SKIN

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OUTLINE:

1. Skin Terminology and Structure
    a. Structure and anatomic components of normal skin
    b. Microscopic terminology
    c. Clinical terminology
2. Acute Inflammatory Dermatoses
    a. Urticaria
    b. Eczema / Spongiotic Dermatitis
    c. Erythema Multiforme
    d. Drug Reaction/Eruption
3. Infectious Dermatoses
    a. Bacterial Infections
        i. Impetigo
        ii. Folliculitis
        iii. Cellulitis and Necrotizing Fasciitis
    b. Fungal Infections
        i. Candidiasis
        ii. Tinea Versicolor
        iii. Dermatophytosis
        iv. Deep Fungal Infections
        v. Onychomycosis
    c. Viral
        i. Warts
            1. Verruca Vulgaris
            2. Verruca Plana
            3. Condyloma
        ii. Herpetic Vesicles
            1. HSV
            2. VZV
        iii. Molluscum Contagiosum
    d. Scabies
4. Chronic Inflammatory Dermatoses
    a. Lupus Erythematosus
    b. Morphea
    c. Psoriasis
    d. Lichen Planus
    e. Sarcoidosis
    f. Lichen Simplex Chronicus / Prurigo Nodularis
    g. Post-Inflammatory Pigment Alteration
5. Blistering Disorders
    a. Pemphigus Vulgaris

   b. Pemphigus Foliaceus
   c. Bullous Pemphigoid
   d. Dermatitis Herpetiformis
6. Benign Neoplasms and Non-Melanoma Skin Cancer
   a. Seborrheic Keratosis
   b. Actinic Keratosis
   c. Squamous Cell Carcinoma
   d. Basal Cell Carcinoma
   e. Merkel Cell Carcinoma
7. Melanocytic Proliferations
   a. Melanocytic Nevi
   b. Melanoma

OBJECTIVES: After studying this unit you should be able to:

1. Identify normal anatomic skin structures microscopically

2. Understand the meaning of common clinical and microscopic terms used to describe skin lesions

3. Describe the characteristic clinical and microscopic features of:

   a. acute inflammatory and infectious dermatoses

   b. chronic inflammatory dermatoses

   c. blistering disorders

   d. benign epidermal neoplasms and non-melanoma skin cancer

   e. melanocytic nevi and melanoma

READING REFERENCE:

1. Robbins Basic Pathology, 10th Edition: Chapter 24, Skin (pg. 889-908) [https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20140017194]
2. Andrews' Diseases of the Skin, 13th Edition [https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20160013402]
   a. Chapter 5, Atopic Dermatitis, Eczema, and Noninfectious Immunodeficiency Disorders (pg. 63-91)
   b. Chapter 6, Contact Dermatitis and Drug Eruptions (pg. 92-139)
   c. Chapter 7, Erythema and Urticaria (pg. 140-156)
   d. Chapter 8, Connective Tissue Diseases (pg.157-183)
   e. Chapter 10, Seborrheic Dermatitis, Psoriasis, Recalcitrant Palmoplantar Eruptions, Pustular Dermatitis, and Erythroderma (pg. 191-204)
   f. Chapter 12, Lichen Planus and Related Conditions (pg. 215-230)
   g. Chapter 14, Bacterial Infections (pg. 252-290)
   h. Chapter 15, Diseases Resulting from Fungi and Yeasts (pg. 291-323)
   i. Chapter 19, Viral Diseases (pg. 362-420)
   j. Chapter 20, Parasitic Infestations, Stings, and Bites (pg. 421-452)

k. Chapter 21, Chronic Blistering Dermatoses (pg. 453-474)
l. Chapter 29, Epidermal Nevi, Neoplasms, and Cysts (pg. 636-685)
m. Chapter 30, Melanocytic Nevi and Neoplasms (pg. 686-703)

3. Andrews' Diseases of the Skin Clinical Atlas [https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20130186102]
    a. Chapter 5, Atopic Dermatitis, Eczema, and Noninfectious Immunodeficiency Disorders (pg. 53-64)
    b. Chapter 6, Contact Dermatitis and Drug Eruptions (pg. 65-85)
    c. Chapter 7, Erythema and Urticaria (pg. 87-99)
    d. Chapter 10, Seborrheic Dermatitis, Psoriasis, Recalcitrant Palmoplantar Eruptions, Pustular Dermatitis, and Erythroderma (pg. 125-138)
    e. Chapter 14, Bacterial Infections (pg. 185-202)
    f. Chapter 15, Diseases Resulting from Fungi and Yeasts (pg. 203-227)
    g. Chapter 19, Viral Diseases (pg. 263-289)
    h. Chapter 20, Parasitic Infestations, Stings, and Bites (pg. 291-307)

