Chapter 1
The Basics: Skin Types, Definitions, and Differentials

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Table 1.1 Skin types

Skin type	History/physical examination
I	Always burn, never tan
II	Always burn, but sometimes tan
III	Sometimes burn, but always tan
IV	Never burn, always tan
V*	Moderately pigmented
VI*	Deeply pigmented dark brown to darkest brown/black

*Patients with natural pigmentation of these types may be classified into a lower skin-type category if the sunburning history so indicates. Adapted from Fitzpatrick TB. Soleil et peau. Journal de Medecine Esthetique. 1975;2(33)

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Skin Lesion Description

Describing skin lesions and findings is an important skill in order to effectively communicate with colleagues. The description should include primary lesion terminology with information in regards to color, distribution, color, configuration, borders, and shape along with any secondary lesions if present. The tables below define terms that are used to describe lesions.

Table 1.2 Primary Lesions

Term	Size	Description
Macule	<1 cm	Flat spot that can only be noticed visually; without elevation
Papule	<1 cm	Dome-shaped, flat-topped, may be umbilicated or with a dell
Vesicle	<1 cm	Raised bump filled with air or clear liquid[a]
Pustule	<1 cm	Raised bump filled with pus
Nodule	<1 cm	Elevated bump on the skin that can occur in all layers of the skin[a]
Cyst	Varies	Nodule filled with liquid or semi-liquid
Plaque	>1 cm	Flat-topped but raised lesion; with elevation
Patch	>1 cm	Large flat spot (macule)
Bulla	>1 cm	Fluid-filled sacs that occur when fluid becomes under the skin[a] - Flaccid (more likely epidermal) vs tense (more likely dermal) - Epidermal bullae can appear tense on acral sites because the overlying stratum corneum is thicker - Although tense blisters can evolve to flaccid, flaccid blisters will not become tense
Tumor	>1 cm	Firm, solid mass on the skin or subcutaneous tissue[a]

[a]Primary Skin Lesions. SkinVision. https://www.skinvision.com/library/primary-skin-lesions. Published July 10, 2017

Table 1.3 Terminology of other descriptive lesions

Term	Description
Wheal	Red, swollen plaque, often itchy and changes shape, aka hives or welts
Telangiectasia	Dilated blood vessels near the skin surface that cause threadlike lines
Petechiae	Non-blanching red spot that is typically <1 cm
Purpura	Non-blanching red spot that is typically >1 cm
Comedones	Dilated hair follicles filled with keratin, bacteria, and sebum Closed comedones (whiteheads) have an obstructed opening to the skin Open comedones (blackheads) have an opening to the skin filled with dark appearing (oxidized) skin debris
Milium or Milia (plural)	Small, superficial epidermoid cysts, appear as small, white bumps
Burrow	Tunnels formed in the skin, appear as linear lines (from parasitic infestation)
Boil (furuncle)	Pus-filled bump that forms under the skin when bacteria infect or inflame one or more hair follicles; begin as red, tender bumps; painful Carbuncles are clusters of boils that form connections under the skin

Table 1.4 Terminology for describing color, shape, texture, and pattern of lesions

Color

Although describing color can be somewhat subjective, the description should be made with the specific color. It is important to also distinguish certain features of colors with specific terms as described in the below table.

Term	Description
Depigmented	No color/white; Wood's lamp will fluoresce
Hypopigmented	Decrease of skin pigment or color
Hyperpigmented	Increase in skin pigment or color
Erythematous	Red and blanches on palpation (or diascopy)
Violaceous	Purple
Purpuric	Red/purple that does not blanch
Dusky	Dark purple/gray; can be difficult to distinguish purpura vs early necrosis

Shape

The outline of an area, or shape, tells important information about the underlying lesion and helpful when communicating through medical records.

Term	Description
Annular	Round with central clearing
Round/nummular/discoid	Round without central clearing
Ovoid	Oval-like
Serpiginous	Having a wavy margin (snake-like)

Table 1.4 (continued)

Targetoid	Like a target, with three zones: dusky (or blistered) center, surrounded by white ring, and then erythema; often refers specifically to erythema multiforme lesions
Polycyclic	Multiple overlapping annular lesions
Arcuate	Incomplete annular arc
Polymorphous	Many different shapes

Texture

Texture refers to the feel and/or consistency of a surface or substance.

