman disease)
- Demodicosis
- Granuloma faciale
- Granulomatous periorificial dermatitis
- Haber syndrome

- Halogenoderma
- Lupus miliaris disseminata faciei
- Lupus vulgaris
- Lymphedema
- Mastocytosis
- Perioral dermatitis
- Pheochromocytoma
- Photosensitive drug reaction
- Polymorphous light eruption
- Recurrent erysipelas
- Sarcoidosis
- Seborrheic dermatitis
- Syringomas
- Tinea faciei
- Trichoepitheliomas

### **Associations**

- Alcohol
- Demodex folliculorum
- Flushing
- Heat
- *Helicobacter pylori* infection
- Migraine
- Oral contraception
- Sun exposure

### **Treatment Options**

- Topical metronidazole
- Oral metronidazole
- Azelaic acid
- Oral tetracyclines
- Oral macrolides

- Topical clindamycin
- Benzoyl peroxide
- Sulfur/sulfacetamide
- Spironolactone
- Isotretinoin
- Ivermectin
- Permethrin
- Sunscreen
- Nicotinamide
- Clonidine
- Beta-blockers
- Pulsed dye laser
- Intense pulse light

**Further reading:**

- Powell FC (2005) Clinical practice. Rosacea. *N Engl J Med* 352(8):793–803

**Rosai–Dorfman Disease (Sinus Histiocytosis with Massive Lymphadenopathy)**

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Non-Langerhans type of histiocytosis that is possibly viral in etiology, arises in the first or second decade of life, and is characterized by lymphadenopathy (often massive), fever, anemia, leukocytosis and, uncommonly, extranodal disease and skin lesions, which are typically red-brown or red-yellow papules and nodules on variable locations of the body. Less commonly and in older patients, Rosai–Dorfman disease can present only on the skin, where the lesions show a predilection for the face

***Differential Diagnosis***

- Acne conglobata
- Benign cephalic histiocytosis
- Cutaneous lymphoid hyperplasia
- Dermatofibroma

- Deep fungal infection
- EBV infection
- Generalized eruptive histiocytoma
- Granuloma annulare
- Granuloma faciale
- Indeterminate cell histiocytosis
- Lepromatous leprosy
- Lupus erythematosus
- Lupus miliaris disseminata faciei
- Lymphoma
- Kikuchi–Fujimoto disease
- Papular xanthomas
- Reticulohistiocytosis
- Rosacea
- Sarcoidosis
- Tuberculosis

**Further reading:**

- Frater JL, Maddox JS, Obadiah JM et al (2006) Cutaneous Rosai–Dorfman disease: comprehensive review of cases reported in the medical literature since 1990 and presentation of an illustrative case. *J Cutan Med Surg* 10(6):281–290

## **Roseola Infantum (Exanthem Subitum)**

Common illness affecting children in the first year of life that is caused by human herpes virus 6 and characterized by a prodrome of extremely high fever (with possible febrile seizures) followed by a morbilliform eruption predominantly affecting the neck and trunk

### ***Differential Diagnosis***

- Adenovirus infection
- Dengue
- Enterovirus infection

- Epstein–Barr virus
- Erythema infectiosum
- Kawasaki disease
- Measles
- Medication reaction
- Meningococemia
- Rocky Mountain spotted fever
- Rubella
- Scarlet fever

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Dyer JA (2007) Childhood viral exanthems. *Pediatr Ann* 36(1):21–29

## **Rothmund–Thomson Syndrome (Poikiloderma Congenitale)**

Autosomal-recessive disorder caused by a defect in the DNA repair helicase, RECQL4, that is characterized by photodistributed erythema and telangiectasia, hypoplastic radius and thumbs, short stature, cataracts, and tendency to develop osteosarcoma

### ***Differential Diagnosis***

- Acrogeria
- Bloom syndrome
- Cockayne syndrome
- Dermatomyositis
- Dyskeratosis congenita
- Erythropoietic protoporphyria
- Fanconi's anemia

- Kindler syndrome
- Lupus erythematosus
- Poikiloderma atrophicans vasculare
- Progeria
- Weary–Kindler syndrome
- Werner syndrome
- Xeroderma pigmentosum

**Further reading:**

- Kumar P, Sharma PK, Gautam RK et al (2007) Late-onset Rothmund–Thomson syndrome. *Int J Dermatol* 46(5):492–493

**Rubella (German Measles)**

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Uncommon viral disease caused by the rubella togavirus that affects children and young adults and is characterized by a morbilliform eruption which lasts 3 days and begins on the face and neck but generalizes caudally, as well as petechiae of the soft palate (Forschheimer spots) and sub-occipital and postauricular lymphadenopathy

***Differential Diagnosis***

- Drug eruption
- Erythema infectiosum
- Juvenile rheumatoid arthritis
- Kawasaki disease
- Measles
- Roseola
- Scarlet fever
- Viral exanthem

**Further reading:**

- Carneiro SC, Cestari T, Allen SH et al (2007) Viral exanthems in the tropics. *Clin Dermatol* 25(2):212–220

## Sarcoidosis (Besnier–Boeck Disease)

Acquired immune-mediated disease of uncertain cause that is marked by granulomatous inflammation in the skin, lungs, and other organs; is possibly a foreign body reaction in individuals susceptible to an infectious or noninfectious exogenous antigen; and is characterized (cutaneously) by red-brown papules, nodules, and plaques on the face, especially the nose and periorbital areas, as well as the trunk and extremities

### *Subtypes/Variants*

- Angiolupoid
- Annular
- Cicatricial alopecia (discoid-lupus-like; Fig. 6.106)
- Exfoliative/erythrodermic
- Granulomatous cheilitis
- Hypopigmented
- Ichthyosiform
- Lupus pernio
- Micropapular (lichenoid)
- Morpheaform
- Mucosal
- Nail



**Fig. 6.106** Discoid-lupus-like sarcoidosis



**Fig. 6.107** Verrucous sarcoidosis

- Nodular
- Papular
- Perforating
- Plaque
- Psoriasiform
- Scar
- Subcutaneous (Darier–Roussy sarcoid)
- Systemic
- Tattoo
- Ulcerative
- Verrucous (Fig. 6.107)

### ***Differential Diagnosis***

Papular, Micropapular, Plaques, Verrucous Plaques, Ulcers, and Alopecia

- Acne
- Actinic granuloma
- Amyloidosis
- Angiofibromas
- Annular elastolytic giant cell granuloma



- Atypical mycobacteria
- Berylliosis
- Blau syndrome
- Cheilitis granulomatosis
- Crohn's disease, cutaneous
- Cutaneous lymphoid hyperplasia
- Cutaneous T cell lymphoma
- Epithelioid sarcoma
- Erythema multiforme
- Folliculitis
- Foreign body granuloma
- Gouty tophus
- Granuloma annulare
- Granuloma faciale
- Granulomatous mycosis fungoides
- Granulomatous periorificial dermatitis
- Granulomatous rosacea
- Granulomatous skin lesions associated with systemic lymphoma
- Histiocytoses
- Immunodeficiency-related noninfectious granuloma
- Interstitial granulomatous drug reaction
- Kaposi's sarcoma
- Leprosy
- Lichen nitidus
- Lichen planus, hypertrophic
- Lichen sclerosis
- Lichen scrofulosorum
- Lichen simplex
- Lipodermatosclerosis
- Lupus erythematosus
- Lupus miliaris disseminata faciei
- Lupus vulgaris
- Lymphocytoma cutis
- Lymphoma
- Lymphomatoid granulomatosis

- Morphea
- Multinucleate cell angiohistiocytoma
- Necrobiosis lipoidica
- Necrobiotic xanthogranuloma
- Pityriasis rosea
- Psoriasis
- Pyoderma gangrenosum
- Rosai–Dorfman disease
- Scabies
- Sporotrichosis
- Syphilis
- Syringomas
- Tinea corporis
- Trichoepitheliomas
- Tuberculosis
- Verruca plana
- Whipple's disease
- Xanthomas

#### Hypopigmented

- Chemical leukoderma
- Discoid lupus erythematosus
- Hypopigmented mycosis fungoides
- Idiopathic guttate hypomelanosis
- Leishmaniasis
- Leprosy
- Tinea versicolor
- Vitiligo
- Pinta
- Postinflammatory hypopigmentation
- Syphilis

#### Lupus Pernio

- Lupus erythematosus
- Lupus vulgaris

- Rosacea
- Rhinophyma
- Rhinoscleroma
- Tertiary syphilis
- Wegener's granulomatosis

### Subcutaneous

- Epidermoid cyst
- Gouty tophi
- Interstitial granulomatous dermatitis
- Lipoma
- Lymphadenopathy
- Metastasis
- Morphea
- Panniculitis
- Rheumatoid nodule
- Subcutaneous granuloma annulare
- Subcutaneous lymphoma

### **Associations**

- Autoimmune hemolytic anemia
- Dermatitis herpetiformis
- Exogenous ochronosis
- Heerfordt's syndrome
- Interferon-alpha therapy
- Lofgren's syndrome
- Mikulicz syndrome
- Sweet's syndrome
- Systemic sclerosis
- Tattoos
- Thyroiditis
- Vitiligo

## ***Evaluation***

- ACE level
- Calcium level
- Chest radiograph
- Complete blood count (lymphopenia)
- Cultures for bacteria, mycobacteria, and fungus
- Electrocardiography
- Hepatic function test
- Neurologic exam
- Ophthalmologic exam
- Pulmonary function test
- Serum protein electrophoresis
- Tuberculin skin test (with controls)

## ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Systemic corticosteroids
- Hydroxychloroquine
- Quinacrine
- Methotrexate
- Allopurinol
- Minocycline
- Isotretinoin
- Thalidomide
- Azathioprine
- Infliximab

## **Further reading:**

- Tchernev G, Patterson JW, Nenoff P et al (2010) Sarcoidosis of the skin--a dermatological puzzle: important differential diagnostic aspects and guidelines for clinical and histopathological recognition. *J Eur Acad Dermatol Venereol* 24(2):125-137

## Scabies

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Superficial cutaneous infestation with the *Sarcoptes scabiei* female mite and characterized by extremely pruritic excoriated papules and vesicles, eczematous dermatitis, and burrows predominantly in the acral areas, web spaces, and groin that can become severely crusted (Norwegian type) in the immunosuppressed

### *Differential Diagnosis*

#### Classic

- Atopic dermatitis
- Bedbug bites
- Bullous pemphigoid
- Cheyletiella dermatitis
- Chigger bites
- Cocaine abuse
- Contact dermatitis
- Cutaneous lymphoid hyperplasia
- Delusions of parasitosis
- Dermatitis herpetiformis
- Dyshidrotic eczema
- Eosinophilic folliculitis
- Erythroderma
- Fiberglass dermatitis
- Formication
- Gianotti–Crosti syndrome
- Grover’s disease
- Harvest-mite bites
- Id reaction
- Impetigo
- Infantile acropustulosis
- Langerhans cell histiocytosis
- Lichen planus

- Neurotic excoriations
- Papular dermatitis
- Papular urticaria
- Pediculosis corporis
- Pityriasis lichenoides
- Pityriasis rosea
- Prurigo simplex
- Pruritus of internal disease
- Psoriasis
- Pyoderma
- Sabra dermatitis
- Seborrheic dermatitis
- Secondary syphilis
- Urticaria
- Urticaria pigmentosum
- Xerotic eczema

#### Norwegian Crusted Type

- Acquired ichthyosis
- Drug eruption
- Eczema
- Exfoliative dermatitis
- Langerhans cell histiocytosis
- Pityriasis rubra pilaris
- Psoriasis
- Seborrheic dermatitis

#### *Treatment Options*

- Permethrin cream
- Malathion lotion
- Benzyl benzoate
- Lindane
- Precipitated sulfur

- Crotamiton
- Ivermectin

**Further reading:**

- Hengge UR, Currie BJ, Jager G et al (2006) Scabies: a ubiquitous neglected skin disease. *Lancet Infect Dis* 6(12):769–779

**Scarlet Fever**

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Toxin-mediated syndrome that is associated with infection of the oropharynx by group A beta-hemolytic *Streptococcus* and is characterized by fever, cervical lymphadenopathy, strawberry-like tongue, a diffuse sandpaper-like erythematous eruption, linear petechiae in the intertriginous folds (Pastia's lines), and eventual acral desquamation

**Differential Diagnosis**

- Drug eruption
- Epstein–Barr virus infection
- Erythema infectiosum
- Gianotti–Crosti syndrome
- Juvenile rheumatoid arthritis
- Kawasaki disease
- Lupus erythematosus
- Measles
- Rat-bite fever
- Rheumatic fever
- Rubella
- Secondary syphilis
- Serum-sickness-like reaction
- Staphylococcal scalded-skin syndrome (abortive form)
- Toxic shock syndrome
- Urticaria
- Viral exanthem

## ***Treatment Options***

- Antistreptococcal antibiotics

### **Further reading:**

- Aber C, Alvarez Connelly E, Schachner LA (2007) Fever and rash in a child: when to worry? *Pediatr Ann* 36(1):30–38

## **Schnitzler Syndrome**

Acquired syndrome of uncertain pathogenesis that is characterized by IgM monoclonal gammopathy, chronic urticaria, febrile episodes, arthralgias and bone pain, and lymphadenopathy

### ***Differential Diagnosis***

- Adult Still's disease
- Chronic immune urticaria
- Episodic angioedema with eosinophilia
- Familial Mediterranean fever
- Hepatitis virus infection
- Lupus erythematosus
- Muckle–Wells syndrome
- Multiple myeloma
- Serum-sickness-like drug reaction
- Urticarial vasculitis
- Waldenstrom macroglobulinemia

### ***Evaluation***

- Complete blood count
- Radiography of painful bones
- Sedimentation rate
- Serum/urinary protein electrophoresis



**Further reading:**

- Almerigogna F, Giudizi MG, Cappelli F et al (2002) Schnitzler's syndrome: what's new? *J Eur Acad Dermatol Venerol* 16(3):214–219

**Scleredema**

Idiopathic mucinosis affecting children or adults that is characterized by mucin deposition in the dermis that leads to poorly defined mildly erythematous indurated plaques with a “peau d’orange” appearance on the upper back or less commonly the face and extremities (Fig. 6.108)



**Fig. 6.108** Scleredema

### ***Subtypes/Variants***

- Type I (adulatorum of Buschke): poststreptococcal
- Type II: monoclonal gammopathy associated
- Type III: (diabeticorum): diabetes associated

### ***Differential Diagnosis***

- Amyloidosis
- Cardiovascular edema
- Cellulitis
- Dermatomyositis
- Erysipelas
- Generalized myxedema
- Lymphedema
- Reticular erythematous mucinosis
- Sclerema neonatorum
- Scleromyxedema
- Systemic sclerosis
- Trichinosis

### ***Evaluation***

- Antistreptolysin O titer
- Fasting blood glucose
- Serum/urinary protein electrophoresis

### ***Treatment Options***

- Treat underlying cause
- Radiation
- Cyclosporine

### **Further reading:**

- Beers WH, Ince A, Moore TL (2006) Scleredema adulatorum of Buschke: a case report and review of the literature. *Semin Arthritis Rheum* 35(6):355–359

## **Sclerema Neonatorum (Underwood Disease)**

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Very rare panniculitis that affects preterm neonates because of a higher melting point of subcutaneous fat (higher saturated to unsaturated fat ratio) and is characterized by generalized induration of the skin along with flexion contractures and a high mortality

### ***Differential Diagnosis***

- Congenital lymphedema
- Poststeroid panniculitis
- Restrictive dermopathy
- Scleredema
- Scleroderma
- Subcutaneous fat necrosis of the newborn
- Turner syndrome

### ***Associations***

- Hypothermia
- Neonatal infections
- Prematurity

### ***Treatment Options***

- Supportive care
- Systemic antibiotics
- Systemic corticosteroids

### **Further reading:**

- Battin M, Harding J, Gunn A (2002) Sclerema neonatorum following hypothermia. *J Paediatr Child Health* 38(5):533–534

## Scleromyxedema (Arndt–Gottron Syndrome)

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Diffuse sclerotic variant of lichen myxedematosus that is associated with IgG-lambda monoclonal gammopathy and that is characterized by a generalized eruption of waxy, flesh-colored papules that coalesce into indurated plaques with eventual diffuse sclerosis of the skin and, occasionally, the internal organs, especially the gastrointestinal tract

### *Differential Diagnosis*

- Diffuse papular granuloma annulare
- Eosinophilic fasciitis
- Generalized eruptive histiocytoma
- Generalized morphea
- Lichen myxedematosus
- Lipoid proteinosis
- Micropapular sarcoidosis
- Mycosis fungoides
- Nephrogenic fibrosing dermopathy
- Scleredema
- Systemic sclerosis

### *Diagnostic Criteria*

- Generalized papular and sclerodermoid eruption
- Microscopic triad of mucin, fibroblasts, and fibrosis
- Monoclonal gammopathy
- Absence of thyroid disease

### *Evaluation*

- Antinuclear antibodies
- Serum protein electrophoresis
- Thyroid function tests

### ***Treatment Options***

- Topical corticosteroids
- Intralesional corticosteroids
- Acitretin
- Isotretinoin
- Melphalan
- Plasmapheresis
- Intravenous immunoglobulin
- Methotrexate
- Cyclosporine
- Radiation
- Extracorporeal photopheresis
- Thalidomide
- Cyclophosphamide
- Chlorambucil

#### **Further reading:**

- Rongioletti F, Reborna A (2001) Updated classification of papular mucinosis, lichen myxedematosus, and scleromyxedema. *J Am Acad Dermatol* 44(2):273–281

### **Sclerosis, Diffuse Systemic (Scleroderma)**

Autoimmune disease that is caused by immune-mediated vascular damage and excessive production of profibrotic cytokines (TGF- $\beta$  and PDGF) that leads to cutaneous and systemic fibrosis and that has the major clinical features of Raynaud phenomenon, progressive tightening and thickening of the skin (especially involving the hands, face, and upper chest and neck), salt-and-pepper-like dyschromia, pulmonary fibrosis, esophageal dysmotility, arthritis, and renal disease

#### ***Differential Diagnosis***

- Amyloidosis
- Aromatic hydrocarbon exposure

- Bleomycin toxicity
- Carcinoid syndrome
- Chronic graft-vs-host disease
- Congenital erythropoietic porphyria
- CREST syndrome
- Diabetic cheiroarthropathy
- Eosinophilia myalgia syndrome
- Eosinophilic fasciitis
- Generalized morphea
- Hepatoerythropoietic porphyria
- Huriez syndrome
- Mixed connective tissue disease
- Nephrogenic fibrosing dermopathy
- Phenylketonuria
- POEMS syndrome
- Porphyria cutanea tarda
- Progeria
- Radiation exposure
- Reflex sympathetic dystrophy
- Scleredema
- Scleromyxedema
- Silicosis
- Toxic oil syndrome
- Trichinosis
- Tumid lupus erythematosus
- Vibration white finger
- Vinyl chloride toxicity
- Vitamin K injection
- Werner syndrome

### ***Associations***

- Primary biliary cirrhosis

### ***Associated Medications (Scleroderma-Like Drug Reaction)***

- Bleomycin
- Carbidopa
- Cocaine
- Docetaxel
- Fosinopril
- Penicillamine
- Vinyl chloride
- Taxanes

### ***Evaluation***

- Antinuclear antibodies (including anticentromere and Scl-70)
- Barium swallow
- Chest radiography
- Complete blood count
- Creatine kinase and aldolase levels
- Echocardiography
- Pulmonary function test
- Renal function test

### ***Treatment Options***

- ACE inhibitor
- Nifedipine
- Methotrexate
- Cyclophosphamide
- Systemic corticosteroids
- Acitretin
- UVA1 phototherapy
- Cyclosporine
- Thalidomide
- Etanercept
- Mycophenolate mofetil

**Further reading:**

- Mori Y, Kahari VM, Varga J (2002) Scleroderma-like cutaneous syndromes. *Curr Rheumatol Rep* 4(2):113–122

**Scrotal Tongue (Lingua Plicata, Fissured Tongue)**

Idiopathic textural change of the dorsal tongue that is associated with several diseases and characterized by furrows or grooves giving the tongue a cerebriform or rugous appearance (Fig. 6.109)

***Differential Diagnosis***

- Amyloid infiltration
- Geographic tongue
- Herpetic geometric glossitis
- Lymphedema
- Lymphangioma
- Macroglossia
- Mucosal neuroma syndrome
- Syphilitic glossitis



**Fig. 6.109** Scrotal tongue



## **Associations**

- Acrodermatitis continua
- Bazex–Dupre–Christol syndrome
- Cowden syndrome
- Down syndrome
- Melkersson–Rosenthal syndrome
- Pachyonychia congenita
- Pemphigus vegetans

## **Further reading:**

- Zargari O (2006) The prevalence and significance of fissured tongue and geographical tongue in psoriatic patients. *Clin Exp Dermatol* 31(2):192–195

## **Scurvy**

Disorder caused by vitamin C deficiency, which is essential for collagen synthesis, that is characterized by follicular hyperkeratosis with corkscrew hairs, perifollicular purpura, anemia, impaired wound healing, periodontal disease with bleeding gums, and intraarticular or subperiosteal hemorrhage

## ***Differential Diagnosis***

- Coagulation abnormality
- Cutaneous small vessel vasculitis
- Ehlers–Danlos syndrome
- Folliculitis
- Keratosis pilaris
- Langerhans cell histiocytosis
- Leukemia
- Phrynoderma
- Physical abuse
- Platelet abnormality
- Pigmented purpuric dermatosis
- Pityriasis rubra pilaris

**Further reading:**

- Heymann WR (2007) Scurvy in children. *J Am Acad Dermatol* 57(2):358–359

**Seabather's Eruption**

Acute, pruritic skin eruption that is caused by contact with the nematocysts of the thimble jellyfish and is characterized by erythematous macules and papules in the covered areas that develop shortly after aquatic activity

***Differential Diagnosis***

- Autoeczematization dermatitis
- Bedbug bites
- Contact dermatitis
- Drug eruption
- Eosinophilic folliculitis
- Folliculitis
- Insect-bite reaction
- Jellyfish sting
- Papular urticaria
- Pityriasis rosea
- Psoriasis, guttate
- Scabies
- Swimmer's itch
- Urticaria
- Varicella
- Viral exanthem

***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Antihistamines

**Further reading:**

- Segura-Puertas L, Ramos ME, Aramburo C et al (2001) One Linuche mystery solved: all 3 stages of the coronate scyphomedusae *Linuche unguiculata* cause seabather's eruption. *J Am Acad Dermatol* 44(4):624–628

## **Sebaceous Adenoma**

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Benign sebaceous neoplasm that affects older patients and is characterized by a large yellow, occasionally polypoid, papule or nodule with central umbilication that is located on the head and neck, including the scalp

### ***Differential Diagnosis***

- Basal cell carcinoma (with sebaceous differentiation)
- Cylindroma
- Keratoacanthoma
- Molluscum contagiosum
- Nevus sebaceus
- Nodular hidradenoma (eccrine acrospiroma)
- Sebaceous carcinoma
- Sebaceous hyperplasia
- Syringocystadenoma papilliferum
- Trichoepithelioma
- Xanthelasma
- Xanthoma

### ***Associations***

- Muir–Torre syndrome

**Further reading:**

- Singh AD, Mudhar HS, Bhola R et al (2005) Sebaceous adenoma of the eyelid in Muir–Torre syndrome. *Arch Ophthalmol* 123(4):562–565

## Sebaceous Carcinoma

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Malignant neoplasm of sebaceous gland derivation that affects the elderly and is characterized by a slow-growing, asymptomatic nodule most commonly on the eyelid and less commonly on other areas of the head and neck or the genitalia

### *Differential Diagnosis*

- Adnexal tumor
- Atypical fibroxanthoma
- Basal cell carcinoma (with sebaceous differentiation)
- Chalazion
- Chronic blepharitis
- Clear cell hidradenocarcinoma
- Hordeolum
- Melanoma (especially balloon cell type)
- Merkel cell carcinoma
- Metastasis
- Mucinous carcinoma
- Ocular pemphigoid
- Ocular rosacea
- Pyogenic granuloma
- Sarcoidosis
- Squamous cell carcinoma (especially clear cell type)

### *Associations*

- Chalazion
- Muir–Torre syndrome

### **Further reading:**

- Tan O, Ergen D, Arslan R (2006) Sebaceous carcinoma on the scalp. *Dermatol Surg* 32(10):1290–1293

## Sebaceous Hyperplasia

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Hyperplasia of the sebaceous glands that commonly affects middle-aged patients, is caused by decreased cell turnover of sebocytes, and is characterized by yellow papules on the face with central umbilication

### *Differential Diagnosis*

- Angiofibroma
- Basal cell carcinoma
- Calcinosis cutis
- Colloid milium
- Favre–Racouchot disease
- Fibrous papule
- Granuloma annulare
- Lipoid proteinosis
- Lymphadenoma
- Milia
- Molluscum contagiosum
- Nevus
- Rhinophyma
- Sarcoidosis
- Sebaceous adenoma
- Sebaceous carcinoma
- Solar elastosis
- Squamous cell carcinoma
- Syringoma
- Trichilemmoma
- Trichodiscoma
- Trichoepithelioma
- Xanthelasma
- Xanthoma

### **Associations**

- Anhidrotic ectodermal dysplasia
- Cyclosporine therapy

### **Further reading:**

- Salim A, Reece SM, Smith AG et al (2006) Sebaceous hyperplasia and skin cancer in patients undergoing renal transplant. *J Am Acad Dermatol* 55(5):878–881

### **Seborrheic Dermatitis (Unna Disease)**

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Type of dermatitis that affects all age groups and is characterized by erythematous plaques with greasy scale, in the areas of the body with numerous sebaceous glands, including the scalp, central face, chest, and intertriginous areas

### **Subtypes/Variants**

- Annular
- Cradle cap
- Erythrodermic
- Facial
- Hypopigmented
- Intertriginous
- Petaloid
- Pityriasiform
- Scalp
- Sebopsoriasis

## *Differential Diagnosis*

### Adult

- Actinic keratosis
- Atopic dermatitis
- Candidiasis
- Contact dermatitis
- Darier's disease
- Dermatomyositis
- Erythrasma
- External otitis media
- Extramammary Paget's disease
- Grover's disease
- Hailey–Hailey disease
- Infectious eczematoid dermatitis
- Intertrigo
- Keratosis lichenoides chronica
- Langerhans cell histiocytosis
- Lichen simplex chronicus
- Lupus erythematosus
- Malabsorption disorders
- Necrolytic migratory erythema
- Pellagra
- Pemphigus erythematosus
- Pemphigus foliaceus
- Pityriasis rosea
- Pityriasis lichenoides chronica
- Pityriasis rubra pilaris
- Psoriasis
- Pyridoxine deficiency
- Riboflavin deficiency
- Rosacea
- Subacute cutaneous lupus erythematosus
- Superficial basal cell carcinoma
- Syphilis

- Tinea barbae
- Tinea capitis
- Tinea faciei
- Tinea versicolor
- Zinc deficiency

### Infantile

- Acrodermatitis enteropathica
- Atopic dermatitis
- Biotin deficiency
- Candidiasis
- Essential fatty acid deficiency
- Infantile psoriasis
- Infectious eczematoid dermatitis
- Infective dermatitis
- Irritant-diaper dermatitis
- Langerhans cell histiocytosis
- Leiner disease
- Malabsorption syndrome
- Netherton syndrome
- Omenn syndrome
- Riboflavin deficiency
- Wiskott–Aldrich syndrome

### Scalp

- Atopic dermatitis
- Contact dermatitis
- Dermatomyositis
- Lupus erythematosus
- Lichen planus
- Pemphigus foliaceus
- Pityriasis amiantacea
- Pityriasis rubra pilaris
- Psoriasis



- Scalp dysesthesia
- Tinea capitis

### **Associations**

- Acquired zinc deficiency
- Bell's palsy
- HIV infection
- Parkinson's disease
- Pityriasis amiantacea
- Stroke

### **Treatment Options**

- Topical corticosteroids
- Topical ketoconazole
- Ciclopirox cream
- Topical calcineurin inhibitors
- Oral ketoconazole
- Benzoyl peroxide
- Zinc pyrithione
- Selenium sulfide
- Salicylic acid
- Tar

### **Further reading:**

- Schwartz RA, Janusz CA, Janniger CK (2006) Seborrheic dermatitis: an overview. *Am Fam Physician* 74(1):125–130

## **Seborrheic Keratosis**

Benign epidermal neoplasm that affects middle-aged to elderly patients and is characterized by a “stuck-on” verrucous or papillomatous, greasy hyperpigmented papule on the head and neck, trunk, or extremities

### ***Subtypes (Histologic)***

- Acanthotic
- Clonal
- Hyperkeratotic
- Irritated
- Melanoacanthoma
- Reticulated (adenoid)

### ***Differential Diagnosis***

#### Seborrheic Keratosis

- Acrochordon
- Acrokeratosis verruciformis of Hopf
- Actinic keratosis
- Arsenical keratosis
- Basal cell carcinoma
- Benign lichenoid keratosis
- Bowen's disease
- Bowenoid papulosis
- Condyloma acuminatum
- Confluent and reticulated papillomatosis
- Cutaneous horn
- Dermatitis papulosa nigra
- Eccrine poroma
- Epidermal nevus
- Epidermodysplasia verruciformis
- Granular cell tumor
- Hydroacanthoma simplex
- Inverted follicular keratosis
- Lentigo
- Malignant melanoma
- Melanocytic nevus
- Melanoma

- Nevus sebaceus
- Pemphigus erythematosis
- Pinkus tumor
- Porokeratosis
- Prurigo nodularis
- Psoriasis, guttate
- Sign of Leser–Trelat
- Solar lentigo
- Squamous cell carcinoma
- Stucco keratosis
- Syringocystadenoma papilliferum
- Tumor of the follicular infundibulum
- Verruca plana
- Verruca vulgaris
- Warty dyskeratoma

#### Sign of Leser–Trelat

- Acrokeratosis verruciformis of Hopf
- Chemotherapy-induced reaction in seborrheic keratoses
- Epidermodysplasia verruciformis
- Erythroderma-related eruptive seborrheic keratoses
- Florid cutaneous papillomatosis
- Verrucous mycosis fungoides
- Warts

#### **Associations**

##### Multiple Eruptive

- Erythroderma
- Internal malignancy
- Pregnancy

##### Sign of Leser–Trelat

- Acanthosis nigricans
- Hypertrichosis lanuginosa

- Internal malignancy
- Pruritus
- Weight loss

**Further reading:**

- Duque MI, Jordan JR, Fleischer AB Jr et al (2003) Frequency of seborrheic keratosis biopsies in the United States: a benchmark of skin lesion care quality and cost effectiveness. *Dermatol Surg* 29(8):796–801

## **Serum-Sickness-Like Drug Reaction**

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Type of drug reaction that resembles serum sickness but lacks any evidence of immune complex deposition and is characterized by fever, arthralgias, periarticular edema, and urticaria, angioedema, or erythema-multiforme-like skin lesions

### ***Differential Diagnosis***

- Cryoglobulinemia
- Erythema marginatum
- Erythema multiforme
- Henoch–Schonlein purpura
- Hepatitis B infection
- Sweet’s syndrome
- Still’s disease
- Urticaria
- Urticarial drug eruption
- Urticarial vasculitis
- Vasculitis