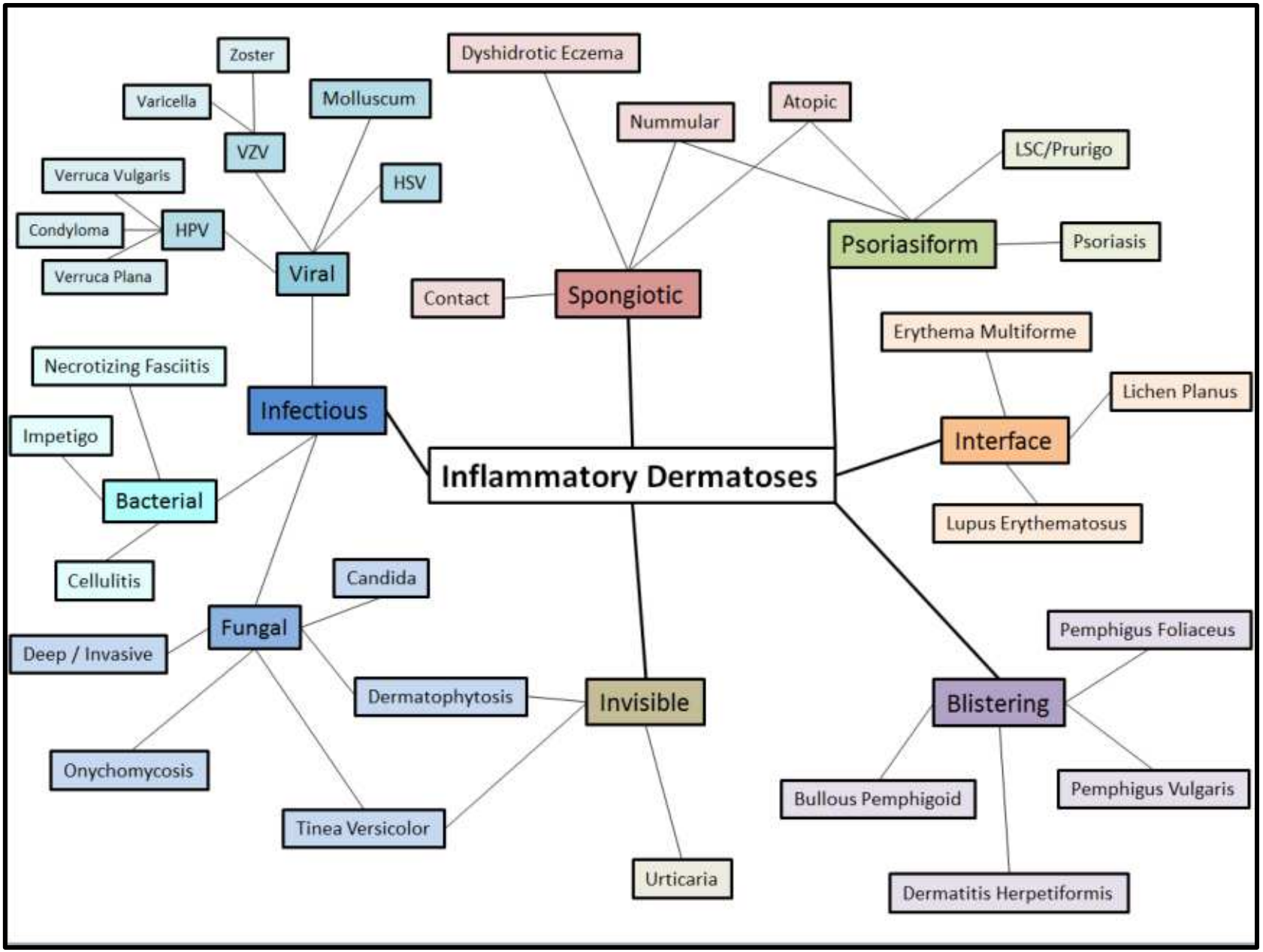
SKIN STUDY GUIDE

Terminology

Pathologic Terms	
Hyperkeratosis	Thickened cornified layer
Acanthosis	Epidermal hyperplasia/thickening
Papillomatosis	Surface elevation due to hyperplasia of dermal papillae
Spongiosis	Epidermal intercellular edema
Acantholysis	Lysis/disruption of intercellular keratinocyte adhesive junctions
Dyskeratosis	Abnormal, premature keratinization
Exocytosis	Lymphocytes migrating into epidermis

Clinical Terms		
Macule	Circumscribed, flat lesion	< 5 mm
Patch		> 5 mm
Papule	Elevated, dome shaped lesion	< 5 mm
Nodule		> 5 mm
Plaque	Elevated, flat topped lesion	> 5 mm
Vesicle	Fluid filled blister	< 5 mm
Bulla		> 5 mm
Pustule	Raised, discrete, pus-filled lesion	
Wheal	Pruritic, elevated lesion with variable blanching and erythema	
Erosion	Loss of portion or the entire epidermis (heals without scar)	
Ulcer	Loss of epidermis and portion of dermis (heals with scar)	
Excoriation	Traumatic, self-inflicted break in skin due to scratching	
Lichenification	Thickened, rough skin due to chronic rubbing/scratching	
Crust/Scab	Dried serum, pus, blood, and epithelial debris	
Scale	Laminated or plate-like mass of keratin due to abnormal keratinization	

Common Terms	
Dermatitis	Inflammation of skin (epidermis/dermis)
Folliculitis	Inflammation of hair follicle
Vasculitis	Inflammation of vessels
Hidradenitis	Inflammation of sweat glands
Panniculitis	Inflammation of subcutaneous fat
Alopecia	Decreased/absent hair


Inflammatory Dermatoses
Infectious
Viral
Zoster
Varicella
VZV
Molluscum
HSV
Verruca Vulgaris
Condyloma
HPV
Verruca Plana
Bacterial
Necrotizing Fasciitis
Impetigo
Cellulitis
Fungal
Candida
Deep / Invasive
Onychomycosis
Tinea Versicolor
Spongiotic
Dyshidrotic Eczema
Nummular
Atopic
Contact
Psoriasiform
LSC/Prurigo
Psoriasis
Interface
Erythema Multiforme
Lichen Planus
Lupus Erythematosus
Invisible
Dermatophytosis
Urticaria
Blistering
Pemphigus Foliaceus
Pemphigus Vulgaris
Bullous Pemphigoid
Dermatitis Herpetiformis

Skin Appendix
COM Flex Curriculum

Additional quick synopsis of various dermatologic conditions for those who are interested. For further information, the books below (available through MUSC library) are all wonderful resources.

Additional Resources:

Andrews' Diseases of the Skin, 13th Ed. (https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20160013402)

Andrews' Diseases of the Skin Clinical Atlas, 2nd Ed. (https://www-clinicalkey-com.ezproxy-v.musc.edu/#!/browse/book/3-s2.0-C20190003032)

Dermatology, 4th Ed. (https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20131144449)

Dermatology Atlas for Skin of Color (https://link.springer.com/book/10.1007%2F978-3-642-54446-0)

Dermatopathology, 3rd Ed. (https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20150040916)

Weedon's Skin Pathology, 5th Ed. (https://www.clinicalkey.com/#!/browse/book/3-s2.0-C20170008388)

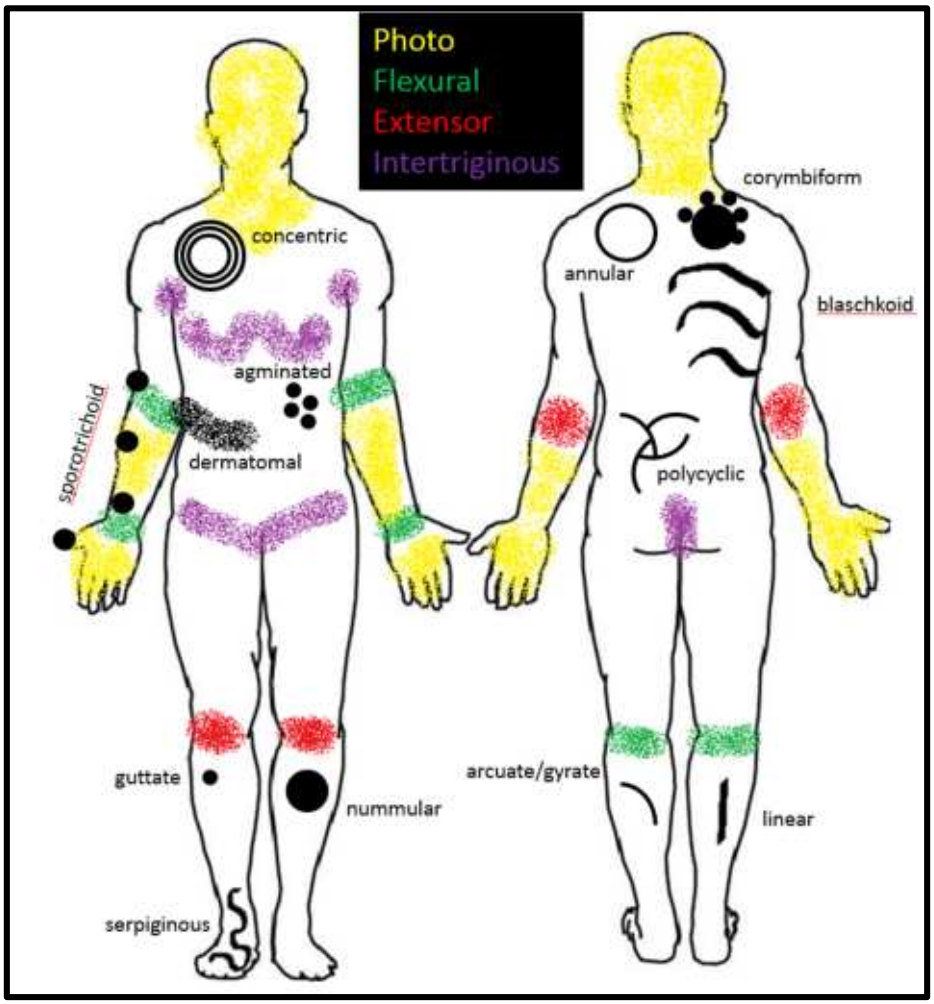
***This material will not be tested, it is just for those who are interested