Term	**Description**
Soft	Easily compressible, like fat
Firm	Not easily compressible or movable, hard; such as when feeling calcium filled lesions that are very hard on palpation
Indurated	Firm and bound-down
Boggy	Edematous, suggesting fluid between collagen in the dermis
Fleshy	Implies exophytic or pedunculated with a soft, squishy texture
Horny	Has thick pointy hyperkeratotic elements, an example is a cutaneous horn
Vegetative	Layered extension of a plaque/tumor, appears to be growing upon itself

(continued)

Table 1.4 (continued)

Juicy	An edematous/fluid-filled appearance

Patterns

Patterns can be thought of as the configuration, groupings, distribution of lesions and also provide diagnostic information.

Term	**Description**
Follicular/folliculocentric	Arising from and associated with hair follicles
Morbilliform	Multiple macules and papules 2 mm to 1 cm
Reticular/reticulated	Net-like
Retiform	Branching and/or angulated
Guttate	Small spots or "drops"
Monomorphic/monomorphous	All lesions appearing identical and in the same stage

Table 1.5 Secondary lesions

Term	**Description**
Erosions	Epidermal breaks in skin (superficial, do not appear deeper than top layer of skin)
Ulcers	Deeper breaks in skin involving the dermis; may appear "punched out" or with "undermined borders"
Crust	Dried exudates or plasma from vesicle, pustule, trauma (aka scab)
Scale	Compacted stratum corneum appearing as flakes "Branny" scale is exfoliating scale (bran-flake like)

Table 1.5 (continued)

Term	Description
Eschars	Thick black/necrotic crusts (can be associated with infections such as rickettsialpox, anthrax, brown recluse spider bites, ecthyma gangrenosum)
Dermal Atrophy	Wrinkled
Epidermal Atrophy	Shiny
Poikiloderma	Appearance with 3 components: atrophy, hypo/hyperpigmentation, and telangiectasia
Collarette of Scale	Small circle of scaling (from ruptured/evolved vesicle or pustule)
Trailing Scale	Scale at inner edge of erythema; occurs in pityriasis rosea and erythema annulare centrifugum
Leading Scale	Scale at edge of erythema (such as in tinea corporis)
Exfoliation	Peeling of topmost skin layer (stratum corneum)
Desquamation	Scaling and loss of topmost skin layer (stratum corneum)
Denudation	Loss of entire epidermis including basement membrane
Epidermal Change	Scale, pigmentation alteration, vesiculation, fissures, lichenification/thickening, epidermal atrophy, verrucous/papillomatous change
Dermal Change	Dermal atrophy, loss of elastic tissue (termed anetoderma), erythema, papules, plaques, nodules, cysts, sclerosis/scar/keloid, peau d'orange (dimpled appearance)

Differential Diagnoses Based on Primary Lesions

Primary Lesions

Macules and Patches

White/Hypopigmented Macules

Alezzandrini's syndrome (vitiligo)
Amelanotic melanoma or melanoma with regression
Amino acid disorders (e.g. Phenylketonuria)
Atrophic lichen planus
Chediak-Higashi syndrome
Chemical leukoderma (i.e. phenols)
Halo nevus without nevus
Hypomelanosis of Ito
Hypopigmented mycosis fungoides
Idiopathic guttate hypomelanosis
Incontinentia pigmenti – fourth stage
Lichen sclerosis et atrophicus
Morphea
Nevus anaemicus
Nevus depigmentosus
Oculocutaneous albinism
Partial albinism (piebaldism)
Pityriasis alba
Pityriasis Lichenoides chronica
Progressive macular hypomelanosis
Post inflammatory hypopigmentation
Radiation dermatitis
Scarring discoid lupus erythematosus
Syphilis, yaws, pinta
Thyroid disease
Tinea versicolor
Tuberculoid leprosy

Tuberous sclerosis
Vitiligo
Vogt-Koyanagi syndrome (vitiligo)
Waardenburg's syndrome (piebaldism)

