Talk the Talk – Dermatology Lingo

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Disclosure

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None

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None
Learning Objectives

Talk the Talk – Dermatology Lingo

• Primary skin lesions
• Secondary skin lesions
• Color, configuration, distribution, signs
• Categorizing cutaneous eruptions
• Clinical differential diagnoses
Mayo Clinic
Locations

Rochester, Minnesota
Mayo Clinic Health System

Scottdale and Phoenix, Arizona

Jacksonville, Florida
Talk the Talk – Dermatology Lingo

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What is an example of a papulosquamous disorder?

- A) Allergic contact dermatitis
- B) Lichen sclerosus
- C) Necrobiosis lipoidica
- D) Secondary syphilis
- E) Urticaria
Basic Morphology in Dermatology

• Primary skin lesions
• Secondary skin lesions
• Color
• Configuration
• Distribution
• Clinical signs
Primary Skin Lesions

- Macule: flat ≤5-10mm
- Patch: flat >5-10mm
- Papule: elevated ≤5-10mm
- Plaque: elevated >5-10mm
- Nodule: discrete lesion with depth
- Cyst: nodule with contents
- Vesicle: serous fluid filled ≤5-10mm
- Bulla: serous fluid filled >5-10mm
- Pustule: vesicle filled with pus
Other Primary Skin Lesions

- Ulcer: full thickness epidermal defect
- Wheal: central erythema & edema with peripheral pallor (hive)
- Telangiectasia: dilated small superficial vessel
- Burrow: scabies mite track
- Comedo: open vs. closed (dilated vs. plugged pore)
Secondary Skin Lesions

- **Scale**: whitish, dry flaking
- **Crust**: honey-colored, dried oozing
- **Lichenification**: thickened skin with accentuated lines
- **Atrophy**: epidermal, dermal, subcutaneous; may result in a dell or trough in the skin
- **Fissure**: narrow linear epithelial defect
- **Erosion**: partial thickness epidermal defect
Other Secondary Skin Lesions

- **Punctum**: central opening of cyst
- **Sinus**: cavity or track underneath skin
- **Induration**: firm skin
  - **Infiltration**: from cells
  - **Edema**: from fluid
  - **Sclerosis**: from collagen thickening
- **Sphacelus**: necrotic or gangrenous tissue
- **Eschar**: dry scab
Types of Scale

- Pityriasiform
- Psoriasiform
- Ichthyosiform
- Lamellar
- Exfoliative
- Gritty
- Follicular
- Collarette
- Furfuraceous
- Micaceous
- Ostraceous
- Keratotic
- Granular
- Hystrix-like
- Craquele
- Seborrheic
Other Skin Lesions

- Papilloma
- Polyp
- Vegetation
- Horn

- Purpura
  - Petechia
  - Ecchymosis
- Infarct
- Gangrene
- Hematoma
Specific Skin Lesions

- Scar: fibrosis after tissue healing
- Hypertrophic scar: raised scar
- Keloid: grows beyond original scar margins
- Striae: stretch mark due to weakened elastic tissue
- Poikiloderma: triad of epidermal atrophy, telangiectasia, dyspigmentation
Other Specific Skin Lesions

- Milium: small white cyst
- Furuncle: abscess
- Carbuncle: coalescence of abscesses
- Calcinosis: calcium deposits in skin
- Angioedema: swelling of dermis and/or subcutaneous tissue
- Excoriation: linear defect in skin surface from a scratch
Color of Dermatoses

- Erythematous: ex. hive
- Violaceous: ex. lichen planus
- Red-brown: ex. sarcoidosis
- Salmon-colored: ex. psoriasis
- Yellow-orange: ex. xanthogranuloma
- Porcelain-white: ex. lichen sclerosus
- Dusky-grey: ex. resolved fixed drug eruption
- Hypo- or hyper-pigmented: ex. vitiligo or melasma
- Skin-colored: ex. skin tag
Configuration of Skin Lesions

- Linear
- Koebnerized
- Sporotrichoid
- Segmental/zosteriform
- Grouped/herpetiform
- Corymbiform
- Reticular/retiform
- Blaschkoid/whorled

- Annular
- Arcuate/arciform
- Serpiginous
- Polycyclic
- Targetoid
- Nummular
- Discoid
- Guttate
Annular Rashes

- Urticaria
- Gyrate/figurate erythemas
- Tinea
- Granuloma annulare
- Sarcoidosis
- Leprosy
- Lupus
- Mycosis fungoides
- Psoriasis
Distribution of Skin Lesions

- Localized, regional, scattered, generalized, total body
- Bilateral vs. unilateral
- Symmetric
- Photo-distributed
- Extensor, flexor, intertriginous, acral
- Spares …
Erythroderma (>75% body surface area)