General

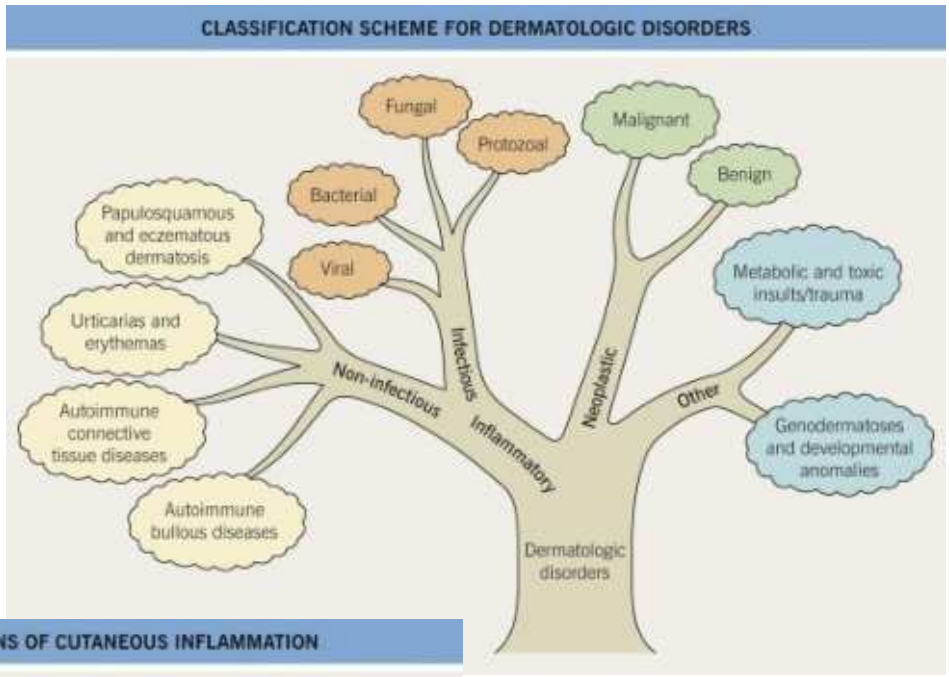
Describing a dermatologic process

Morphology	Term
Flat	macule →→ patch
Elevated	papule →→ plaque/nodule
Blister	vesicle →→ bulla

- Color
  - Pink, red, purple/violaceous, yellow, salmon
  - Depigmented, hypopigmented, hyperpigmented
- Morphology
  - Size and topography
  - Secondary changes: excoriation, crust, erosion/ulceration, atrophy, lichenification
- Distribution
  - Location: generalized/diffuse, localized, symmetric, extensor, flexural, intertriginous, acral, photo
  - Grouping and configuration: corymbiform, concentric, linear, agminated, annular, arcuate, gyrate, polycyclic, serpiginous, guttate, nummular, linear, sporotrichoid, dermatomal, blaschkoid
- Evolution/Involution
  - Polymorphous vs uniform
  - Residual scar, pigmentation, etc.



Classification/Categories



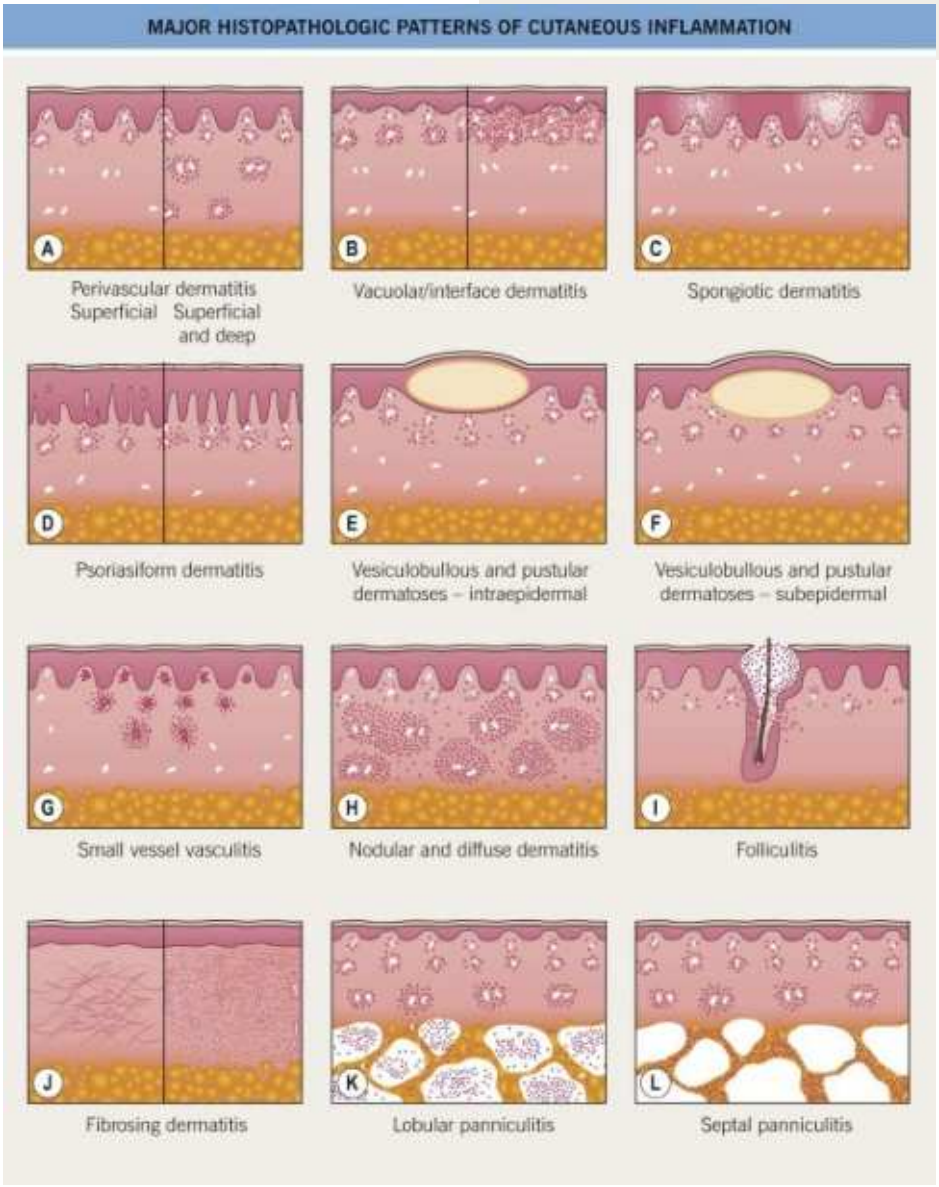


Image Source: Dermatology Essentials

Physical/Environmental

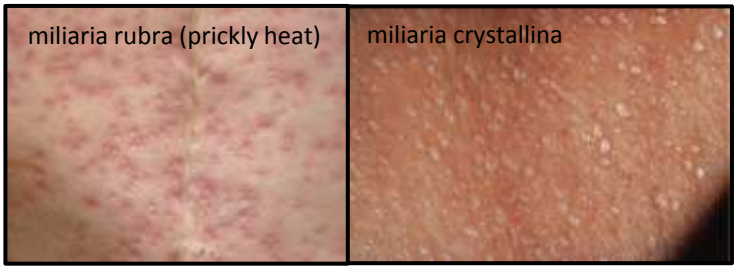
Thermal Burns

- Type of burn and body surface involved are important for prognosis
- Scarring may lead to deformities, contractures, and increased risk of SCC