Brown Macules

Acanthosis nigricans
Adrenocorticotropic hormone (ACTH) administration
Addison's disease
Agminated Nevus
Albright's syndrome
Ataxia-telangiectasia
Becker's nevus
Berloque dermatitis
Bloom's syndrome
Cafe au lait spots
Congenital nevus
Drug (i.e. arsenic, psoralen, chlorpromazine, minocycline)
Dyskeratosis congenita
Ephelides
Erythema dyschromicum perstans (initial lesions)
Erythromelanosis follicularis faciei et colli
Exogenous Ochronosis
Fanconi's syndrome
Fixed drug eruption
Galli-Galli disease
Hemochromatosis
Junctional nevus
Lentigo maligna
Lentigo
Lichen amyloidosis
lncontinentia pigmenti - third stage
Macular amyloidosis
Melasma
Mongolian spot
Moynahan's syndrome (LEOPARD)

Nevus of Ota/Ito
Nevus spilus
Peutz-Jeghers syndrome
Pigmented contact dermatitis (Riehl's melanosis)
Phytophotodermatitis (i.e. limes, celery, fig)
Postinflammatory hyperpigmentation
Seborrheic keratosis (early)
Speckled lentiginous nevus
Traumatic tattoo
Tuberous sclerosis
Urticaria Pigmentosa
Von Recklinghausen's Neurofibromatosis

Erythema/Red Macules

Acral erythema (palms and soles – due to chemotherapy)
Carcinoid
Drug hypersensitivity syndrome (sulfa, anticonvulsants, allopurinol, minocycline)
Erysipelas
Figurate erythemas –

- Erythema multiforme
- Erythema annulare centrifugum
- Erythema marginatum
- Erythema chronica migrans
- Erythema gyratum repens
- Erythema dyschromicum perstans

Fixed drug eruption
Necrolytic migratory erythema (glucagonoma)
Physical agents –

- Heat (erythema ab igne, first degree burn)
- Cold
- Trauma

Postinflammatory erythema
Scarlet fever
Staph/strep toxic shock syndrome
Toxic erythema (drug, infection, systemic disease)
Ultraviolet exposure
Urticaria
Urticaria pigmentosa
Vascular nevi
Viral exanthems (i.e. nterovirus, hepatitis, mononucleosis, measles, roseola, erythema infectiosum)

Atrophic Patches

Acrodermatitis chronica atrophicans
Anetoderma
Aplasia cutis congenita
Atrophic lichen planus
Atrophie blanche
Atrophoderma of Pasini and Pierini
Chronic graft vs. host reaction
Extramammary Paget's
Focal dermal hypoplasia
Follicular atrophoderma
Leprosy
Lichen sclerosus et atrophicus
Lupus erythematosus
Macular atrophy
Malignant atrophic papulosis (Degos disease)
Meischer's granuloma (giant cell elastophagocytosis)
Morphea
Necrobiosis lipoidica diabeticorum
Nevus lipomatosus
Sarcoidosis
Steroid application or injection
Striae
Syphilis, tertiary

Papules and Plaques

Red Papules

Arthropod reaction
Bacteremia (i.e. meningococcal, gonococcal)
Disseminated candidiasis
Eruptive xanthomas
Folliculitis (i.e. bacterial, candidal, eosinophilic, fungal, viral)
Gianotti-Crosti syndrome (children-acral only; hepatitis B, EBV)
Guttate Psoriasis
Hot tub folliculitis (*Pseudomonas*)
Lymphomatoid papulosis
Miliaria rubra/profunda
Papular drug eruption
Pityriasis lichenoides et varioliformis acuta
Scabies
Secondary Syphilis
Viral exanthem

Annular Papules

Alopecia mucinosa
Arthropod reaction
Basal cell carcinoma
Contact dermatitis
Dermatophyte infections
Elastosis perforans serpiginosa
Erythema elevatum diutinum
Granuloma annulare
Leiomyoma
Lichen planus
Lymphocytic infiltrate of Jessner
Lymphocytoma cutis
Lymphoma/leukemia cutis

Leishmaniasis
Mastocytoma
Meischer's granuloma (giant cell elastophagocytosis)
Necrobiosis lipoidica diabeticorum
Nummular eczema
Sarcoidosis
Syphilis, secondary or tertiary