### ***Associated Medications***

- Beta-lactam antibiotics
- Bupropion

- Carbamazepine
- Cefaclor
- Ciprofloxacin
- Clopidogrel
- Co-trimoxazole
- Fluoxetine
- Infliximab
- Minocycline
- Phenytoin
- Rifampin

### ***Treatment Options***

- Discontinue offending medication
- Antihistamines
- Systemic corticosteroids

### **Further reading:**

- Yerushalmi J, Zvulunov A, Halevy S (2002) Serum sickness-like reactions. *Cutis* 69(5):395–397

## **Severe Combined Immunodeficiency**

Syndrome of combined T cell and B cell deficiency with variable cause and presentation that is most commonly caused by an X-linked mutation of the common gamma chain of the T cell receptor and is characterized by recurrent visceral and cutaneous infections with *Candida* and various other fungal or bacteria pathogens, a severe seborrheic-dermatitis-like eruption (Leiner's disease), failure to thrive, and early death

### ***Subtypes/Variants***

- Adenosine deaminase (ADA) deficiency
- IL-7 receptor deficiency
- JAK3 deficiency

- MHC class II deficiency
- Omenn syndrome
- Purine nucleoside phosphorylase (PNP) deficiency
- T cell receptor deficiency
- X-linked severe combined immunodeficiency
- ZAP-70 deficiency

### ***Differential Diagnosis***

- Chronic mucocutaneous candidiasis
- DiGeorge syndrome
- Good syndrome
- HIV infection
- Leukemia
- Nezelof syndrome
- Wiskott–Aldrich syndrome
- X-linked agammaglobulinemia

### ***Evaluation***

- Chest radiograph
- Complete blood count
- Immunoglobulin levels
- Lymphocyte flow cytometry
- *Trichophyton* or *Candida* skin testing

### **Further reading:**

- Buckley RH (2004) The multiple causes of human SCID. *J Clin Invest* 114(10):1409–1411

### **Sezary Syndrome**

Leukemic variant of cutaneous T cell lymphoma with a poor prognosis that is characterized by erythroderma, lymphadenopathy, and Sezary cells in the blood, skin, and lymph nodes, along with severe pruritus, palmoplantar keratoderma, alopecia, and nail dystrophy

### ***Differential Diagnosis***

- Atopic dermatitis
- Congenital ichthyosiform erythroderma
- Drug reaction
- Erythrodermic mycosis fungoides
- Idiopathic erythroderma
- Paraneoplastic erythroderma
- Pityriasis rubra pilaris
- Psoriasis

### ***Diagnostic Criteria (One or More)***

- Aberrant expression of pan T cell markers
- Absolute Sezary cell count of 1,000 cells/mm<sup>3</sup>
- CD4/CD8 ratio of 10 or higher
- Chromosomal abnormality in T cell clone
- Increased lymphocyte counts with evidence of a T cell clone by Southern blot or PCR

### ***Evaluation***

- Bone marrow biopsy
- Chest radiograph
- Complete blood count with peripheral blood Sezary cell prep
- CT scan of chest, abdomen, and pelvis
- Lactate dehydrogenase level
- Liver function test
- Lymph node exam and biopsy
- Lymphocyte flow cytometry
- Serum chemistry

### ***Treatment Options***

- Methotrexate
- Extracorporeal photochemotherapy
- Bexarotene
- Systemic antibiotics
- Antihistamines
- Vorinostat
- Alemtuzumab
- Gemcitabine
- Single or multiagent chemotherapy

### **Further reading:**

- Vonderheid EC, Bernengo MG, Burg G et al (2002) Update on erythrodermic cutaneous T-cell lymphoma: report of the International Society for Cutaneous Lymphomas. *J Am Acad Dermatol* 46(1):95–106

### **Sinus Pericranii**

Acquired or congenital anomalous connection (possibly trauma related) between an extracranial blood-filled nodule and the intracranial dural sinuses that is characterized by a soft, compressible mass near the midline of the frontal, parietal, or occipital scalp that increases in size with increased intracranial pressure

### ***Differential Diagnosis***

- Aplasia cutis congenita
- Arteriovenous fistula
- Cutaneous meningioma
- Cylindroma
- Dermoid cyst



- En coupe de sabre
- Eosinophilic granuloma
- Hemangioma
- Heterotopic brain tissue
- Meningoencephalocele
- Venous malformation

**Further reading:**

- Sheu M, Fauteux G, Chang H et al (2002) Sinus pericranii: dermatologic considerations and literature review. J Am Acad Dermatol 46(6):934–941

## Sjögren's Syndrome

Autoimmune disease of unknown cause that predominantly affects women and is characterized by dry skin, dry eyes, dry mouth, salivary gland enlargement, arthritis, an annular papulosquamous eruption, SS-A or SS-B antibodies, and other concomitant autoimmune diseases

### *Differential Diagnosis*

- Amyloidosis
- Burning mouth syndrome
- Cheilitis granulomatosis
- Drug reaction or adverse effect
- Graft-vs-host disease
- HIV infection
- Lupus erythematosus
- Lymphoma
- Mucosal pemphigoid
- Rheumatoid arthritis
- Sarcoidosis
- Viral infection

### **Diagnostic Criteria (4/6)**

- Salivary gland biopsy reveals aggregation of at least 50 mononuclear cells around intralobular duct
- Antibodies to SS-B and/or SS-A, positive ANA, or RF
- Daily dry eyes for more than 3 months
- Daily dry mouth for more than 3 months
- Salivary scintigraphy, parotid sialography test positive, or reduced salivary flow test
- Schirmer's test positive (<5 mm in 5 min)

### **Associations**

- Acral ichthyosiform myxedema
- B cell lymphoma
- Benign hypergammaglobulinemic purpura of Waldenstrom
- Other autoimmune diseases
- Salivary gland enlargement
- Thyroiditis

### **Evaluation**

- Antinuclear antibodies (including SS-A and SS-B)
- Chest radiograph
- Complete blood count
- Liver function test
- Ophthalmologic exam (Schirmer's test)
- Renal function test
- Rheumatoid factor
- Urinalysis

### **Further reading:**

- Vitali C, Bombardieri S, Jonsson R et al (2002) Classification criteria for Sjogren's syndrome: a revised version of the European criteria proposed by the American-European Consensus Group. *Ann Rheum Dis* 61(6):554–558

## **Sjögren–Larsson Syndrome**

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Inherited metabolic disorder (AR) that is caused by deficiency of fatty aldehyde dehydrogenase (FALDH) and is characterized by flexure-predominant ichthyosis, photophobia, “glistening dot”-type retinitis pigmentosa, spastic diplegia, mental retardation, and seizures

### ***Differential Diagnosis***

- Ataxia–telangiectasia
- Congenital ichthyosiform erythroderma
- IFAP syndrome
- Lamellar ichthyosis
- Multiple sulfatase deficiency
- Neutral lipid storage disease
- Refsum disease
- Severe ichthyosis vulgaris
- Trichothiodystrophy
- X-linked recessive ichthyosis

### **Further reading:**

- Alio AB, Bird LM, McClellan SD et al (2006) Sjogren–Larsson syndrome: a case report and literature review. *Cutis* 78(1):61–65

## **Smallpox (Variola)**

Viral infection caused by the smallpox virus that is characterized by erythematous macules that erupt first on the face, spread to the trunk and extremities, evolve simultaneously to become monomorphic vesiculopustules with central umbilication, and eventually crust and scar

## *Differential Diagnosis*

- Acute generalized exanthematous pustulosis
- Contact dermatitis
- Coxsackievirus infection
- Disseminated zoster
- Eczema herpeticum
- Enteroviral infection
- Erythema multiforme
- Herpes simplex virus infection
- Impetigo
- Infectious mononucleosis
- Kaposi's varicelliform eruption
- Kawasaki disease
- Leukemia
- Meningococemia
- Monkeypox
- Molluscum contagiosum
- Parvovirus infection
- Rat-bite fever
- Rickettsialpox
- Rocky Mountain spotted fever
- Rubella
- Rubeola
- Scarlet fever
- Syphilis
- Varicella

## *Evaluation*

- Viral culture of the oropharynx
- Electron microscopy or PCR of lesional tissue

## **Further reading:**

- Moore ZS, Seward JF, Lane JM (2006) Smallpox. *Lancet* 367(9508):425–435

## Smooth Muscle Hamartoma

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Congenital or acquired hamartoma of smooth muscle that becomes more indurated with rubbing (pseudo-Darier's sign), is associated with Becker's nevus (acquired) or the Michelin tire baby presentation (congenital and generalized variant), and is characterized by a firm plaque with or without hyperpigmentation and hypertrichosis on the trunk, especially the lumbosacral area, or the proximal extremities

### *Differential Diagnosis*

- Accessory nipple
- Becker's nevus
- Café-au-lait macule
- Congenital melanocytic nevus
- Connective tissue nevus
- Dermatofibrosis lenticularis disseminata
- Fibrous hamartoma of infancy
- Infantile myofibromatosis
- Leiomyoma
- Neurofibroma
- Rhabdomyoma
- Solitary mastocytoma

### **Further reading:**

- Morales-Callaghan A, Vila JB, Cardenal EA, Bernier MA, Fraile HA, Miranda-Romero A (2005) Acquired cutaneous smooth muscle hamartoma. J Eur Acad Dermatol Venereol 19(1):142–143

## Solar Elastosis

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Common acquired disorder of elastic tissue that affects the elderly, is associated with chronic cumulative sun exposure, and is characterized by multiple yellow papules which coalesce into plaques on the sun-exposed areas, especially the face and neck

### ***Subtypes/Variants***

- Actinic elastotic plaque or papule (Dubreuil elastoma)
- Bullous solar elastosis
- Cutis rhomboidalis nuchae
- Favre–Racouchot syndrome
- Fibroelastolytic papulosis of the neck
- Juxtaclavicular beaded lines

### ***Differential Diagnosis***

- Basal cell carcinoma
- Carotenoderma
- Colloid milium
- Comedonal acne
- Epidermoid cysts
- Granuloma annulare
- Lupus erythematosus
- Papular mucinosis
- Polymorphous light eruption
- Pseudoxanthoma elasticum
- Sebaceous hyperplasia
- Squamous cell carcinoma

### **Further reading:**

- Heras JA, Jimenez F, Soguero ML et al (2007) Bullous solar elastosis. Clin Exp Dermatol 32(3):272–274

### **Solid Facial Edema**

Variant or complication of acne vulgaris that is characterized by tender, nonpitting erythematous edema of the glabella, nasal bridge, and cheeks

### ***Differential Diagnosis***

- Angioedema
- Cellulitis
- Erysipelas
- Melkersson–Rosenthal syndrome
- Rosacea fulminans
- Rosacea-related lymphedema (Morbihan disease)

### ***Treatment Options***

- Tetracycline antibiotics
- Isotretinoin
- Systemic corticosteroids
- Compression and massage

### **Further reading:**

- Manolache L, Benea V, Petrescu-Seceleanu D (2009) A case of solid facial oedema successfully treated with isotretinoin. *J Eur Acad Dermatol Venereol* 23(8):965–966

### **Spider Angioma (Nevus Araneus)**

Benign acquired vascular ectasia that is characterized by a blanching vascular papule with a central feeding arteriole from which numerous tiny vessels extend radially and is most commonly located on the trunk, but also the face or extremities

### ***Differential Diagnosis***

- Angioma serpiginosum
- Arteriovenous malformation

- Arthropod-bite reaction
- Cherry angioma
- Rosacea
- Telangiectatic mat

### **Associations**

- Hyperestrogenemia
- Liver disease (especially alcoholic)
- Oral contraception
- Pregnancy
- Thyrotoxicosis

### **Further reading:**

- Requena L, Sangueza OP (1997) Cutaneous vascular anomalies. Part I. Hamartomas, malformations, and dilation of preexisting vessels. *J Am Acad Dermatol* 37(4):523–549

## **Spiny Keratoderma (Music-Box Spine Dermatosi)s**

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Uncommon subtype of focal palmoplantar keratoderma characterized by miniscule digitate hyperkeratoses of the palms and soles, with occasional association with internal malignancy

### **Differential Diagnosis**

- Arsenical keratoses
- Darier's disease
- Filiform warts
- Hyperkeratotic spicules of myeloma
- Keratosis punctata
- Multiple minute digitate hyperkeratosis
- Porokeratosis punctata



**Further reading:**

- Torres G, Behshad R, Han A, Castrovinci AJ, Gilliam AC (2008) “I forgot to shave my hands”: a case of spiny keratoderma. *J Am Acad Dermatol* 58(2):344–348

**Spitz Nevus**

Tumor of epithelioid and/or spindle cell melanocytes that is confused histologically with melanoma, arises in children and young adults, and is characterized by a red, orange, or brown dome-shaped papule (or, occasionally, a darkly pigmented papule, also known as a pigmented spindle cell nevus of Reed) on the face or extremities

***Differential Diagnosis***

- Adnexal tumors
- Arthropod-bite reaction
- Blue nevus
- Dermatofibroma
- Hemangioma
- Juvenile xanthogranuloma
- Idiopathic facial aseptic granuloma
- Keloid
- Malignant melanoma
- Mastocytoma
- Melanoacanthoma
- Melanocytic nevus
- Molluscum contagiosum
- Pigmented basal cell carcinoma
- Pyogenic granuloma
- Traumatic tattoo
- Verruca

**Further reading:**

- Sulit DJ, Guardiano RA, Krivda S (2007) Classic and atypical Spitz nevi: review of the literature. *Cutis* 79(2):141–146

**Sporotrichosis (Schenck's Disease)**

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Chronic deep fungal infection caused by contamination of traumatized skin with the dimorphic fungus, *Sporothrix schencki*, and that is characterized most commonly by erythematous nodules and ulcers along the lines of lymphatic drainage of an extremity

***Subtypes/Variants***

- Disseminated
- Fixed
- Lymphocutaneous

***Differential Diagnosis***

- Anthrax
- Atypical mycobacterial infection
- Cat-scratch disease
- Cellulitis
- Chromoblastomycosis
- Dimorphic fungi
- Erysipeloid
- Leishmaniasis
- Mycetoma
- Nocardiosis
- Protothecosis
- Pyoderma gangrenosum
- Pyogenic lesions
- Sarcoidosis

- Syphilis
- Tuberculosis
- Tularemia

### ***Evaluation***

- Bacterial, mycobacterial, and fungal culture of affected tissue
- Chest radiograph

### ***Treatment Options***

- Itraconazole
- Surgical excision
- Potassium iodide

### **Further reading:**

- Ramos-e-Silva M, Vasconcelos C, Carneiro S et al (2007) Sporotrichosis. Clin Dermatol 25(2):181–187

## **Squamous Cell Carcinoma**

Malignant epidermal neoplasm that most commonly arises in the chronically sun-exposed areas of elderly patients and is characterized by an erythematous, indurated, hyperkeratotic papule, nodule, or plaque with central ulceration and crust

### ***Subtypes (Histologic)***

- Acantholytic
- Adenosquamous
- Angiosarcoma-like
- Basosquamous
- Clear cell
- Desmoplastic

- Keratoacanthoma
- Metaplastic carcinoma
- Spindle cell
- Verrucous

### *Differential Diagnosis*

#### General

- Adnexal tumor
- Atypical fibroxanthoma
- Actinic keratosis
- Basal cell carcinoma
- Blastomycosis
- Bromoderma
- Eccrine poroma
- Granular cell tumor
- Halogenoderma
- Inverted follicular keratosis
- Keratoacanthoma
- Leishmaniasis
- Lymphoepithelioma-like carcinoma
- Melanoma (especially amelanotic)
- Merkel cell carcinoma
- Metastatic squamous cell carcinoma
- Paget's disease
- Porocarcinoma
- Proliferating pilar cyst
- Pseudoepitheliomatous hyperplasia
- Pyoderma gangrenosum
- Pyogenic granuloma
- Sebaceous carcinoma
- Seborrheic keratosis
- Syphilis
- Tuberculosis
- Trichilemmal carcinoma

- Verrucous carcinoma
- Wart
- Warty dyskeratoma

### Penile

- Bowen's disease
- Buschke–Lowenstein tumor
- Chronic herpes simplex virus infection
- Condyloma acuminatum
- Genital ulcer
- Metastatic disease
- Pseudoepitheliomatous keratotic and micaceous balanitis
- Verruciform xanthoma
- Warty dyskeratoma

### Periungual/Subungual

- Keratoacanthoma
- Metastatic carcinoma
- Onychomatricoma
- Porocarcinoma
- Verrucous carcinoma
- Viral warts

### **Associations**

- Acne conglobata
- Actinic keratosis
- Arsenical keratosis
- Burn scars
- Chromomycosis
- Dental sinus
- Discoid lupus erythematosus
- Environmental carcinogen exposure
- Epidermodysplasia verruciformis

- Epidermolysis bullosa (especially dystrophic)
- Erythema ab igne
- Ferguson–Smith syndrome
- Granuloma inguinale
- Hailey–Hailey disease
- Hidradenitis suppurativa
- HPV infection
- Leprosy
- Lichen sclerosus et atrophicus
- Lupus vulgaris
- Marjolin ulcer
- Morphea
- Muir–Torre syndrome
- Necrobiosis lipoidica
- Oculocutaneous albinism
- Oral erosive lichen planus
- Osteomyelitis
- Perianal pyoderma
- Pilonidal cyst
- Porokeratosis
- Radiation dermatitis
- Scars
- Snake-bite ulcer
- Venous ulcers
- Xeroderma pigmentosum

### ***Associations (Penile)***

- Chronic irritation and inflammation
- Granuloma inguinale
- Human papilloma virus infection
- Immunosuppression
- Lack of circumcision
- Lichen sclerosus
- Poor hygiene
- Pseudoepitheliomatous keratotic and micaceous balanitis

### ***Treatment Options***

- Simple surgical excision
- Mohs micrographic surgery
- 5FU cream
- Imiquimod
- Electrodesiccation and curettage
- Intralesional 5FU
- Intralesional methotrexate
- Intralesional interferon
- Acitretin
- Isotretinoin
- Radiation

### **Further reading:**

- Cassarino DS, Derienzo DP, Barr RJ (2006) Cutaneous squamous cell carcinoma: a comprehensive clinicopathologic classification. *J Cutan Pathol* 33(3):191–206

### **Staphylococcal Scalded-Skin Syndrome (Ritter's Disease)**

Superficial blistering disorder of children and adults that is caused by release of epidermolytic toxin from a distal focus of infection and is characterized by tender erythema and superficial flaccid bullae most commonly noted around the mouth and intertriginous areas

### ***Differential Diagnosis***

- Bullous congenital ichthyosiform erythroderma
- Bullous impetigo
- Child abuse
- Diffuse cutaneous mastocytosis
- Drug reaction
- Epidermolysis bullosa
- Graft-vs-host disease

- Ichthyosis bullosa of Siemens
- Kawasaki disease
- Peeling skin syndrome
- Pemphigus foliaceus
- Scarlet fever
- Sunburn reaction
- Thermal burn
- Toxic epidermal necrolysis
- Toxic shock syndrome
- Viral exanthem

### **Associations**

- Chronic renal failure
- HIV infection
- Wound infections
- Occult infections

### **Treatment Options**

- Treat the underlying cause
- Antistaphylococcal antibiotics

### **Further reading:**

- Stanley JR, Amagai M (2006) Pemphigus, bullous impetigo, and the staphylococcal scalded-skin syndrome. *N Engl J Med* 355(17):1800–1810

## **Stasis Dermatitis**

Type of dermatitis that arises on the ankle, dorsal foot, and/or tibial area of patients with chronic venous insufficiency and is characterized by pruritic, scaly, erythematous eczematous, or lichenified plaques with surrounding lipodermatosclerosis, hemisiderosis, edema, venous varicosities, or other features of venous stasis



### ***Differential Diagnosis***

- Acroangiodermatitis of Mali
- Asteatotic eczema
- Atopic dermatitis
- Cellulitis
- Contact dermatitis
- Dermatophytosis
- Elephantiasis
- Kaposi's sarcoma
- Lichen planus
- Lipodermatosclerosis
- Livedoid vasculopathy
- Mycosis fungoides
- Necrobiosis lipoidica
- Nummular eczema
- Pigmented purpuric dermatosis
- Pretibial myxedema
- Psoriasis

### ***Associations***

- Acroangiodermatitis
- Atrophie blanche
- Lipodermatosclerosis
- Venous leg ulcers

### ***Treatment Options***

- Compression, elevation, and rest
- Topical corticosteroids
- Systemic corticosteroids
- Systemic antibiotics
- Pentoxifylline
- Diuresis

**Further reading:**

- Barron GS, Jacob SE, Kirsner RS (2007) Dermatologic complications of chronic venous disease: medical management and beyond. *Ann Vasc Surg* 21(5):652–662

**Steatocystoma Multiplex**

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Inherited disorder (AD) associated with mutation of keratin 17 that is characterized by multiple yellow to flesh-colored superficial cutaneous cysts containing an oily fluid on the upper chest or proximal upper extremities

***Differential Diagnosis***

- Acne conglobata
- Acne vulgaris
- Chloracne
- Dermoid cyst
- Epidermal inclusion cysts
- Eruptive vellus hair cysts
- Gardner syndrome
- Milia
- Syringoma
- Trichilemmal cyst

***Associations***

- Hidradenitis suppurativa
- LEOPARD syndrome
- Natal teeth
- Pachyonychia congenita, type II
- Preauricular pits

***Treatment Options***

- Incision and drainage
- Surgical excision

- Tetracycline antibiotics
- Isotretinoin

**Further reading:**

- Chu DH (2003) Steatocystoma multiplex. *Dermatol Online J* 9(4):18

**Stevens–Johnson Syndrome/Toxic Epidermal Necrolysis**

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Related life-threatening syndromes that are caused by immune-mediated epithelial apoptosis, are associated with a variety of medicinal and infectious triggers, and that clinically fall on spectrum with Stevens–Johnson syndrome having more erosions of the mucosal surfaces along with atypical target lesions affecting <10% of the body surface area while toxic epidermal necrolysis is characterized by more widespread (>30% BSA) epidermal sloughing and necrosis (Fig. 6.110)

***Differential Diagnosis*****Stevens–Johnson Syndrome**

- Aphthous stomatitis
- Behçet's disease



**Fig. 6.110** Stevens–Johnson syndrome

- Erosive lichen planus
- Erythema multiforme
- Fixed drug eruption
- Henoch–Schonlein purpura
- Herpes simplex virus infection
- Kawasaki disease
- Linear IgA bullous dermatosis
- Mucosal pemphigoid
- Paraneoplastic pemphigus
- Pemphigus vulgaris
- Rowell's syndrome
- Toxic epidermal necrolysis

### Toxic Epidermal Necrolysis

- Acute graft-vs-host disease
- Acute generalized exanthematous pustulosis
- Drug-induced pemphigoid
- Drug-induced pemphigus
- Drug-induced linear IgA bullous dermatosis
- Paraneoplastic pemphigus
- Pseudoporphyria
- Severe presentation of acute lupus erythematosus (ASAP syndrome)
- Severe phototoxicity
- Staphylococcal scalded-skin syndrome
- Stevens–Johnson syndrome
- Subacute cutaneous lupus erythematosus
- Thermal burns
- Widespread fixed drug eruption

### **Associations**

- Bone marrow transplant
- HIV infection
- Medications
- *Mycoplasma* infection

### ***Associated Medications***

- Allopurinol
- Aminopenicillins
- Antiretroviral medications
- Barbiturates
- Carbamazepine
- Lamotrigine
- Phenytoin
- Piroxicam
- Sulfonamides
- Tetracycline

### ***Staging (SCORTEN: Predicts Mortality)***

- Age >40 years
- Bicarbonate <20 mmol/l
- Blood urea nitrogen >10 mmol/l
- Glucose >14 mmol/l
- HR >120
- Initial epidermal detachment of >10% BSA
- Malignancy

### ***Evaluation***

- Bacterial culture of affected tissues
- Chest radiograph
- Liver function test
- Ophthalmology consultation
- Renal function test
- Serum chemistry/glucose

### ***Treatment Options***

- Supportive care
- Intravenous immunoglobulins
- Systemic corticosteroids
- Cyclosporine

#### **Further reading:**

- Pereira FA, Mudgil AV, Rosmarin DM (2007) Toxic epidermal necrolysis. *J Am Acad Dermatol* 56(2):181–200

### **Stomatitis Nicotina**

Heat-induced inflammation of the minor salivary glands of the palate that is associated with tobacco smoking and is characterized by white papules with central erythema on the hard palate

#### ***Differential Diagnosis***

- Aphthous stomatitis
- Forschheimer spots
- Herpangina
- Orolabial herpes infection
- Thermal burn

#### **Further reading:**

- Taybos G (2003) Oral changes associated with tobacco use. *Am J Med Sci* 326(4):179–182

### **Streptococcal Perianal Disease**

Superficial infection of the perianal area caused by group A beta-hemolytic streptococcus that is most commonly seen in children and is characterized by bright-red erythema surrounding the anus

### ***Differential Diagnosis***

- Candidiasis
- Chafing
- Child abuse
- Inflammatory bowel disease
- Intertrigo (diaper dermatitis)
- Pinworm infection
- Psoriasis
- Seborrheic dermatitis

### ***Associations***

- Guttate psoriasis

### ***Treatment Options***

- Antistreptococcal antibiotics

### **Further reading:**

- Herbst R (2003) Perineal streptococcal dermatitis/disease: recognition and management. *Am J Clin Dermatol* 4(8):555–560

### **Striae Distensae**

Atrophy of the dermis caused by stretching of the skin during pregnancy, weight gain, or muscle building that is characterized by linear atrophic erythematous bands on the trunk or proximal extremities

### ***Differential Diagnosis***

- Anetoderma
- Linear focal elastosis
- Marfan syndrome

- Middermal elastolysis
- Steroid-induced striae
- Trauma

### ***Associations***

- Corticosteroids
- Cushing's syndrome
- Obesity
- Pregnancy
- Puberty
- Weight loss

### ***Treatment Options***

- Observation
- Topical tretinoin
- Pulsed dye laser
- Glycolic acid
- Intense pulsed light

### **Further reading:**

- Yosipovitch G, Devore A, Dawn A (2007) Obesity and the skin: skin physiology and skin manifestations of obesity. *J Am Acad Dermatol* 56(6):901–916

## **Stucco Keratosis**

Benign hyperkeratotic papules of unknown cause that commonly affect middle-aged to elderly patients and are characterized by white, scaly, papules on the anterior lower extremities and occasionally the dorsal hands

### ***Differential Diagnosis***

- Acrokeratosis verruciformis
- Disseminated actinic porokeratosis



- Epidermodysplasia verruciformis
- Flegel's disease
- Hyperkeratotic seborrheic keratosis
- Verruca plana

**Further reading:**

- Stockfleth E, Rowert J, Arndt R et al (2000) Detection of human papillomavirus and response to topical 5% imiquimod in a case of stucco keratosis. *Br J Dermatol* 143(4):846–850

**Subcorneal Pustular Dermatitis (Sneddon–Wilkinson Disease)**

---

Idiopathic pustular psoriasis-like eruption affecting middle-aged to elderly patients that is characterized by superficial flaccid pustules, often in annular or serpiginous patterns that are located predominantly in the flexures

***Differential Diagnosis***

- Acute generalized exanthematous pustulosis
- Amicrobial pustulosis with autoimmunity
- Bullous impetigo
- Candidiasis
- Dermatophytosis
- Dermatitis herpetiformis
- Eosinophilic pustular folliculitis
- Folliculitis
- Hailey–Hailey disease
- IgA pemphigus, subcorneal pustular dermatosis type
- Necrolytic migratory erythema
- Pemphigus foliaceus
- Pemphigus vulgaris
- Pustular psoriasis
- Tinea corporis

### **Associations**

- Crohn's disease
- Hyperthyroidism
- IgA paraproteinemia
- Morphea
- Multiple sclerosis
- Pyoderma gangrenosum
- Rheumatoid arthritis
- SAPHO syndrome
- Systemic lupus erythematosus

### **Evaluation**

- Complete blood count
- Direct immunofluorescence
- Gram stain and potassium hydroxide examination of pustule
- Serum/urinary protein electrophoresis

### **Treatment Options**

- Dapsone
- Systemic corticosteroids
- Acitretin
- Tetracycline
- Narrowband UVB
- Infliximab

### **Further reading:**

- Iobst W, Ingraham K (2005) Sneddon–Wilkinson disease in a patient with rheumatoid arthritis. *Arthritis Rheum* 52(12):3771

## Subcutaneous Fat Necrosis of the Newborn

---

Uncommon panniculitis affecting term newborns that is possibly caused by an increased ratio of saturated to unsaturated subcutaneous fat and is characterized by hypercalcemia along with erythematous, edematous plaques predominantly located on the cheeks, buttocks, and thighs

### *Differential Diagnosis*

- Cellulitis
- Erythema nodosum
- Farber's lipogranulomatosis
- Hemangioma
- Neurofibromatosis
- Poststeroid panniculitis
- Sarcoma
- Sclerema neonatorum

### *Associations*

- Complicated delivery
- Hypothermia
- Meconium aspiration

### *Treatment Options*

- Supportive care
- Management of hypercalcemia

### **Further reading:**

- Mahe E, Girszyn N, Hadj-Rabia S et al (2007) Subcutaneous fat necrosis of the newborn: a systematic evaluation of risk factors, clinical manifestations, complications and outcome of 16 children. *Br J Dermatol* 156(4):709–715

## **Subepidermal Calcified Nodule**

---

Type of idiopathic calcinosis cutis that arises in childhood and is characterized by a solitary, hard, yellow-white or erythematous, protuberant dermal nodule on the head and neck, especially the face or ear

### ***Differential Diagnosis***

- Chondroid syringoma
- Cutaneous horn
- Dermatofibroma
- Epidermal inclusion cyst
- Milia-like calcinosis cutis
- Molluscum contagiosum
- Pilomatricoma
- Verruca vulgaris

### **Further reading:**

- Juzych LA, Nordby CA (2001) Subepidermal calcified nodule. *Pediatr Dermatol* 18(3):238–240

## **Submucous Fibrosis of Oral Cavity**

---

Fibrosing disorder of the oral cavity that is associated with various irritating substances and is characterized first by a progressive thickening of the palate and tonsillar pillars with later involvement of the entire oral cavity, which can eventually become ulcerated or associated with trismus, or develop squamous cell carcinoma

### ***Differential Diagnosis***

- Amyloidosis
- Gingival fibromatosis
- Leukoplakia

- Lichen planus
- Lipoid proteinosis
- Mucosal pemphigoid
- Oral fibroma
- Salivary gland neoplasm
- Scleroderma
- Squamous cell carcinoma

### **Associations**

- Betel nuts (areca nuts)
- Chili peppers
- Iron deficiency
- Malnutrition
- Vitamin deficiency

### **Further reading:**

- Hazarey VK, Erlewad DM, Mundhe KA et al (2007) Oral submucous fibrosis: study of 1000 cases from central India. J Oral Pathol Med 36(1):12–17

### **Subungual Exostosis**

Uncommon, solitary, cartilaginous tumor that is likely caused by trauma, arises most commonly on the great toe in the first two decades of life, and is characterized by a hard, painful, raised subungual nodule with or without overlying nail dystrophy and surrounding callus formation

### **Differential Diagnosis**

- Enchondroma
- Glomus tumor
- Koenen tumor
- Melanoma
- Metastatic lesion

- Osteochondroma
- Pterygium inversus unguis
- Squamous cell carcinoma of nail bed
- Subungual wart
- Traumatic nail dystrophy