Type	Description
First degree	Erythema and vascular congestion → desquamation Pain and increased surface heat Example: sunburn
Second degree	Superficial: edema, vesicle and bullae formation Recover without scarring
	Deep: pale, anesthetic, involves dermis → scarring ~1 month to heal
Third degree	Involves entire dermis and some subcutis, complete loss of skin appendages Ulcerated wound → scar (requires graft) + constitutional symptoms
Fourth degree	Involves skin, subcutis, and underlying tendons Constitutional symptoms (requires graft)

Miliaria

- Occlusion of eccrine ducts → increased pressure due to sweat production → rupture and sweat extravasation
- Common in hot, humid climates



Erythema Ab Igne

Reticulated erythema or pigmentary alteration due to prolonged heat exposure (sitting by fire, heating pad, laptop / electronics)

Perniosis/Chilblains

Erythema and swelling of toes, fingers, ears following exposure to cold, damp environment
Predisposing factors: poor circulation, cryoglobulins, crack cocaine, lupus erythematosus
Child wears snow boots during school day after walking to school in snow, lateral thighs in female equestrians riding on cold day

Radiation Dermatitis

Acute and chronic changes; vary based on dose and length of exposure

Phytophotodermatitis

- Phototoxic reaction due to contact with plant furocoumarin and UVA exposure
- Vesicles and bullae form several hours after exposure → hyperpigmentation
- Common phototoxic plants: dill, fennel, fig, carrot, lime, bergamot, mustard, parsley, celery

Eruption on hands following day at beach/on boat drinking corona with lime

Image Source: Andrews' Diseases of the Skin, 13th ed

Physical/Environmental

Actinic Injury

- Sunburn (solar erythema): caused by UVB
  - Acute reaction to excessive sunlight exposure
  - Develops within 6 hours, may become tender and blister depending on severity → peaks at 24 hours → desquamation 1 week later
  - Increased UV exposure at higher altitudes, summer months in temperate climates, closer to equator, middle of day (9 am-4 pm)
  - Minimal treatment options available, prophylaxis is best
- Freckle (ephelis) and Lentigo (sun/age spots)
  - Brown macules on sun-exposed skin
  - More prominent with increased sun exposure
  - Freckles usually appear in childhood, lentigines usually appear in late adulthood
  - Increased production of melanin pigment (not a melanocytic proliferation)

Solar lentigines

poikiloderma of Civatte

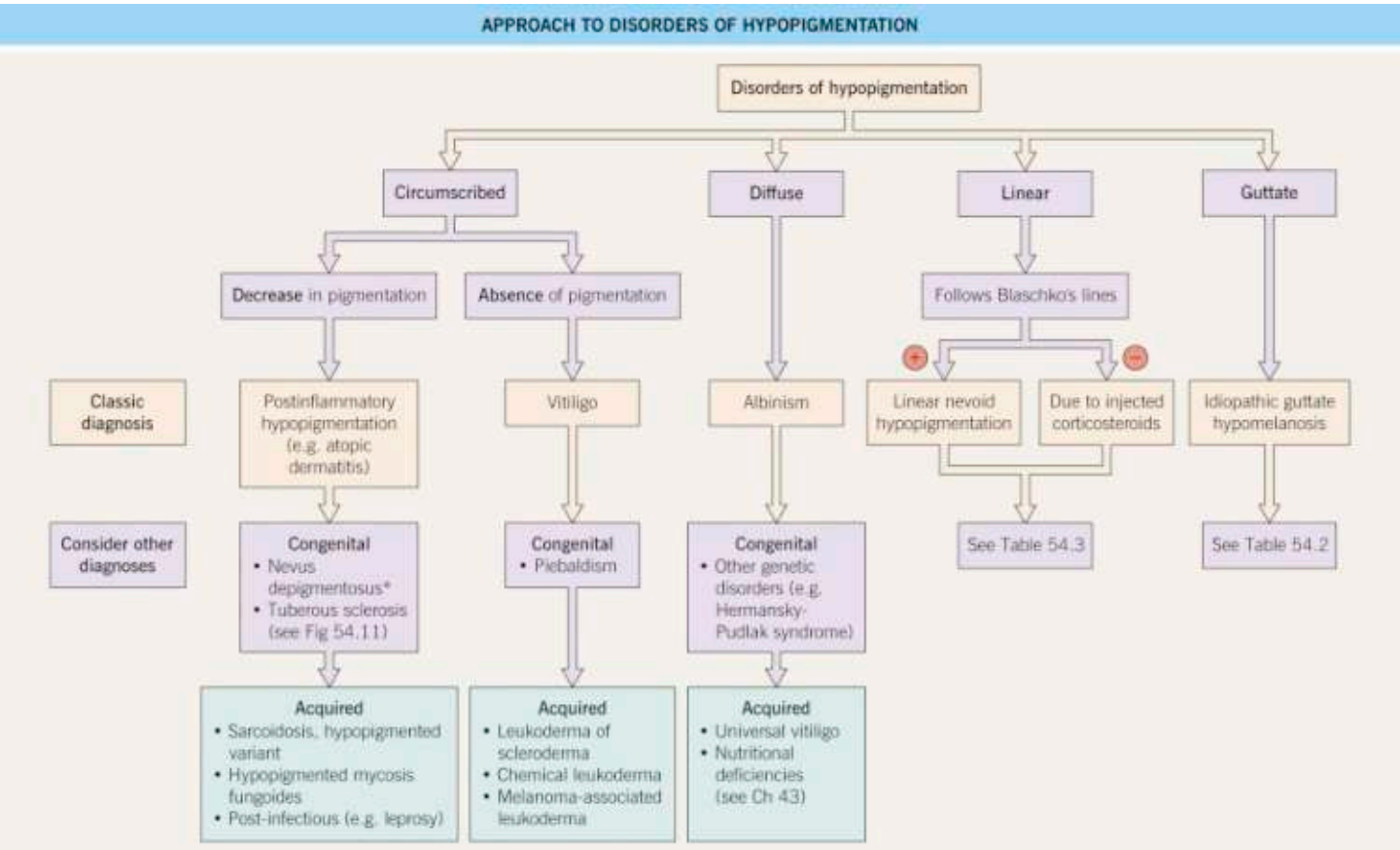
- Photoaging (dermatoheliosis)
  - Long-term excessive sun exposure (accelerated by cigarette smoking)
  - Most prominent on chest, neck, face, hands
  - Skin appears atrophic and wrinkled with uneven pigmentation
  - Microscopically, solar elastosis is evidence of chronic sun damage