Hyperkeratotic Papules

Acquired perforating dermatosis (Kyrle's disease)
Acrokeratosis verruciformis of Hopf
Actinic keratosis
Arsenic ingestion
Confluent reticulate papillomatosis (Gougerot-Carteaud)
Cutaneous horn
Darier's disease
Elastosis perforans serpiginosa (elastic fibers)
Epidermal nevi (Inflammatory Linear Verrucous Epidermal Nevus – ILVEN)
Follicular lichen planus
Incontinentia pigmenti (verrucous stage)
Keratoacanthoma
Keratosis pilaris
Keratosis punctata
Lichen spinulosus
Lichen striatus
Lithium ingestion
Localized epidermolytic hyperkeratosis
Perforating folliculitis
Phrynoderma
Pityriasis rubra pilaris
Porokeratosis
Psoriasis
Reactive perforating collagenosis (collagen fibers)
Seborrheic keratosis
Verruca vulgaris/plana

Lichenoid Papules

Bowenoid papulosis (genitals)
Cowden's disease (lichenoid papules on the face)
Gianotti-Crosti (acral lichenoid papules)
Lichen amyloidosis
Lichen myxedematosus
Lichen nitidus
Lichen planus
Lichen sclerosus et atrophicus
Lichen simplex chronicus
Lichen spinulosus
Lichen striatus
Lichenoid actinic keratosis
Lichenoid drug eruption
Lichenoid seborrheic keratosis
Papular granuloma annulare
Sarcoidosis
Secondary syphilis
Tuberculosis cutis lichenoides (lichen scrofulosorum)
Verruca plana

Linear Papules

Contact dermatitis
Granuloma annulare
Herpes zoster (usually vesicular)
Ichthyosis hystrix
Insect bites
Jellyfish stings (usually vesicular)
Koebnerization (i.e. lichen planus, psoriasis, verruca vulgaris)
Linear epidermal nevus
Lichen planus
Linear porokeratosis
Lichen nitidus
Lichen striatus

Linear verruca vulgaris/plana
Nevus unius lateris
Nevus verrucosus
Sporotrichosis

Red Plaques

Actinic keratosis
Acute hemorrhagic edema of infancy
Alopecia mucinosa
Amelanotic melanoma
Bowen's disease
Discoid lupus
Eosinophilic granuloma
Erysipelas
Erythema elevatum diutinum
Fixed drug eruption
Granuloma annulare
Granuloma faciale
Kaposi's sarcoma
Langerhan's cell histiocytosis (intertriginous areas)
Leishmaniasis
Leprosy
Leukemia/lymphoma cutis
Lupus vulgaris
Lymphocytic infiltrate of Jessner
Malignant angioendotheliomatosis
Mycosis fungoides
Polymorphous light eruption
Pseudolymphoma of Spiegler-Fendt
Psoriasis
Rosacea
Sarcoidosis
Seborrheic dermatitis
Superficial basal cell carcinoma
Sweet's syndrome

Annular Plaques

Actinic granuloma (annular elastolytic giant Cell Granuloma)
Alopecia mucinosa
Basal cell carcinoma
Bowen's disease
Cutaneous larva migrans
Deep fungal infection
Discoid lupus erythematosus
Eosinophilic annular erythema
Erysipeloid
Erythema annulare centrifugum
Erythema chronicum migrans (Lyme disease)
Erythema multiforme
Factitial dermatitis
Fixed drug eruption
Granuloma annulare
Granuloma faciale
Leprosy
Leukemia/lymphoma cutis
Lichen planus
Lichen sclerosus et atrophicus
Lichen simplex chronicus
Lupus vulgaris
Lymphocytic infiltrate of Jessner
Lymphocytoma cutis
Morphea
Mycosis fungoides
Necrobiosis lipoidica diabeticorum
Necrolytic migratory erythema
Nummular eczema
Papular mucinosis
Parapsoriasis
Polymorphous light eruption
Porokeratosis of Mibelli
Psoriasis
Sarcoidosis
Seborrheic dermatitis