**Further reading:**

- Guarneri C, Guarneri F, Risitano G et al (2005) Solitary asymptomatic nodule of the great toe. *Int J Dermatol* 44(3):245–247
- Suga H, Mukouda M (2005) Subungual exostosis: a review of 16 cases focusing on postoperative deformity of the nail. *Ann Plast Surg* 55(3):272–275

**Supernumerary Digit (Rudimentary Polydactyly)**

Developmental anomaly caused by erroneous duplication of digital soft tissue or intrauterine amputation of a superfluous digit that is characterized by a solitary or bilateral flesh-colored pedunculated nodule most commonly located on the ulnar aspect of the fifth digit

***Differential Diagnosis***

- Acquired digital fibrokeratoma
- Epidermal inclusion cyst
- Fibroma
- Neurofibroma
- Pyogenic granuloma
- Traumatic neuroma
- Wart

***Associations***

- Basal cell nevus syndrome
- Bardet–Biedl syndrome
- Down syndrome

- EEC syndrome
- Ellis–van Creveld syndrome
- Oral–facial–digital syndrome
- Rubinstein–Taybi syndrome
- VATER association

**Further reading:**

- Leber GE, Gosain AK (2003) Surgical excision of pedunculated supernumerary digits prevents traumatic amputation neuromas. *Pediatr Dermatol* 20(2):108–112

## **Supernumerary Nipple**

---

Developmental anomaly characterized by the development of an additional nipple or areola with or without underlying mammary tissue along the mammary (milk) line, the line of ectodermal differentiation along which the breasts develop that runs from the axilla to the groin

### ***Differential Diagnosis***

- Acrochordon
- Café-au-lait macule
- Congenital melanocytic nevus
- Dermatofibroma
- Lipoma
- Lymphangioma
- Neurofibroma
- Nevus
- Scar
- Wart

### ***Associations***

- Ectodermal dysplasias
- Fanconi anemia

- Ipsilateral Becker's nevi
- Urinary tract malformations
- Simpson–Golabi–Behmel syndrome
- Trichoodontoonychial dysplasia
- Turner syndrome

**Further reading:**

- Brown J, Schwartz RA (2004) Supernumerary nipples and renal malformations: a family study. *J Cutan Med Surg* 8(3):170–172

### **Sweet's Syndrome (Acute Febrile Neutrophilic Dermatitis)**

Idiopathic reactive inflammatory syndrome associated with several triggers that is characterized by fever, leukocytosis, and neutrophil-rich, erythematous, edematous plaques with central pustules (and, occasionally, vesiculation) on the face and extremities (Fig. 6.111)



**Fig. 6.111** Sweet's syndrome  
(Courtesy of A. Record)



### ***Differential Diagnosis***

- Acne fulminans
- Acral erythema
- Acute hemorrhagic edema of infancy
- Behçet's disease
- Bowel-associated dermatosis–arthritis syndrome
- Cellulitis
- Chloroma
- Cutaneous small vessel vasculitis
- Deep fungal infection
- Eccerine syringosquamous metaplasia
- Erythema elevatum diutinum
- Erythema multiforme
- Erythema nodosum
- Familial Mediterranean fever
- Fixed drug eruption, neutrophilic type
- Granuloma annulare
- Granuloma faciale
- Halogenoderma
- Hyper-IgD syndrome
- Lupus erythematosus
- Leishmaniasis
- Leukemia cutis
- Lymphoma cutis
- Metastatic disease
- Mycobacterial infection (including leprosy)
- Neutrophilic dermatosis of the dorsal hands
- Neutrophilic eccrine hidradenitis
- Panniculitis
- Pyoderma
- Pyoderma gangrenosum (especially bullous type)
- Rheumatoid neutrophilic dermatosis
- Rosacea fulminans

- Sarcoidosis
- Septic vasculitis
- Syphilis
- TNF-receptor-associated periodic fever syndrome
- Urticarial vasculitis

### ***Diagnostic Criteria (Two Major and Two Minor)***

- Major criteria
  - Abrupt onset of typical cutaneous lesions
  - Histopathology consistent with Sweet's syndrome
- Minor criteria
  - Preceded by one of the associated infections or vaccinations, or accompanied by one of the associated malignancies, inflammatory disorders, or pregnancy
  - Presence of fever and constitutional signs and symptoms
  - Leukocytosis
  - Excellent response to systemic corticosteroids

### ***Associations***

- Behçet's disease
- Hematologic malignancy
- Hepatitis B infection
- Inflammatory bowel disease
- Medications
- Polycythemia
- Pregnancy
- Rheumatoid arthritis
- Sarcoidosis
- Sjögren's syndrome
- Solid tumors
- Streptococcal upper respiratory illness

- Thyroid disease
- Tuberculosis
- Vaccination (influenza)
- Yersiniosis

### ***Associated Medications***

- All-trans retinoic acid
- Carbamazepine
- Celecoxib
- Clozapine
- Diazepam
- G-CSF
- Furosemide
- Hydralazine
- Isotretinoin
- Minocycline
- Nitrofurantoin
- Oral contraception
- Sulfamethoxazole–trimethoprim

### ***Evaluation***

- Antinuclear antibodies
- Antistreptolysin O titers
- Appropriate cancer screening
- Bacterial, mycobacterial, and fungal cultures
- Complete blood count
- Liver function test
- Pregnancy test
- Rheumatoid factor
- Sedimentation rate
- Thyroid function test
- Urinalysis

## ***Treatment Options***

- Systemic corticosteroids
- Dapsone
- Colchicine
- Potassium iodide
- Tetracycline
- Metronidazole
- Cyclosporine
- Clofazimine
- Cyclophosphamide

### **Further reading:**

- Neoh CY, Tan AW, Ng SK (2007) Sweet's syndrome: a spectrum of unusual clinical presentations and associations. *Br J Dermatol* 156(3):480–485

## **Swimmer's Itch**

Acute pruritic eruption that is caused by aquatic contact with cercarial forms of avian schistosomes and is characterized by pruritic erythematous papules on the uncovered areas of the body

## ***Differential Diagnosis***

- Allergic contact dermatitis
- Aquagenic urticaria
- Cholinergic urticaria
- Cold urticaria
- Creeping eruption
- Dermatographism
- Harvest-mite infestation
- Marine plant allergy
- Insect bites
- Scabies

- Seabather's eruption
- Urticaria

### ***Treatment Options***

- Observation and reassurance
- Antihistamines
- Topical corticosteroids
- Systemic corticosteroids

### **Further reading:**

- Folster-Holst R, Disko R, Rowert J et al (2001) Cercarial dermatitis contracted via contact with an aquarium: case report and review. *Br J Dermatol* 145(4):638–640

## **Syphilis, Acquired**

Sexually transmitted multistage infection that is caused by *Treponema pallidum* and is characterized by a painless, firm, well-defined genital ulcer (primary), a papulosquamous eruption involving the face, trunk, and extremities, including the palms and soles (secondary), and gummatous lesions along with cerebral and cardiovascular effects (tertiary)

### ***Subtypes/Variants***

- Annular
- Condyloma lata
- Corymbose
- Corona veneris
- Lues maligna
- Lues maligna (Fig. 6.112)
- Moth-eaten alopecia
- Mucous patches
- Rupial (Fig. 6.113)
- Split papules



**Fig. 6.112** Lues maligna (Courtesy of A. Record)



**Fig. 6.113** Rupial syphilis

## *Differential Diagnosis*

### Primary

- Aphthous stomatitis
- Behçet's disease
- Chancroid
- Fixed drug eruption
- Genital herpes
- Genital trauma
- Granuloma inguinale
- Lymphogranuloma venereum
- Lymphoma
- Squamous cell carcinoma
- Trauma

### Secondary

- Alopecia areata
- Bowenoid papulosis
- Chronic aphthous ulcers
- Condyloma acuminatum
- Cutaneous plasmacytosis
- Drug eruption
- Erythema multiforme
- Eruptive syringomas
- Folliculitis
- Granuloma annulare
- Guttate psoriasis
- Hand-foot-mouth disease
- Herpangina
- Lupus erythematosus
- Lichen planus, eruptive
- Nummular eczema
- Perleche
- Pityriasis lichenoides chronica
- Pityriasis rosea

- Pityriasis rubra pilaris
- Primary HIV infection
- Scabies
- Squamous cell carcinoma
- Viral exanthem
- Warts

### Tertiary

- Deep fungal infection
- Leishmaniasis
- Leprosy
- Lupus erythematosus
- Lupus vulgaris
- Mycosis fungoides
- Sarcoidosis
- Venous ulcer

### **Treatment Options**

- Penicillin
- Azithromycin
- Doxycycline
- Ceftriaxone

### **Further reading:**

- Lautenschlager S (2006) Cutaneous manifestations of syphilis: recognition and management. *Am J Clin Dermatol* 7(5):291–304

## **Syphilis, Congenital**

Intrauterine infection of the fetus with *Treponema pallidum* that gives rise to numerous birth and developmental defects, including rhagades (parrot lines), snuffles (rhinitis), mucous patches, bullous lesions, hepatosplenomegaly, lymphadenopathy, saddle-nose deformity, Hutchinson's triad



(VIII cranial nerve deafness, keratitis, peg-shaped teeth), mulberry molars, pseudoparalysis, and frontal bossing

### ***Differential Diagnosis***

- Congenital CMV
- Congenital rubella
- Ectodermal dysplasia
- Hurler syndrome
- Neonatal herpes simplex virus infection
- Neonatal lupus
- Neonatal pemphigus
- Staphylococcal scalded-skin syndrome
- Toxoplasmosis

### ***Treatment Options***

- Penicillin

### **Further reading:**

- Lugo A, Sanchez S, Sanchez JL (2006) Congenital syphilis. *Pediatr Dermatol* 23(2):121–123

## **Syringocystadenoma Papilliferum (of Werther)**

Benign neoplasm of apocrine derivation (a type of apocrine adenoma) that most often arises in a nevus sebaceus (and less commonly on normal skin) and is characterized by a cluster of erythematous papules that are occasionally oozing, crusted, or verrucous

### ***Differential Diagnosis***

- Apocrine adenoma
- Basal cell carcinoma

- Eccrine acrospiroma
- Metastatic adenocarcinoma
- Pyogenic granuloma
- Trichadenoma
- Trichoblastoma
- Trichilemmoma
- Warty dyskeratoma
- Verruca

**Further reading:**

- Laxmisha C, Thappa DM, Mishra MM et al (2007) Linear syringocystadenoma papilliferum of the scalp. J Eur Acad Dermatol Venereol 21(2):275–276

**Syringofibroadenoma of Mascaró, Eccrine  
(Acrosyringal Nevus of Weedon and Lewis)**

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Benign tumor of acrosyringal derivation that is characterized by a flesh-colored or erythematous, hyperkeratotic, occasionally linear, nodule or plaque most commonly on the distal extremities, including the palms and soles

***Differential Diagnosis***

- Clear cell acanthoma
- Fibroepithelioma of Pinkus
- Hidroacanthoma simplex
- Irritated seborrheic keratosis
- Palmoplantar keratoderma
- Porocarcinoma
- Porokeratotic eccrine ostial dermal duct nevus
- Poroma
- Spiradenoma
- Tumor of the follicular infundibulum
- Verruca

- Verrucous carcinoma
- Verrucous xanthoma

### **Associations**

- Bullous pemphigoid
- Burns
- Chronic ulcer
- Ectodermal dysplasias
- Epidermolysis bullosa
- Erosive lichen planus
- Schopf–Schulz–Passarge syndrome (multiple)
- Squamous cell carcinoma
- Venous stasis

### **Further reading:**

- Kawaguchi M, Takeda H, Mitsuhashi Y et al (2003) Eccrine syringofibroadenoma with diffuse plantar hyperkeratosis. *Br J Dermatol* 149(4):885–886

## **Syringoma**

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Benign neoplasm of eccrine ductal derivation that is characterized by multiple, small, flesh-colored, slightly translucent papules on the face, especially the lower eyelid and infraorbital cheek, or elsewhere in an eruptive fashion, on the neck, chest, arms, or periumbilical area

### **Differential Diagnosis**

#### Facial

- Basal cell carcinoma
- Eruptive vellus hair cysts
- Granulomatous rosacea

- Lupus miliaris disseminata faciei
- Microcystic adnexal carcinoma
- Milium
- Molluscum contagiosum
- Periocular dermatitis
- Sarcoidosis
- Secondary syphilis
- Steatocystoma multiplex
- Trichodiscoma
- Trichoepithelioma
- Verruca plana
- Xanthelasma

### Eruptive

- Acne vulgaris
- Eruptive xanthomas
- Lichen nitidus
- Lichen planus
- Papular pityriasis rosea
- Papular sarcoidosis
- Verruca plana

### Associations

- Brooke–Spiegler syndrome
- Carbamazepine
- Diabetes (clear cell type)
- Down syndrome
- Nicolau–Balus syndrome

### Further reading:

- Teixeira M, Ferreira M, Machado S et al (2005) Eruptive syringomas. *Dermatol Online J* 11(3):34

## **Tache Noir**

---

Refers to the “black spot” or eschar that results from a tick bite and is associated with several rickettsial diseases, especially scrub typhus, rickettsialpox, and Mediterranean fever

### ***Differential Diagnosis***

- Anthrax
- Arthropod-bite reaction
- Aspergillosis
- Brown recluse spider bite
- Cigarette burn
- Ecthyma
- Ecthyma gangrenosum
- Fusariosis
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Tularemia

### **Further reading:**

- Kim DM, Won KJ, Park CY et al (2007) Distribution of eschars on the body of scrub typhus patients: a prospective study. *Am J Trop Med Hyg* 76(5):806–809

## **Takayasu’s Arteritis (Pulseless Disease)**

---

Large vessel type of vasculitis that predominantly occurs in Asia and is characterized by aortitis leading to absent pulses and impaired circulation, generalized pyoderma-gangrenosum-like skin lesions, erythema nodosum, and other features

### ***Differential Diagnosis***

- Atherosclerosis
- Behçet’s disease

- Buerger's disease
- Coarctation of the aorta
- Cogan's syndrome
- Hodgkin's disease
- Pyoderma gangrenosum
- Sarcoidosis
- Syphilitic aortitis
- Temporal arteritis
- Viral myocarditis

### ***Diagnostic Criteria (ACR; 3/6)***

- Age <40 years at onset
- Arteriogram abnormal
- BP >10 mmHg difference between two arms
- Bruits
- Decreased brachial artery pulses
- Limb claudication

### ***Evaluation***

- Antinuclear antibodies
- Chest radiograph
- Complete blood count
- Echocardiography
- Liver function tests
- MR angiography/MRI of chest
- Renal function tests
- Rheumatoid factor level
- Sedimentation rate
- Urinalysis

### **Further reading:**

- Fiorentino DF (2003) Cutaneous vasculitis. *J Am Acad Dermatol* 48(3):311–340

## **Talon Noir (Black Heel)**

---

Dark discoloration of the heel or palm that is caused by shearing forces on the skin (often sports-related) which lead to hemorrhage into the epidermis and is characterized by an asymptomatic black macule

### ***Differential Diagnosis***

- Achenbach syndrome
- Fixed drug eruption
- Foreign body
- Lentigo
- Melanoma
- Nevus
- Wart
- Tinea nigra
- Traumatic tattoo

### **Further reading:**

- Mailler-Savage EA, Adams BB (2006) Skin manifestations of running. *J Am Acad Dermatol* 55(2):290–301

## **Targetoid Hemosiderotic Hemangioma (Hobnail Hemangioma)**

---

Benign vascular neoplasm that is often induced by trauma; is characterized by a nodule or plaque with a violaceous center and a brown, erythematous, or hemorrhagic periphery (giving it a targetoid appearance); and is typically located on the trunk or extremities of a young to middle-aged adult (Fig. 6.114)

### ***Differential Diagnosis***

- Angiokeratoma
- Angiosarcoma



**Fig. 6.114** Targetoid hemosiderotic hemangioma

- Benign hemangioma
- Benign lymphangiomatosis
- Cutaneous endometriosis
- Dabska's tumor
- Dermatofibroma
- Erythema multiforme
- Granuloma annulare
- Kaposi's sarcoma
- Melanoma
- Nevus
- Retiform hemangiomaendothelioma
- Spider angioma
- Traumatized cherry angioma
- Traumatized lymphangiectasis
- Venous lake

**Further reading:**

- Morales-Callaghan AM, Martinez-Garcia G, Aragonese-Fraile H et al (2007) Targetoid hemosiderotic hemangioma: clinical and dermoscopic findings. *J Eur Acad Dermatol Venereol* 21(2):267–269



## Telangiectasia, Generalized Essential

---

Idiopathic, acquired disorder with onset in adult life that predominantly affects women and is characterized by persistent telangiectasias that initially erupt on the lower extremities and then spread to encompass the upper extremities and trunk

### *Differential Diagnosis*

- Angiokeratoma corporis diffusum
- Carcinoma telangiectaticum
- CREST syndrome
- Drug-induced telangiectasia
- Hereditary benign telangiectasia
- Hereditary hemorrhagic telangiectasia
- Spider angiomas (especially in liver disease)
- Telangiectasia macularis eruptive perstans
- Universal angiomatosis

### **Further reading:**

- Blume JE (2005) Generalized essential telangiectasia: a case report and review of the literature. *Cutis* 75(4):223–224

## Telangiectasia, Hereditary Hemorrhagic (Osler–Weber–Rendu Disease)

---

Inherited vascular disorder (AD) caused by defects in the endoglin or activin-like kinase genes that is characterized by epistaxis, telangiectasias of the skin and oral mucosa, pulmonary arteriovenous malformations, and gastrointestinal bleeding

### ***Differential Diagnosis***

- Angiokeratoma corporis diffusum
- Ataxia–telangiectasia
- Carcinoma telangiectaticum
- Coats disease
- Cockayne syndrome
- CREST syndrome
- Dermatomyositis
- Generalized essential telangiectasia
- Hereditary benign telangiectasia
- Rosacea
- Rothmund–Thomson syndrome
- Scleroderma
- Telangiectasia macularis eruptive perstans
- Universal angiomatosis

### ***Diagnostic Criteria (3/4)***

- Epistaxis: spontaneous and recurrent
- Telangiectasias: multiple at characteristic sites
- Visceral lesions: gastrointestinal telangiectasia, pulmonary, hepatic, cerebral, or spinal AVM
- Family history: one affected first-degree relative

### ***Evaluation***

- Chest radiography
- Complete blood count
- Iron studies
- Prothrombin time and partial thromboplastin time
- Stool for occult blood
- Upper and lower endoscopy

**Further reading:**

- Garzon MC, Huang JT, Enjolras O, Frieden IJ (2007) Vascular malformations. Part II: associated syndromes. *J Am Acad Dermatol* 56(4):541–564

**Telangiectasia Macularis Eruptiva Perstans**

Rare subtype of cutaneous mastocytosis that affects adults and is characterized by numerous mildly pruritic, reddish-brown, blanchable macules with telangiectasias that are Darier's sign negative and predominantly located on the trunk (Fig. 6.71)

***Differential Diagnosis***

- Angioma serpiginosum
- Carcinoid syndrome
- Carcinoma telangiectaticum
- Corticosteroids
- CREST syndrome
- Dermatomyositis
- Drug-induced telangiectasia
- Generalized essential telangiectasia
- Hereditary benign telangiectasia
- Liver disease
- Lupus erythematosus
- Mycosis fungoides
- Osler–Weber–Rendu disease
- Radiodermatitis
- Spider angiomas
- Unilateral nevoid telangiectasia

***Evaluation***

- Complete blood count
- Serum tryptase level

### ***Treatment Options***

- Observation and reassurance
- Antihistamines
- Pulsed dye laser

#### **Further reading:**

- Nguyen NQ (2004) Telangiectasia macularis eruptiva perstans. *Dermatol Online J* 10(3):1

### **Telangiectasia, Unilateral Nevoid**

Congenital or acquired vascular nevus that is characterized by a linear, segmental distribution of telangiectasias involving a dermatome, most commonly on the neck, upper chest, or shoulder

#### ***Differential Diagnosis***

- Angioma serpiginosum
- Carcinoma telangiectaticum
- Erythema ab igne
- Generalized essential telangiectasia
- Poikiloderma atrophicans vasculare
- Port-wine stain
- Radiation-induced telangiectasias
- Steroid-induced telangiectasias

#### **Further reading:**

- Sharma VK, Khandpur S (2006) Unilateral nevoid telangiectasia: response to pulsed dye laser. *Int J Dermatol* 45(8):960–964

### **Telogen Effluvium**

Type of alopecia that is often associated with a stressful event which triggers a large number of hairs to enter telogen simultaneously and is characterized by the acute onset (or less commonly, a more chronic process) of diffuse, nonscarring, noninflammatory alopecia

### ***Differential Diagnosis***

- Alopecia areata, diffuse pattern
- Anagen effluvium
- Androgenetic alopecia
- Androgen-induced alopecia
- Loose anagen hair
- Lupus hair
- Syphilitic alopecia
- Thyrotoxicosis
- Tinea capitis
- Trichorrhexis nodosa
- Trichotillomania

### ***Associations***

- Allergic contact dermatitis
- Anticoagulants
- Antithyroid antibodies
- Extreme dieting
- Flare of systemic lupus erythematosus
- High fever
- Hyperthyroidism
- Hypothyroidism
- Medications
- Newborn
- Postpartum period
- Postoperative period
- Profound blood loss
- Rapid weight loss
- Retinoids
- Seborrheic dermatitis
- Severe chronic illness
- Severe infection
- Severe prolonged stress
- Trichodynia

### ***Associated Medications***

- ACE inhibitors
- Albendazole
- Anticoagulants
- Antimitotic agents
- Beta-blockers
- Bromocriptine
- Carbamazepine
- Danazol
- Heparin
- Interferon alpha
- Lipid-lowering drugs
- Lithium
- Nicotinic acid
- Nitrofurantoin
- Oral contraception
- Retinoids
- Valproate

### ***Treatment Options***

- Observation and reassurance
- Minoxidil

### **Further reading:**

- Harrison S, Sinclair R (2002) Telogen effluvium. *Clin Exp Dermatol* 27(5):389–395

### **Temporal Arteritis (Giant Cell Arteritis)**

Large vessel vasculitis syndrome of unknown cause that affects the elderly and is characterized by jaw claudication, headaches or scalp tenderness, visual disturbance, polymyalgia rheumatica, and rarely, ulceration of the scalp

### ***Differential Diagnosis***

- Amyloidosis
- Behçet's disease
- Cogan's syndrome
- Headache (other causes)
- Idiopathic facial pain syndrome
- Lupus erythematosus
- Polyarteritis nodosa
- Rheumatoid arthritis
- Sarcoidosis
- Takayasu's arteritis
- Trigeminal neuralgia
- Wegener's granulomatosis

### ***Diagnostic Criteria (3/5)***

- Abnormal temporal artery on clinical examination (tenderness to palpation or decreased pulsation)
- Age >50 years at onset
- Elevated erythrocyte sedimentation rate
- New type of headache
- Temporal artery biopsy showing vasculitis

### ***Evaluation***

- Complete blood count
- CT scan/angiography of affected vessels
- Ophthalmologic examination
- Renal function test
- Sedimentation rate
- Temporal artery biopsy

### **Further reading:**

- Fiorentino DF (2003) Cutaneous vasculitis. J Am Acad Dermatol 48(3):311–340



**Fig. 6.115** Triangular temporal alopecia

### **Temporal Triangular Alopecia (Brauer Nevus)**

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Idiopathic, usually acquired, localized type of alopecia that develops in early childhood and is characterized by a triangular, nonscarring patch of alopecia on the frontotemporal portion of the scalp (Fig. 6.115)

#### ***Differential Diagnosis***

- Alopecia areata
- Aplasia cutis congenita
- Nevus sebaceus
- Tinea capitis
- Traction alopecia
- Trichotillomania



## **Associations**

- Epilepsy
- Mental retardation
- Phakomatosis pigmentovascularis

### **Further reading:**

- Elmer KB, George RM (2002) Congenital triangular alopecia: a case report and review. *Cutis* 69(4):255–256

## **Terra Firma–Forme Dermatitis**

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Cutaneous discoloration of uncertain cause that is characterized by dirty-brown macular hyperpigmentation that cannot be removed with routine cleaning but can be removed with isopropyl alcohol

### ***Differential Diagnosis***

- Acanthosis nigricans
- Atopic dermatitis
- Confluent and reticulated papillomatosis
- Dermatitis neglecta
- Postinflammatory hyperpigmentation
- Prurigo pigmentosa
- X-linked ichthyosis

### **Further reading:**

- Browning J, Rosen T (2005) Terra firma–forme dermatosis revisited. *Dermatol Online J* 11(2):15

## **Thromboangiitis Obliterans (Buerger's Disease)**

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Idiopathic vascular disorder that is associated with smoking, occurs predominantly in young to middle-aged adult men, and is characterized by digital pain, ischemic necrosis, and gangrene of the hands and feet

### ***Differential Diagnosis***

- Achenbach syndrome
- Antiphospholipid antibody syndrome
- Arteriosclerosis obliterans
- Cannabis arteritis
- Cocaine abuse
- CREST syndrome
- Cryoglobulinemia
- Neuropathic ulcers
- Peripheral artery disease
- Raynaud's disease
- Reflex sympathetic dystrophy
- Scleroderma
- Systemic vasculitis syndromes
- Takayasu's arteritis

### ***Diagnostic Criteria***

- Age younger than 45 years
- Current (or recent) history of tobacco use
- Presence of distal extremity ischemia documented by noninvasive vascular testing such as ultrasound
- Exclusion of autoimmune diseases, hypercoagulable states, and diabetes mellitus by laboratory tests
- Exclusion of a proximal source of emboli by echocardiography and arteriography
- Consistent arteriographic findings in the clinically involved and noninvolved limbs

### ***Evaluation***

- Anticardiolipin antibodies
- Antinuclear antibodies (including Scl-70 antibodies)

- Arteriography
- Complete blood count
- Echocardiography
- Lupus anticoagulant
- Rheumatoid factor
- Sedimentation rate

### ***Treatment Options***

- Cessation of tobacco use
- Iloprost
- Pain control
- Antibiotics
- Amputation

### **Further reading:**

- Olin JW, Shih A (2006) Thromboangiitis obliterans (Buerger's disease). *Curr Opin Rheumatol* 18(1):18–24

## **Thrombophlebitis, Superficial**

Inflammation of the superficial veins that is caused by various hypercoagulable disorders, infection, or trauma and is characterized by a tender linear erythematous subcutaneous cord

### ***Differential Diagnosis***

- Bacterial infection
- Behçet's disease
- Candidiasis
- Cellulitis
- Cutaneous larva migrans
- Deep venous thrombosis
- Erythema induratum
- Erythema nodosum

- Factitial
- Hypercoagulable
- Internal malignancy
- Interstitial granulomatous dermatitis (rope sign)
- Lupus panniculitis
- Lymphangiitis
- Mondor's disease
- Oral contraception
- Pancreatic panniculitis
- Polyarteritis nodosa
- Pregnancy
- Secondary syphilis

### **Associations**

- Buerger's disease
- Hormonal therapy
- Hypercoagulable state
- Internal malignancy
- Pregnancy
- Prolonged immobilization
- Sickle cell disease
- Surgery
- Trauma

### **Further reading:**

- Luis Rodriguez-Peralto J, Carrillo R, Rosales B et al (2007) Superficial thrombophlebitis. *Semin Cutan Med Surg* 26(2):71–76

## **Thyroglossal Duct Cyst**

Developmental anomaly that is caused by failure of the thyroglossal duct to involute and is characterized by a recurrently inflamed subcutaneous mass in the anterior midline neck located between the thyroid gland and the posterior tongue

### ***Differential Diagnosis***

- Branchial cleft cyst
- Bronchogenic cyst
- Congenital midline cervical cleft
- Dermoid cyst
- Epidermal inclusion cyst
- Infantile hemangioma
- Lipoma
- Thyroid cancer
- Venous malformation

### **Further reading:**

- Acierno SP, Waldhausen JH (2007) Congenital cervical cysts, sinuses and fistulae. *Otolaryngol Clin North Am* 40(1):161–176, vii–viii

### **Tinea Barbae**

Dermatophyte infection of the beard area that can be superficial and noninflammatory or deeper and inflammatory (kerion type) and is characterized by scaly, annular plaques with pustules and broken-off hairs (superficial; most commonly caused by *T. rubrum* or *T. violaceum*) or a deep inflammatory nodule or plaque with pustules and sinus tracts (deep; most commonly by *T. mentagrophytes* or *T. verrucosum*)

### ***Differential Diagnosis***

- Acne vulgaris
- Actinomycosis
- Bacterial folliculitis
- Blastomycosis
- Blastomycosis-like pyoderma
- *Candida* folliculitis
- Dental sinus
- Halogenoderma

- Herpetic sycosis
- Impetigo
- Lupus vulgaris
- Perioral dermatitis
- Pseudofolliculitis barbae
- Pyoderma faciale
- Ruptured epidermal inclusion cyst
- Seborrheic dermatitis
- Sweet's syndrome
- Sycosis barbae
- Syphilis

### **Treatment Options**

- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Maeda M, Nakashima T, Satho M et al (2002) Tinea barbae due to *Trichophyton verrucosum*. Eur J Dermatol 12(3):272–274

## **Tinea Capitis**

Dermatophyte infection of the scalp caused most commonly by *Trichophyton tonsurans* that predominantly affects African–American children and is characterized by gray patches of hair loss, stubs of broken hairs (black-dot pattern), pustules, fine seborrheic scale, kerion formation (inflammatory, boggy nodule caused by hypersensitivity to dermatophyte), and accompanying regional lymphadenopathy (Fig. 6.116)

### **Subtypes/Variants**

- Black dot
- Favus



**Fig. 6.116** Tinea capitis

- Gray patch
- Kerion
- Seborrheic-dermatitis-like

### ***Differential Diagnosis***

#### Classic

- Alopecia areata
- Bacterial pyoderma
- Demodicosis
- Dermatomyositis
- Folliculitis
- Folliculitis decalvans
- Impetigo
- Lichen simplex
- Lupus erythematosus
- Pediculosis

- Pemphigus foliaceus
- Pityriasis amiantacea
- Psoriasis
- Seborrheic dermatitis
- Secondary syphilis
- Traction alopecia
- Triangular temporal alopecia
- Trichotillomania

### Kerion

- Bacterial pyoderma/furuncle
- Botryomycosis
- Dissecting cellulitis
- Folliculitis decalvans
- Inflamed cyst
- Metastatic lesion
- Myiasis

### **Treatment Options**

- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Seebacher C, Abeck D, Brasch J et al (2007) Tinea capitis: ringworm of the scalp. *Mycoses* 50(3):218–226

### **Tinea Corporis**

Dermatophyte infection of the trunk and extremities that is most commonly caused by *Trichophyton rubrum* and is characterized by pruritic, erythematous, annular scaly plaques (Fig. 6.117)





**Fig. 6.117** Tinea corporis

### *Subtypes/Variants*

- Tinea corporis, classic
- Tinea gladiatorum
- Tinea imbricata
- Tinea profunda (Majocchi's granuloma)

### *Differential Diagnosis*

- Candidiasis
- Contact dermatitis
- Cutaneous T cell lymphoma
- Erythema annulare centrifugum
- Granuloma annulare
- Lupus erythematosus
- Nummular eczema
- Parapsoriasis
- Pityriasis rosea (herald patch)
- Psoriasis