- Differential diagnosis:
  - Pre-existing dermatosis
    - Psoriasis
    - Atopic dermatitis
  - Malignancy
    - Mycosis fungoides / Sezary syndrome
    - Paraneoplastic
  - Medication
    - Drug eruption
    - Systemic corticosteroids withdrawn
  - Autoimmune
    - Dermatomyositis
    - Pemphigus foliaceus
Clinical Signs in Dermatoses

- Nikolsky sign: peeling away adjacent skin with friction
- Asboe-hensen: expanding bulla laterally with pressure
- Darier’s sign: urticate lesion with scratching
- Auspitz sign: pinpoint bleeding after removing adherent scale
- Latent scale: inducing scale with scratching
- Dermatographism: urticate normal skin with scratching
Overview of Cutaneous Eruptions

- Papulosquamous
- Lichenoid
- Eczematous
- Exanthems
- Erythemas
- Purpuras
- Vesiculobullous
- Acneiform/Follicular
- Erosive
- Ulcerative
- Infiltrated
- Sclerotic
- Atrophic
- Panniculitides
- Deposits
- Pigmentary
Papulosquamous Disorders

• Clinical: Sharply marginated, erythematous, scaly papules and plaques

• Pathologic: Epidermal hyperplasia (acanthosis) with hyperkeratosis (ortho/para-keratosis)
Papulosquamous Disorders

- Psoriasis
- Pityriasis rubra pilaris
- Pityriasis rosea
- Secondary syphilis
- Tinea
- Cutaneous lupus and dermatomyositis
- Parapsoriasis
- Mycosis fungoides
- Some lichenoid and eczematous disorders
Lichenoid Disorders

• Clinical: Flat-topped, violaceous, papules and plaques with ± scale

• Pathologic: Interface dermatitis (lichenoid or vacuolar)
Lichenoid Disorders

- Lichen planus
- Lichen nitidus
- Lichen striatus
- Lichen sclerosus
- Pityriasis lichenoides
- Lichenoid drug eruption
- Chronic graft-versus-host disease
Eczematous Disorders

- Clinical: Ill-defined, erythematous, papules and plaques with epidermal alteration (scale, crust, lichenification)

- Pathologic: Spongiotic dermatitis (edema between epidermal keratinocytes)
Eczematous Disorders

- Contact allergic
- Contact irritant
- Auto-sensitization / ID reaction
- Pompholyx / dyshidrotic
- Atopic
- Seborrheic
- Stasis
- Nummular
- Neurodermatitis / prurigo nodularis
- Lichen simplex chronicus
Exanthsms ("maculopapular rash")

• Clinical: Coalescing, morbilliform, blanching, erythematous macules and papules ± exfoliative scale

• Pathologic: Perivascular inflammation and dermatitis (mild spongiotic or interface)
Exanthems

- Drug eruptions
- Viral exanthems
- Rickettsial exanthems
- Acute graft-versus-host disease
Erythemas

- Clinical: Discrete, blanching, erythematous wheals, papules, or plaques ± mild scale
- Pathologic: Perivascular inflammation ± dermal edema ± interface or spongiotic dermatitis
Erythemas

- Urticaria
- Angioedema
- Erythema multiforme
- Fixed drug eruption
- Erysipelas/cellulitis
- Gyrate/figurate erythemas
  - Erythema annulare centrifugum
  - Erythema gyratum repens
  - Erythema chronicum migrans
  - Erythema marginatum
Purpuras

- Clinical: Petechia, ecchymoses, palpable purpura, cutaneous infarcts, and/or gangrene
- Pathologic: Perivascular hemorrhage ± vasculitis/vascular occlusion
Purpuras

- Trauma-related
  - Solar purpura, valsalva related, accidental and non-accidental trauma
- Progressive pigmented purpuras / Pigmented purpuric dermatoses
  - Schamberg’s, Gougerot Blum, Majocchi, Doucas Kapetanakis, lichen aureus
- Thrombocytopenic
  - Idiopathic thrombocytopenic purpura, thrombotic thrombocytopenic purpura, heparin-induced thrombocytopenia, various causes of pancytopenia
Purpuras

- Immune-mediated
  - Leukocytoclastic vasculitis, ANCA-related / medium-sized vessel vasculitis, urticarial vasculitis, type II/III cryoglobulinemia

- Infectious-related
  - Fungal septic, purpura fulminans, ecthyma gangrenosum, rocky mountain spotted fever, bacterial endocarditis, meningococcemia

- Vascular-occlusive
  - Calciphylaxis, livedoid vasculopathy, type 1 cryoglobulinemia, antiphospholipid antibody syndrome, warfarin necrosis, heparin necrosis, other coagulopathy
Vesiculobullous Disorders

• Clinical: Blisters and/or erosions on an erythematous base

• Pathologic: Subcorneal, intraepidermal, or subepidermal blisters
Vesiculobullous Disorders