Syphilis, secondary
Tinea
Urticaria

Nodules and Tumors

Table 1.6 Dermal tumors and nodules

Dermal tumor/nodule	Diseases
Appendageal	Adenoma sebaceum
	Chondroid syringoma
	Clear cell acanthoma
	Clear cell hidradenoma
	Cylindroma
	Eccrine acrospiroma
	Eccrine poroma
	Eccrine spiradenoma
	Eruptive vellus hair cyst
	Hydrocystoma
	Nevus sebaceous
	Pilomatrixoma
	Sebaceous adenoma (consider Muir-Torre syndrome)
	Sebaceous epithelioma (consider Muir-Torre syndrome)
	Sweet's syndrome
	Syringoma
	Trichoepithelioma
	Trichofolliculoma
	Tricholemmoma
Malignancy	Cutaneous metastases
	Kaposi's sarcoma
	Keratoacanthoma
	Keratoacanthoma/squamous cell carcinoma
	Leukemia/lymphoma cutis
	Mycosis fungoides
	Nodular basal/squamous cell carcinoma
	Nodular melanoma
	Various soft tissue sarcomas

(continued)

Table 1.6 (continued)

Dermal tumor/nodule	Diseases
Cysts	Dermoid cyst Digital mucous cyst Epidermoid cyst Ganglion cyst Median raphe cyst Phaeohyphomycotic cyst Pilar (trichilemmal) cyst Steatocystoma multiplex
Granulomas	Foreign body granuloma Infectious granuloma (atypical mycobacteria, fungal) Juvenile xanthogranuloma Lupus vulgaris Reticulohistiocytoma Rheumatoid nodule Sarcoidosis Subcutaneous granuloma annulare
Histiocytomas	Dermatofibroma Dermatofibrosarcoma protuberans Fibrous histiocytoma Progressive nodular histiocytosis Sclerosing hemangioma
Neural	Neurilemmoma, schwannoma, neurothekeoma Neurofibroma Neuroma

Table 1.6 (continued)

Dermal tumor/nodule	Diseases
Vascular	Acquired tufted angioma Angiolymphoid hyperplasia with eosinophilia Angiosarcoma A-V malformation Erythema elevatum diutinum Glomus tumor Hemangiopericytoma Hemangioma Kaposi's sarcoma (classical and HIV) Nodular vasculitis Polyarteritis nodosa Superficial thrombophlebitis Thrombosed varicosity
Infectious Nodules	Abscess Anthrax Atypical mycobacteria Bacterial lymphangitis Blastomycosis Cat scratch disease Cutaneous Tuberculosis Deep fungal infection Furunculosis Giant Molluscum Glanders Leishmaniasis Lepromatous leprosy Melioidosis Milker's nodule Mycetoma Nocardia Orf Primary inoculation blastomycosis Primary inoculation tuberculosis Sporotrichosis Superficial Thrombophlebitis Trichophyton granuloma Tularemia

(continued)

Table 1.6 (continued)

Dermal tumor/nodule	Diseases
Inflammatory Nodules (not otherwise specified)	Calcinosis Cutis Clear cell acanthoma Digital fibrokeratoma Gottron's papules (dermatomyositis) Subcutaneous fat necrosis Sweet's syndrome
Other	Atypical fibroxanthoma Calcinosis/osteoma cutis Eruptive/tuberous xanthoma Erythema nodosum Foreign body Hypertrophic scar/keloid Leiomyoma Lipoma/hibernoma Seroma/hematoma Spitz nevus Tophus

Red Nodules

Table 1.7 Red Nodules

Nodule	Diseases
Malignancy	Amelanotic melanoma
	Basal/squamous cell carcinoma
	Cutaneous endometriosis
	Keratoacanthoma
	Leukemia cutis
	Lymphoma cutis
	Metastatic carcinoma
Histiocytic	Atypical fibroxanthoma
	Dermatofibroma
	Dermatofibrosarcoma protuberans
	Eosinophilic granuloma
	Eruptive xanthoma
	Foreign body granuloma
	Nodular granuloma annulare
	Sarcoidosis
Infectious	Anthrax
	Atypical mycobacteria
	Bacterial abscess, furuncle
	Leishmaniasis
	Milker's nodule
	Nodular scabies
	Orf
	Tularemia
Inflammatory	Erythema induratum
	Erythema nodosum
	Insect bites
	Sweet's syndrome
	Weber-Christian panniculitis

(continued)

Table 1.7 (continued)