- Pyoderma
- Sarcoidosis
- Seborrheic dermatitis
- Subacute cutaneous lupus erythematosus
- Superficial pemphigus
- Syphilis
- Tinea versicolor

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Ziemer M, Seyfarth F, Elsner P, Hipler UC (2007) Atypical manifestations of tinea corporis. *Mycoses* 50(Suppl 2):31–35

### **Tinea Cruris**

Dermatophyte infection of the groin that is most commonly caused by *Trichophyton rubrum* and is characterized by pruritic, erythematous, annular scaly plaques that spare the scrotum

### ***Differential Diagnosis***

- Acanthosis nigricans
- Baboon syndrome
- Candidiasis

- Contact dermatitis
- Erythrasma
- Extramammary Paget's disease
- Hailey–Hailey disease
- Intertrigo
- Inverse pityriasis rosea
- Irritant dermatitis
- Langerhans cell histiocytosis
- Mycosis fungoides
- Pediculosis
- Pemphigus foliaceus
- Psoriasis
- Pyoderma
- Seborrheic dermatitis

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Gupta AK, Chaudhry M, Elewski B (2003) Tinea corporis, tinea cruris, tinea nigra, and piedra. *Dermatol Clin* 21(3):395–400

### **Tinea Faciei**

Dermatophyte infection of the face that is most commonly caused by *Trichophyton rubrum* and is characterized by annular, often unilateral scaly plaques (Fig. 6.118)



**Fig. 6.118** Tinea faciei

### *Differential Diagnosis*

- Actinic keratosis
- Atopic dermatitis
- Candidiasis
- Coccidioidomycosis
- Contact dermatitis
- Demodex folliculitis
- Granuloma annulare
- Impetigo
- Lupus erythematosus
- Lupus vulgaris
- Jessner's lymphocytic infiltrate
- Perioral dermatitis
- Pityriasis alba
- Polymorphous light eruption
- Psoriasis
- Pyoderma
- Rosacea

- Sarcoidosis
- Seborrheic dermatitis
- Syphilis

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Lin RL, Szepietowski JC, Schwartz RA (2004) Tinea faciei, an often deceptive facial eruption. *Int J Dermatol* 43(6):437–440

## **Tinea Incognito**

Refers to a dermatophytosis that has been modified by treatment with topical steroids and that mimics a variety of dermatoses

### ***Differential Diagnosis***

- Discoid lupus erythematosus
- Impetigo
- Lichen planus
- Nummular eczema
- Psoriasis
- Purpura
- Rosacea
- Seborrheic dermatitis

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Romano C, Maritati E, Gianni C (2006) Tinea incognito in Italy: a 15-year survey. *Mycoses* 49(5):383–387

### **Tinea Manuum**

Dermatophyte infection of the palm that is most commonly caused by *Trichophyton rubrum* and is characterized by erythema and scale which is predominantly localized to the palmar creases

### ***Differential Diagnosis***

- Atopic dermatitis
- Contact dermatitis
- Dyshidrotic eczema
- Keratolysis exfoliativa
- Palmoplantar pustulosis
- Psoriasis

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream

- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

**Further reading:**

- Aste N, Pau M, Aste N (2005) Tinea manuum bullosa. *Mycoses* 48(1):80–81

**Tinea Nigra**

Superficial fungal infection that occurs most commonly in the tropics, is caused by the dematiaceous fungus *Hortaea werneckii*, and is characterized by an asymptomatic tan-to-black circular patch on the palm or sole

***Differential Diagnosis***

- Acral melanocytic nevi
- Addison's disease
- Chemical stain
- Fixed drug eruption
- Melanoma
- Pinta
- Postinflammatory hyperpigmentation
- *Scytalidium* infection
- Syphilis
- Talon noir
- Yaws

***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream

- Naftifine cream
- Ciclopirox
- Salicylic acid
- Topical retinoids
- Terbinafine
- Griseofulvin
- Itraconazole

**Further reading:**

- Gupta AK, Chaudhry M, Elewski B (2003) Tinea corporis, tinea cruris, tinea nigra, and piedra. *Dermatol Clin* 21(3):395–400

## **Tinea Pedis**

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Dermatophyte infection of the feet that is caused most commonly by *Trichophyton rubrum* and is characterized by erythema and scale with occasional bullae on the lateral aspects of the sole and/or interdigital area

### ***Subtypes/Variants***

- Interdigital
- Moccasin
- Ulcerative
- Vesiculobullous

### ***Differential Diagnosis***

- Acral lentiginous melanoma
- Atopic dermatitis
- Bacterial intertrigo
- Candidiasis
- Contact dermatitis
- Dyshidrotic eczema
- Erythrasma
- Erythema multiforme



- Friction blister
- Gram-negative toe-web infection
- Id reaction
- Juvenile plantar dermatosis
- Kaposi's sarcoma
- Localized bullous pemphigoid
- Mycosis fungoides palmaris et plantaris
- Pagetoid reticulosis
- Psoriasis
- Pyoderma
- Scabies
- Syphilis
- Weber–Cockayne syndrome

### ***Treatment Options***

- Topical imidazoles
- Terbinafine cream
- Butenafine cream
- Naftifine cream
- Ciclopirox
- Terbinafine
- Griseofulvin
- Itraconazole

### **Further reading:**

- Ecemis T, Degerli K, Aktas E et al (2006) The necessity of culture for the diagnosis of tinea pedis. *Am J Med Sci* 331(2):88–90

## **Tinea Unguium**

Type of onychomycosis representing a recalcitrant dermatophyte infection of the nails that is most commonly caused by *Trichophyton rubrum* and is characterized by nail thickening, discoloration, subungual debris, and onycholysis

### ***Differential Diagnosis***

- Bacterial paronychia
- Chronic mucocutaneous candidiasis
- Congenital malalignment of great toenails
- Contact dermatitis
- Darier's disease
- Lichen planus
- Melanoma
- Nail–patella syndrome
- Nondermatophyte onychomycosis
- Norwegian scabies
- Old age
- Onychogryposis
- Onycholysis
- Pachyonychia congenita
- Peripheral vascular disease
- Pincer nail deformity
- Pityriasis rubra pilaris
- *Pseudomonas* infection
- Psoriasis
- Traumatic nail dystrophy
- Twenty-nail dystrophy
- Yellow-nail syndrome

### ***Associations***

- AIDS
- Diabetes mellitus
- Elderly
- Peripheral vascular disease
- Smokers
- Tinea pedis
- Trauma

### **Treatment Options**

- Terbinafine
- Griseofulvin
- Itraconazole
- Nail removal

### **Further reading:**

- Scher RK, Tavakkol A, Sigurgeirsson B (2007) Onychomycosis: diagnosis and definition of cure. *J Am Acad Dermatol* 56(6):939–944

### **Tinea Versicolor (Pityriasis Versicolor, Eichstedt's Disease)**

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Superficial, recurrent fungal infection that is caused by *Malassezia globosa* and is characterized by asymptomatic, patchy scaly areas of hyperpigmentation or hypopigmentation on the upper chest, back, neck, and proximal extremities. An uncommon presentation of tinea versicolor is atrophic macules on the chest or upper back (pityriasis versicolor atrophicans) (Fig. 6.119)

### **Differential Diagnosis**

- Anetoderma
- Bier spots
- Confluent and reticulated papillomatosis
- Epidermodysplasia verruciformis
- Erythema dyschromicum perstans
- Erythrasma
- Florid cutaneous papillomatosis
- Idiopathic eruptive macular pigmentation
- Lupus erythematosus
- Melasma
- Multiple tumors of the follicular infundibulum
- Mycosis fungoides
- Parapsoriasis



**Fig. 6.119** Tinea versicolor atrophicans

- Pinta
- Pityriasis alba
- Pityriasis rosea
- Pityriasis rubra pilaris
- Progressive macular hypomelanosis
- Postinflammatory hyperpigmentation
- Postinflammatory hypopigmentation
- Seborrheic dermatitis
- Secondary syphilis (including syphilitic anetoderma)
- Tinea corporis
- Vitiligo

### ***Treatment Options***

- Topical ketoconazole
- Oral ketoconazole
- Selenium sulfide

**Further reading:**

- Crowson AN, Magro CM (2003) Atrophying tinea versicolor: a clinical and histological study of 12 patients. *Int J Dermatol* 42(12):928–932
- Gupta AK, Batra R, Bluhm R et al (2004) Skin diseases associated with *Malassezia* species. *J Am Acad Dermatol* 51(5):785–798

**Toxic Shock Syndrome**

Toxin-mediated syndrome associated with a focal *Staphylococcal* skin or visceral infection that is characterized by fever, hypotension, a diffuse morbilliform eruption, strawberry tongue, desquamation of the palms and soles, and variable internal organ manifestations (a more protracted variant that affects HIV-positive patients is called recalcitrant, erythematous, and desquamative (RED) disorder)

***Differential Diagnosis***

- Acute graft-vs-host disease
- Acute pyelonephritis
- Acute rheumatic fever
- Acute viral syndrome
- Capillary leak syndrome
- Drug reaction
- Gastroenteritis
- Hemolytic uremic syndrome
- Kawasaki disease
- Legionnaire disease
- Leptospirosis
- Lyme disease
- Meningococcemia
- Osteomyelitis
- Pelvic inflammatory disease
- Rocky Mountain spotted fever
- Scarlet fever

- Septic shock
- Staphylococcal scalded-skin syndrome
- Streptococcal toxic-shock-like syndrome
- Systemic lupus erythematosus
- Systemic mastocytosis
- Toxic epidermal necrolysis
- Typhus

### ***Diagnostic Criteria***

- Fever: temperature  $>39.6^{\circ}\text{C}$  (or  $>102^{\circ}\text{F}$ )
- Rash: diffuse macular erythroderma
- Desquamation: 1–2 weeks after the onset of illness (especially palms and soles)
- Hypotension: systolic blood pressure  $<90$  mmHg for adults (less than fifth percentile for children)
- Involvement of three or more of the following organ systems:
  - Gastrointestinal
  - Muscular
  - Central nervous
  - Renal
  - Hepatic
  - Mucous membranes (erythema)
  - Hematologic (platelets  $<100,000/\text{mm}^3$ )
- Lack of evidence for other causes (if done):
- Negative blood, throat, cerebrospinal fluid cultures
- Negative serologic tests for Rocky Mountain spotted fever, leptospirosis, and measles

### ***Associations***

- Cellulitis
- Influenza
- Necrotizing fasciitis

- Postoperative wound infection
- Postpartum infection
- Sinusitis
- Thermal burns

### ***Evaluation***

- Blood cultures
- Cerebrospinal fluid cultures
- Chest radiograph
- Complete blood count
- Liver function test
- Renal function test
- Throat cultures
- Urinalysis

### ***Treatment Options***

- Supportive care
- Systemic antibiotics

### **Further reading:**

- Herzer CM (2001) Toxic shock syndrome: broadening the differential diagnosis. *J Am Board Fam Pract* 14(2):131–136
- Nelson C (2004) Early recognition and treatment of staphylococcal and streptococcal toxic shock. *J Pediatr Adolesc Gynecol* 17(4):289–292

### **Traction Alopecia**

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Type of alopecia that is associated with styling, braiding, rolling, or tightening of the hair in such a way as to cause chronic mechanical forces that pull on multiple hair shafts and that is characterized by regional non-scarring (occasionally scarring) alopecia in the areas affected by the traction

### ***Differential Diagnosis***

- Alopecia areata
- Anagen effluvium
- Androgenetic alopecia
- Aplasia cutis congenita
- Frontal fibrosing alopecia
- Central centrifugal cicatricial alopecia
- Lupus erythematosus
- Occipital pressure alopecia
- Syphilis
- Telogen effluvium
- Tinea capitis
- Trichorrhexis nodosa
- Trichotillomania

#### **Further reading:**

- Hantash BM, Schwartz RA (2003) Traction alopecia in children. *Cutis* 71(1):18–20

### **Traction Folliculitis**

Type of folliculitis that affects the scalp of patients with traction that is characterized by pustules only in the follicles affected by traction (Fig. 6.120)

### ***Differential Diagnosis***

- Bacterial folliculitis
- Occlusive folliculitis
- Tinea capitis

### ***Evaluation***

- Bacterial culture
- Fungal culture





**Fig. 6.120** Traction folliculitis

### *Treatment Options*

- Reduction of traction
- Topical antibiotics
- Oral antibiotics

### **Further reading:**

- Fox GN, Stausmire JM, Mehregan DR (2007) Traction folliculitis: an underreported entity. *Cutis* 79(1):26–30

### **Tragus, Accessory**

Developmental anomaly representing a remnant of the first branchial arch that is characterized as a fleshy papule or papules located in the preauricular area

### *Differential Diagnosis*

- Acrochordon
- Branchial cyst or sinus

- Bronchogenic cyst
- Epidermoid cyst
- Juvenile xanthogranuloma
- Melanocytic nevus
- Neurofibroma
- Preauricular cyst or sinus
- Rhabdomyomatous mesenchymal hamartoma
- Spitz nevus
- Thyroglossal duct cyst

### **Associations**

- Goldenhar syndrome
- Townes–Brocks syndrome
- Treacher Collins–Franceschetti syndrome
- VACTERL association
- Wolf–Hirschhorn syndrome

### **Evaluation (Especially if Multiple)**

- Hearing testing
- Renal/urinary tract ultrasound

### **Further reading:**

- Jansen T, Romiti R, Altmeyer P (2000) Accessory tragus: report of two cases and review of the literature. *Pediatr Dermatol* 17(5):391–394

## **Transient Neonatal Pustular Melanosis**

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Benign dermatosis that affects predominantly African–American neonates, resolves within weeks to months, and is characterized by vesiculopustules that heal to hyperpigmented macules on the face, neck, and trunk but also the palms and soles

### ***Differential Diagnosis***

- Acropustulosis of infancy
- Candidiasis
- Eosinophilic pustular folliculitis
- Erythema toxicum neonatorum
- Impetigo
- Milia
- Miliaria
- Mongolian spots
- Neonatal acne
- Neonatal herpes simplex virus infection

### ***Treatment Options***

- Observation and reassurance

### **Further reading:**

- Mengesha YM, Bennett ML (2002) Pustular skin disorders: diagnosis and treatment. *Am J Clin Dermatol* 3(6):389–400

### **Traumatic Tattoo**

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Accident-related tattoo that is caused by traumatic implantation of a pigmented foreign body into the skin and is characterized by solitary or multiple blue or black macules or papules with or without surrounding inflammation

### ***Differential Diagnosis***

- Blue nevus
- Drug-induced pigmentation
- Exogenous ochronosis

- Lentigo
- Melanocytic nevus
- Melanoma
- Talon noir

**Further reading:**

- Kang MJ, Kim MY, Kim YJ et al (2007) Traumatic tattoo associated with jet injector (Dermojet) use. *J Dermatol* 34(10):732–733

**Trench Fever**

Blood-borne bacterial infection that affects homeless persons, is caused by *Bartonella quintana* and transmitted by *Pediculus humanus* var. *corporeis*, and is characterized by febrile episodes, bone pain, conjunctivitis, and a morbilliform eruption on the trunk

***Differential Diagnosis***

- Babesiosis
- Bacillary angiomatosis
- Cryptococcosis
- Endocarditis
- HIV infection
- Lyme disease
- Rat-bite fever
- Reactive arthritis with conjunctivitis and urethritis
- Relapsing fever
- Rocky Mountain spotted fever
- Q fever
- Schnitzler's syndrome
- Toxic shock syndrome
- Tuberculosis

## ***Evaluation***

- Bartonella ELISA and Western blot
- Blood cultures
- Echocardiography

## **Further reading:**

- Brouqui P, Raoult D (2006) Arthropod-borne diseases in homeless. *Ann N Y Acad Sci* 1078:223–235

## **Trichilemmoma**

Benign neoplasm derived from the outer root sheath that is characterized by a warty flesh-colored papule on the face

## ***Differential Diagnosis***

- Angiofibroma
- Basal cell carcinoma
- Clear cell acanthoma
- Eccrine acrospiroma
- Epidermal inclusion cyst
- Hidroacanthoma simplex
- Inverted follicular keratosis
- Neurilemmoma
- Poroma
- Seborrheic keratosis
- Trichoblastoma
- Trichoepithelioma
- Trichofolliculoma
- Wart
- Warty dyskeratoma

## Associations

- Cowden's disease
- Nevus sebaceus

## Further reading:

- Kurokawa I, Nishijima S, Kusumoto K et al (2003) Trichilemmoma: an immunohistochemical study of cytokeratins. *Br J Dermatol* 149(1):99–104

## Trichinosis

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Parasitic infestation with the nematode *Trichinella spiralis* that is acquired by ingesting larval cysts in uncooked pork and is characterized by muscle weakness and myalgias, fever, facial edema (especially of the eyelids), eosinophilia, urticaria, splinter hemorrhages, and palmar erythema

## Differential Diagnosis

- Allergic reaction
- Angioedema
- Cysticercosis
- Dermatomyositis
- Eosinophilia–myalgia syndrome
- Hypereosinophilic syndrome
- Small vessel vasculitis
- Sparganosis
- Toxoplasmosis
- Visceral larva migrans

## Evaluation

- Complete blood count
- Creatine kinase
- CT/MRI scan of brain or extremities

- Muscle biopsy
- Urinalysis

**Further reading:**

- Pozio E, Gomez Morales MA, Dupouy-Camet J (2003) Clinical aspects, diagnosis and treatment of trichinellosis. *Expert Rev Anti Infect Ther* 1(3):471–482

## **Trichodiscoma**

---

Benign neoplasm of follicular derivation that is associated with Birt–Hogg–Dube syndrome (when multiple) and is characterized by small, often multiple flesh-colored papules on the head and neck, and often on the face

### ***Differential Diagnosis***

- Acrochordon
- Angiofibroma
- Basal cell carcinoma
- Fibrofolliculoma
- Fibrous papule
- Palisaded encapsulated neuroma
- Perifollicular fibroma
- Syringoma
- Trichilemmoma
- Trichoepithelioma
- Trichofolliculoma

**Further reading:**

- Collins GL, Somach S, Morgan MB (2006) CD-34-reactive trichodiscoma. *J Cutan Pathol* 33(10):709

## **Trichodysplasia Spinulosa**

---

Facial skin eruption, possibly caused by polyoma virus, that affects patients on immunosuppressive therapy, especially transplant recipients, and that is characterized by erythematous follicular papules on the mid-face, chin, and glabella, as well as loss of eyebrows

### ***Differential Diagnosis***

- Acne vulgaris
- Drug-induced acne
- Follicular mucinosis
- Keratosis pilaris
- Keratosis pilaris atrophicans
- Lichen myxedematosus
- Sebaceous hyperplasia
- Trichostasis spinulosa

### ***Treatment Options***

- Valganciclovir
- Topical cidofovir
- Topical retinoids
- Systemic retinoids

### **Further reading:**

- Schwieger-Briel A, Balma-Mena A, Ngan B, Dipchand A, Pope E (2010) Trichodysplasia spinulosa--a rare complication in immunosuppressed patients. *Pediatr Dermatol* 27(5):509–513

## **Trichoepithelioma**

Benign neoplasm of follicular derivation that can be solitary or multiple (as a part of a hereditary syndrome) and is characterized by a small, flesh-colored dome-shaped papule on the face, especially around the nose (Fig. 6.121)

### ***Differential Diagnosis***

- Angiofibroma
- Basal cell carcinoma
- Basaloid follicular hamartoma syndrome





**Fig. 6.121** Trichoepitheliomas

- Colloid milium
- Cylindroma
- Fibrofolliculoma
- Fibrous papule
- Microcystic adnexal carcinoma
- Milium
- Pilar cyst
- Steatocystoma
- Syringoma
- Trichilemmoma
- Trichoadenoma
- Trichoblastoma
- Trichodiscoma

### ***Associations***

- Brooke–Spiegler syndrome
- Myasthenia gravis
- Rasmussen syndrome
- Rombo syndrome
- Systemic lupus erythematosus

**Further reading:**

- Kim C, Kovich OI, Dosik J (2007) Brooke–Spiegler syndrome. *Dermatol Online J* 13(1):10

**Trichofolliculoma**

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Benign hamartomatous tumor of the hair follicle characterized by a small, circumscribed papule with a central pore from which fine, white hairs are protruding

***Differential Diagnosis***

- Angiofibroma
- Basal cell carcinoma
- Colloid milium
- Cylindroma
- Dermoid cyst
- Dilated pore of Winer
- Fibrofolliculoma
- Folliculosebaceous cystic hamartoma
- Ingrown hair
- Microcystic adnexal carcinoma
- Midline nasal dermoid fistula
- Milium
- Molluscum contagiosum
- Perifollicular fibroma
- Pilar sheath acanthoma
- Pilar cyst
- Pili multigemini
- Syringoma
- Trichilemmoma
- Trichodiscoma
- Trichoepithelioma

- Trichostasis spinulosa
- Vellus hair cyst

**Further reading:**

- Kurokawa I, Kusumoto K, Sensaki H et al (2003) Trichofolliculoma: case report with immunohistochemical study of cytokeratins. *Br J Dermatol* 148(3):597–598

## **Trichomycosis Axillaris/Pubis**

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Superficial bacterial infection of the hair shafts of the axilla or pubic area that is caused by *Corynebacteria tenuis* and is characterized yellow granules that are firmly adherent to the hair shaft

### ***Differential Diagnosis***

- Antiperspirant residue
- Hair casts
- Pediculosis pubis
- Piedra

### ***Associations***

- Erythrasma

### ***Treatment Options***

- Removal of hair
- Topical clindamycin

**Further reading:**

- Lee PL, Lemos B, O'Brien SH et al (2007) Cutaneous diphtheroid infection and review of other cutaneous Gram-positive *Bacillus* infections. *Cutis* 79(5):371–377

## **Trichoptilosis (Split Ends)**

---

Hair-shaft abnormality associated with distal trichorrhhexis nodosa that is caused by excessive mechanical or chemical stress on the hair and is characterized by longitudinal splitting of the hair shaft from its most distal end in a proximal direction

### ***Differential Diagnosis***

- Pili bifurcati

### ***Associations***

- Monilethrix
- Netherton's syndrome
- Trauma
- Trichorrhhexis nodosa
- Trichothiodystrophy

### **Further reading:**

- Im M, Kye KC, Seo YJ et al (2006) Central trichoptilosis with onycholysis. *Int J Dermatol* 45(10):1187–1188

## **Trichorrhhexis Invaginata**

---

Inherited hair-shaft abnormality, associated with Netherton's syndrome and increased hair fragility, that is caused by invagination of the distal hair shaft into the proximal hair shaft and is characterized by sparse hair on the scalp

### ***Differential Diagnosis***

- Ectodermal dysplasia
- Monilethrix

- Trichorrhexis nodosa
- Trichoschisis

### ***Evaluation***

- Hair-shaft examination (highest yield from eyebrows)

### **Further reading:**

- Sun JD, Linden KG (2006) Netherton syndrome: a case report and review of the literature. *Int J Dermatol* 45(6):693–697

## **Trichorrhexis Nodosa**

Inherited or acquired disorder of hair fragility that is associated with a variety of metabolic and physical causes and is characterized by nodes along the hair shaft that represent portions that are frayed and prone to breakage

### ***Subtypes/Variants***

- Acquired distal
- Acquired localized
- Acquired proximal
- Congenital

### ***Differential Diagnosis***

- Anagen effluvium
- Hair casts
- Hypothyroidism
- Monilethrix
- Pediculosis
- Piedra
- Trichorrhexis invaginata

- Trichoschisis
- Trichotillomania

### **Associations**

- Arginosuccinic aciduria
- Bazex–Dupre–Christol syndrome
- Chemical/physical hair treatments
- Citrullinemia
- Hypothyroidism
- Intractable infant diarrhea
- Menkes kinky-hair syndrome
- Netherton syndrome
- Neurodermatitis
- Trichoptilosis
- Trichothiodystrophy

### **Further reading:**

- Burkhart CG, Burkhart CN (2007) Trichorrhexis nodosa revisited. *Skinmed* 6(2):57–58

### **Trichostasis Spinulosa**

---

Follicular disorder caused by retention of telogen hairs within the follicle that is characterized by hyperkeratotic and hyperpigmented papules on the face (asymptomatic) or the trunk and extremities (pruritic)

### **Differential Diagnosis**

- Comedonal acne
- Eruptive vellus hair cysts
- Favre–Racouchot disease
- Keratosis pilaris
- Keratotic spicules of myeloma
- Lichen spinulosus

- Nevus comedonicus
- Pili bifurcati
- Pili multigemini
- Pseudofolliculitis barbae
- Trichofolliculomas

**Further reading:**

- Strobos MA, Jonkman MF (2002) Trichostasis spinulosa: itchy follicular papules in young adults. *Int J Dermatol* 41(10):643–646

**Trichothiodystrophy**

Hereditary (AR) sulfur deficiency of the hair that is associated with several syndromes and is characterized by a tiger-tail appearance under polarized microscopy, brittle hair, pili torti, trichoschisis, and trichorrhexis nodosa

***Differential Diagnosis***

- Bloom syndrome
- Cockayne syndrome
- Kindler syndrome
- Menkes kinky-hair syndrome
- Netherton syndrome
- Nonbullous congenital ichthyosiform erythroderma
- Progeria
- Rothmund–Thomson syndrome
- Sjögren–Larsson syndrome
- Werner syndrome
- Xeroderma pigmentosum

***Associations***

- BIDS syndrome
- Cockayne syndrome

- Collodion membrane
- IBIDS syndrome (Tay syndrome)
- Marinesco–Sjögren syndrome
- PIBIDS syndrome
- Xeroderma pigmentosum

**Further reading:**

- Itin PH, Sarasin A, Pittelkow MR (2001) Trichothiodystrophy: update on the sulfur-deficient brittle hair syndromes. *J Am Acad Dermatol* 44(6):891–920

**Trichotillomania**

Neurotic disorder that affects people of all ages, is caused by compulsive plucking of hair shafts from the follicle, and is characterized by a patch of nonscarring alopecia in a geometric, often triangular pattern, that has growing hairs of variable length within the patch

***Differential Diagnosis***

- Alopecia areata
- Alopecia mucinosa
- Androgenetic alopecia
- Child abuse
- Lupus erythematosus
- Monilethrix
- Pili torti
- Pressure alopecia
- Syphilis
- Temporal triangular alopecia
- Tinea capitis
- Traction alopecia
- Traumatic alopecia



### ***Diagnostic Criteria (DSM IV)***

- Increasing sense of tension immediately before pulling out the hair or when attempting to resist the behavior
- Pleasure, gratification, or relief when pulling out the hair
- Recurrent pulling out of one's hair resulting in noticeable hair loss
- Disturbance is not better accounted for by another mental disorder and is not due to a general medical condition (e.g., a dermatological condition)
- Disturbance provokes clinically marked distress and/or impairment in occupational, social, or other areas of functioning

### ***Treatment Options***

- Psychotherapy
- SSRIs

#### **Further reading:**

- Hautmann G, Hercogova J, Lotti T (2002) Trichotillomania. *J Am Acad Dermatol* 46(6):807–821

### **Trigeminal Trophic Syndrome**

Rare cause of ulceration that is associated with trigeminal nerve injury or pathology and that is characterized by a persistent, unilateral, painless ulcer near the nasal ala with associated numbness, paresthesias, and a history of picking or scratching the affected area

### ***Differential Diagnosis***

- Basal cell carcinoma
- Cocaine abuse
- Deep fungal infection
- Factitial ulcer
- Herpes simplex virus infection
- Infection

- Leishmaniasis
- Leprosy
- Malignancy
- Temporal arteritis
- Squamous cell carcinoma
- Syphilis
- Tuberculosis
- Wegener's granulomatosis
- Zoster

### **Associations**

- Trigeminal nerve surgery
- Tumors of the trigeminal nerve
- Viral infection of the trigeminal nerve
- Zoster

### **Treatment Options**

- Occlusive dressing
- Gabapentin
- Amitriptyline
- Carbamazepine
- Transcutaneous electric nerve stimulation

### **Further reading:**

- Setyadi HG, Cohen PR, Schulze KE et al (2007) Trigeminal trophic syndrome. South Med J 100(1):43–48

## **Tropical (Phagedenic) Ulcer**

Nonspecific term for any polymicrobial (including fusobacterium) infectious ulcer that affects malnourished children and adults in tropical areas and is characterized by a solitary, often trauma-related ulcer on the extremities

### ***Differential Diagnosis***

- Atypical mycobacterium
- Bacterial pyoderma
- Buruli ulcer
- Chromomycosis
- Cutaneous diphtheria
- Ecthyma
- Gummatous syphilis
- Leishmaniasis
- Pyoderma gangrenosum
- Squamous cell carcinoma
- Spider bite
- Venous stasis ulcer
- Yaws

### **Further reading:**

- Robinson DC, Adriaans B, Hay RJ et al (1988) The clinical and epidemiologic features of tropical ulcer (tropical phagedenic ulcer). *Int J Dermatol* (1):49–53

### **Trypanosomiasis, African (African Sleeping Sickness)**

Disease caused by the protozoa, *Trypanosoma brucei* (var. *rhodesiense* in east Africa or var. *gambiense* in west Africa), that is transmitted by the tsetse fly, *Glossina morsitans*, and is characterized by intermittent fever, generalized lymphadenopathy (especially posterior cervical; called Winterbottom's sign), angioedema, somnolence, and coma, with the east African form having a more rapid deterioration and worse prognosis

### ***Differential Diagnosis***

- Borreliosis
- Brucellosis
- Cryptococcal meningitis
- HIV disease

- Malaria
- Neurosyphilis
- Tuberculosis
- Typhoid fever
- Visceral leishmaniasis

### **Evaluation**

- Complete blood count with peripheral blood smear
- Cerebrospinal fluid examination
- CT/MRI scan of the brain
- Sedimentation rate

### **Further reading:**

- Maudlin I (2006) African trypanosomiasis. *Ann Trop Med Parasitol* 100(8):679–701

### **Trypanosomiasis, American (Chagas Disease)**

Disease caused by the protozoan organism, *Trypanosoma cruzi*, that is transmitted by several species of reduviid bug, especially *Triatoma infestans*, and is characterized by an erythematous edematous bite called a chagoma (or Romana's sign when around the eye), fever, a morbilliform skin eruption, and in chronic forms, cardiomegaly, megaesophagus, and megacolon

### **Differential Diagnosis**

- Angioedema
- Atypical mycobacterial infection
- Cutaneous tuberculosis
- Deep fungal infection
- Leishmaniasis
- Paracoccidioidomycosis
- Periorbital cellulitis

**Further reading:**

- Teixeira AR, Nitz N, Guimaro MC et al (2006) Chagas disease. *Postgrad Med J* 82(974):788–798

**Tuberculosis, Cutaneous**

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Refers to the variable cutaneous presentation of infection with *Mycobacterium tuberculosis* that can be primarily cutaneous or disseminated to the skin from an underlying focus of infection

**Subtypes/Variants**

- Lupus vulgaris
- Miliary tuberculosis
- Scrofuloderma (tuberculosis cutis colliquativa)
- Tuberculosis cutis orificialis
- Tuberculosis verrucosa cutis (prosector's wart, Wilkes disease)
- Tuberculous cellulitis
- Tuberculous chancre (primary inoculation tuberculosis)
- Tuberculous gumma

**Differential Diagnosis****Lupus Vulgaris**

- Blastomycosis
- Colloid milium
- Discoid lupus erythematosus
- Granulomatous rosacea
- Leishmaniasis, lupoid type
- Leprosy
- Lichen simplex chronicus
- Sarcoidosis
- Squamous cell carcinoma
- Tertiary syphilis
- Wegener's granulomatosis