dermatoheliosis

cutis rhomboidalis nuchae

Image Source: Andrews' Diseases of the Skin, 13th ed

Pigmentation Disorders



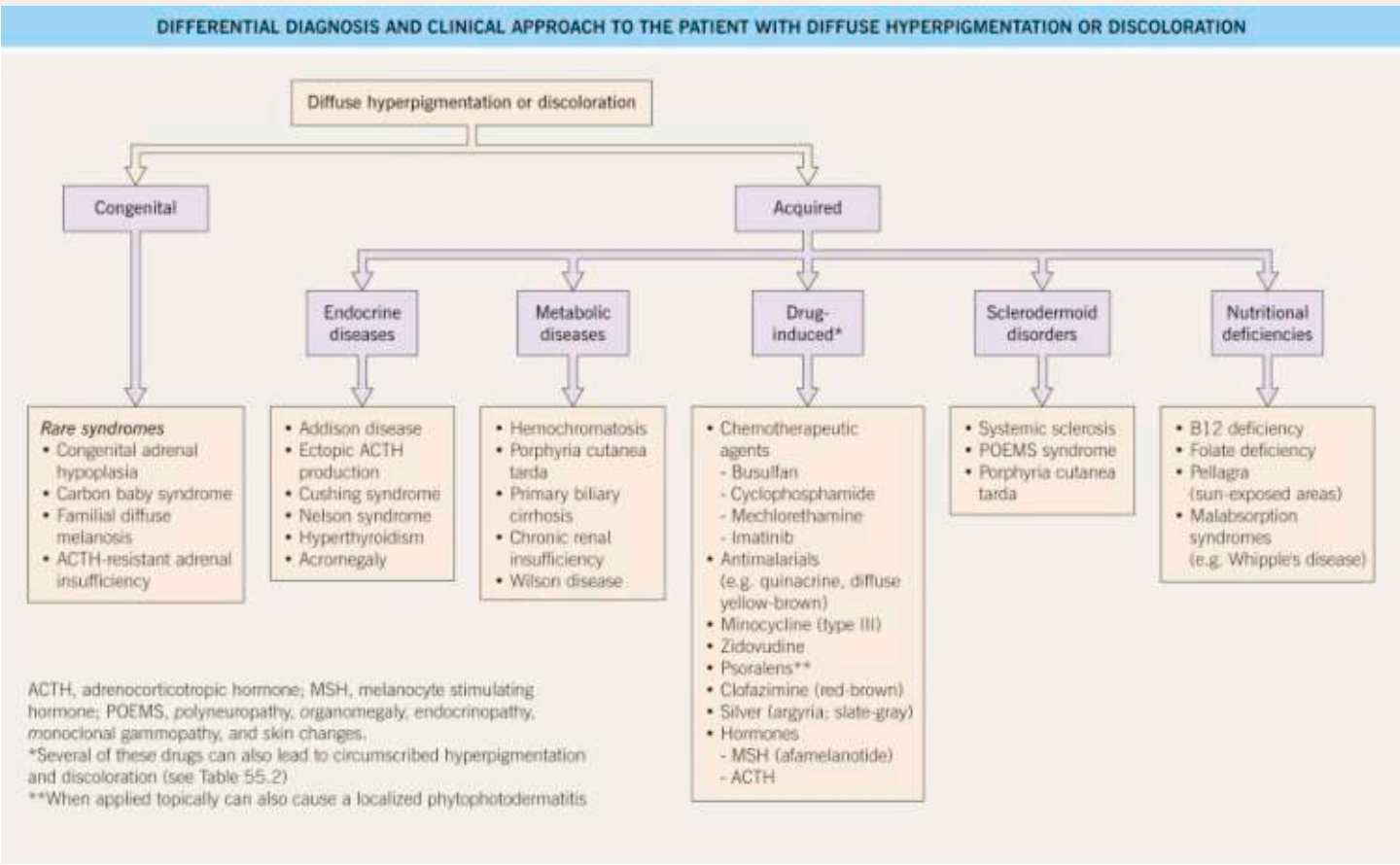


Image Source: Dermatology Essentials

Pigmentary Disorders	
Post-inflammatory pigment alteration	Hyper- or hypopigmentation due to inflammatory condition
Melasma	Brown patches on malar cheeks and forehead Predisposing factors: sun exposure, female hormones, and Fitzpatrick skin types IV and V Tx: sunscreen, bleaching creams, tretinoin
Vitiligo	Acquired, autoimmune depigmenting condition Localized, segmental, generalized, universal, acrofacial, and mucosal patterns Symmetric depigmented macules and patches Increased risk of other autoimmune conditions Tx: light therapy, topical steroid and steroid-sparing agents, systemic immunosuppressive agents
Peutz-Jeghers	Hyperpigmented macules on lips and oral mucosa GI polyposis
Albinism: reduced or absent melanin in skin, hair, and eyes	Oculocutaneous albinism 7 types (may also have ↓ visual acuity) Autosomal recessive
	Chediak-Higashi Syndrome Partial oculocutaneous albinism with giant granules (defective platelets, recurrent infections) Autosomal recessive
	Hermansky-Pudlak Syndrome Oculocutaneous albinism, defective platelets, interstitial lung disease Autosomal recessive (↑in Puerto Ricans)
Piebaldism	White forelock and depigmented patches (congenital) Autosomal dominant
Drug Induced	Chemotherapy, antimalarials, heavy metals, OCP, amiodarone, AZT, clofazimine, diltiazem, minocycline







Image Source: Andrews' Diseases of the Skin, 13th ed

Hair

Hirsutism: male pattern hair growth in females

Hypertrichosis: ↑ hair

Hair Cycle

- Anagen phase: growing, 2-6 years
- Catagen phase: transition, 1-2 weeks
- Telogen phase: resting, 3-5 months
- Hair sheds/falls out

≈90% of scalp hair is in anagen phase
Grows about 0.37 mm/day

Types

Lanugo: fine hair covering fetus
Terminal: coarse, thick hair (scalp, male face)
Vellus: fine, lighter colored (body)

Alopecia: loss of hair

Categorized based on presence/absence of:

- Scarring
- Inflammation

Scarring

Non-scarring

Non-inflammatory

Inflammatory

*CCCA: central centrifugal cicatricial alopecia

CCCA
Progressive scarring alopecia starting at crown in AA females

Discoid LE
Erythema, follicular plugging
PIPA

Lichen Planopilaris
Perifollicular erythema
Patches of progressive scarring

Traction
Due to prolonged tension from braids, ponytail, etc.; involves periphery of scalp with preserved frontal/temporal fringe

Trichotillosis
Compulsive pulling/plucking hair
Irregular patches and broken hair
+/- trichophagia → bezoar

Alopecia Areata
Rapid, complete loss of round-oval patches
Hx of regrowth, exclamation point hairs
+/- nail pitting

Pattern/Androgenetic
Female and male patterns
May begin anytime after puberty
Related to androgens

Telogen Effluvium
Excessive shedding (too many in telogen phase)
Physical/psychological stressor 3-5 months prior