Nodule	Diseases
Vascular	Angiokeratoma (consider Fabry's disease) Angiosarcoma Arterious-Venous malformation Bacillary angiomatosis Cutaneous polyarteritis nodosa (especially wrists and ankles) Hemangioma Hemangiopericytoma Kaposi's sarcoma Leukocytoclastic vasculitis Pyogenic granuloma
Miscellaneous	Appendageal tumors (clear cell acanthoma, clear cell hidradenoma, eccrine poroma) Clear cell acanthoma Cutaneous myiasis Leiomyoma Lymphomatoid papulosis Neurothekeoma Spitz nevus

Subcutaneous Nodules without Epidermal Changes

Table 1.8 Subcutaneous nodules without epidermal changes

Nodule	Diseases
Appendageal	Spiradenoma, hidrocystoma, acrospiroma, mixed tumor, pilar tumors, etc.
Calcified	Calcified epidermoid and pilar cysts Calcinosis cutis (consider CREST) Osteoma cutis Pilomatrixoma Primary and metastatic calcification

Table 1.8 (continued)

Nodule	Diseases
Cysts	Embryologic (branchial cleft, bronchogenic cyst, cystic hygroma, thyroglossal duct cyst) Epidermal inclusion cyst Ganglion Mucous Pilar (trichilemmal) Seroma Steatocystoma multiplex Vellus hair cysts
Histiocytomas	Dermatofibroma Dermatofibrosarcoma protuberans Fibrous histiocytoma Sclerosing hemangioma
Neural	Neurofibroma Neurolemmoma, schwannoma, neurothekeoma Neuroma
Sarcomas	Angiosarcoma Fibrosarcoma Leiomyosarcoma Liposarcoma Malignant fibrous histiocytoma
Other	Angiolipoma Cutaneous myiasis Erythema elevatum diutinum Foreign body granuloma Glanders (“Farcy buds” - Burkholderia Malleli) Gouty tophi Leiomyoma Lipoma Metastatic carcinoma Nodular pseudosarcomatous fasciitis Rheumatoid nodule Subcutaneous granuloma annulare Synovial tumor Thrombosed varicosity

Painful Tumors

Adiposis dolorosa (Dercum's disease)
Angiolipoma
Blue rubber bleb nevus
Chondrodermatitis nodularis helicis
Cutaneous endometriosis
Eccrine spiradenoma
Endometriosis
Foreign body granuloma
Glomus tumor
Granular cell tumor
Leiomyoma
Neurilemmoma
Neuroma
Osteoma cutis

Pustules

Acne vulgaris
Acute febrile neutrophilic dermatosis
Anthrax
Atypical mycobacteria
Benign familial pemphigus (Hailey-Hailey disease)
Cellulitis
Cowpox
Deep fungal infections (i.e. actinomycosis, nocardia, sporotrichosis)
Dermatitis herpetiformis
Disseminated candidiasis
Ecthyma
Erysipeloid
Erythema toxicum neonatorum
Folliculitis (bacterial, candidal, eosinophilic, fungal, steroid use)
Furuncle, carbuncle
Gonococcemia
Herpes simplex/zoster

Hot tub folliculitis (*Pseudomonas*)
Impetigo
Impetigo herpetiformis
Infected contact dermatitis
Infected dyshidrotic eczema
Intertrigo
Miliaria
Miliaria rubra
Monkeypox
Multiple arthropod bites
Pemphigus foliaceus, IgA pemphigus
Perleche
Pustular psoriasis
Rhinoscleroma
Scabies
Smallpox
Steroid acne
Subcorneal pustular dermatosis (Sneddon-Wilkinson)
Sycosis barbae
Tinea
Transient neonatal pustular melanosis
Varicella

Vesicles and Bullae

Arthropod reaction
Behçet's syndrome
Benign familial pemphigus (Hailey-Hailey disease)
Benign mucous membrane pemphigoid
Bullosa diabeticorum
Bullous fixed drug eruption
Bullous impetigo
Bullous lichen planus
Bullous pemphigoid
Burn, second degree
Cat scratch disease
Chronic bullous dermatosis of childhood
Coma blisters