### Miliary

- Cryptococcosis
- Histoplasmosis
- Papulonecrotic tuberculid
- Pityriasis lichenoides et varioliformis acuta
- Rickettsialpox
- Varicella
- Viral exanthem

### Scrofuloderma

- Acne conglobata
- Actinomycosis
- Bacterial lymphadenitis
- Coccidioidomycosis
- Hidradenitis suppurativa
- Lymphoma
- Osteomyelitis
- Paracoccidioidomycosis
- Sarcoidosis
- Sporotrichosis
- Syphilitic gumma

### Tuberculous Chancre, Primary Inoculation Type

- Cat-scratch fever
- Deep fungal infection
- Leishmaniasis
- *Mycobacterium marinum* infection
- Nocardiosis
- Pyoderma gangrenosum
- Pyogenic ulcer
- Sporotrichosis
- Syphilis
- Tularemia
- Yaws

### Tuberculosis Verrucosa Cutis

- Blastomycosis
- Chromoblastomycosis
- Halogenoderma
- Hypertrophic lichen planus
- Majocchi granuloma
- *Mycobacterium marinum* infection
- Orf/milker's nodule
- Tertiary syphilis
- Verrucous carcinoma
- Warts

### Evaluation

- Bacterial, mycobacterial, and fungal culture of lesional tissue material and blood
- Chest radiograph
- PCR of affected tissue
- Tuberculin skin test

### Further reading:

- Bravo FG, Gotuzzo E (2007) Cutaneous tuberculosis. Clin Dermatol 25(2):173–180

### Tuberous Sclerosis (Bourneville–Pringle Syndrome)

Inherited or sporadic genodermatosis caused by mutation of the genes encoding tuberin (TSC1) or hamartin (TSC2) that is characterized by hypopigmented macules, periungual fibromas, facial angiofibromas, shagreen patch, gingival fibromas, seizures, and mental retardation, among many other features

### ***Differential Diagnosis***

- Epidermal nevus syndrome
- Hunter and Hurler syndromes
- Hypomelanosis of Ito
- Multiple endocrine neoplasia, type IIb
- Neurofibromatosis
- Nevus depigmentosus
- Phylloid hypomelanosis
- Proteus syndrome

### ***Diagnostic Criteria (Two Major or One Major+Two Minor)***

- Major features
  - Facial angiofibromas or forehead plaque
  - Nontraumatic ungual or periungual fibromas
  - Hypomelanotic macules (three or more)
  - Shagreen patch
  - Multiple retinal nodular hamartomas
  - Cortical tubers
  - Subependymal nodules
  - Subependymal giant cell astrocytoma
  - Cardiac rhabdomyoma, single or multiple
  - Lymphangioleiomyomatosis
  - Renal angiomyolipoma
- Minor features
  - Multiple, randomly distributed pits in dental enamel
  - Hamartomatous rectal polyps
  - Bone cysts
  - Cerebral white matter radial migration lines
  - Gingival fibromas
  - Nonrenal hamartoma



- Retinal achromic patch
- Confetti skin lesions
- Multiple renal cysts

### **Evaluation**

- CT/MRI scan of chest, brain
- Echocardiography
- Electrocardiography
- Electroencephalogram
- Genetic testing
- Neurodevelopmental testing
- Ophthalmologic exam
- Renal ultrasound

### **Further reading:**

- Roach ES, Gomez MR, Northrup H (1998) Tuberous sclerosis complex consensus conference: revised clinical diagnostic criteria. *J Child Neurol* 13(12):624–628
- Schwartz RA, Fernandez G, Kotulska K et al (2007) Tuberous sclerosis complex: advances in diagnosis, genetics, and management. *J Am Acad Dermatol* 57(2):189–202

### **Tufted Angioma (Angioblastoma of Nakagawa)**

---

Uncommon vascular tumor that can be complicated by Kasabach–Merritt syndrome, develops in the first decade of life, and is characterized by a red or purple vascular plaque most commonly located on the trunk

### **Differential Diagnosis**

- Dabska tumor
- Hemangiopericytoma
- Infantile hemangioma
- Kaposi's sarcoma
- Kaposiform hemangioendothelioma

- Melanoma
- Venous malformation

### **Evaluation**

- Complete blood count

### **Further reading:**

- Kamath GH, Bhat RM, Kumar S (2005) Tufted angioma. *Int J Dermatol* 44(12):1045–1047

## **Tularemia**

Blood-borne bacterial infection with *Francisella tularensis* that is acquired by contact with infected animals or via the bite of an infected tick, such as *Dermacentor andersoni* or *Amblyomma americanum*, and is characterized by fever and several different clinical presentations, the most common of which is the ulceroglandular form, in which there is a fever, an ulcerated cutaneous nodule, sporotrichoid lesions along the lymphatic drainage, and regional lymphadenopathy

### **Subtypes/Variants**

- Glandular
- Oculoglandular
- Oropharyngeal
- Pneumonic
- Typhoidal
- Ulceroglandular

### **Differential Diagnosis**

- Anthrax
- Atypical mycobacterial infection
- Blastomycosis

- Brucellosis
- Cat-scratch disease
- Coccidioidomycosis
- Diphtheria
- Ecthyma
- Endocarditis
- Foreign body granuloma
- Furuncle
- Glanders
- Leishmaniasis
- Lymphogranuloma venereum
- Majocchi's granuloma
- Malaria
- Melioidosis
- Mononucleosis
- Nocardiosis
- Orf/milker's nodule
- Paronychia
- *Pasteurella multocida* infection
- Plague
- Rat-bite fever
- Rocky Mountain spotted fever
- Sporotrichosis
- Syphilis
- Tuberculosis
- Typhoid fever

### **Evaluation**

- Chest radiography
- Complete blood count
- ELISA and Western blot for tularemia antibodies

### **Further reading:**

- Tarnvik A, Chu MC (2007) New approaches to diagnosis and therapy of tularemia. *Ann N Y Acad Sci* 1105:378–404

## **Tumor of the Follicular Infundibulum**

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Benign neoplasm of follicular derivation that arises in older patients and is characterized by a solitary, variably scaly, hypopigmented to flesh-colored papule, nodule, or plaque on the face

### ***Differential Diagnosis***

- Basal cell carcinoma
- Desmoplastic trichoepithelioma
- Eccrine syringofibroadenoma
- Microcystic adnexal carcinoma
- Seborrheic keratosis
- Trichilemmoma
- Trichodiscoma

### **Further reading:**

- Cheng AC, Chang YL, Wu YY et al (2004) Multiple tumors of the follicular infundibulum. *Dermatol Surg* 30(9):1246–1248

## **Tungiasis**

---

Type of infestation of the foot that is caused by the female *Tunga penetrans* flea, which burrows through the epidermis into the dermis, and is characterized by a pruritic or painful white papule with a central black dot

### ***Differential Diagnosis***

- Callus or clavus
- Creeping eruption
- Dracunculiasis
- Foreign body granuloma
- Insect-bite reaction
- Myiasis

- Squamous cell carcinoma
- Tick bite
- Verruca plantaris
- Verruga peruana

**Further reading:**

- Hager J, Jacobs A, Orengo IF, Rosen T (2008) Tungiasis in the United States: a travel souvenir. *Dermatol Online J* 14(12):3

## Typhus, Epidemic

Louse-borne rickettsial disease that is caused by *Rickettsia prowazekii*, transmitted by *Pediculus humanus* var. *corporis*, and characterized by fever, headache, myalgias, and a centrifugally spreading, macular and petechial eruption that spares the palms and soles but that can become gangrenous

### *Differential Diagnosis*

- Anthrax
- Dengue fever
- Ehrlichiosis
- Infectious mononucleosis
- Kawasaki disease
- Leptospirosis
- Malaria
- Meningococemia
- Relapsing fever
- Rubella
- Rubeola
- Toxic shock syndrome
- Tularemia
- Typhoid fever
- Viral exanthem

## Evaluation

- PCR
- Indirect immunofluorescence
- Rickettsia ELISA and Western blot

### Further reading:

- Elston DM (2005) Rickettsial skin disease: uncommon presentations. *Clin Dermatol* 23(6):541–544

## Typhus, Endemic

Flea-borne rickettsial disease that is caused by *Rickettsia typhi* or *Rickettsia felis*; is transmitted by the rat flea, *Xenopsylla cheopis*, or the cat flea, *Ctenocephalides felis*; and is characterized by fever, headache, and a centrifugally spreading, macular and petechial eruption that spares the palms and soles

## Differential Diagnosis

- Anthrax
- Dengue fever
- Ehrlichiosis
- Infectious mononucleosis
- Kawasaki disease
- Leptospirosis
- Malaria
- Meningococemia
- Relapsing fever
- Rubella
- Rubeola
- Toxic shock syndrome
- Tularemia
- Typhoid fever
- Viral exanthem

### **Evaluation**

- PCR
- Indirect immunofluorescence
- Rickettsia ELISA and Western blot

### **Further reading:**

- Elston DM (2005) Rickettsial skin disease: uncommon presentations. *Clin Dermatol* 23(6):541–544

### **Typhus, Scrub (Tsutsugamushi Fever)**

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Mite-borne rickettsial disease that is caused by *Orientia tsutsugamushi*, transmitted by the chigger (larval stage of the mite *Leptotrombidium akamushi*), and characterized by a tache noir at the site of the bite, fever, regional lymphadenopathy, and a centrifugally spreading macular and erythematous skin eruption

### **Differential Diagnosis**

- Anthrax
- Dengue fever
- Ehrlichiosis
- Infectious mononucleosis
- Kawasaki disease
- Leptospirosis
- Malaria
- Meningococemia
- Relapsing fever
- Rubella
- Rubeola
- Toxic shock syndrome
- Tularemia
- Typhoid fever

- Typhus
- Viral exanthem

### **Evaluation**

- PCR
- Indirect immunofluorescence
- Rickettsia ELISA and Western blot

### **Further reading:**

- Rajagopal R, Khati C, Vasdev V, Trehan A (2003) Scrub typhus: a case report. Indian J Dermatol Venereol Leprol 69(6):413–415

## **Ulerythema Ophryogenes (Keratosis Pilaris Atrophicans Faciei, Taenzer Disease)**

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Uncommon, idiopathic disorder of follicular keratinization and subtype of keratosis pilaris atrophicans that is characterized by erythematous, keratotic papules on the cheeks and lateral eyebrows that evolve to atrophic scars

### **Differential Diagnosis**

- Acne vulgaris
- Atopic dermatitis
- Folliculitis
- Keratosis pilaris
- Keratosis pilaris rubra
- Keratosis pilaris spinulosa decalvans
- Lupus erythematosus
- Madarosis
- Pityriasis rubra pilaris
- Rosacea
- Seborrheic dermatitis
- Trichodysplasia spinulosa



### **Associations**

- Cornelia de Lange syndrome
- Noonan syndrome
- Rubinstein–Taybi syndrome

### **Further reading:**

- Callaway SR, Leshner JL Jr (2004) Keratosis pilaris atrophicans: case series and review. *Pediatr Dermatol* 21(1):14–17

## **Uncombable Hair Syndrome (Pili Trianguli et Canaliculi)**

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Inherited or sporadic hair-shaft disorder that becomes apparent in childhood, is possibly caused by premature keratinization of the inner root sheath, and is characterized by unruly, uncombable blond, shiny hair, which is shown to have a cross-sectional triangular shape and longitudinal grooves on microscopic examination

### **Differential Diagnosis**

- Loose anagen hair syndrome
- Marie Unna syndrome
- Menkes kinky-hair disease
- Monilethrix
- Pili Torti
- Plica polonica (neuropathica)
- Progeria
- Woolly hair nevus

### **Associations**

- Digital abnormalities
- Ectodermal dysplasia
- Enamel dysplasia
- Juvenile cataracts

- Loose anagen hair
- Wilson's disease

**Further reading:**

- Jarell AD, Hall MA, Sperling LC (2007) Uncombable hair syndrome. *Pediatr Dermatol* 24(4):436–438

## **Unilateral Laterothoracic Exanthem**

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Childhood exanthem possibly viral in etiology that is characterized first by an erythematous lesion with a surrounding halo in the axillary region that later spreads locally and becomes erythematous, eczematous, and coalescent, only to spontaneously resolve with desquamation

### ***Differential Diagnosis***

- Atopic dermatitis
- Contact dermatitis
- Dermatophytosis
- Drug eruption
- Gianotti–Crosti syndrome
- Inverse pityriasis rosea
- Miliaria
- Molluscum dermatitis
- Scabies
- Scarlet fever
- Tinea corporis

### ***Treatment Options***

- Observation and reassurance
- Topical corticosteroids

**Further reading:**

- McCuaig CC, Russo P, Powell J et al (1996) Unilateral laterothoracic exanthem. A clinicopathologic study of forty-eight patients. *J Am Acad Dermatol* 34(6):979–984

## Urticaria

Acute or chronic disorder affecting children and adults that is caused by mast cell degranulation which is triggered by a variety of immunologic, physical, or idiopathic mechanisms and that is characterized by erythematous, pruritic, flat papules or plaques of dermal edema (wheals) without any epidermal change and with variable distribution and severity

### Subtypes

- Acute ordinary (classic)
- Adrenergic (Fig. 6.122)
- Aquagenic
- Cholinergic (Grant syndrome)
- Chronic idiopathic
- Cold
- Contact
- Delayed pressure
- Dermatographism



**Fig. 6.122** Adrenergic urticaria

- Exercise induced
- Heat
- Solar

### ***Differential Diagnosis***

#### Classic

- Anhidrosis with pruritus
- Bullous pemphigoid
- Erythema marginatum
- Erythema multiforme
- Insect-bite reaction
- Mastocytosis
- Pruritic urticarial papules and plaques of pregnancy
- Rheumatoid neutrophilic dermatosis
- Serum-sickness-like reaction
- Still's disease
- Sweet's syndrome
- Urticarial vasculitis

#### Aquagenic

- Aquagenic pruritus
- Cholinergic urticaria (hot water)
- Cold urticaria (cold water)
- Dermatographism
- Heat urticaria

#### Cold

- Angioedema
- Aquagenic urticaria
- Cold panniculitis
- Cryoglobulinemia
- Perniosis

### Persistent

- Urticarial bullous pemphigoid
- Urticarial erythema multiforme
- Urticarial vasculitis
- Urticarial dermatitis
- Urticaria pigmentosum

### Associations

- Alcohol consumption
- Arthropod bites
- Autoimmune progesterone dermatitis
- Autoimmunity
- Candidiasis
- Chronic infection
- Cold
- Contact
- Dental infection
- Dermatographism
- Dermatophytosis
- Episodic angioedema with eosinophilia
- Exercise
- Foods
- Heat
- Hepatitis B vaccination
- Hypereosinophilic syndrome
- IPEX syndrome
- Medications
- Muckle–Wells syndrome
- Nicotine
- Parasitic infestation
- Pressure
- Upper respiratory infection
- Urinary tract infection

- Schnitzler syndrome
- Water

### Cold

- Acute viral infection
- Atopy
- Cryoglobulins
- Familial cold autoinflammatory syndrome
- Monoclonal gammopathy
- HIV infection
- Syphilis

### Foods

- Aspartame
- Caffeine
- Eggs
- Fish
- Fruits
- Ketchup
- Nuts
- Peanut oil
- Seafood
- Soybeans
- Spices
- Tea
- Tomatoes
- Vanilla
- Wheat

### *Associated Medications*

- ACE inhibitors
- Aspirin
- Beta-lactam antibiotics

- NSAIDs
- Opiates
- Polymyxin B
- Radiocontrast media
- Tubocurarine

### ***Evaluation***

- Not recommended for duration <6 weeks
- See “[Urticaria, Chronic Idiopathic](#)”

### ***Treatment Options***

- Antihistamines
- Leukotriene inhibitors
- Systemic corticosteroids
- Doxepin

### **Further reading:**

- Peroni A, Colato C, Schena D, Girolomoni G (2010) Urticarial lesions: if not urticaria, what else? The differential diagnosis of urticaria: part I. Cutaneous diseases. J Am Acad Dermatol 62(4):541–555; quiz 555–556

## **Urticaria, Chronic Idiopathic**

Idiopathic, possibly immune-mediated type of urticaria with a variety of associated causes that is characterized by at least 6 weeks of recurrent, pruritic erythematous wheals on the trunk and extremities

### ***Differential Diagnosis***

- Allergic contact dermatitis
- Arthropod-bite reactions
- Atopic dermatitis

- Early bullous pemphigoid
- Erythema multiforme
- Hypereosinophilic syndrome
- Mastocytosis
- Rheumatoid neutrophilic dermatosis
- Scabies
- Schnitzler syndrome
- Serum-sickness-like reaction
- Urticarial dermatitis
- Urticarial vasculitis

### **Associations**

- Autoimmune thyroid disease
- Dental infections
- Gastrointestinal candidiasis
- *Helicobacter pylori* infection
- Intestinal parasite
- Muckle–Wells syndrome
- Pernicious anemia
- Rheumatoid arthritis
- Schnitzler syndrome
- Systemic lupus erythematosus
- Stress
- Type I diabetes mellitus
- Vitiligo

### **Evaluation**

- Antinuclear antibodies
- Complement levels
- Complete blood count
- Cryoproteins
- Dental radiography



- Sedimentation rate
- Viral hepatitis panel
- Epstein–Barr virus serology
- Pregnancy test
- Sinus radiography
- Stool examination for ova, cysts, and parasites
- Streptococcal serology
- Syphilis serology
- Thyroid function tests
- Thyroid microsomal and peroxidase antibodies
- Urinalysis

### ***Treatment Options***

- Antihistamines
- Leukotriene inhibitors
- Systemic corticosteroids
- Doxepin
- Nifedipine
- Thyroid hormone
- Cyclosporine
- Mycophenolate mofetil
- Intravenous immunoglobulin
- Plasmapheresis

### **Further reading:**

- Zuberbier T, Maurer M (2007) Urticaria: current opinions about etiology, diagnosis and therapy. *Acta Derm Venereol* 87(3):196–205

### **Urticaria, Contact**

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Type of urticaria induced by physical contact with a variety of substances that is caused by either a type I hypersensitivity reaction (immunologic) or direct mast cell degranulation (nonimmunologic) and is characterized

by rapid-onset, erythematous, edematous, pruritic plaques, with or without eczematous changes on the hands or other exposed areas

### ***Differential Diagnosis***

- Achenbach syndrome
- Airborne contact dermatitis
- Anaphylaxis
- Angioedema
- Aquagenic urticaria
- Cold urticaria
- Contact dermatitis
- Hand eczema
- Palmar hidradenitis
- Perniosis
- Pressure urticaria
- Protein contact dermatitis

### ***Associations***

#### Nonimmunologic

- Benzoic acid
- Cinnamic aldehyde
- Cobalt chloride
- DMSO
- Formaldehyde
- Histamine
- Sorbic acid
- Stinging nettles
- Spurges
- Turpentine

#### Immunologic

- Ammonium persulfate
- Animal dander

- Bacitracin
- Eggs
- Flour
- Grains
- Grasses
- Latex
- Nuts
- Plants
- Potatoes
- Spices
- Vegetables (especially celery)

### ***Treatment Options***

- Avoidance of triggering substance
- Antihistamines

### **Further reading:**

- Bourrain JL (2006) Occupational contact urticaria. *Clin Rev Allergy Immunol* 30(1):39–46

## **Urticaria, Solar**

Uncommon immune-mediated type of urticaria that is induced by ultraviolet or visible light and is characterized by pruritic, erythematous wheals on the exposed areas, shortly after sun exposure, with relative sparing of the face and hands

### ***Differential Diagnosis***

- Acute cutaneous lupus erythematosus
- Cholinergic urticaria
- Erythropoietic protoporphyria
- Exercise-induced urticaria

- Heat urticaria
- Photocontact dermatitis
- Photosensitive drug reaction
- Polymorphous light eruption
- Porphyria cutanea tarda

### ***Treatment Options***

- Sunscreen
- Antihistamines
- Hydroxychloroquine
- Intravenous immunoglobulins

### **Further reading:**

- Beattie PE, Dawe RS, Ibbotson SH et al (2003) Characteristics and prognosis of idiopathic solar urticaria: a cohort of 87 cases. *Arch Dermatol* 139(9):1149–1154

## **Urticarial Dermatitis**

Refers to the clinical manifestation of the dermal hypersensitivity reaction that is characterized by localized or widespread, pruritic, erythematous plaques with a combination of urticarial and eczematous features and excoriated papules

### ***Differential Diagnosis***

- Autoimmune progesterone dermatitis
- Bullous pemphigoid
- Contact dermatitis
- Drug reaction
- Hypereosinophilic syndrome
- Nummular eczema
- Prurigo
- Scabies

- Urticaria
- Urticarial vasculitis

### ***Treatment Options***

- Topical corticosteroids
- Systemic corticosteroids
- Antihistamines
- Dapsone
- Narrowband UVB

### **Further reading:**

- Kossard S, Hamann I, Wilkinson B (2006) Defining urticarial dermatitis: a subset of dermal hypersensitivity reaction pattern. *Arch Dermatol* 142(1):29–34

## **Urticarial Vasculitis**

Presentation of cutaneous small vessel (leukocytoclastic) vasculitis that resembles urticaria, except that it is more painful than pruritic, individual lesions last longer than 24 h, and it resolves with postinflammatory hyperpigmentation and bruising (Fig. 6.123)

### ***Differential Diagnosis***

- Acute hemorrhagic edema of childhood
- Allergic contact dermatitis
- Erythema multiforme
- Lyme disease
- Ordinary urticaria
- Pigmented purpuric dermatosis
- Schnitzler syndrome
- Serum-sickness-like drug reaction
- Systemic lupus erythematosus



**Fig. 6.123** Urticarial vasculitis (Courtesy of A. Record)

### ***Associations***

- Arthritis
- Chronic obstructive pulmonary disease
- Cocaine use
- EBV infection
- Fluoxetine
- HBV infection
- HCV infection
- Hypocomplementemia
- Idiopathic
- Inflammatory bowel disease
- Internal malignancy
- Interstitial lung disease
- Lyme disease
- Methotrexate (exacerbates)
- Mixed connective tissue disease
- Myeloma

- NSAIDs
- Pericarditis
- Polyarteritis nodosa
- Polycythemia vera
- Potassium iodide
- Pregnancy
- Schnitzler's syndrome
- Sjögren's syndrome
- Sun exposure
- Systemic lupus erythematosus
- Uveitis
- Viral infection
- Wegener's granulomatosis

### ***Evaluation***

- Anti-C1q antibodies
- Antinuclear antibodies (including SS-A and SS-B)
- Complement levels
- Direct immunofluorescence
- Renal function test
- Urinalysis
- Viral hepatitis panel

### ***Treatment Options***

- Antihistamines
- Dapsone
- Colchicine
- Hydroxychloroquine
- Azathioprine
- Mycophenolate
- Rituximab

**Further reading:**

- See Lee JS, Loh TH, Seow SC et al (2007) Prolonged urticaria with purpura: the spectrum of clinical and histopathologic features in a prospective series of 22 patients exhibiting the clinical features of urticarial vasculitis. *J Am Acad Dermatol* 56(6):994–100

**Varicella (Chicken Pox)**

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Pruritic, childhood, centrifugally spreading exanthem that is caused by infection with the highly contagious varicella-zoster virus and is characterized by a widespread mucocutaneous eruption of lesions in various stages of evolution including erythematous macules, papules, vesicles, and crusts, some of which resemble a “dewdrop on a rose petal”

***Differential Diagnosis***

- Bullous pemphigoid
- Coxsackievirus infection
- Congenital syphilis
- Contact dermatitis
- Dermatitis herpetiformis
- Disseminated zoster
- Drug eruption
- Echovirus infection
- Erythema multiforme
- Herpes simplex virus infection
- Hydroa vacciniforme
- Insect bites
- Langerhans cell histiocytosis
- Monkeypox
- Papular urticaria
- Pityriasis lichenoides et varioliformis acuta
- Rickettsialpox
- Scabies



- Secondary syphilis
- Smallpox

### ***Associations***

- Lymphoma and leukemia (when hemorrhagic)
- Purpura fulminans
- Reye syndrome

### ***Treatment Options***

- Observation and reassurance
- Acyclovir

### **Further reading:**

- McCrary ML, Severson J, Tyring SK (1999) Varicella zoster virus. *J Am Acad Dermatol* 41(1):1–14

## **Vasculitis, Cutaneous Small Vessel**

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Inflammation of the postcapillary venules of the skin with or without associated systemic vasculitis that is caused by depositing of immune complexes in the skin (predominantly in response to an acute infection or a medication), leading to inflammatory, palpable purpura typically located on dependent areas such as the legs or buttocks

### ***Subtypes/Variants***

- Bullous
- Erythema elevatum diutinum
- Erythema-multiforme-like lesions
- Livedo reticularis
- Necrotic/ulcerative lesions

- Palpable purpura
- Pustular
- Urticarial

### *Differential Diagnosis*

- Amyloidosis
- Angiocentric T cell lymphoma
- Antiphospholipid antibody syndrome
- Arthropod bites
- Atrial myxoma
- Benign hypergammaglobulinemic purpura
- Buerger disease
- Cholesterol emboli
- Churg–Strauss syndrome
- Coagulopathy
- Cocaine-associated vasculopathy
- Disseminated candidiasis
- Drug eruption
- Eccrine syringosquamous metaplasia
- Erythema multiforme
- Gonococemia
- Immune thrombocytopenic purpura
- Infective endocarditis
- Livedo reticularis
- Livedoid vasculopathy
- Meningococemia
- Neutrophilic eccrine hidradenitis
- Perniosis
- Pigmented purpuric dermatosis
- Pityriasis lichenoides
- Polyarteritis nodosa
- Rocky Mountain spotted fever
- Scurvy

- Sneddon syndrome
- Sweet's syndrome
- Thrombotic thrombocytopenic purpura
- Urticaria
- Viral exanthem
- Wegener's granulomatosis

### ***Associations***

- Behçet's disease
- Chronic occult infections
- Cryoglobulinemia
- Cystic fibrosis
- Dermatomyositis
- Endocarditis
- Erythema elevatum diutinum
- Food and food additives
- Hairy-cell leukemia
- Hepatitis B and C
- Idiopathic
- Inflammatory bowel disease
- Internal malignancy
- Intestinal bypass
- Lymphomas
- Macroglobulinemia
- Medications
- Mycobacterial disease
- Myeloma
- Relapsing polychondritis
- Rheumatoid arthritis
- Sjögren's syndrome
- Systemic lupus erythematosus
- Streptococcal infection
- Systemic vasculitis syndromes

- Upper respiratory infection
- Urinary tract infection

### ***Associated Medications***

- Allopurinol
- Aspirin
- Barbiturates
- Beta-lactam antibiotics
- Cocaine
- Contrast dye
- Hydralazine (ANCA+)
- Minocycline (ANCA+)
- NSAIDs
- Phenothiazine
- Phenytoin
- Propylthiouracil (ANCA+)
- Quinidine
- Sulfonamides
- Thiazides

### ***Evaluation***

- Anticardiolipin antibodies
- Antineutrophilic cytoplasmic antibodies
- Antinuclear antibodies
- Blood cultures
- Chest radiograph
- Complement
- Complete blood count
- Creatine kinase and aldolase level
- Cryoglobulins
- Direct immunofluorescence

- Liver function test
- Lupus anticoagulant
- Nerve conduction studies
- Renal function test
- Sedimentation rate
- Serum protein electrophoresis
- Urinalysis
- Viral hepatitis panel

### ***Treatment Options***

- Treat underlying cause
- Systemic corticosteroids
- Dapsone
- Colchicine
- Azathioprine
- Mycophenolate mofetil
- Methotrexate
- Cyclophosphamide
- Intravenous immunoglobulin
- Rituximab
- Pentoxifylline

### **Further reading:**

- Carlson JA, Chen KR (2006) Cutaneous vasculitis update: small vessel neutrophilic vasculitis syndromes. *Am J Dermatopathol* 28(6):486–506

### **Venous Lake**

Venous ectasia associated with chronic sun exposure that affects older males and is characterized by a blue, compressible papule on the head and neck, especially the ear and lip

### ***Differential Diagnosis***

- Angiokeratoma
- Basal cell carcinoma
- Blue nevus
- Hemangioma
- Hidrocystoma
- Melanoma
- Mucocele
- Mucosal melanosis
- Traumatic tattoo

### **Further reading:**

- Requena L, Sangueza OP (1997) Cutaneous vascular anomalies. Part I. Hamartomas, malformations, and dilation of preexisting vessels. *J Am Acad Dermatol* 37(4):523–549

### **Venous Malformation**

Anatomic malformation that presents at birth or early childhood, arises through a variety of genetic mechanisms, can be solitary or multiple (in the setting of a variety of associated syndromes), and is characterized by a blue, compressible, occasionally painful (especially upon waking due to stasis overnight) nodule or mass most commonly located on the head and neck (but that can occur anywhere)

### ***Differential Diagnosis***

- Deep infantile hemangioma
- Extensive mongolian spots
- Glomuvenous malformation
- Kaposiform hemangioendothelioma
- Lymphangioma
- Nevus flammeus

- Nevus of Ota and Ito
- Spindle cell hemangioendothelioma
- Tufted angioma

### **Associations**

- Bannayan–Riley–Ruvulcaba syndrome
- Blue rubber bleb nevus syndrome (Bean syndrome)
- Bockenheimer syndrome
- Cerebral cavernomas
- Familial cutaneous and mucosal venous malformation
- Gorham’s syndrome
- Glomangiomas and familial glomangiomas
- Maffucci syndrome

### **Further reading:**

- Garzon MC, Huang JT, Enjolras O et al (2007) Vascular malformations: part I. *J Am Acad Dermatol* 56(3):353–370

## **Verrucous Carcinoma**

Low-grade type of squamous cell carcinoma that is associated with HPV types VI and XI and is characterized by an exophytic, markedly hyperkeratotic, verrucous nodule in the oral cavity (oral florid papillomatosis), on the hand or foot (epithelioma cuniculatum (Fig. 6.124)), the anogenital area (giant condyloma of Buschke–Lowenstein), or anywhere else (papillomatosis cutis carcinoides of Gottron)

### **Differential Diagnosis**

- Actinomycosis
- Blastomycosis
- Eccrine porocarcinoma



**Fig. 6.124** Epithelioma cuniculatum

- Elephantiasis verrucosa
- Granular cell tumor
- Keratoacanthoma
- Leishmaniasis
- Leprosy
- Mycetoma
- Squamous cell carcinoma
- Wart
- Warty tuberculosis

**Further reading:**

- Lozzi GP, Peris K (2007) Carcinoma cuniculatum. Can Med Assoc J 177(3):249–251



## **Vibrio Vulnificus Infection**

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Blood-borne infection with the aquatic bacteria, *Vibrio vulnificus*, that results from consumption of contaminated raw shellfish or infection of a wound with contaminated water and is characterized by large hemorrhage, bullous lesions on the trunk and extremities, sepsis, and a high mortality

### ***Differential Diagnosis***

- *Aeromonas* infection
- Clostridial myonecrosis
- Necrotizing fasciitis
- Pseudomonal bacteremia
- Purpura fulminans

