Preparing for the American Board of Pathology (ABPath) Examination of Fundamental Knowledge and Skills

# Dermatopathology

*Content Specifications*

# Overview:

## Dermatopathology Content Specifications

This guide outlines the content that may appear on the American Board of Pathology's Dermatopathology Subspecialty exam. It provides a framework based on the knowledge and skills typically covered in Fellow-level training, along with applicable Core and Advanced Resident topics from residency training that the trainee is expected to know or be able to perform.

**Key to Designations:**

C = Core/Foundational Knowledge

AR = Advanced Resident Knowledge

F = Fellow/Advanced Practitioner Knowledge

The exam assesses the knowledge, judgment, skills, and abilities necessary to identify specific entities, properly process specimens, and diagnose and monitor diseases using methods common in the practice of Dermatopathology. The specific diseases, tests, and concepts listed in this document are important for candidates to know, but it is not possible to create a fully comprehensive list of all the material needed for certification and effective practice. Candidates should use this guide as a reference for preparing for certification and professional practice.

Table of Contents

# Contents

## 1. Inflammatory Reaction Patterns

a. Interface Dermatitis (Lichenoid Reaction Pattern)

| | | |
|---|---|---|
| i. | Pattern Recognition | C |
| ii. | Lichen Planus | AR |
| iii. | Lichen Planus-Like Keratosis (Benign Lichenoid Keratosis) | AR |
| iv. | Lichenoid Drug Eruptions | AR |
| v. | Lichen Sclerosis | AR |
| vi. | Erythema Multiforme | AR |
| vii. | Toxic Epidermal Necrolysis/Stevens-Johnson Syndrome | AR |
| viii. | Graft-versus-Host Disease | AR |
| | 1. Eruption of lymphocyte recovery | F |
| ix. | Lupus Erythematosus | |
| | 1. Discoid Lupus Erythematosus | AR |
| | 2. Subacute Lupus Erythematosus | AR |
| | 3. Hypertrophic Lupus Erythematosus | AR |
| | 4. Acute Lupus Erythematosus | F |
| | 5. Systemic Lupus Erythematosus | F |
| | 6. Neonatal Lupus Erythematosus | F |
| | 7. Bullous Lupus Erythematosus | F |
| | 8. Tumid Lupus Erythematosus | F |
| | 9. Lupus Panniculitis | F |
| x. | Lichenoid and Granulomatous Dermatitis | F |
| xi. | Erythema Dyschromicum Perstans | F |
| xii. | Lichen Nitidus | F |
| xiii. | Lichen Striatus | F |
| xiv. | Fixed Drug Eruptions | F |
| xv. | Dermatomyositis | F |
| xvi. | Pityriasis Lichenoides | F |
| xvii. | Poikilodermas | F |
| | 1. Dyskeratosis Congenita | F |
| | 2. Poikiloderma of Civatte | F |

b. Psoriasiform Reaction Pattern

| | | |
|---|---|---|
| i. | Pattern Recognition | C |
| ii. | Psoriasis | AR |
| iii. | Lichen Simplex Chronicus | AR |
| iv. | Prurigo Nodularis | AR |
| v. | Reactive Arthritis (Reiter Syndrome) | F |
| vi. | Pityriasis Rubra Pilaris | F |