Image Source: Andrews' Diseases of the Skin, 13th ed

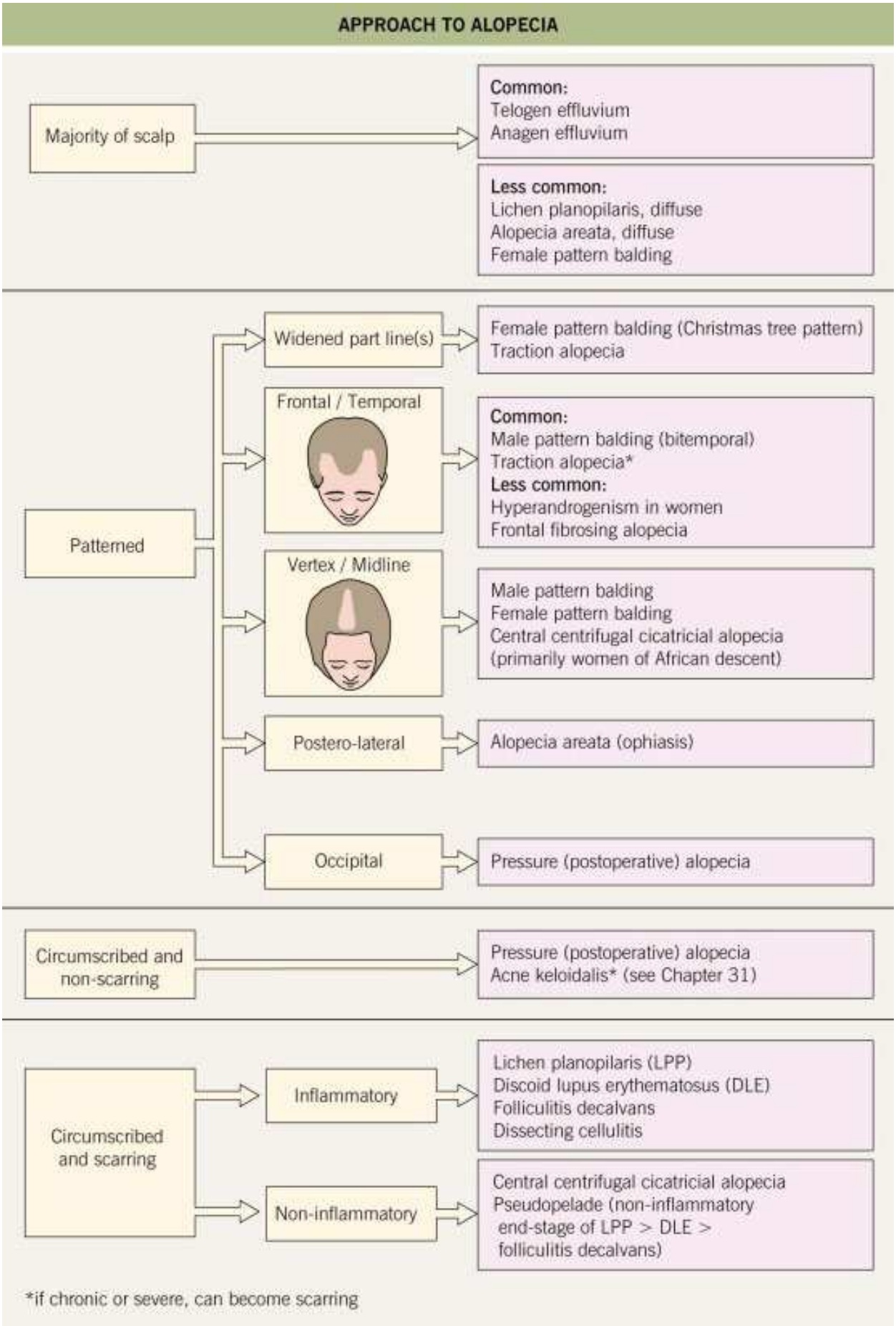


Image Source: Dermatology Essentials

Eczema

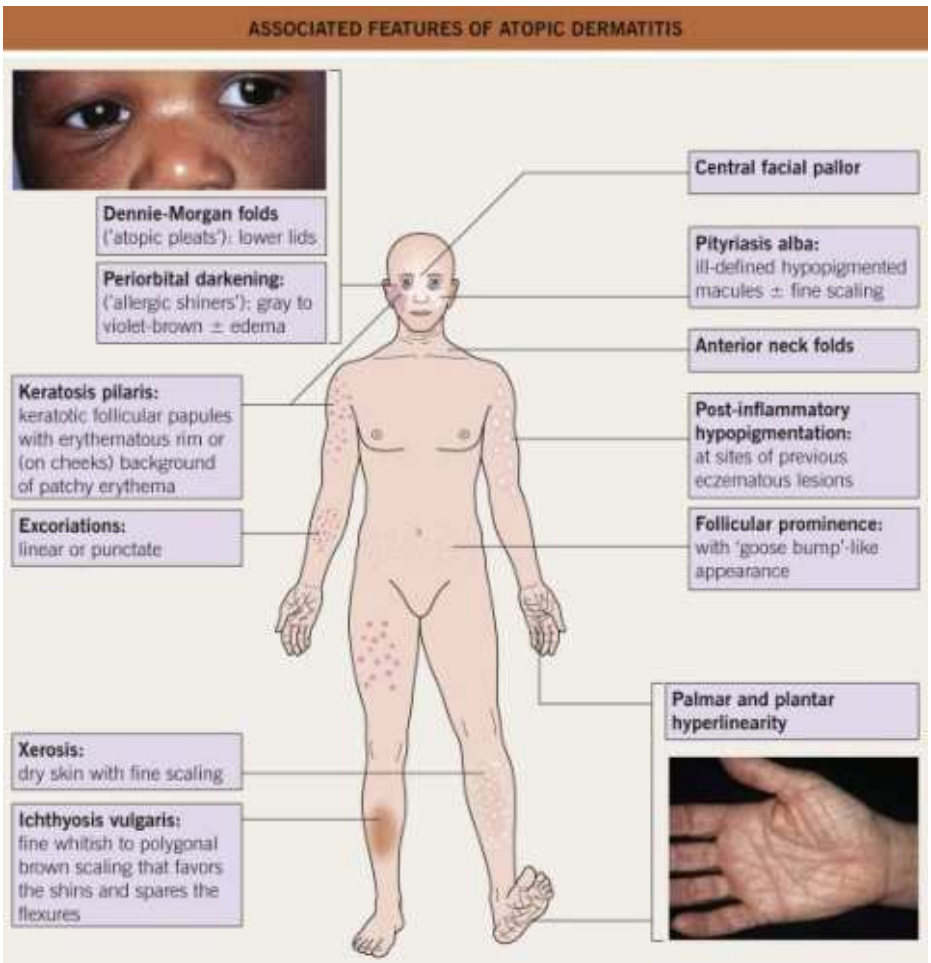
Atopic Dermatitis

Chronic, pruritic dermatitis often associated with other atopic conditions
Presentation varies with age

Major Diagnostic Criteria (three of following):
- Pruritis
- Typical morphology and distribution
- Chronic or relapsing
- Personal or family history of atopic disease

Minor Diagnostic Criteria (three of following):
- Xerosis
- Perifollicular accentuation
- Ichthyosis/hyperlinear palms/keratosis pilaris
- Hand/foot dermatitis
- Nipple eczema
- Dennie-Morgan infraorbital fold or orbital darkening
- Facial pallor/erythema
- Pityriasis alba

- Itch when sweating
- Early age of onset
- Course influenced by environment or emotions
- Tendency for cutaneous infections
- Intolerance to wool and lipid solvents
- Cheilitis
- Eyes: Recurrent conjunctivitis, keratoconus, or anterior subcapsular cataracts
- IgE reactivity or elevated serum IgE
- Food hypersensitivity
- White dermatographism / delayed blanch to cholinergic agents