### ***Associations***

- Cirrhosis
- Diabetes
- Gastric surgery
- Glucocorticoid use
- Hemochromatosis

### **Further reading:**

- Ralph A, Currie BJ (2007) *Vibrio vulnificus* and *V. parahaemolyticus* necrotizing fasciitis in fishermen visiting an estuarine tropical northern Australian location. J Infect 54(3):e111–e114

## **Vitiligo**

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Immune-mediated pigmentary disorder of uncertain cause that is characterized by depigmented macules and patches anywhere on the body, especially on the face (especially periorificially), hands, or genitalia, or in a generalized distribution

### *Subtypes/Variants*

- Acrofacial
- Blue
- Focal
- Generalized (vulgaris)
- Inflammatory
- Lip tip
- Mixed
- Mucosal
- Ponctue
- Quadrichrome
- Trichrome (Fig. 6.125)
- Unilateral (segmental)
- Universal



**Fig. 6.125** Trichrome vitiligo

### ***Differential Diagnosis***

- Annular lichenoid dermatitis of youth
- Chemical leukoderma
- Discoid lupus erythematosus
- Halo nevus
- Hypopigmented mycosis fungoides
- Idiopathic guttate hypomelanosis
- Leprosy
- Lichen sclerosis
- Nevus anemicus
- Nevus depigmentosus
- Nevoid hypomelanosis
- Onchocerciasis
- Photodistributed vitiligo-like drug reaction in HIV patients
- Piebaldism
- Pinta
- Postinflammatory depigmentation
- Postinflammatory hypopigmentation
- Sarcoidosis
- Scleroderma-related leukoderma
- Tinea versicolor
- Topical steroid leukoderma
- Tuberous sclerosis
- Vogt–Koyanagi–Harada syndrome

### ***Associations***

- Addison's disease
- Alopecia areata
- Atrophic gastritis
- Candidiasis
- Chronic actinic dermatitis
- Dermatitis herpetiformis

- Diabetes mellitus
- Down syndrome
- Halo nevus
- Idiopathic T cell lymphopenia
- Interferon alpha
- Melanoma
- Pemphigus vulgaris
- Pernicious anemia
- Primary biliary cirrhosis
- Psoriasis
- Sarcoidosis
- Spondylarthritis
- Thyroid disease
- Twenty-nail dystrophy
- Uveitis

### ***Evaluation***

- Complete blood count
- Thyroid function test and antithyroid antibodies
- Fasting blood glucose

### ***Treatment Options***

- Topical corticosteroids
- Tacrolimus ointment
- Narrowband UVB
- Vitamin D analogues
- Excimer laser
- Skin grafts

### **Further reading:**

- Sehgal VN, Srivastava G (2007) Vitiligo: compendium of clinico-epidemiological features. Indian J Dermatol Venereol Leprol 73(3):149–156

## **Vogt–Koyanagi–Harada Syndrome**

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Acquired, immune-mediated syndrome of unknown cause that affects young to middle-aged adults and is characterized by meningoencephalitis, followed by vitiligo, poliosis, uveitis, and hearing disturbance

### ***Differential Diagnosis***

- Alezzandrini syndrome
- Alopecia areata
- Piebaldism
- Vitiligo

### ***Phases***

- I: Prodromic or meningoencephalitic
- II: Uveitis
- III: Convalescent: poliosis and vitiligo
- IV: Recurrent uveitis

### ***Diagnostic Criteria (Complete VKH: Criteria 1–5; Incomplete: 1–3+4 or 5; Probable: 1–3)***

- 1. No history of penetrating ocular trauma or surgery preceding the initial onset of uveitis
- 2. No clinical or laboratory evidence suggestive of other ocular disease entities
- 3. Bilateral ocular involvement with evidence of a diffuse choroiditis, depending on the stage of the disease when the patient is examined
- 4. Meningismus, tinnitus, or cerebrospinal fluid pleocytosis
- 5. Alopecia, poliosis, or vitiligo

## **Associations**

- Diabetes
- Hypothyroidism
- Interferon
- Melanoma
- Ulcerative colitis

### **Further reading:**

- Read RW, Holland GN, Rao NA et al (2001) Revised diagnostic criteria for Vogt–Koyanagi–Harada disease: report of an international committee on nomenclature. *Am J Ophthalmol* 131:647–652

## **Vohwinkel Syndrome (Keratoderma Hereditaria Mutilans)**

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Inherited (AD) syndrome caused by mutation of the gene encoding either loricrin or connexin 26 that is characterized by diffuse palmoplantar keratoderma with the potential for pseudoainhum and starfish-shaped keratotic plaques on the dorsal hands and feet, elbows, and knees; ichthyosis (with loricrin mutation; Camisa's syndrome); and deafness (with connexin 26 mutation; classic Vohwinkel's syndrome)

### **Differential Diagnosis**

- Congenital syphilis
- Hidrotic ectodermal dysplasia
- Leprosy
- Mal de Meleda
- Olmsted syndrome
- Palmoplantar keratoderma with deafness
- Progressive symmetric erythrokeratoderma
- Pseudoainhum
- Psoriasis
- Tertiary syphilis
- Yaws

**Further reading:**

- Ul Bari A (2006) Keratoderma hereditarium mutilans (Vohwinkel syndrome) in three siblings. *Dermatol Online J* 12(7):10

**Waardenburg Syndrome**

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Inherited pigmentary disorder (AD) that is caused by failure of complete melanoblast migration as a result of several gene defects and is characterized by a white forelock; canities; dystopia canthorum (not type II); heterochromia iridis; spots of unpigmented skin on the face, trunk, and extremities; hearing loss (type II), limb defects (type III), and Hirschsprung's disease (type IV)

***Differential Diagnosis***

- Oculocutaneous albinism
- Hermansky–Pudlak syndrome
- Piebaldism
- Vitiligo
- Woolf syndrome
- Vogt–Koyanagi–Harada syndrome
- Ziprkowski–Margolis syndrome

**Further reading:**

- Karaman A, Aliagaoglu C (2006) Waardenburg syndrome type 1. *Dermatol Online J* 12(3):21

**Warfarin Necrosis**

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Cutaneous necrosis that occurs within 5 days of initiating therapy with warfarin, is associated with underlying hypercoagulability that is exacerbated by warfarin-induced protein-C deficiency, and is characterized by purpuric, necrotic plaques in the areas of the body with abundant subcutaneous fat (Fig. 6.126)



**Fig. 6.126** Warfarin necrosis

### *Differential Diagnosis*

- Anthrax
- Calciphylaxis
- Heparin necrosis
- Necrotizing fasciitis
- Pyoderma gangrenosum
- Spider-bite reaction
- Traumatic ulceration
- Vasculitis

### *Treatment Options*

- Discontinuation of warfarin
- Vitamin K
- Heparin
- Activated protein C

### **Further reading:**

- Jones A, Walling H (2007) Retiform purpura in plaques: a morphological approach to diagnosis. *Clin Exp Dermatol* 32(5):596–602



## **Wart (Verruca)**

---

Benign growth that is caused by infection with various types of human papillomavirus and is characterized by a papule or nodule with a rough or verrucous surface

### ***Subtypes/Variants***

- Butcher's wart
- Common (verruca vulgaris)
- Cystic
- Filiform
- Flat (verruca plana)
- Focal epithelial hyperplasia
- Genital (condyloma acuminatum)
- Mosaic
- Myremecial
- Plantar (verruca plantaris)

### ***Differential Diagnosis***

#### Verruca Vulgaris

- Acne vulgaris
- Acquired digital fibrokeratoma
- Acrochordon
- Acrokeratosis verruciformis
- Actinic keratosis
- Amelanotic melanoma
- Angiokeratoma
- Arsenical keratosis
- Bowen's disease
- Callus/clavus
- Condyloma lata
- Cowden's disease keratoses
- Digital mucous cyst

- Eccrine syringofibroadenoma
- Keratoacanthoma
- Knuckle pads
- Lichen nitidus
- Lichen planus
- Molluscum contagiosum
- Mucinous syringometaplasia
- Periungual fibroma
- Poroma
- Prurigo nodularis
- Psoriasis
- Seborrheic keratosis
- Squamous cell carcinoma
- Syringocystadenoma papilliferum
- Trichilemmoma
- Tuberculosis verrucosa cutis
- Warty dyskeratoma

#### Plantar

- Corn
- Epidermal cyst
- Focal plantar keratoderma
- Melanoma
- Pitted keratolysis
- Poroma
- Punctate porokeratosis
- Syphilitic clavus
- Tungiasis
- Verrucous carcinoma

#### *Associations*

- Epidermodysplasia verruciformis
- Hyperimmunoglobulin M syndrome
- WHIM syndrome

### ***Treatment Options***

- Cryotherapy
- Salicylic acid
- Podophyllin
- Cantharidin
- Intralesional candida antigen
- Electrodessication and curettage
- 5FU cream
- Dibutyl squaric acid ester
- Oral zinc supplements
- Oral cimetidine
- Acitretin
- Duct tape
- Imiquimod
- Pulsed dye laser
- CO<sub>2</sub> laser
- Intralesional bleomycin

### **Further reading:**

- Dalmau J, Abellaneda C, Puig S, Zaballos P, Malveyh J (2006) Acral melanoma simulating warts: dermoscopic clues to prevent missing a melanoma. *Dermatol Surg* 32(8):1072–1078

### **Warty Dyskeratoma**

Benign epidermal neoplasm characterized by a hyperkeratotic papule with a central pore that is most commonly located on the face, or less commonly, on the oral mucosa or genital areas

### ***Differential Diagnosis***

- Acantholytic acanthoma
- Acantholytic actinic keratosis

- Acantholytic squamous cell carcinoma
- Basal cell carcinoma
- Darier's disease
- Epidermal nevus
- Familial dyskeratotic comedones
- Focal acantholytic dyskeratosis
- Grover's disease
- Hailey–Hailey disease
- Hypertrophic actinic keratosis
- Keratoacanthoma
- Pilar sheath acanthoma
- Seborrheic keratosis
- Solitary acantholytic keratosis
- Syringocystadenoma papilliferum
- Verruca

**Further reading:**

- Kaddu S, Dong H, Mayer G et al (2002) Warty dyskeratoma–“follicular dyskeratoma”: analysis of clinicopathologic features of a distinctive follicular adnexal neoplasm. *J Am Acad Dermatol* 47(3):423–428

**Weathering Nodule of the Ear**

Small fibrous papule that arises on the ear of patients with a history of chronic sun exposure and is characterized by a white- or flesh-colored papule or multiple papules along the helical rim

***Differential Diagnosis***

- Amyloid
- Calcinosis cutis
- Chondrodermatitis nodularis helicis
- Colloid milium
- Elastotic nodule of the ear

- Gouty tophi
- Granuloma annulare
- Milia
- Rheumatoid nodules

**Further reading:**

- Kennedy C (2005) Weathering nodules are not the same as elastotic nodules. *J Am Acad Dermatol* 52:925–926

## **Wegener's Granulomatosis**

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Type of systemic necrotizing vasculitis that is associated with antineutrophil cytoplasmic antibodies (c-ANCA) and is characterized by granulomatous inflammation of the nasal passages (leading to chronic nasal discharge and sinusitis), lungs, and skin (ulcers, inflammatory purpura, and subcutaneous nodules)

### ***Differential Diagnosis***

- Churg–Strauss syndrome
- Cryoglobulinemia
- Henoch–Schonlein purpura
- Leishmaniasis
- Lymphomatoid granulomatosis
- Microscopic polyangiitis
- Natural killer cell lymphoma
- Polyarteritis nodosa
- Pyoderma gangrenosum
- Rhinoscleroma
- Sarcoidosis (lupus pernio)
- Sweet's syndrome
- Syphilis
- Temporal arteritis
- Yaws

### ***Diagnostic Criteria (ACR; 2/4)***

- Nasal or oral inflammation
- Chest X-ray showing nodules, infiltrates (fixed), or cavities
- Microscopic hematuria or red cell casts in urine
- Granulomatous inflammation on biopsy (within vessel wall or perivascular)

### ***Evaluation***

- Antineutrophilic cytoplasmic antibodies
- Chest radiograph
- Complement levels
- Complete blood count
- Renal function test
- Sedimentation rate
- Sinus radiograph or CT scan
- Urinalysis

### **Further reading:**

- Fiorentino DF (2003) Cutaneous vasculitis. *J Am Acad Dermatol* 48(3):311–340

### **Werner Syndrome (Adult Progeria)**

Inherited premature aging syndrome (AR) that is caused by a mutation of the RECQ2 DNA helicase repair gene and is characterized by onset in the second decade of poikilodermatous skin changes, leg ulcers, sclerodermatous face and hands, diabetes, tendency toward the development of various malignancies, including sarcomas, and death in middle age due to atherosclerosis or malignancy

### ***Differential Diagnosis***

- Acrogeria
- Diabetic cheiroarthropathy with stiff skin

- Hutchinson–Gilford progeria syndrome
- Rothmund–Thomson syndrome
- Scleroderma
- Systemic sclerosis

### ***Diagnostic Criteria***

Cardinal signs and symptoms (onset over 10 years old):

- Cataracts (bilateral)
- Characteristic dermatological pathology (tight skin, atrophic skin, pigmentary alterations, ulceration, hyperkeratosis, and regional subcutaneous atrophy) and characteristic facies (“bird” facies)
- Short stature
- Parental consanguinity (third cousin or greater) or affected sibling
- Premature graying and/or thinning of scalp hair

Further signs and symptoms:

- Diabetes mellitus
- Hypogonadism (secondary sexual underdevelopment, diminished fertility, testicular, or ovarian atrophy)
- Osteoporosis
- Osteosclerosis of distal phalanges of fingers and/or toes (X-ray diagnosis)
- Soft tissue calcification
- Evidence of premature atherosclerosis (e.g., history of myocardial infarction)
- Mesenchymal neoplasms, rare neoplasms, or multiple neoplasms
- Voice changes (high pitched, squeaky, or hoarse voice)
- Flat feet

Definite: All cardinal+two others

Probable: First three cardinal+two others

Possible: Either cataracts or dermatological alterations and any four others

Exclusion: Onset of signs and symptoms before adolescence (except stature)

## **Associations**

- Cataracts
- Diabetes mellitus
- Internal malignancy
- Leg ulcers
- Osteoporosis

## **Further reading:**

- Mohaghegh P, Hickson ID (2001) DNA helicase deficiencies associated with cancer predisposition and premature ageing disorders. *Hum Molec Genet* 10:741–746
- Oshima J, Martin G, and Hisama, F. Werner Syndrome. *GeneReviews*. Seattle (WA): University of Washington, Seattle; 1993–2002 Dec 02

## **White Sponge Nevus (of Cannon)**

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Autosomal-dominant familial disorder with onset early in life that is caused by a defect in the genes encoding keratin 4 or 13 and is characterized by a benign, white, keratotic, and thickened plaque on the buccal mucosa, often bilateral, with or without involvement of the surrounding areas of the oral cavity

## **Differential Diagnosis**

- Cheek-bite keratosis
- Dyskeratosis congenita
- Hereditary benign intraepithelial dyskeratosis
- Leukoplakia
- Oral acanthosis nigricans
- Oral florid papillomatosis
- Pachyonychia congenita
- Smokeless-tobacco keratosis



**Further reading:**

- Martelli H Jr, Pereira S, Rocha T et al (2007) White sponge nevus: report of a three-generation family. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod* 103(1):43–47

**Wiskott–Aldrich Syndrome**

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X-linked recessive disorder that is caused by a defect in the WASP transcription factor which is important in lymphocyte and platelet function and is characterized by thrombocytopenic purpura and other bleeding problems, recurrent infections, eczema, and impaired cellular and humoral immunity

***Differential Diagnosis***

- Agammaglobulinemias
- Ataxia–telangiectasis
- Atopic dermatitis
- Chédiak–Higashi syndrome
- Chronic granulomatous disease
- DiGeorge syndrome
- Graft-vs-host disease
- Hermansky–Pudlak syndrome
- Hyper-IgE syndrome
- Langerhans cell histiocytosis
- Omenn syndrome
- Severe combined immunodeficiency
- Seborrheic dermatitis

**Further reading:**

- Notarangelo LD, Mori L (2005) Wiskott–Aldrich syndrome: another piece in the puzzle. *Clin Exp Immunol* 139(2):173–175

## Woolly Hair Nevus

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Sporadic congenital disorder of hair that is characterized by one or more discrete patches of curly, unruly hair that is different in color and consistency from surrounding normal hair

### *Differential Diagnosis*

- Acquired progressive kinking of the hair
- Carvajal syndrome woolly hair
- Menkes kinky-hair syndrome
- Naxos syndrome woolly hair
- Plica polonica (neuropathica)
- Uncombable hair syndrome

### *Associations*

- Epidermal nevi
- Incontinentia pigmenti
- Infantile diarrhea syndromes
- Precocious puberty

### **Further reading:**

- Kumaran S, Dogra S, Handa S, Kanwar AJ (2004) Woolly-hair nevus. *Pediatr Dermatol* 21(5):609–610

## Xanthoma

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Dermatologic manifestation of hyperlipidemia that represents a focal, benign collection of lipid-laden histiocytes and is characterized by papular, nodular, or plaque-type lesions with variable size, morphologic features, and associated lipid abnormality



**Fig. 6.127** Eruptive xanthomas

### *Subtypes*

- Eruptive (Fig. 6.127)
- Intertriginous
- Papular
- Plane
- Tendinous
- Tuberous
- Verruciform
- Xanthelasma
- Xanthoma striatum palmare

### *Differential Diagnosis*

#### Eruptive

- Cutaneous Rosai–Dorfman disease
- Erythema elevatum diutinum
- Eruptive histiocytomas

- Folliculitis
- Generalized eruptive histiocytoma
- Granuloma annulare
- Juvenile xanthogranuloma
- Molluscum contagiosum
- Multicentric reticulohistiocytosis
- Papular sarcoidosis
- Papular xanthoma
- Xanthoma disseminatum

#### Plane

- Carotenoderma
- Erythrasma
- Fox–Fordyce disease
- Lichenification
- Pseudoxanthoma elasticum
- Xanthelasma mastocytosis

#### Tendinous

- Erythema elevatum diutinum
- Ganglion cyst
- Giant cell tumor of the tendon sheath
- Gouty tophi
- Juvenile xanthogranuloma
- Lipoma
- Rheumatoid nodule
- Subcutaneous sarcoidosis

#### Tuberous

- Erythema elevatum diutinum
- Granuloma annulare
- Gouty tophi
- Histioid leprosy
- Juvenile xanthogranuloma

- Lymphoma
- Mastocytosis
- Neurofibromas
- Rheumatoid nodule
- Sarcoidosis

#### Verruciform

- Condyloma acuminatum
- Eccrine syringofibroadenoma
- Epidermal nevus
- Granular cell tumor
- Inflammatory linear verrucous epidermal nevus
- Leukoplakia
- Seborrheic keratosis
- Squamous cell carcinoma
- Verrucous carcinoma
- Viral wart
- Warty dyskeratoma

#### Xanthelasma

- Amyloidosis
- Lipoid proteinosis
- Milia
- Necrobiotic xanthogranuloma
- Nodular elastoidosis
- Sarcoidosis
- Sebaceous hyperplasia
- Syringoma
- Xanthoma disseminatum

#### **Associations**

##### Eruptive

- Alcohol abuse
- Diabetes mellitus

- Estrogen replacement
- High caloric intake
- Hypothyroidism
- Obesity
- Retinoid therapy
- Type I hyperlipidemia (elevated chylomicrons)
- Type IV hyperlipidemia (elevated VLDL)
- Type V hyperlipidemia (elevated chylomicrons and VLDLs)

### Plane

- Dysbetalipoproteinemia (palmar crease type)
- Homozygous familial hypercholesterolemia (intertriginous type)
- Monoclonal gammopathy

### Tendinous

- Cerebrotendinous xanthomatosis
- Dysbetalipoproteinemia
- Familial hypercholesterolemia
- Hepatic cholestasis
- Sitosterolemia

### Tuberous

- Dysbetalipoproteinemia
- Familial hypercholesterolemia

### Verruciform

- Bite keratosis
- Discoid lupus erythematosus
- Epidermolysis bullosa acquisita
- Graft-vs-host disease
- Lichen planus
- Pemphigus vulgaris

### ***Evaluation***

- Lipid panel
- Serum/urinary protein electrophoresis

### **Further reading:**

- Sopena J, Gamo R, Iglesias L, Rodriguez-Peralto JL (2004) Disseminated verruciform xanthoma. *Br J Dermatol* 151(3):717–719

## **Xanthoma Disseminatum (Montgomery Syndrome)**

Rare type of histiocytosis (non-Langerhans cell type) that arises primarily in adulthood and is characterized by diabetes insipidus and hundreds of yellow to brown keloid-like papules and nodules predominantly on the face and intertriginous areas, as well as in the oral cavity, airway, and bones

### ***Differential Diagnosis***

- Amyloidosis
- Eruptive xanthoma
- Generalized eruptive histiocytoma
- Juvenile xanthogranuloma
- Keloids
- Langerhans cell histiocytosis
- Lipoid proteinosis
- Multicentric reticulohistiocytosis
- Necrobiotic xanthogranulomas
- Papular xanthoma
- Pseudoxanthoma elasticum
- Pseudoxanthomatous mastocytosis
- Sarcoidosis

### **Further reading:**

- Buyukavci M, Selimoglu A, Yildirim U et al (2005) Xanthoma disseminatum with hepatic involvement in a child. *Pediatr Dermatol* 22(6):550–553

## Xeroderma Pigmentosum (Kaposi's Dermatitis)

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Group of autosomal-recessive disorders that have faulty DNA repair of UV-radiation-induced DNA damage, have a variety of gene defects in components of the nucleotide excision repair pathway, and are characterized by photosensitivity, skin cancers early in life, premature aging of the skin, chronic conjunctivitis, lentigines, freckling, poikiloderma, xerosis, progressive neurologic deterioration (not all patients), and early death

### *Differential Diagnosis*

- Ataxia–telangiectasia
- Basal cell nevus syndrome
- Bloom syndrome
- Cockayne syndrome
- Congenital erythropoietic porphyria
- Erythropoietic protoporphyria
- Hartnup syndrome
- Hydroa vacciniforme
- Kindler syndrome
- LEOPARD syndrome
- Lupus erythematosus
- Polymorphous light eruption
- Rothmund–Thomson syndrome
- Trichothiodystrophy

### *Associations*

- Cockayne syndrome
- Trichothiodystrophy
- Neurologic dysfunction (De Sanctis–Cacchione syndrome)

### **Further reading:**

- Lichon V, Khachemoune A (2007) Xeroderma pigmentosum: beyond skin cancer. *J Drugs Dermatol* 6(3):281–288



## **X-Linked Dominant Chondrodysplasia Punctata (Conradi–Hunermann–Happle Syndrome)**

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X-linked dominant disorder that is lethal in males, is caused by a defect in the emopamil-binding protein gene, and is characterized by collodion baby presentation, ichthyosiform erythroderma along the lines of Blaschko that is eventually replaced by follicular atrophoderma, stippling of the epiphyses on radiography, cataracts, and nail dystrophy

### ***Differential Diagnosis***

- CHILD syndrome
- Collodion baby
- Congenital ichthyosiform erythroderma
- Epidermal nevi syndrome
- Ichthyosis linearis circumflexa
- Incontinentia pigmenti
- Neutral lipid storage disease
- Other forms of chondrodysplasia punctata
- Sjögren–Larsson syndrome

### **Further reading:**

- Trachea D, Read CP, Hull D et al (2007) A severely affected female infant with X-linked dominant chondrodysplasia punctata: a case report and a brief review of the literature. *Pediatr Dev Pathol* 10(2):142–148

## **X-Linked Reticulate Pigmentary Disorder (Partington’s Syndrome, Familial Cutaneous Amyloidosis)**

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X-linked pigmentary disorder of unknown cause that is characterized by brown pigmentation either along Blaschko’s lines (in carrier females) or in a generalized distribution (in affected males), with males suffering from failure to thrive, colitis, and pneumonia and surviving adults demonstrating amyloid deposits in the skin

### **Differential Diagnosis**

- Dyskeratosis congenita
- Dermatopathia pigmentosa reticularis
- Dowling–Degos disease
- Confluent and reticulated papillomatosis
- Incontinentia pigmenti
- Linear and whorled nevoid hypermelanosis
- Naegali–Franceschetti–Jadassohn syndrome
- Primary cutaneous amyloidosis
- Reticulate acropigmentation of Kitamura
- Rothmund–Thomson syndrome
- Weary–Kindler syndrome

### **Further reading:**

- Anderson RC, Zinn AR, Kim J et al (2005) X-linked reticulate pigmentary disorder with systemic manifestations: report of a third family and literature review. *Pediatr Dermatol* 22(2):122–126

### **Yaws (Pian, Frambesia)**

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Nonvenereal tropical infection caused by *Treponema pertenue* and characterized by a cutaneous ulcer (primary, mother yaw), verrucous, raspberry-like nodules and plaques (secondary, daughter yaws), painful palmoplantar hyperkeratosis (crab yaws), and gummatous lesions of the skin and bone (tertiary yaws, gangosa, goundoa), especially the nasopharynx and palate

### **Differential Diagnosis**

- Calluses
- Condyloma
- Eczema
- Endemic syphilis

- Idiopathic keratoderma
- Insect-bite reactions
- Leishmaniasis
- Leprosy
- Nutritional deficiency
- Osteomyelitis
- Paracoccidioidomycosis
- Psoriasis
- Rhinoscleroma
- Sarcoidosis
- Scabies
- Sickle cell disease
- Tuberculosis
- Tungiasis
- Venereal syphilis
- Vitamin deficiencies
- Warts

### ***Evaluation***

- Serologic tests for syphilis

### **Further reading:**

- Lupi O, Madkan V, Tyring SK (2006) Tropical dermatology: bacterial tropical diseases. *J Am Acad Dermatol* 54(4):559–578

### **Yellow-Nail Syndrome (Samman Syndrome)**

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Acquired disorder of the nails that is associated with lymphedema, arises in adulthood, and is characterized by yellow color change of all nails, slowed growth of the nails, onycholysis, and nail thickening

## *Differential Diagnosis*

- Onychomycosis
- Peripheral vascular disease
- Psoriasis
- Smoker's nails
- Twenty-nail dystrophy

## *Associations*

- Bronchiectasis
- Chronic bronchitis
- Lymphedema
- Malignancy with lung involvement
- Pleural effusions and empyema
- Respiratory tract infection
- Sinusitis

## **Further reading:**

- Hoque SR, Mansour S, Mortimer PS (2007) Yellow nail syndrome: not a genetic disorder? Eleven new cases and a review of the literature. *Br J Dermatol* 156(6):1230–1234

## Zygomycosis

Term for mycotic infection due to several different types of ubiquitous, saprophytic fungi from the orders Mucorales and Entomophthorales that are characterized by an acute, rapidly spreading, angioinvasive infection, especially of the head and neck, including the orbit and sinuses (rhinocerebral type, which predominantly arises in ketoacidotic diabetes) with typical black pus and high mortality

### ***Differential Diagnosis***

- Anthrax
- Aspergillosis
- Ecthyma gangrenosum
- Fusariosis
- Nocardiosis
- Orbital cellulitis
- *Pseudallescheria boydii* infection

### **Further reading:**

- Roden MM, Zaoutis TE, Buchanan WL et al (2005) Epidemiology and outcome of zygomycosis: a review of 929 reported cases. Clin Infect Dis 41(5):634–653

**Agenaes syndrome** AR; hereditary cholestasis with eventual cirrhosis; hypoplastic lymphatics leading to lymphedema of the legs

**Acanthamebiasis** Amoebic infestation with the ubiquitous *Acanthamoeba* that affects AIDS patients and causes disseminated disease with nodular skin lesions, meningoencephalitis, and sinusitis

**Acantholytic acanthoma** Benign keratotic neoplasm that arises in older patients most commonly on the trunk; histopathologic examination reveals acantholysis

**Acantholytic dyskeratosis of the vulva** Benign pruritic papular eruption of the vulvar area with histologic features of transient acantholytic dermatosis

**Acatlasemia (Takahara's disease)** AR; catalase gene mutation; inability to detox bacterial hydrogen peroxide; painful oral ulcers; destruction of dental alveoli; loss of teeth

**Acquired bilateral nevus of Ota-like macules (Hori's nevus)** Acquired type of dermal melanocytosis that arises in middle-aged women of Asian descent and is characterized by darkly pigmented macules on the bilateral infraorbital cheeks (with absence of scleral or tympanic involvement)

**Acquired brachial cutaneous dyschromatosis** Acquired pigmentary disorder affecting the arm of middle-aged women that is characterized by hyperpigmented and hypopigmented macules on the dorsal aspect of the forearms

**Acquired elastotic hemangioma** Benign vascular neoplasm that arises in adulthood and is characterized by a slow-growing, angiomatous papule, nodular, or plaque on the sun-exposed areas

**Acquired progressive lymphangioma** Benign lymphatic proliferation that arises in children and young adults and is characterized by a localized, flat bruise-like plaque on the trunk or extremities

**Acral ichthyosiform mucinosis** Rare type of mucinosis associated with Sjögren's syndrome that appears on the lower legs and mimics pretibial myxedema

**Acrogeria (Gottron syndrome)** AR; atrophy and loss of subcutaneous fat on the extremities; short stature; no effect on longevity

**Acute intermittent porphyria** AD; porphobilinogen deaminase mutation; onset in puberty; acute episodes of abdominal pain, paresthesias, paralysis; SIADH; seizures; psychotic behavior; attacks precipitated by alcohol ingestion, infection, and starvation; no skin findings

**Acute syndrome of apoptotic pan-epidermolysis (ASAP)** Toxic epidermal necrolysis-like presentation of acute cutaneous lupus characterized by massive epidermal necrosis

**ADULT syndrome** AD; ectrodactyly, lacrimal duct obstruction, hypodontia, alopecia, and nail dystrophy

**Aggressive digital papillary adenocarcinoma** Aggressive type of eccrine carcinoma that arises on the distal, often volar, aspect of the fingers or toes

**Alagille syndrome** AD; jagged-1 gene mutation; hypoplastic intrahepatic bile ducts; xanthomas; photosensitivity; pruritus; typical facies; jaundice; numerous other anomalies

**Albright's hereditary osteodystrophy** AD; inactivating mutation of the G stimulatory protein; short metacarpals; osteoma cutis; hypocalcemia; pseudohypoparathyroidism

**Alport's syndrome** XLD; type-IV collagen mutation; deafness; kidney disease; genital leiomyomas; cataracts

**Alstrom syndrome** AR; ALMS1 gene mutation; retinitis pigmentosa; deafness; obesity; diabetes; acanthosis nigricans

**Ambras syndrome** Sporadic/AD; type of congenital hypertrichosis characterized by generalized hypertrichosis with diffuse, uniform involvement of the face; hairs are long and fine; dysmorphic facial features; dental abnormalities

**Andogsky syndrome** The association of anterior cataracts with adult atopic dermatitis

**Angelman syndrome** Sporadic; maternal partial deletion of chromosome 15; severe motor and intellectual retardation; ataxia; hypotonia; epilepsy; absence of speech; large mandible; open-mouthed expression; paroxysmal laughter

**Angina bullosa hemorrhagica** Asymptomatic, blood-filled blister of the oral cavity with uncertain etiology; most commonly involve the hard palate; heal without scarring

**Angiocentric eosinophilic fibrosis** Idiopathic, chronic fibrosing vasculitis of the upper respiratory mucosa that is probably a mucosal variant of granuloma faciale; affects middle-aged adults