Congenital ichthyosiform erythroderma
Contact dermatitis
Dermatitis herpetiformis
Discoid lupus erythematosus
Drug reaction (bullous)
Dyshidrotic eczema (pompholyx)
Epidermolysis bullosa
Erythema elevatum diutinum
Erythema multiforme
Erythema toxicum neonatorum
Factitial
Factitial dermatitis
Friction blister
Gonococcemia, meningococcemia
Gunther's disease
Hand, foot, and mouth disease
Herpes gestationis
Herpes simplex/zoster
Hydroa vacciniforme
Incontinentia pigmenti
Lymphangioma/seroma
Miliaria
Necrolytic migratory erythema (glucagonoma)
Neonatal pustular melanosis
Pemphigus vulgaris, foliaceus, lgA
Photoallergic drug eruption
Polymorphous light emption
Porphyria cutanea tarda
Pressure urticaria
Pseudoporphyria
Pyoderma gangrenosum
Rickettsialpox
Rocky mountain spotted fever
Scabies
Smallpox
Smallpox (variola)
Staph scalded skin syndrome
Stevens-Johnson syndrome
Subcorneal pustular dermatosis (Sneddon-Wilkinson)

Sweet's syndrome
Tinea corporis
Tinea manuum/pedis
Toxic epidermal necrolysis
Transient acantholytic dermatosis (Grover's disease)
Urticaria pigmentosa/mastocytoma
Varicella
Vesicular id reaction
Viral infection (simplex, zoster, varicella, smallpox)
Weber-Cockayne syndrome

Ulcers

Table 1.9 Ulcers and associated diseases

Ulcers	Diseases	Lymphadenitis
Bacterial	Anthrax	+
	Chancroid	+
	Cutaneous diphtheria	
	Ecthyma	
	Glanders	+
	Granuloma inguinale	
	Leprosy	
	Melioidosis	+
	Phagedenic ulcer	
	Scrofuloderma	
	Syphilis	+
	Tuberculosis and atypical mycobacteria	
	Tularemia	+
	Yaws	

(continued)

Table 1.9 (continued)

Ulcers	Diseases	Lymphadenitis
Bites	I.e. brown recluse spider	
Blood element pathology	Cold agglutinins	
	Congenital hemolytic anemia	
	Polycythemia	
	Sickle cell ulcer	
Burns	Chemical, electrical, thermal	
Circulatory disorders	Decubitus (pressure)	
	Hypertensive	
	Stasis	
	Sickle cell ulcer	
	Thromboangiitis	
	Thrombosed varicosity	
	Vasculitis	
Deep Fungal	Actinomycosis	
	Blastomycosis	
	Candida	
	Chromoblastomycosis	
	Coccidioidomycosis	
	Histoplasmosis	
	Murcomycosis	
	Sporotrichosis	+
Factitial	Delusions of parasitosis	
	Neurotic excoriations	

Table 1.9 (continued)

Ulcers	Diseases	Lymphadenitis
Malignancy	Basal cell	
	Lymphoproliferative malignancies	
	Melanoma	
	Metastases	
	Mycosis fungoides	
	Squamous cell	
Miscellaneous	Antiphospholipid syndrome	
	Crohn's disease	
	Intravenous drug abuse	
	Necrobiosis lipoidica diabeticorum	
	Pyoderma gangrenosum	
	Radiation dermatitis	
Parasitic	Amebiasis	
	Leishmaniasis	
Traumatic		

Necrotic Lesions

Bromoderma
Behçet's disease
Calciphylaxis
Chemical agents - coumadin, intravenous adrenergics, chemotherapeutic agents, cocaine levamisole
Disseminated intravascular coagulation
Dysproteinemias – cryoglobulins, cryofibrinogens
Embolization –thrombus, fat

Envenomation – brown recluse spider, snakes, scorpion
Factitial
Granulomatosis with polyangiitis
Infection – bacterial (i.e. anthrax, streptococcus, atypical mycobacteria, mengiococcus, rickettsial, treponemal), fungal (i.e. nocardia, actinomycosis, sporotrichosis, histoplasmosis, cryptococcus, blastomycosis, tuberculosis), viral (i.e. smallpox, varicella)
Physical agents – heat, cold, trauma, pressure, electrical, radiation
Primary vascular – artetiosclerosis, thromboangiitis, diabetes
Pyoderma gangrenosum
Vasculitis secondary to connective tissue disease – SLE, polyarteritis, rheumatoid arthritis, temporal arteritis, Wegener's, CREST
Vasospastic – Raynaud's, hypertensive ulcer, ergot poisoning, arterial or venous drug extravasation