- Pemphigoid variants
- Pemphigus variants
- Dermatitis herpetiformis
- Linear IgA bullous dermatosis
- Bullous lupus erythematosus
- Epidermolysis bullosa aquisita
- Porphyria cutanea tarda
- Diabetic bulla
- Coma blisters
- Friction or suction blisters
- Herpes virus infections
- Acute contact dermatitis
Acneiform/Follicular Disorders

- Clinical: Pustules, comedones, follicular papules, and/or inflammatory papules/nodules/cysts
- Pathologic: Perifollicular/periadnexal inflammation
Acneiform/Follicular Disorders

- Acne
- Rosacea
- Folliculitis
- Miliaria
- Fox-fordyce
- Hidradenitis
- Keratosis pilaris
Erosive Disorders

• Clinical: Diffuse cutaneous erosions

• Pathologic: Erosions with epidermal necrosis
Erosive Disorders

- Stevens-Johnson syndrome/Toxic epidermal necrolysis (SJS / TEN)
- Staph Scalded Skin Syndrome (SSSS)
- Deficiency dermatoses
  - Glucagonoma / necrolytic migratory erythema
  - Niacin / pellagra
  - Zinc / acrodermatitis enteropathica
Ulcerative Disorders

- Clinical: Primary localized ulcers
- Pathologic: Ulceration and healing skin response with acute and chronic inflammation
Ulcerative disorders

- Infection
- Malignancy
- Vasculitis/vascular-occlusive
- Venous stasis
- Arterial
- Diabetic
- Neuropathic
- Traumatic
- Factitial
- Pyoderma gangrenosum
Infiltrated Disorders

• Clinical: Dermally infiltrated papules, plaques, and/or nodules

• Pathologic: Dense dermal inflammation or granulomas
Infiltrated Disorders

- Histiocytic disorders
  - Langerhan’s cell histiocytosis and other histiocytoses
- Xanthomatous disorders
  - Xanthomas and xanthogranulomas
- Neutrophilic dermatoses
  - Sweet syndrome, superficial pyoderma, erythema elevatum diutinum, pustular vasculitis, granuloma faciale
Infiltrated Disorders

- Mast cell disorders
  - Mastocytosis and its variants
- Plasma cell disorders
  - Cutaneous plasmacytomas
- Hematolymphoid disorders
  - Leukemia cutis, cutaneous lymphomas, lymphoid hyperplasia
- Granulomatous disorders
  - Sarcoid, granuloma annulare, necrobiosis lipoidica, leprosy
Sclerotic Disorders

• Clinical: Indurated, sclerotic plaques
• Pathologic: Dermal and/or subcutaneous sclerosis or fibrosis
Sclerotic Disorders

- Morphea
- Lichen sclerosus
- Scleroderma
- Scleromyxedema
- Scleredema
- Eosinophilic fasciitis
- Nephrogenic fibrosing dermopathy/nephrogenic systemic fibrosis
- Sclerodermoid graft-versus-host disease
- Sclerodermoid porphyria
Atrophic Disorders

• Clinical: Cutaneous atrophy
• Pathologic: Decreased epidermal thickness, elastic fibers, collagen, or fat
Atrophic Disorders

- Atrophoderma
- Steroid atrophy
- Anetoderma
- Cutis laxa
- Dermal elastolysis
- Acquired lipoatrophy / lipodystrophy
Panniculitides

- Clinical: Multiple subcutaneous nodules
- Pathologic: Lobular or septal panniculitis
Panniculitides

• Septal
  • Erythema nodosum, deep morphea, deep granuloma annulare

• Lobular
  • Erythema induratum, α1 anti-trypsin deficiency, panniculitis-like T-cell lymphoma, subcutaneous sarcoid, pancreatic, cold, traumatic, factitial, infective, neutrophilic, or lupus panniculitis
Deposits

• Clinical: Dermal nodules
• Pathologic: Mucinosis, calcinosis, elastosis, hyalinosis
Deposits

- Calcinosis cutis
- Osteoma cutis
- Gout
- Amyloidosis
- Mucinoses
Pigmentary Disorders

• Clinical: Hypo- or hyper-pigmented macules and/or patches

• Pathologic: Epidermal hypopigmentation or epidermal hyperpigmentation or dermal pigmentary deposits
Pigmentary Disorders

Hypopigmentation
- Vitiligo
- Hypomelanosis
- Pityriasis alba
- Post-inflammatory

Hyperpigmentation
- Melasma
- Hypermelanosis
- Ashy dermatosis
- Post-inflammatory
- Macular amyloid
- Notalgia paresthetica / frictional melanosis
- Terra firma forme
- Pigment deposits
Summary

- Primary skin lesions
- Secondary skin lesions
- Color, configuration, distribution, signs
- Categorizing cutaneous eruptions
- Clinical differential diagnoses
Questions & Discussion

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