**Angiolipoleiomyoma** Rare, benign mesenchymal tumor that can arise at any age and is characterized by a solitary subcutaneous nodule located most commonly on the acral areas, especially the ear

**Anosacral amyloidosis** Uncommon type of cutaneous amyloidosis that affects the perianal area and is characterized by a pruritic, lichenified plaque

**APECED syndrome** AR; AIRE gene mutation; autoimmune polyendocrinopathy; candidiasis; ectodermal defects; hypoparathyroidism; Addison's disease; chronic mucocutaneous candidiasis; alopecia



**Apert syndrome** AD; fibroblast growth factor receptor 2 (FGFR2) gene mutation; severe acne; craniosynostosis; syndactyly; mental retardation

**Ascher syndrome** Enlarged upper lip; blepharochalasis; thyroid goiter, and other endocrine abnormalities

**Atrophia maculosa varioliformis cutis** Idiopathic disorder of dermal connective tissue that affects young adults and is characterized by spontaneous varioliform and linear scars on the face

**Autoimmune polyendocrine syndrome II (Schmidt syndrome)** The association of Addison's disease with either autoimmune thyroid disease or type-I diabetes mellitus; arises in middle age; women more commonly affected

**Babesiosis** Tick-borne protozoan disease that is transmitted by Ixodes ticks, caused by *Babesia microti*, and characterized by intraerythrocytic infection, fever, chills, jaundice, and splenomegaly

**Bandler syndrome** Intestinal hemangiomas; mucocutaneous hyperpigmentation

**Bannwarth's syndrome** Neurologic manifestations of Lyme borreliosis; facial nerve neuropathy, often bilateral; meningoencephalitis

**Barber-Say syndrome** AD; macrostomia; hypertelorism; ectropion; atrophic skin; hypertrichosis; growth retardation

**Bardet-Biedl syndrome** AR; diabetes; obesity; mental retardation; digital anomalies; retinal disease; urogenital anomalies

**Barraquer-Simons syndrome (acquired partial lipodystrophy)** Sporadic or AD; childhood onset; associated with autoimmunity or preceding illness; C3 nephritic factor present; low complement; membranoproliferative glomerulonephritis; cephalothoracic lipoatrophy; sparing of lower extremities

**Bart–Pumphrey syndrome** AD; GJB2 gene mutation; knuckle pads; leukonychia; cochlear deafness; palmoplantar keratoderma

**Beare–Stevenson cutis gyrata syndrome** AD; FGFR2 gene mutation; cutis verticis gyrata; acanthosis nigricans; craniosynostosis; genital abnormalities; ear anomalies

**Benign neonatal hemangiomatosis** Sporadic; multiple cutaneous hemangiomas at birth or within the first month of life without any visceral involvement; spontaneously involute within the first few years of life

**Berardinelli–Seip syndrome (congenital generalized lipodystrophy)** AR; Seipin or AGPAT2 gene; onset at birth; loss of subcutaneous fat on the face, trunk and extremities with sparing of the palms, soles, and orbital fat; insulin resistance and diabetes; hypertriglyceridemia; liver failure

**BIDS syndrome** AR; ERCC2, ERCC4; brittle hair (trichothiodystrophy); intellectual impairment; decreased fertility; short stature

**Bjornstad syndrome** AR; BCS1L gene; pili torti; sensorineural deafness

**Blaschkitis** Inflammatory lichen striatus-like dermatosis that affects adults and occurs along Blaschko's lines

**Bockenheimer syndrome (genuine diffuse phlebectasia)** Venous ectasia of an extremity, with diffuse involvement of all levels of the venous circulation and with an upper extremity more commonly involved than a lower extremity

**Book syndrome** AD; premolar hypoplasia; palmoplantar hyperhidrosis; premature canities

**Borst–Jadassohn phenomenon (intraepithelial epithelioma)** Intraepidermal nesting that can be seen in a variety of benign or malignant epithelial neoplasms

**Brachyonychia (Racket nails)** Abnormality of nail development that is caused by early cessation of distal phalangeal growth and characterized by fingernails that are wider than they are long; seen in Rubenstein-Taybi syndrome; can be a benign finding

**Branchio-oculo-facial syndrome** AD; cleft lip; branchial sinus; lacrimal duct obstruction; scalp cysts; coloboma; premature canities; deafness

**Branchio-oto-renal syndrome (Melnick–Fraser syndrome)** AD; EYA1 gene mutation; deafness; branchial cleft cysts/sinuses; pre-auricular pits; renal anomalies

**Brooke–Spiegler syndrome** AD; CYLD gene; multiple trichoepitheliomas; cylindromas; spiradenomas

**Brunsting–Perry cicatricial pemphigoid** Type of cicatricial pemphigoid that is localized to the head and neck with minimal mucosal involvement

**Bruton's agammaglobulinemia** XLR; defect in tyrosine kinase needed for pre-B-cell to B-cell transition; decreased immunoglobulins, decreased B cells; frequent infections with encapsulated bacteria; eczema; autoimmune disease; enteroviral infections; dermatomyositis–encephalitis syndrome

**Bywater's lesions** Nail-fold infarcts that occur in the setting of rheumatoid arthritis

**Cantu syndrome** AD; congenital hypertrichosis; palmoplantar hyperkeratosis; cutis laxa; osteochondrodysplasia; cardiomegaly

**Carcinoma en curaisse** Manifestation of cutaneous metastasis that resembles keloids, hypertrophic scars, or morphea, and that most commonly originates from breast carcinoma and is most commonly located on the chest wall

**Carcinoma erysipelatoides** Manifestation of cutaneous metastasis involving the dermal lymphatics that resembles erysipelas and most commonly originates from breast carcinoma

**Carcinoma telangiectaticum** Manifestation of cutaneous metastasis involving the dermal capillaries that presents with multiple grouped lymphangioma-like papulovesicles

**Carvajal syndrome** AR; desmoplakin gene mutation; striate and epidermolytic palmoplantar keratoderma; left ventricular dilated cardiomyopathy; woolly hair

**Castleman's disease** Acquired B-cell lymphoproliferative disorder associated with HHV-8 infection and IL-6 overproduction and characterized by lymphadenopathy in multiple sites, hepatosplenomegaly, fever, anemia, weight loss, and, uncommonly, paraneoplastic pemphigus

**Catastrophic antiphospholipid antibody syndrome (CAPS, Asherson syndrome)** Accelerated and life-threatening form of antiphospholipid antibody syndrome characterized by widespread thrombosis and multiorgan failure

**Cellular angiofibroma of the vulva** Rare type of angiofibroma that occurs on the vulva of middle-aged women and is characterized by a subcutaneous mass on the vulva that may be confused with Bartholin's gland cyst, lipoma, or leiomyoma

**Cerebrotendinous xanthomatosis** AR; sterol 27-hydroxylase gene mutation; lipid-storage disease; xanthomas; cerebellar ataxia beginning after puberty; spinal cord involvement; premature atherosclerosis; cataracts; deposits of cholesterol and cholestanol found in every tissue, including the Achilles tendons (tendinous xanthomas), brain, and lungs

**CHANDS syndrome (Baughman syndrome)** AR; curly hair, ankyloblepharon, nail dystrophy

**Cheyletiella dermatitis** An eruption caused by zoonotic, nonburrowing mites of the *Cheyletiella* genera that is characterized by pruritic, grouped, or widespread papules and is frequently transmitted via contact with dogs or cats

**Chiclero ulcer** Another name for New World cutaneous leishmaniasis caused by *Leishmania mexicana* that is characterized by a chronic ulcer that erodes the pinna of the ear

**CHIME syndrome (Zunich neuroectodermal syndrome)** AR; colobomas, congenital heart disease, ichthyosiform dermatosis, mental retardation, and ear anomalies/epilepsy

**Chondrodysplasia punctata** Refers to a developmental anomaly of the skeleton that is characterized by stippling of the epiphyses; also refers to a group of inherited disorders (AR, AR, XLR, or XLD) that, in addition to having chondrodysplasia punctata, have variable ichthyosis, mental retardation, cataracts, and shortened limbs (rhizomelia, AR type)

**CINCA syndrome** Chronic infantile neurologic, cutaneous, and articular syndrome; see NOMID

**Clear cell papulosis** Hypopigmented, macular to slightly papular eruption along the milk line, but especially in the pubic area; occurs in early childhood; lesions have intraepidermal clear cells that may be related to Paget's cells or Toker cells or may be of eccrine derivation

**Coats' disease** Exudative retinitis due to retinal telangiectasia that is associated with facial and conjunctival telangiectasias

**Cobb syndrome (cutaneomeningospinal angiomatosis)** Spinal cord angioma or arteriovenous malformation with port wine stain, angioma, angiokeratoma, angioliipoma, or lymphangioma in the associated dermatome

**Cockayne–Touraine syndrome** AD; type-VII collagen gene mutation; type of dominant dystrophic EB that differs from the Pasini type only by the absence of albopapuloid skin lesions

**Coffin–Siris syndrome** AR; absent nail on the fifth digits of the hands and feet; scalp hypotrichosis; body hypertrichosis; characteristic facies; developmental delay

**Cogan syndrome** Vestibuloauditory symptoms including sudden hearing loss; bilateral interstitial keratitis; headache; fever; arthralgias; associated with aortitis and systemic vasculitis

**Cohen syndrome** AR; COH1 gene; acanthosis nigricans; obesity; hypotonia; mental retardation; microcephaly; characteristic facial features; retinochoroidal dystrophy; myopia

**Coma bullae** Bullous skin lesions arising the comatose patient, especially in the setting of drug overdose (barbiturates); may arise from direct pressure and hypoxia or direct toxic effect of the drug; sweat gland necrosis

**Condyloma lata** Cutaneous manifestation of secondary syphilis that is characterized by highly infectious, moist, gray, flat papules and plaques on the anogenital areas

**Congenital contractural arachnodactyly (Beals–Hecht syndrome)** AD; fibrillin 2 gene mutation; arachnodactyly; contractures; crumpled ears; a highly arched palate; marfanoid body habitus

**Congenital erosive and vesicular dermatosis** Sporadic, erosive disorder and cause of infantile scarring that presents at birth with widespread erosions involving the trunk and extensor extremities; spares face; heals by 3 months of age; leaves reticulate scarring

**Cook's syndrome** AD; bilateral nail hypoplasia of the first, second, and third fingernails; absence of fourth and fifth fingernails; absence of all toe nails

**Cornelia de Lange syndrome** Sporadic; NIPBL gene; low-pitched cry; synophrys; mental retardation; facial and body hypertrichosis; characteristic facies; cutis marmorata; limb hypoplasia

**Costello syndrome** AR; HRAS gene mutation; acanthosis nigricans; periorificial papillomas; cutis laxa of the neck, palms, and soles; mental retardation; sociable, humorous behavior

**Crandall's syndrome** AR; pili torti; deafness; hypogonadism

**Crigler–Najjar syndrome** AR; UDP–glycucuronosyltransferase gene; severe congenital jaundice and kernicterus; some with early death; unconjugated hyperbilirubinemia

**Cross syndrome (Cross–McCusick–Breen syndrome)** AR; silvery hair; generalized hypopigmentation; mental retardation; nystagmus, gingival fibromatosis; ataxia and spasticity

**Crouzon's syndrome** AD; FGFR3 mutation; acanthosis nigricans; craniosynostosis; exophthalmos

**Crowe's sign** Axillary freckling that is a diagnostic criteria for von Recklinghausen's disease

**Cullen's sign** Periumbilical purpura or hematoma that is associated with acute hemorrhagic pancreatitis and other causes of intraabdominal hemorrhage

**Cutaneous pii migrans** Rare condition in which a hair penetrates the stratum corneum, grows into the epidermis, and causes a painful creeping eruption

**Cutis pleonasmus** Refers to excess skin that results after rapid weight loss, as with bariatric surgery

**Cyclic neutropenia** Sporadic/AD; neutrophil elastase gene mutation; onset in childhood; 21-day cycle of neutrophil count changes; infections; fever; malaise; mucosal ulcers

**De Barsy syndrome** AR; congenital cutis laxa; corneal clouding, psychomotor retardation; hypotonia

**Deck-chair sign** Sparing of truncal skin folds that is associated with a variety of dermatoses, especially papuloerythroderma of Ofuji

**Dermatopathia pigmentosa reticularis** Pigmentary disorder characterized by diffuse reticulated hyperpigmentation, nonscarring alopecia, and nail dystrophy

**Dermatopathic lymphadenitis** Benign enlargement of the lymph nodes that occurs in the setting of erythroderma

**Diabetic cheiroarthropathy/stiff skin** Acquired scleroderma-like disorder associated with cutaneous induration of the distal aspects of the extremities; digital sclerosis and limited joint mobility (cheiroarthropathy); a characteristic feature is an inability to tightly oppose the middle aspects of palms (prayer sign)

**Diffuse neonatal hemangiomatosis** Multiple (can be hundreds) cutaneous and visceral (especially hepatic) hemangiomas; heart failure; hypothyroidism; hepatomegaly; early death

**DiGeorge syndrome** Sporadic/AD; TBX1 gene mutation; thymic aplasia with absence of T cells; candidiasis and other infections; absence of parathyroid glands with hypocalcemia; aortic arch anomalies; eczema; characteristic facies

**Dirofilariasis** Infestation with the filarial worm, *Dirofilaria repens/immitis*, which is acquired most commonly by arthropod bite, and characterized by a subcutaneous or subconjunctival nodule or creeping eruption

**Disseminated intravascular coagulation** Activation of the coagulation system due to a variety of causes (infection, trauma, etc.) that is characterized by purpura fulminans, simultaneous bleeding (due to consumption of coagulation factors) and clotting, and multiorgan failure

**Distichiasis–lymphedema syndrome** AD; FOXC2 gene mutation; bilateral lymphedema of the lower extremities with onset in the first or second



decade of life; distichiasis (double row of eyelashes); occasionally, cardiac defects or spinal extradural cysts

**Donahue syndrome** AR; insulin receptor gene mutation; hyperinsulinemia; mental retardation; hypertrichosis; acanthosis nigricans; large genitalia; lipodystrophy

**DOOR syndrome** AR; deafness; onychoosteodystrophy; mental retardation; seizures; phalangeal abnormalities

**Dowling–Meara type epidermolysis bullosa (EB herpetiformis)** AD; keratin 5/14 gene mutation; skin fragility and herpetiform blistering with onset in the neonatal period; periorificial erosions; palmoplantar keratoderma; dystrophic nails

**Dubin–Johnson syndrome** AR canalicular multispecific organic anion transporter (CMOAT) gene mutation; direct hyperbilirubinemia; jaundice by the second decade of life

**Duncan’s disease (X-linked lymphoproliferative disorder)** XLR; SH2DIA gene mutation; inability to mount immune response against EBV; death due to EBV-induced lymphoma

**Ectodermal dysplasia with absent dermatoglyphics (Basan syndrome)** AD; hypohidrosis; absent dermatoglyphics; nail dystrophy

**Ectodermal dysplasia with skin fragility syndrome (McGrath syndrome)** AR; plakophilin 1 gene mutation; skin fragility with extensive skin erosions; nail dystrophy; palmoplantar keratoderma; hypotrichosis; hypohidrosis

**Eczematid-like purpura of Doucas and Kapetanakis (itchy purpura, disseminated pruriginous angiodermatitis)** Type of pigmented purpuric dermatosis that shares features with Schamburg’s disease but with more pruritus, tendency to begin on the lower legs and spread superiorly to the trunk, and tendency for relapse

**EEC syndrome (Rudiger syndrome)** AD; p63 gene mutation; ectrodactyly (“lobster claw”); ectodermal dysplasia (sparse to absent hair; pegged teeth; nail dystrophy); cleft lip and/or palate; mental retardation; conductive hearing loss

**Elejalde syndrome** AR; myosin Va gene mutation; severe mental retardation; hypotonia; silvery hair; generalized hypopigmentation

**Ellis–Van Creveld syndrome** AR; EVC gene mutation; hypodontia; hyponychia; sparse hair; short limbs; chondrodysplasia; atrial septal defects; polydactyly; hypertelorism

**Encephalocraniocutaneous lipomatosis (Haberland syndrome)** Sporadic; unilateral scalp fat hamartoma with overlying alopecia; ipsilateral intracranial lipomas; cerebral atrophy; porencephaly; mental retardation; seizures

**Eosinophilic, polymorphic, and pruritic eruption associated with radiotherapy (EPPER)** Cutaneous eruption affecting cancer patients receiving radiotherapy that is characterized by a generalized, pruritic eruption with excoriations, erythematous papules and nodules, or wheals and bullae that is not confined to the treatment area

**Epibulbar dermoids** Benign, congenital tumors containing choristomatous material and located on the conjunctiva

**Erosio interdigitale blastomycetica** Candidal infection of the finger web spaces characterized by a white, macerated scaly plaque

**Eruption of lymphocyte recovery** Cutaneous eruption that occurs after the recovery of peripheral lymphocytes following bone marrow ablation that is characterized by a macular or papular eruption that resembles acute graft-vs-host disease

**Erysipelas melanomatosum** Cutaneous metastatic melanoma that presents as an erysipelas-like eruption

**Erythrokeratoderma with ataxia (Giroux–Barbeau syndrome)** AD; EKV-like erythrokeratoderma that resolves in early to middle adulthood; progressive ataxia with onset in middle age

**Erythrokeratolysis hiemalis (Oudsthoorn disease)** AD; winter-predominant eruption that affects South Africans; annular, scaly, erythematous plaques on the extremities and buttocks; recurrent erythema and peeling of the palms and soles

**Espundia** Refers to destructive changes of the nose and mouth that occur in mucocutaneous leishmaniasis

**Esthiomene** Elephantiasis of the genitals characterized by enlargement, thickening, and fibrosis most commonly referenced in the setting of chronic lymphogranuloma venereum or cutaneous tuberculosis

**FACES syndrome** The association of nevus spilus with facial features, anorexia, cachexia, and eye and skin anomalies

**Familial cold autoinflammatory syndrome (familial cold urticaria)** AD; cryopyrin gene mutation; hereditary periodic fever syndrome characterized by fever, arthralgias, and urticaria following cold exposure; onset in the first 6 months of life

**Familial dysautonomia (Riley–Day syndrome)** AR; IKBKAP gene mutation; autonomic dysfunction in a variety of organ systems; absent fungiform papillae of the tongue; decreased deep tendon reflexes; decreased response to pain or temperature; orthostatic hypotension; lack of tears with emotional crying

**Fanconi anemia** AR; FANA–FANN complementation group genes; pancytopenia; absent thumbs; hypoplastic radius; diffuse hyperpigmentation; horseshoe kidney; leukemia; café-au-lait macules; heart defects

**Farber lipogranulomatosis** AR; acid ceramidase gene mutation; visceral accumulation of ceramides; hoarseness; periarticular nodules and cutaneous infiltrates; painful joints; mental retardation; perianal telangiectasias; cherry-red macula

**Fascioliasis** Infestation with the liver fluke, *Fasciola hepatica*, which is acquired by ingesting uncooked aquatic vegetation and characterized by fever, right upper quadrant pain, intrahepatic cysts, and migratory skin lesions or cutaneous nodules

**Felty's syndrome** Rheumatoid arthritis; neutropenia; splenomegaly; leg ulcers

**Ferguson-Smith syndrome** AD; ESS1 gene mutation; multiple self-healing keratoacanthomas beginning early in life

**Fibroblastic rheumatism** Rare rheumatologic disease that mimicks multicentric reticulohistiocytosis and is characterized by rapidly progressive polyarthritis along with cutaneous nodules (with fibroblast proliferation) involving the hands and sclerodactyly

**Fibrodysplasia ossificans progressiva** Sporadic/AD; ACVR1 gene mutation; onset in childhood; endochondral type of primary osteoma cutis; characterized by hard subcutaneous nodules most commonly on posterior neck and back; monophalangeic malformed great toes

**Fibroma of the tendon sheath** Benign myofibroblastic tumor that is characterized by a small, sometimes multinodular subcutaneous nodule on the hands or feet, often digital

**Folliculitis spinulosa decalvans** Subtype of keratosis pilaris atrophicans that is characterized by follicular papules on the scalp with pustule formation and scarring alopecia; onset in childhood with worsening at puberty

**Forscheimer spots** Enanthem of early rubella that is characterized by discrete rose-colored macules on the soft palate

**Galli–Galli disease** Acantholytic variant of Dowling–Degos disease that combines features of Dowling–Degos disease and transient acantholytic dermatosis (Grover’s disease) and is characterized by reticulated hyperpigmentation and pruritic keratotic and erythematous papules predominantly in the flexures but also on the trunk and extremities

**Giant cell fibroblastoma** Juvenile variant of dermatofibrosarcoma protuberans that presents as a painless, slow-growing soft tissue mass most commonly on the back or thigh

**Generalized eruptive histiocytoma** Benign type of non-Langerhans cell histiocytosis that is characterized by a widespread eruption of flesh-red-brown papules on the trunk and extremities; adult-onset and self-limited

**Generalized eruptive keratoacanthomas (Gryzbowski)** Rare generalized eruption of hundreds of pruritic keratoacanthomas affecting cutaneous and mucosal surfaces with onset in adult life

**Gilbert syndrome** AR; UDP–glucuronosyltransferase gene mutation; unconjugated hyperbilirubinemia; mild jaundice; normal liver function tests

**Gnathostomiasis** Infestation with a nematode, *Gnathostoma spinigerum*, that is endemic in southeast Asia and is characterized most commonly by migratory skin eruption or soft tissue swelling or nodule

**Goldenhar syndrome** Sporadic; accessory tragi; ear pits; deafness; eye, vertebral, and cardiac abnormalities; hemifacial microsomia; epibulbar dermoids

**Goodpasture syndrome** Autoimmune disease in which antibodies are generated against type IV collagen that is characterized by pulmonary hemorrhage and glomerulonephritis

**Good syndrome** Adult-onset immunodeficiency syndrome that coincides with the development of a thymoma; hypogammaglobulinemia and B-cell lymphopenia with or without T-cell lymphopenia are characteristic

**Gopalan syndrome** Peripheral neuropathy syndrome associated with malnutrition (deficiency of B vitamins) that is characterized by palmo-plantar hyperhidrosis and burning pain in the soles of the feet

**Gorham syndrome (vanishing bone syndrome)** Breakdown of bone and subsequent fibrosis as a result of an overlying or adjacent vascular malformation

**Gram-negative folliculitis** Folliculitis caused most commonly by *Klebsiella*, *Enterobacter*, and *Serratia* that is a complication of long-term antibiotic treatment of acne, and is characterized by follicular erythematous papules and pustules that may be misdiagnosed as an exacerbation of acne

**Grinspan syndrome** The association of oral lichen planus with diabetes mellitus and hypertension; possibly drug induced

**Haber syndrome** AD; familial rosacea-like dermatosis; pitted scars; seborrheic keratoses

**HAIR-AN syndrome** The association of hyperandrogenism with insulin resistance and acanthosis nigricans

**Haim–Munk syndrome** AR; cathepsin C gene mutation; diffuse palmo-plantar keratoderma; arachnodactyly; onychogryphosis; other features of Papillon–Lefèvre syndrome

**Hallerman–Streiff syndrome (oculomandibulofacial syndrome)** Sporadic; bird-like facies, natal teeth; microphthalmia; micrognathia; sutural alopecia and sparse hair; dyscephaly

**Hallopeau–Siemens syndrome** AR; type-VII collagen gene mutation; most severe form of recessive dystrophic epidermolysis bullosa; mitten

deformity; generalized skin and mucosal blistering; squamous cell carcinoma

**Harlequin color change** Peculiar, benign phenomenon that affects newborn infants that is characterized by well-demarcated hyperemia on one half of the body, including the face, with blanching of the contralateral side

**Hay–Wells syndrome (AEC syndrome)** AD; p63 gene defect; ankyloblepharon; ectodermal dysplasia; cleft lip/palate; erosive scalp disease

**Heck's disease (focal epithelial hyperplasia)** Oral infection with HPV types 13 and 32 that is characterized by multiple flesh-colored asymptomatic papules on the oral mucosa, especially the labial, buccal, and lingual mucosa

**Heerfordt's syndrome** Association of acute sarcoidosis with fever, uveitis, and facial nerve palsy

**Hennekam syndrome** AR; congenital lymphedema of limbs and genitals; intestinal lymphangiectasia; hypoproteinemia; lymphopenia; hypogammaglobulinemia; characteristic facies

**Hepatoerythropoietic porphyria** AD; uroporphyrinogen decarboxylase gene mutation; homozygous, severe variant of porphyria cutanea tarda that presents in infancy

**Hereditary benign telangiectasia** AD; multiple telangiectasias that arise in the first year of life in variable locations, with the sun-exposed areas the most common; tends to be more severe in women; lesions improve with increasing age

**Hereditary coproporphyria** AD; coproporphyrinogen oxidase mutation; acute type of porphyria characterized by episodic abdominal pain, nausea/vomiting, constipation, photosensitivity, and neuropsychiatric symptoms

**Hereditary painful callosities** Autosomal-dominant, nummular type of keratoderma characterized by tender callosities over the pressure points of the palms and soles

**Herpetic geometric glossitis** Uncommon presentation of herpes simplex virus infection that affects the tongue of predominantly immunocompromised and that is characterized by painful linear fissures

**Hibernoma** Type of lipoma arising in adulthood that is derived from brown fat and is characterized by a subcutaneous mass on the interscapular back or neck

**HID syndrome** AD/AR; connexin 26 gene mutation; generalized ichthyosis hystrix with deafness

**Homocystinuria** Inherited metabolic disorder (AR) caused by deficiency of cystathionine synthase that is characterized by facial flushing, livedo reticularis, venous or arterial thrombosis, leg ulcers, marfanoid body habitus, ectopia lentis, osteoporosis, and variable neurologic disturbance and mental retardation

**Huriez syndrome** AD; TYS gene mutation; palmoplantar keratoderma in early childhood with progressive scleroatrophy; nail dystrophy; squamous cell carcinoma

**Hyperimmunoglobulin D syndrome** AR; mevalonate kinase gene mutation; high serum igd level on two occasions at least 1 month apart; periodic fever; cervical lymphadenopathy; abdominal pain; arthralgias; skin eruption of erythematous papules or purpura

**Hyperimmunoglobulin M syndrome** XLR; CD40 ligand gene mutation or NEMO gene mutation; high igm with other Ig's low; recurrent infections; numerous verruca vulgaris; ectodermal dysplasia (NEMO mutation only)



**Ichthyosis hystrix-type epidermal nevus** Type of epidermal nevus that is markedly hyperkeratotic with porcupine-like projections and bilateral distribution along Blaschko's lines

**Ichthyosis hystrix, Curth–Macklin type** AD; keratin 1 gene mutation; diffuse porcupine-like hyperkeratosis; palmoplantar keratoderma

**Indeterminate cell histiocytosis** Rare type of histiocytosis caused by an infiltrate of cells with both macrophage and Langerhans cell markers; affects all age groups; characterized by solitary or multiple red-brown papules or nodules on the face, trunk, or extremities

**Inherited patterned lentiginosis** AD; diffuse hyperpigmented macules on the face, lip, extremities, buttocks, palms, and soles without any internal manifestations

**Jacquet's erosive diaper dermatitis** Severe form of irritant diaper dermatitis characterized by erosions with elevated borders, giving them an umbilicated appearance

**Jaffe–Campanacci syndrome** The association of café-au-lait macules with nonossifying fibromas of the long bones and skeletal defects; may be a manifestation of neurofibromatosis

**Johanson–Blizzard syndrome** AR; aplasia cutis congenita of scalp; characteristic facies; imperforate anus; pancreatic insufficiency; failure to thrive; growth retardation; deafness

**Johnson–McMillin syndrome** AD; alopecia; hypogonadotropic hypogonadism; anosmia; conductive deafness; microtia; café-au-lait macules

**Kallmann syndrome** AD/XLR; KAL1,2 gene mutations; anosmia; cryptorchidism; hypothalamic hypogonadism; various anomalies

**Kanzaki disease** AR; alpha-galactosaminidase gene mutation; adult onset; angiokeratoma corporis diffusum; intellectual impairment

**Kasabach–Merritt syndrome** Syndrome associated with kaposiform hemangioendothelioma and tufted angioma that is characterized by consumption of platelets, bleeding tendency, purpura, and a high mortality

**Keratotic spicules of myeloma** Paraneoplastic phenomenon associated with myeloma that is characterized by filiform projections of hyperkeratotic, paraprotein-containing material arising from the follicles on the nose, scalp, or neck

**Klinefelter syndrome** Chromosomal disorder; XXY; hypogonadism; tall stature; psychiatric disturbance; leg ulcers; severe acne

**Kobberling and Dunnigan syndromes (familial partial lipodystrophy)** Two distinct types of familial partial lipodystrophy; Dunnigan type is autosomal dominant and associated with a lamin A/C gene mutation; inheritance and gene mutation in Kobberling type is unclear; both are associated with loss of subcutaneous fat on the extremities, with sparing of the face and variable involvement of the trunk

**Koplik's spots** Pathognomonic enanthem associated with measles that is characterized by erythematous macules or papules with a central white spot on the buccal and lingual mucosa

**Kwashiorkor** Acquired disorder caused by severe protein malnutrition; hypopigmentation; generalized edema; alternating light and dark bands in hair (flag sign); erosive and desquamating dermatitis with “pasted-on” scale (flaky paint sign)

**Kyrle's disease** Name for a type of perforating disorder that is associated with renal failure and diabetes mellitus and is characterized by multiple keratotic papules through which dermal material is perforating; term should be abandoned and replaced with acquired perforating dermatosis

**Lawrence syndrome (acquired generalized lipodystrophy)** Type of lipodystrophy that arises in childhood; may be associated with a preceding

viral infection, panniculitis or autoimmune disease; characterized by loss of subcutaneous fat from the face, trunk, and extremities, including the palms and soles; acanthosis nigricans; liver disease; hyperinsulinemia and diabetes

**Leiner's disease** Cutaneous presentation of immunodeficiency characterized by generalized erythroderma; diarrhea, and failure to thrive; associated with Bruton's agammaglobulinemia, C3 and C5 deficiency, Hyper-ige syndrome, severe combined immunodeficiency, and Omenn's syndrome

**Legius syndrome (NF1-like syndrome)** Autosomal dominant disorder caused by mutation of the SPRED1 gene and characterized by cafe-au-lait macules, axillary freckling, lipomas, macrocephaly, and developmental delays, but no neurofibromas

**Leis syndrome** Autosomal recessive disorder characterized by ectodermal dysplasia and acanthosis nigricans

**Lennert's lymphoma (lymphoepithelioid cell lymphoma)** Type of peripheral T-cell lymphoma characterized by epithelioid histiocytes that presents most commonly with cervical lymphadenopathy and uncommonly with nonspecific cutaneous features

**Lesar-Trelat sign** Controversial paraneoplastic phenomenon characterized by the eruption of hundreds of seborrheic keratoses on the trunk; association with pruritus and/or acanthosis nigricans should increase suspicious for underlying malignancy

**Lesch-Nyhan syndrome** XLR; HGPRT gene mutation; hyperuricemia and gout; mental retardation; self-mutilation behavior; choreathetosis

**Lhermitte-Duclos disease** CNS manifestations of Cowden's syndrome characterized by cerebellar gangliocytoma, ataxia, and seizures

**Lichen aureus** Type of pigmented purpuric dermatosis that occurs in younger patients; characterized by circumscribed collection of macules or flat papules with variable color, ranging from golden-yellow to bronze or brown