Vascular Lesions

Non-palpable Purpura (Petechial and Ecchymotic)

Capillaritis

- Schamberg's purpura- "cayenne pepper" pattern on legs
- Majocchi's purpura (purpura annularis telangiectoidess)
- Gougerot-Blum – purpuric lichenoid dermatitis
- Ducas and Kapetanakis – eczematoid purpura

Coagulopathies – disseminated intravascular coagulation, liver disease, anticoagulant therapy
Drug – anticoagulants, phenacetin, steroids, NSAIDs
Hypersensitivity vasculitis
Infections – Subacute Bacterial Endocarditis, Rock Mountain Spotted Fever (RMSF), meningococcemia, gonococcemia, Weil's disease (leptospirosis), various hemorrhagic fevers including Ebola and Marburg, congenital rubella, echovirus, toxoplasmosis, cytomegalovirus

Livedo reticularis
Resolving erythemas
Scurvy (perifollicular)
Senile purpura
Systemic disease – diabetes, Cushing's disease, uremia
Thrombocythemia
Thrombocytopenia – ITP, TIP, bone marrow depression
Toxic venoms
Traumatic purpura
Waldenström's hyperglobulinemic purpura

Palpable Purpura (Cutaneous Vasculitis)

I. **Primarily Cutaneous**

Cutaneous polyarteritis nodosa
Erythema elevatum diutinum
Hypersensitivity vasculitis/idiopathic allergic vasculitis/anaphylactoid purpura (all likely the same entity) – usually due to infection, drug, or systemic disease
Pityriasis lichenoides et varioliformis acuta (PLEVA) (lymphocytic as opposed to leukocytoclastic)
Sweet's syndrome
Urticarial vasculitis/erythema multiforme

II. **Cutaneous and systemic – usually leukocytoclastic unless noted**

Abnormalities in blood viscosity

- *Cold agglutinins* – viral pneumonia, SLE, lymphoma
- *Cryofibrinogens* – abnormality in clotting and degradation – seen in viral diseases (especially hepatitis)
- *Cryoglobulinemia* – cold exposure, multiple myeloma, SBE, leukemia, RA, liver disease, hepatitis, disseminated cancer, syphilis, mononucleosis, primary idiopathic
- *Hypergammaglobulinemic purpura*

Carcinoma: lymphoma, leukemia, lung and bowel cancer, Hodgkin's disease, multiple myeloma

Collagen vascular diseases (usually a livedo pattern): rheumatoid arthritis, SLE, dermatomyositis, Sjörgen's, inflammatory bowel disease
Drug (usually lymphocytic): ASA, NSAIDs, sulfa, chloroquine, penicillin, quinidine, thiazides, TB drugs, phenothiazines
Infection: streptococcus, Rock Mountain Spotted Fever, GC, meningiococcemia, Tuberculosis, syphilis, viruses (especially hepatitis)
Other:

- *Henoch-Schöenlein purpura* – abdominal pain, mucosal bleeding, hematuria, arthralgias, headache
- *Polyarteritis nodosa and other related granulomatous arteritides* – allergic granulomatosis, Wegener's

Telangiectasia

Primary

Ataxia telangiectasia
Essential telangiectasia
Hereditary hemorrhagic telangiectasia (Osler-Weber-Rendu)
Nevus telangiectaticus
Poikilodermatous diseases (Bloom's syndrome, Cockayne's syndrome, Dyskeratosis congenita
Poikiloderma atrophicans vasculare, Rothmund-Thomson syndrome)
Spider angioma
Telangiectasia macularis eruptiva perstans
Xeroderma pigmentosum

Secondary

Actinic damage
Basal cell carcinoma
Chronic topical steroid application
Collagen vascular disease

Drugs (estrogen, corticosteroids)
Keloid
Liver disease
Melasma
Necrobiosis lipoidica
Poikiloderma of Civatte
Pregnancy
Radiation dermatitis
Rosacea

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