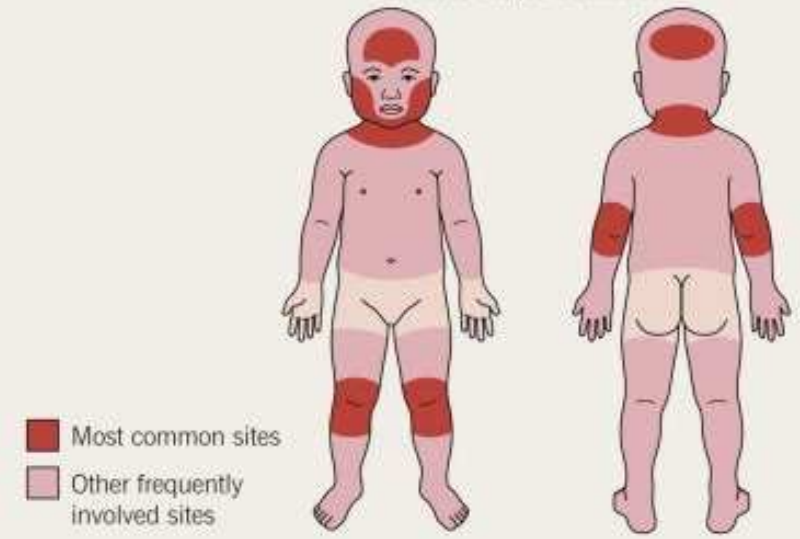


Treatment
- Education
- Barrier repair: gentle skin care, daily moisturization, limit hot water and scrubbing
- Antimicrobial therapy for infection
- Antihistamines for pruritis
- Topical corticosteroids and calcineurin inhibitors
- Phototherapy
- Systemic therapy: Dupilumab (IL-4 receptor inhibitor), corticosteroids, cyclosporine, methotrexate

Image Source: Dermatology Essentials, Photograph Source: Andrews' Diseases of the Skin, 13th Ed.

DISTRIBUTION PATTERNS OF ATOPIC DERMATITIS AND REGIONAL VARIANTS

Infantile atopic dermatitis



Childhood and adolescent atopic dermatitis

Head and neck dermatitis: primarily of face and neck after puberty; may be triggered by *Malassezia* overgrowth

Ear eczema: Erythema, scaling and fissuring under earlobe and/or in retroauricular region, ± bacterial superinfection

Eyelid eczema*: often has prominent lichenification

Dryness (chapping) of vermilion lips, ± peeling, fissuring, angular cheilitis

Erythema and scaling *surrounding* vermilion lips, often due to irritation from licking **(lip licker's eczema)**

Dyshidrotic eczema: deep-seated vesicles favoring sides of fingers and palms

Juvenile plantar dermatosis: glazed erythema, scaling and fissuring of plantar forefeet

Nipple eczema: exacerbated by rubbing of clothing (e.g. in joggers/athletes)

Frictional lichenoid eruption: multiple, small, flat-topped pink to skin colored papules on elbows > knees, classically in atopic boys in spring/summer

Prurigo-like lesions: firm, dome-shaped papulonodules with central scale-crust, favoring extensor extremities

Atopic hand eczema*: often superimposed irritant contact dermatitis

Nummular lesions†: coin-shaped eczematous plaques, often with oozing/crusting, favoring extremities

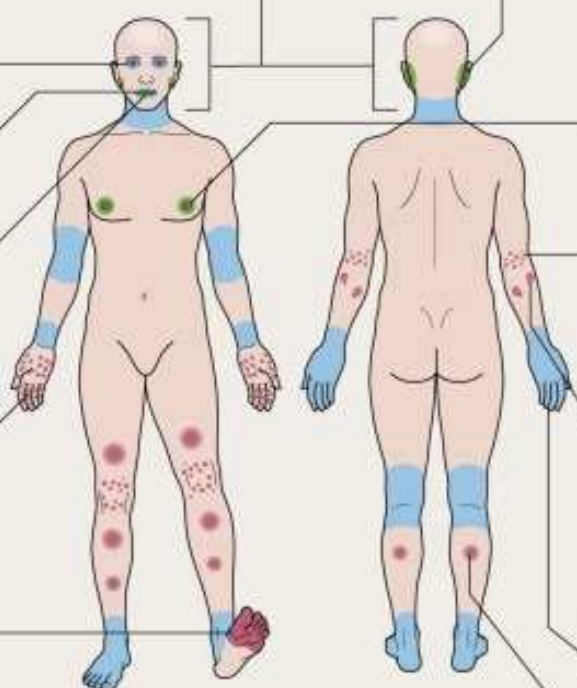


Image Source: Dermatology Essentials

Eczema

Image Source: Andrews' Diseases of the Skin, 13th ed; Andrews' Diseases of the Skin Clinical Atlas

Eyelid Dermatitis

Often related to atopic dermatitis or contact dermatitis
Female>male
Thin skin is sensitive to airborne substances and transfer from hands
Fragrance, nail polish, etc.

Nipple Eczema

Areola and surrounding skin
More common in women and infants
Atopic dermatitis, breastfeeding, contact dermatitis, friction (jogger's nipple)
r/o Paget disease

Hand Dermatitis

Very common, may be associated with atopic dermatitis
80% of occupation dermatitides
Components of contact dermatitis should be assessed
Consider: environmental allergens, topical medications, frequency of "wet" work (skin contact with liquid or in gloves, frequent hand washing), occupational chemical/allergen exposure
Tx: vinyl gloves +/- white cotton gloves underneath, moisturizing, topical steroids, phototherapy

Xerotic Eczema (Asteatoic Eczema, Eczema Craquele)

Dry, red skin ("winter itch")
Red, scaly patches with fine cracks in epidermis
Extensor extremities, flank
Common in elderly and during winter
Tx: gentle skin care, barrier repair

Nummular Eczema

Discrete, coin-shaped, erythematous, pruritic patches (2-4 cm)
Lower legs, dorsal hands, extensor arms
Tx: topical corticosteroids or calcineurin inhibitors, antihistamine, phototherapy

Acneiform Disorders

Acne Vulgaris

Common condition of teenagers and young adults; face and upper trunk; mild – severe presentations, and may have associated systemic symptoms
May lead to post-inflammatory pigment alteration or scarring
Variants:

- Non-inflammatory: open and closed comedones
- Inflammatory: erythematous papules and pustules, nodules, and cysts
- Hormonal: predominantly adult females; may have hyperandrogenism and frequently have flares related to menstrual cycle (lower face, jawline, and neck)
- Acne excoriee: predominantly teenage girls and young women; picking leads to crusted erosions and scarring
- Acne mechanica: comedone formation due to friction or occlusion
- Acne cosmetica: comedone formation due to follicle occluding cosmetic products (hair products, makeup, occupational exposures)
- Acne fulminans: predominantly teenage boys; abrupt onset of inflammatory nodules on face and trunk that may coalesce with systemic symptoms
- Neonatal acne: 2 weeks – 3 months; papules and pustules without comedones
- Infantile acne: 3 months – 2 years; comedones, papules, pustules, and cysts

Therapeutic Options (consider severity, distribution, type, and patient preference):

- Topical retinoids (tretinoin, adapalene, tazarotene): at least 3-4 weeks use before response, predominantly comedolytic
- Topical antimicrobials (benzoyl peroxide, clindamycin, erythromycin): reduces bacterial burden
- Oral antibiotics (tetracyclines): antibacterial and anti-inflammatory, 3-6 months
- Oral contraceptives and spironolactone: hormonal acne
- Oral isotretinoin: 4-6 months to reach target cumulative dose of 120-150 mg/kg
- Other options: lifestyle modification, azaleic acid, salicylic acid, topical dapsone, intralesional steroid