**Limb–mammary syndrome** AD; p63 gene mutation; hypoplasia of the mammary glands; lacrimal duct atresia; limb defects; hypohidrosis; nail dystrophy

**Lipedematous scalp/alopecia** Term for circumscribed or diffuse thickening of the subcutaneous layer of the scalp of adults that can manifest as localized or diffuse alopecia

**Lipoatrophia semicircularis** Localized lipoatrophy possibly caused by mechanical compression of the affected area that is characterized by semicircular depression, often bilateral, of the anteriolateral thigh

**Lipoblastoma** Localized or diffuse (lipoblastomatosis) soft tissue mass comprised of lipoblasts most often arising on the extremities shortly after birth

**Lipodystrophia centrifugalis abdominalis infantalis** Rare type of acquired localized lipodystrophy that affects Asians and is characterized by centrifugal loss of subcutaneous fat involving the abdomen and groin with peripheral panniculitis

**Lipschutz ulcer** Acute, nonvenereal vulvar ulceration predominantly affecting adolescent women as a manifestation of EBV infection

**Loaiasis** Type of filariasis caused by *Loa loa*; characterized by lymphedema, recurrent angioedema (Calabar swellings), urticaria, subconjunctival migratory lesions, and eosinophilia

**Loeffler's syndrome** Transient pulmonary eosinophilia and radiographic shadowing due to a variety of causes but often described in the setting of parasitic infestation or drug allergy

**Lofgren's syndrome** Syndrome associated with acute onset of sarcoidosis that is characterized by fever, arthritis, bilateral hilar lymphadenopathy, erythema nodosum, and uveitis

**Lupus pernio** Manifestation of cutaneous sarcoidosis that is characterized by an indolent, red-to-violaceous plaque on the nose, cheeks, lips, or ears with associated upper airway disease and bony cysts of the digits

**Lupus vulgaris** Type of cutaneous tuberculosis that most commonly results from hematogenous spread of the organism; occurs in patients with good immunity to the organism; characterized by apple-jelly-colored papules, nodules, or plaques on the face and ears

**Lycopenemia** Refers to yellow-orange discoloration of the skin that results from excessive consumption of dietary lycopene, usually from tomatoes

**Lymphedema tarda** AD; type of hereditary lymphedema of the legs with onset around age 35 years

**Lymphoepithelioma-like carcinoma of the skin** Uncommon primary cutaneous neoplasm that resembles lymphoepitheliomatous tumors of the nasopharynx and that arises as a red or purple nodule on the face and scalp of middle-aged to elderly patients

**Maculae cerulae** Cutaneous manifestation of pediculosis pubis that is characterized by blue macules in the affected area representing louse-bite-induced purpura

**MAGIC syndrome** Mouth and genital ulcers with inflamed cartilage; combines features of Behçet's disease and relapsing polychondritis

**Mal de meleda** AR; SLURP1 gene mutation; diffuse transgrediens palmoplantar keratoderma; scrotal tongue; nail dystrophy; pseudoainhum; hyperkeratosis of the flexures; hyperhidrosis

**Malignant peripheral nerve sheath tumor** Malignant neural neoplasm of Schwann cell derivation and type of soft tissue sarcoma that arises most commonly in patients with neurofibromatosis, often in the setting of malignant degeneration of a plexiform neurofibroma

**Marie-Unna hypotrichosis** AD; MUHH gene mutation; hereditary hypotrichosis; milia

**Marinesco-Sjögren syndrome** AR; SIL1 gene mutation; sparse, brittle hair; trichoschisis; congenital cataracts; cerebellar ataxia; mental retardation

**Mechanic's hands** Cutaneous manifestation of the antisynthetase syndrome (Jo-1 antibodies; Raynaud's phenomenon; arthritis, and interstitial lung disease) characterized by hyperkeratosis and fissuring of the hands, particularly on the radial aspect

**Meige lymphedema (lymphedema praecox)** AD; hereditary lymphedema of the legs; onset around puberty

**Melioidosis (Whitmore's disease)** Rapidly fatal bacterial infection predominantly diagnosed in southeast Asia that is caused by *Burkholderia pseudomalle*; characterized by pulmonary and cutaneous abscesses and sepsis

**Melorheostosis** Radiographic finding in some patients with scleroderma, including localized forms, that is characterized by cortical or endosteal hyperostosis of the long bones, giving the bone the appearance of dripping candle wax

**Metageria** AR; premature aging syndrome; tall stature; poikiloderma; generalized lipoatrophy; diabetes; atherosclerosis

**Meyerson's nevus (halo dermatitis)** Eczematous eruption encircling a pre-existing melanocytic nevus

**Microvenular hemangioma** Benign, acquired vascular neoplasm that can be difficult to distinguish from Kaposi's sarcoma and is characterized by a small red-to-purple nodule on the forearm of a young to middle-aged adult

**MIDAS syndrome** XLD; microphthalmia; dermal aplasia (lesions of the upper half of the body); sclerocornea

**Mikulicz syndrome** Enlargement of salivary glands and lacrimal glands due to infiltration with granulomatous inflammation or lymphoma; associated with tuberculosis, sarcoidosis, lymphoma, and Sjögren's syndrome

**Milroy disease** AD; VEGFR3 gene mutation; congenital lymphedema of the extremities with onset at birth or early childhood

**MORFAN syndrome** Syndrome characterized by mental retardation, overgrowth, remarkable face, acanthosis nigricans

**Morton's neuroma** Term for localized neuropathic pain in the foot caused by chronic irritation of an intermetatarsal nerve; typically involves the third metatarsal space

**Moyamoya disease** Disorder predominantly diagnosed in Japan that is characterized by progressive intracranial vascular stenosis of the circle of Willis; recurrent transient ischemic attacks and strokes; livedo reticularis

**Muehrcke's lines** Type of apparent leukonychia that results from chronic hypoalbuminemia that is characterized by paired white bands that are parallel to the lunula and do not grow out with the nail

**Muckle–Wells syndrome** AD; CIAS1 gene mutation (cryopyrin); urticaria; periodic fever; abdominal pain; polyarthralgias or arthritis; myalgias; sensorineural deafness; AA amyloidosis

**Multiple endocrine neoplasia, type I (Wermer syndrome)** AD; MEN gene mutation; tumors of the pituitary, pancreas; and parathyroid glands; lipomas; angiofibromas; collagenomas; café-au-lait macules

**Multiple endocrine neoplasia, type IIA (Sipple syndrome)** AD; RET gene mutation; tumors of the parathyroid, adrenal gland (pheochromocytoma), and thyroid (medullary thyroid carcinoma); macular amyloidosis/notalgia paresthetica

**Myospherulosis, cutaneous (spherulocytosis)** Subcutaneous disorder associated with degeneration of erythrocytes in spherule-like structures, often in the setting of petrolatum use on wound; characterized by pseudocystic nodules anywhere on the body

**Naxos disease** AR; plakoglobin gene mutation; diffuse palmoplantar keratoderma; woolly hair; arrhythmic right ventricular cardiomyopathy

**Nelson's syndrome** Complication of bilateral adrenalectomy for Cushing's syndrome that is characterized by rapid development of an ACTH and MSH secreting pituitary tumor; diffuse hyperpigmentation

**NERDS syndrome** The association of eosinophilia with articular nodules, rheumatism, dermatitis, and episodic swelling of the hands and feet

**Neu-Laxova syndrome** AR; severe intrauterine growth retardation; polyhydramnios; edema; ectodermal dysplasia and ichthyosis; severe CNS developmental defects

**Neurofibromatosis, type II** AD, schwannomin gene mutation (merlin); acoustic schwannomas; less cutaneous features than NF1; no Lisch nodules; can have cutaneous neurofibromas and schwannomas; less than 6 CALMS; posterior subcapsular lenticular opacities

**Nevus mucinosis** Type of connective tissue nevus containing mucin that can occur as a solitary finding or in combination with other features of Hunter's syndrome; characterized by flesh-colored papules on the trunk that are present at birth or erupt in early childhood

**Nezelof syndrome** Type of T-cell immunodeficiency due to absence of the thymus gland; associated with normal immunoglobulins

**Nicolau syndrome (embolia cutis medicamentosa)** Necrotic reaction occurring after intramuscular injection with penicillin, NSAIDs, or glucocorticosteroids; caused by compression or embolization leading to arterial compromise

**Nicolau-Balus syndrome** Eruptive micropapular syringomas, milia, and atrophoderma vermiculatum

**Niemann-Pick disease** AR; sphingomyelinase gene mutation; diffuse hyperpigmentation; xanthomas; hepatosplenomegaly; lymphadenopathy; cherry-red maculae; mental retardation; death in early childhood



**Nijmegen breakage syndrome** AR; NBS gene mutation; microcephaly; immunodeficiency; growth retardation; bird-like facies; no ataxia or telangiectasias

**NISCH syndrome** AR; claudin-1 gene mutation; neonatal ichthyosis; sclerosing cholangitis; hypotrichosis

**Njolstad syndrome** AR; congenital lymphedema of legs and face; pulmonary lymphangiectasia; hydrops fetalis

**Noma (cancrum oris)** Grotesque orofacial gangrene that results from progressive polymicrobial necrotizing gingivitis; predominantly affects malnourished children of sub-Saharan Africa

**NOMID syndrome (neonatal onset multisystem inflammatory disease)** Sporadic; CIAS1 (cryopyrin) gene mutation; migratory skin eruption; arthropathy with overgrowth of patella and distal femur; distinctive facies; chronic meningitis; progressive deafness and visual impairment

**Noninvoluting congenital hemangioma** Rare type of congenital hemangioma; GLUT-1 negative; fails to involute

**Oasthouse syndrome (methionine malabsorption syndrome)** AR; impaired absorption of methionine; urine smells like dried malt; canities; mental retardation; seizures

**Oculocerebrocutaneous syndrome (Delleman syndrome)** Sporadic; CNS cysts; congenital hydrocephalus; agenesis of the corpus callosum; aplasia cutis congenita; orbital cysts; microphthalmia

**Oculodentodigital syndrome** AD; connexin 43 gene mutation; microphthalmos; pitted teeth; syndactyly; sparse hair; neurologic disturbance

**Oculoectodermal syndrome** AD/AR; aplasia cutis congenita; epibulbar dermoids; cutaneous hyperpigmentation; giant cell granulomas

**Odontotrichomelic syndrome** AR; ectodermal dysplasia; malformed ears; four-limb hypoplasia; mental retardation; hypogonadism

**Oliver–Macfarlane syndrome (congenital trichomegaly)** Sporadic; chorioretinal degeneration; growth hormone deficiency; cerebellar dysfunction; long eyelashes and bushy eyebrows; sparse scalp hair

**Ollier syndrome** Sporadic; enchondromatosis; cartilaginous tumors (benign and malignant) in an asymmetric and random distribution; lacks the venous malformations seen with Maffucci's syndrome

**Olmsted syndrome** AD; diffuse mutilating palmoplantar keratoderma; pseudoainhum; periorificial hyperkeratosis

**Omenn's syndrome** AR; RAG1/2 gene mutation; Leiner's phenotype; severe combined immunodeficiency; lymphadenopathy; hepatosplenomegaly; failure to thrive

**Oral–facial–digital syndrome** XLD/AR; CXORF5 gene mutation (XLR); combination of oral anomalies (hyperplastic frenulum or dental abnormalities), facial anomalies, and syndactyly or polydactyly

**Osteopathia striata** Bony abnormality associated with Goltz syndrome; radiography reveals bilateral vertically oriented sclerotic striations extending from the metaphyses of the long bones to the diaphyses

**Osteopoikilosis** Asymptomatic bone abnormality associated with Buschke–Ollendorf syndrome; radiography reveals round or oval foci of increased density in the juxtaarticular areas

**Otomycosis** Superficial fungal infection of the external ear canal caused by a variety of fungi; causes include *Aspergillus* sp. and *Candida* sp.

**Pallister–Killian syndrome** Mosaic disorder; tetrasomy for chromosome 12p; hyperpigmentation and hypopigmentation along Blaschko's lines; mental retardation; seizures; characteristic facies

**PAPA syndrome** AD; PSTPIP1 gene mutation; destructive pyogenic arthritis; pyoderma gangrenosum; severe cystic acne

**Papillon–Lefèvre syndrome** AR; cathepsin C gene mutation; neutrophil dysfunction; diffuse palmoplantar keratoderma; periodontosis with premature loss of teeth; hyperkeratosis of the elbows and knees; dural calcification

**Paragonimiasis** Infestation with the trematode, *Paragonimus westermani*; occurs after ingesting raw shellfish; can affect any organ with invasion of the pulmonary system invasion most common; skin lesions are subcutaneous swellings or migratory lesions

**Paraneoplastic acral vascular syndrome** The association of Raynaud's phenomenon, gangrene, and acrocyanosis with an internal malignancy, most commonly adenocarcinoma; gangrene most common

**Parry–Romberg syndrome** Type of localized scleroderma (morphea profunda) that affects the face and is characterized by hemifacial atrophy involving the skin, fat, and bone

**PELVIS syndrome** The association of perineal hemangioma with external genitalia malformations, lipomyelomeningocele, vesicorenal abnormalities, imperforate anus, or skin tags

**PFAPA syndrome** Periodic fever syndrome occurring in early childhood; periodic fever; aphthous stomatitis; pharyngitis; adenitis

**PHACES syndrome** Posterior fossa malformation (Dandy–Walker malformation); segmental hemangioma of the face; arterial abnormality; cardiac abnormality (various); eye abnormality (various); sternal clefting or supraumbilical raphe; cleft palate

**Phakomatosis pigmentokeratolica** Type of epidermal nevus syndrome; nevus sebaceus along Blaschko's lines; nevus spilus; scoliosis; hemiatrophy; various ocular and CNS defects

**Phylloid hypomelanosis** Mosaic trisomy 13; hypopigmented macules resembling begonia leaves; agenesis of the corpus callosum; digital defects; deafness

**PIBIDS** AR; ERCC2, ERCC4; photosensitivity; ichthyosis; brittle hair; intellectual impairment; decreased fertility; short stature

**Pigmented purpuric lichenoid dermatosis of Gougerot and Blum** Type of benign pigmented purpura characterized by grouped lichenoid papules on the lower extremities, in addition to purpura

**Pilar sheath acanthoma** Benign follicular hamartoma most commonly occurring on the upper lip that is characterized by a pore-like papule or nodule, resembling a dilated pore or trichofolliculoma

**Pili annulati** AD; hair-shaft disorder; onset in early childhood; abnormally shiny hair with alternating light (representing air-filled cavities) and dark segments

**Plasmacytosis, cutaneous** Reactive polyclonal lymphoplasmacytic disorder characterized by infiltration of the skin with plasma cells and characterized by numerous erythematous to brown macules on the trunk or extremities

**Plate-like osteoma cutis** Type of primary osteoma cutis that occurs in newborns and young children; no associated calcium or phosphate abnormalities or preceding inflammation, trauma, or infection; characterized by a solitary, hard, dermal plaque most often located on the scalp

**Plica polonica (neuropathica)** Irreversible tangling and matting of the hair shafts of the scalp that is associated with malodor and crust; associated with pediculosis capitis and traction alopecia; occipital scalp involved most commonly

**Plummer-Vinson syndrome** Unknown cause; koilonychia; iron deficiency; esophageal web; dysphagia

**Podoconiosis** Nonfilarial endemic lymphatic filariasis; progressive bilateral fibrotic swelling of the lower extremities including the feet; affects predominantly the barefoot workers of Central and South America; caused by absorption of silica particles from the soil

**Poikiloderma atrophicans vasculare** Variant of cutaneous T-cell lymphoma characterized by plaques of hyperpigmentation, hypopigmentation, atrophy, and telangiectasia

**Popliteal pterygium syndrome** AD; IRF6 gene mutation; popliteal webs; lip pits; cleft lip/palate; cryptorchidism; nail dystrophy; digital anomalies

**Prader–Willi syndrome** Deletion of part of paternal chromosome 15; acanthosis nigricans; insatiable appetite; obesity; almond eyes; neonatal hypotonia; diffuse hypopigmentation; may also have oculocutaneous albinism type 2

**Primary biliary cirrhosis (Hanot syndrome)** Inflammatory disorder associated with destruction of the intrahepatic bile ducts that is associated with antimitochondrial antibodies, liver failure, pruritus, jaundice, and xanthomas

**Proctalgia fugax** Idiopathic anorectal pain disorder characterized by sudden-onset, intermittent, and recurrent episodes of rectal pain that lasts for at least 3 s

**Progressive cribriform and zosteriform hyperpigmentation** Localized hyperpigmentation similar to linear and whorled nevoid hypermelanosis but with onset typically in the second decade of life; no associated abnormalities

**Progressive osseous heteroplasia** AD; paternally inherited inactivating mutations of GNAS1 gene; primary intramembranous osteoma cutis that starts in infancy, is progressive, and can be associated with limited mobility later in life; lesions are asymptomatic papules, nodules, plaques on the trunk and extremities; can involve fascia and muscles

**Prolidase deficiency** AR; peptidase D gene mutation; leg ulcers; skin fragility; mental retardation; typical facies; lymphedema; purpura and telangiectasias

**Pseudo-mycosis fungoides** Lymphomatous condition often triggered by medications, especially carbamazepine and phenytoin, that is characterized by widespread patches and plaques with similar clinical and histological features to that of mycosis fungoides and that resolve after discontinuing the medication

**Pustulosis acuta generalisata** Refers to a generalized pustular eruption involving the trunk and extremities that arises following a group A streptococcal infection

**Ramsay-Hunt syndrome** Varicella-zoster virus reactivation syndrome with involvement of the facial and auditory nerves; zoster within the conchal bowl; deafness; facial nerve palsy

**Rapidly involuting congenital hemangioma** Rare congenital type of hemangioma; GLUT-1 negative; lack a proliferative phase; involute by 1–2 years

**Rapp-Hodgkin syndrome** AD; p63 gene mutation; anhidrotic ectodermal dysplasia; cleft lip/palate; ocular abnormality; hypospadias

**Rasmussen syndrome** Syndrome characterized by trichoepitheliomas, milia, and cylindroma

**Reed syndrome (familial leiomyomatosis cutis and uteri)** AD; fumarate hydratase gene mutation; cutaneous and uterine leiomyomas; papillary renal cell carcinoma

**Refsum disease** AR; phytanoyl-coa hydroxylase gene mutation; ichthyosis; ataxia; retinitis pigmentosa; peripheral neuropathy

**Restrictive dermopathy** AR; LMNA gene or ZMPSTE4 gene mutation; tight, thin translucent skin; flexion contractures; early death; fixed “O” face

**Rhinoentomophthoromycosis** Type of invasive zygomycosis of the rhinofacial region that is caused most commonly by *Conidiobolus coronatus*, a soil saprophyte, and is characterized by painless induration and swelling of the central face that begins via inhalation into, or traumatic inoculation of, the nasal passages

**Richner–Hanhart syndrome (tyrosinemia, type II)** AR; tyrosine aminotransferase gene mutation; focal, tender, palmoplantar keratoderma; herpetiform corneal erosions; photophobia; mental retardation

**Riga–Fede disease (lingual traumatic ulceration, congenital autonomic dysfunction with universal pain loss)** Chronic trauma-induced granulomatous and ulcerative disorder of the oral cavity, especially the tongue; affects infants at eruption of primary teeth; associated with autonomic dysfunction (Riley–Day syndrome)

**Robert’s syndrome** AR; ESCO2 gene mutation; facial port wine stain; cleft lip/palate; hypotrichosis; limb defects

**Rombo syndrome** AD; basal cell carcinomas in childhood; atrophoderma vermiculatum; trichoepitheliomas; milia; vasodilation of the hands and feet with cyanosis

**Ross’ syndrome** Acquired disorder of sympathetic degeneration presenting with generalized hypohidrosis, Adies’ tonic pupil, and hyporeflexia

**Rowell’s syndrome** Erythema multiforme-like lesions in a patient with discoid lupus erythematosus or systemic lupus erythematosus; positive La (SS-B) autoantibodies; positive rheumatoid factor

**Rubenstein–Taybi syndrome** AD; CREB binding protein gene mutation; broad thumbs; keloids; hypertrichosis; mental retardation; characteristic facies; cardiac and genitourinary anomalies; CNS tumors

**Russell–Silver syndrome** AD/AR; dwarfism; hemihypertrophy; clinodactyly; characteristic facies; ivory epiphyses

**Sabra dermatitis** Pruritic erythematous papular eruption that is caused by exposure to the fine needles of the prickly pear

**SAHA syndrome** The association of seborrhea, acne, hirsutism, and alopecia that may reflect underlying hyperandrogenism in the setting of polycystic ovary disease or other endocrine disorder

**SAPHO syndrome** The association of synovitis, acne, palmoplantar pustulosis, hyperostosis, and osteitis

**Schamberg's disease (progressive pigmentary dermatosis)** Type of pigmented purpuric dermatosis predominantly affecting men that is characterized by yellow-brown patches on the legs with scattered cayenne-pepper-like macules

**Schilder's disease (adrenoleukodystrophy)** XLR; ABCD1 gene mutation; accumulation of very long chain fatty acids in the body; childhood and adult forms; adrenal insufficiency; diffuse hyperpigmentation; rapidly progressive cerebral demyelination

**Schimmelpenning–Feuerstein–Mims syndrome** Sporadic; type of epidermal nevus syndrome associated with extensive nevus sebaceus; seizures; coloboma; mental retardation; hypophosphatemic rickets

**Schopf–Schulz–Passarge syndrome** AR; hypotrichosis; palmo-plantar keratoderma; hidrocystomas; eccrine syringofibroadenoma; hypodontia

**Scrofuloderma (tuberculosis cutis colliquativa)** Type of cutaneous tuberculosis that predominantly affects children; results from direct extension of an underlying focus of infection to the skin; characterized by draining sinus tracts and scarring most often affecting the cervical lymph node basin

**Seckel syndrome** AR; ATR gene mutation; dwarfism; bird-headed facial appearance; mental retardation



**Secretan syndrome (factitial edema)** Self-inflicted or occupation-related hard edema of the dorsal hand

**Setleis syndrome (facial ectodermal dysplasia, focal facial dermal dysplasia, Brauer lines)** AD/AR; leonine facies; aplasia cutis congenita of the bilateral temples; redundant facial skin; frontal bossing

**Shabbir syndrome (LOGIC syndrome, laryngoonychocutaneous syndrome)** AR; laminin-alpha 3 (LAMA3) gene mutation; hoarseness; nail dystrophy; skin ulcers; hypodontia; conjunctival scarring; possibly related to junctional epidermolysis bullosa

**SHORT syndrome** AR; partial lipodystrophy; short stature; hyperextensibility of joints or hernia (inguinal) or both, ocular depression, Rieger anomaly (abnormal development of anterior segment of the eye), teething delay

**Simpson–Golabi–Behmel syndrome** XLR; glypican 3 gene mutation; supernumerary nipples; pre- and postnatal overgrowth; “bulldog” facies; congenital heart defects; numerous other defects

**Sneddon syndrome** Cerebrovascular accidents; livedo reticularis; vaso-occlusive disease of several different organ systems; antiphospholipid antibodies

**Southern tick-associated rash illness (STARI)** Lyme-disease-like illness occurring in the southern part of the United States that is transmitted by *Amblyomma americanum*, possibly caused by *Borrelia lonestari*, and characterized by an erythema migrans-like eruption with flu-like symptoms

**Sparganosis** Infestation with *Spirometra* tapeworm; subcutaneous swelling with variable muscle, ocular, urogenital, gastrointestinal, or CNS involvement

**Stein–Leventhal disease** Polycystic ovary disease; acanthosis nigricans; acne; irregular menstruation; obesity

**Stewart–Bluefarb syndrome** A type of pseudo-Kaposi's sarcoma (as opposed to acroangiokeratosis of Mali) that occurs in young, healthy adults with an underlying arteriovenous malformation of the lower extremity

**Stewart–Treves syndrome** Development of angiosarcoma in a chronically lymphedematous extremity; classically described in the post-mastectomy patient

**Stickler syndrome** AD; COL2A1 gene mutation; marfanoid body habitus; myopia; retinal detachments; cataracts; glaucoma; stiff or hyperflexible joints; cleft or high arched palate; micrognathia

**Sturge–Weber syndrome** Sporadic; port wine stain in the trigeminal nerve distribution, especially V1; leptomeningeal angiomas of the ipsilateral side; glaucoma; seizures; intracranial (tram-track) calcifications

**Superior vena cava syndrome** Edema, telangiectasia, and engorged veins on the chest, neck, and face as a result of blockage of the superior vena cava; typically occurs in the setting of intrathoracic malignancy

**Sybert palmoplantar keratoderma (Greither's type)** AD; diffuse type of palmoplantar keratoderma with erythema, peeling, and hyperkeratosis; transgrediens; hyperkeratosis over the elbows and knees

**TAR syndrome** AR; thrombocytopenia; absent radii; facial port wine stain; milk allergy; cardiac, cerebral, renal anomalies

**Tay syndrome (IBIDS)** AR; ERCC2, ERCC4; ichthyosis; brittle hair (trichothiodystrophy); intellectual impairment; decreased fertility; short stature

**Thrombotic thrombocytopenic purpura (Moschowitz disease)** Acquired idiopathic disorder associated with deficiency of an enzyme which cleaves von Willebrand factor multimers; microangiopathic hemolytic anemia; thrombocytopenia and purpura; fever; renal failure; altered mental status or other CNS abnormality

**Tietz syndrome** AD; MITF gene mutation; diffuse hypopigmentation; congenital deafness

**Townes–Brocks’ syndrome** AD; SALL1 gene mutation; imperforate anus; auricular pits, fistula, or skin tags; deafness; triphalangeal thumbs; other digital anomalies; urogenital anomalies

**Toxic oil syndrome** Scleroderma-like illness that is caused by consumption of denatured rapeseed oil

**Treacher–Collins–Franceschetti syndrome (mandibulofacial dysostosis)** Sporadic; TCOF1 gene mutation; accessory tragi; pre-auricular skin tags and pits; coloboma; facial bone hypoplasia; ear malformations; conductive hearing loss

**Tricho-rhino-phalangeal syndrome** AD; TRPS1 gene mutation; brittle, sparse hair; pear-shaped nose; cone-shaped epiphyses of the digits; short stature

**Trimethylaminuria (fish-odor syndrome)** AR; flavin-containing monooxygenase 3 gene mutation; impaired processing of trimethylamine; presents with self-declaration of a fishy body odor by the patient or family/friends of the patient

**Tripe palms** Refers to paraneoplastic phenomenon that occurs in the setting of gastric cancer or lung cancer; often accompanies malignant acanthosis nigricans; characterized by thickening of the palms with velvety or papillomatous textural changes

**Tuberculosis, miliary** Disseminated form that affects patients with an impaired immune response to *Mycobacterium tuberculosis*, especially children; characterized by multiple erythematous macules, papules, and nodules with or without ulceration

**Tuberculous, primary inoculation (tuberculous chancre)** Primary infection of the skin with accompanying lymphadenopathy in a patient

previously unexposed to *Mycobacterium tuberculosis* and characterized by red papule that evolves to a nodule and then ulcer

**Tuberculosis verrucosa cutis (prosector's wart)** Results from exogenous infection of a patient with prior sensitization to *Mycobacterium tuberculosis*; characterized by a warty plaque affecting the hands or feet

**Tumor necrosis factor receptor-associated periodic syndrome (TRAPS)** AD; TNFRSF1A gene mutation; periodic fever; abdominal pain; myalgias; arthralgias; skin eruption during attacks; localized erythematous macules and papules or edematous, annular and serpiginous plaques; response to steroids, not colchicine

**Turcot syndrome** AD/AR; familial colorectal cancer with CNS tumors (glioma or medulloblastoma)

**Unna-Thost palmoplantar keratoderma** AD; keratin 1 mutation; diffuse nonepidermolytic palmoplantar keratoderma

**Van der Woude syndrome** AD; IRF-6 gene mutation; popliteal webbing; bilateral lower-lip pits; cleft lip or palate; limb defects

**Variegate porphyria** AD; protoporphyrinogen oxidase mutation; episodes of abdominal pain, neuropsychiatric symptoms, and blistering on the sun-exposed areas; combines features of porphyria cutanea tarda and acute intermittent porphyria; urinary copro greater than uro during attacks

**VATER/VACTERL association** Vertebral anomalies; anal atresia; cardiac defects; tracheo-esophageal fistula; radial anomalies; limb anomalies

**Vilanova disease (subacute nodular migratory panniculitis, chronic erythema nodosum)** Variant of erythema nodosum with significant clinical differences including unilateral lesions, peripheral migration of lesions, absence of pain, and less of an association with typical causative agents as in classic erythema nodosum

**Von Hippel–Lindau syndrome** AD; VHL gene mutation; adult onset; facial port wine stain; retinal, cerebellar, or spinal hemangioblastoma; pheochromocytoma; renal and pancreatic cysts; renal cell carcinoma

**Vörner palmoplantar keratoderma** AD; keratin 9 gene mutation; diffuse epidermolytic palmoplantar keratoderma

**Waldenstrom’s macroglobulinemia** Type of lymphoplasmacytic lymphoma associated with an IgM monoclonal gammopathy; hepatosplenomegaly; lymphadenopathy; hyperviscosity; cryoglobulinemia; peripheral neuropathy; igm storage papules in skin; primary amyloidosis

**Watson syndrome** AD; NF1 gene mutation pulmonary stenosis; café-au-lait macules; mental retardation; short stature; neurofibromas

**Weber–Cockayne syndrome (EBS, localized)** AD; keratin 5/keratin 14 mutation; blisters localized to the hands and feet; induced by repeated trauma or friction

**WHIM syndrome** AD; CXCR4 gene mutation; warts; hypogammaglobulinemia; sinopulmonary infections; myelokathexis

**Whipple’s disease** Infection with the Gram-positive bacteria, *Tropheryma whippelii*, that is characterized by diarrhea, malabsorption; vitamin deficiencies; diffuse patchy hyperpigmentation; arthritis; fever; weight loss

**Wilson’s disease (hepatolenticular degeneration)** AR; ATP7B gene mutation; error in copper metabolism; neurodegenerative disease; cirrhosis; copper deposition in liver, brain; corneal Kayser–Fleischer rings; blue lunula

**Winchester syndrome** AR; matrix metalloproteinase 2 gene mutation; joint contractures; gingival hypertrophy; dwarfism, corneal opacities; mental retardation

**Witkop's syndrome (tooth-and-nail syndrome)** AD; MSX1 gene mutation; hypoplastic nails; hypodontia

**Witten and Zak keratoacanthomas** Familial keratoacanthoma syndrome characterized by both small, miliary, and eruptive (like Grzybowski type) as well as medium-sized (Ferguson-Smith type) keratoacanthomas

**Wolf-Hirschhorn syndrome** Chromosome 4p deletion; severe growth retardation and mental defect; microcephaly; "Greek helmet" facies; cleft lip or palate; coloboma; cardiac septal defects; aplasia cutis of the scalp; seizures

**Wyburn-Mason syndrome (Bonnet-Dechaume-Blanc syndrome)** Arteriovenous malformation of the brain and retina; ipsilateral port wine stain; seizures; mental retardation

**Zellweger syndrome** Rare syndrome caused by the decreased or absence of peroxisomes and that is characterized by faulty development of the CNS, hepatomegaly, characteristic facies, chondrodysplasia punctuate, and eye abnormalities

**Ziprkowski-Margolis syndrome** XLR; congenital deafness; piebaldism; light hair

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