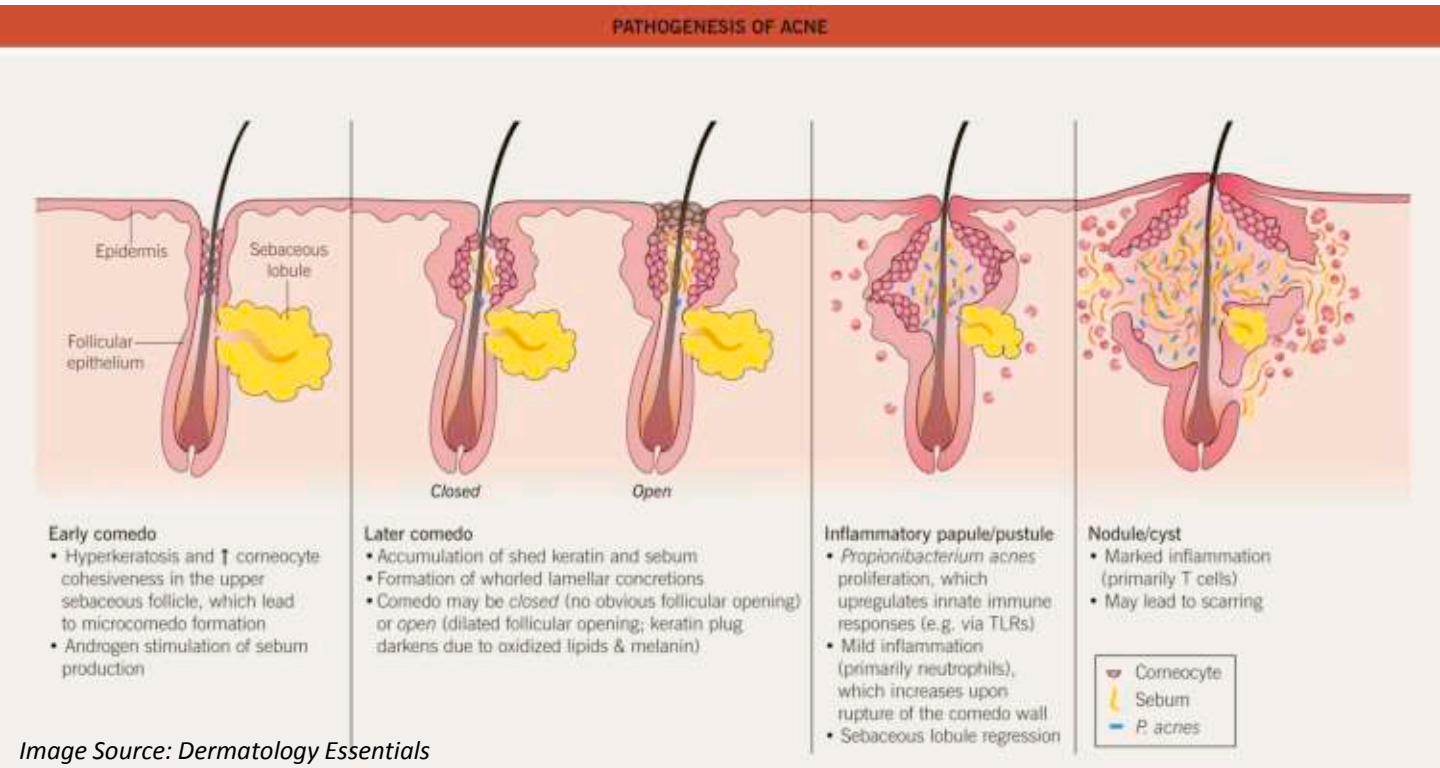


Image Source: Dermatology Essentials

Acneiform Disorders

Rosacea

Typically begins in 4th decade with variable severity; central face

Variants:

- Erythematotelangiectatic: flushing/blushing → central facial erythema, telangiectasia
- Papulopustular: papules and pustules
- Phymatous: irregular thickening of nose (bulbous)
- Ocular: telangiectasia, periorbital edema, blepharitis, recurrent styes, keratitis
- Rosacea fulminans

Treatment (consider severity and type): topical antibiotic, azelaic acid, oral tetracycline, oral isotretinoin, laser, surgical excision/electrosurgery

Periorificial Dermatitis

Children and adults

Pink papules and small pustules around orifices (commonly mouth and nose)

Exacerbated by topical steroids

Deep Folliculitis

Firm tender papules and nodules

"follicular occlusion tetrad": hidradenitis suppurativa, dissecting cellulitis, acne conglobate, pilonidal sinus

Pseudofolliculitis barbae

Acne keloidalis nuchae

Hidradenitis suppurativa

Image Source: Dermatology Essentials

Genodermatoses and Congenital

Disease	Inheritance	Dermatologic Presentation
Neurofibromatosis Type 1	Autosomal dominant	≥ 6 café au lait macules, axillary/inguinal freckling, neurofibromas, Lisch nodules
Noonan Syndrome	Autosomal dominant	Lymphedema, short curly hair, dystrophic nails, keloid formation, elastic skin, ulerythema of eyebrows, granular cell tumors, abnormal dermatoglyphs, café au lait macules
LEOPARD Syndrome	Autosomal dominant	Lentigines, EKG abnormalities, Ocular hypertelorism, Pulmonary stenosis, Abnormal genitalia, Retardation of growth, Deafness
Proteus Syndrome	Autosomal dominant	Disproportionate, asymmetric overgrowth, epidermal nevi, vascular malformations, CT nevi
Tuberous Sclerosis	Autosomal dominant	Fibromas, shagreen patches, ash-leaf macules, café au lait macules, dental pits,
Xeroderma Pigmentosum	Autosomal recessive	Extreme photosensitivity → freckling and skin cancer (defective DNA thymidine dimer repair)
Bloom Syndrome	Autosomal recessive	Photosensitivity, malar telangiectasia, dwarfism, cataracts
Rothmund-Thomson Syndrome	Autosomal recessive	Poikiloderma, photosensitivity, skin cancer
Gorlin-Goltz Syndrome	Autosomal dominant	BCC, palmar/plantar pits, hypertelorism, frontal bossing
Reed Syndrome	Autosomal dominant	Multiple leiomyomas

Image Source: Andrews' Diseases of the Skin, 13th ed; Andrews' Diseases of the Skin Clinical Atlas

Genodermatoses and Congenital





Disease	Inheritance	Dermatologic Presentation
Incontinentia Pigmenti	X-linked dominant	Vesicular, verrucous, and pigmentary stages with Blaschkoid distribution
Epidermolysis Bullosa	variable	Group of disorders; skin fragility and blistering due to physical injury
Hailey-Hailey Disease	Autosomal dominant	Recurrent vesiculobullous dermatitis of neck, axillae, and flexures
Ichthyoses	Variable	Disorders of keratinization leading to various types of scale
Darier Disease	Autosomal dominant	Brown papules in seborrheic distribution, nail changes, verrucous papules on hands and shins
Ectodermal Dysplasia	Variable	Group of disorders where components of the skin are absent, abnormal, or incomplete (hypohidrotic, hidrotic, EEC, etc.)
Goltz Syndrome	X-linked dominant	Focal dermal hypoplasia Blaschkoid red-tan atrophic plaques, papillomas, skeletal defects, dental/ocular defects
Keratosis Pilaris	Autosomal dominant	Small follicular papules with keratin plug in each follicle




Image Source: Andrews' Diseases of the Skin, 13th ed; Andrews' Diseases of the Skin Clinical Atlas