| | |
|---|---|
| vii. Psoriasiform Keratosis | F |
| c. Spongiotic Reaction Pattern | |
| i. Pattern Recognition | C |
| ii. Stasis Dermatitis | AR |
| iii. Allergic Contact Dermatitis | F |
| iv. Incontinentia Pigmenti | F |
| v. Pityriasis Rosea | F |
| vi. Irritant Contact Dermatitis | F |
| vii. Nummular Dermatitis | F |
| viii. Seborrheic Dermatitis | F |
| ix. Atopic Dermatitis | F |
| x. Id Reaction | F |
| xi. Pompholyx | F |
| xii. Juvenile Plantar Dermatosis | F |
| xiii. Papular Acrodermatitis of Childhood (Gianotti-Crosti Syndrome) | F |
| d. Vesiculobullous Reaction Pattern | |
| i. Intracorneal / Subcorneal Blisters & Pustules | C |
| 1. Pemphigus Foliaceus | AR |
| 2. Pemphigus Erythematosus | F |
| 3. Subcorneal Pustular Dermatosis (Sneddon-Wilkinson) | F |
| 4. IgA Pemphigus | F |
| 5. Infantile Acropustulosis | F |
| 6. Erythema Toxicum Neonatorium | F |
| 7. Transient Neonatal Pustular Melanosis | F |
| 8. Acute Generalized Exanthematous Pustulosis | F |
| 9. Miliaria Crystallina | F |
| 10. Halogenoderma | F |
| ii. Suprabasilar Blisters/Intraepidermal Blisters | C |
| 1. Acantholysis | C |
| 2. Acantholytic Dyskeratosis | C |
| 3. Pemphigus Vulgaris | AR |
| 4. Hailey-Hailey Disease | F |
| 5. Darier Disease | F |
| 6. Grover Disease | F |
| 7. Pemphigus Vegetans | F |
| 8. Paraneoplastic Pemphigus | F |
| iii. Subepidermal Blisters | C |
| 1. Bullous Pemphigoid | AR |
| 2. Dermatitis Herpetiformis | AR |
| 3. Epidermolysis Bullosa | F |
| a) Epidermolysis Bullosa Simplex | F |
| b) Junctional Epidermolysis Bullosa | F |
| c) Dystrophic Epidermolysis Bullosa | F |
| 4. Epidermolysis Bullosa Acquistia | F |

| | |
|---|---|
| 5. Pemphigoid Gestationis | F |
| 6. Linear IgA Bullous Dermatosis | F |
| 7. Cicatricial Pemphigold | F |
| 8. Bullous Diabeticorum | F |
| e. The Granulomatous Reaction Pattern, Non-Infectious | |
| i. Sarcoidal / Tuberculoid (Non-Infectious) | C |
| 1. Reactions to Foreign Materials | C |
| 2. Sarcoidosis | AR |
| 3. Melkersson-Rosenthal Syndrome (Cheilitis Granulomatosis) | F |
| 4. Cutaneous Crohn Disease | F |
| ii. Necrobiotic Palisading Granulomas | C |
| 1. Granuloma Annulare | AR |
| 2. Necrobiosis Lipoidica | AR |
| 3. Rheumatoid Nodules | AR |
| 4. Palisaded and Neutrophilic Granulomatous Dermatitis | F |
| 5. Elastolytic Granuloma | F |
| 6. Necrobiotic Xanthogranuloma | F |
| iii. Suppurative Granulomas | C |
| 1. Ruptured Cysts and Follicles | C |
| 2. Foreign Body Granulomas | C |
| iv. Miscellaneous Granulomas | |
| 1. Chalazion | AR |
| 2. Lupus Miliaris Disseminatus Faciei | F |
| 3. Interstitial Granulomatous Reaction | F |
| f. The Vasculopathic Reaction Pattern | |
| i. General Considerations / Pattern Recognition | C |
| ii. Non-Inflammatory Purpuras, including Solar Purpura | F |
| iii. Vascular Occlusive Diseases | C |
| 1. Disseminated Intravascular Coagulation | AR |
| 2. Cholesterol and Other Types of Embolism | AR |
| 3. Livedo Reticularis | F |
| 4. Protein C and Protein S Deficiencies | F |
| 5. Warfarin Necrosis | F |
| 6. Atrophie Blanche (Livedoid Vasculopathy) | F |
| 7. Thrombotic Thrombocytopenic Purpura | F |
| 8. Cryoglobulinemia, Monoclonal | F |
| 9. Antiphospholipid Syndrome | F |
| 10. Factor V Leiden Mutation | F |
| 11. Sneddon Syndrome | F |
| 12. Levamisole-Induced Vasculitis / Vasculopathy | F |
| iv. Urticaria | AR |
| v. Acute & Chronic Vasculitis | |
| 1. Leukocytoclastic (Hypersensitivity) Vasculitis | AR |
| 2. Henoch-Schönlein Purpura/IgA | AR |

3. Polyarteritis Nodosa AR
4. Urticarial Vasculitis F
5. Mixed Cryoglobulinemia F
6. Septic Vasculitis F
7. Erythema Elevatum Diutinum F
8. Granuloma Faciale F
9. Microscopic Polyangiitis (Polyarteritis) F
10. Superficial Thrombophlebitis F

vi. Neutrophilic Dermatoses
1. Sweet Syndrome AR
2. Pyoderma Gangrenosum AR
3. Neutrophilic Dermatosis of the Hand (Pustular Vasculitis) F
4. Bowel-Associated Dermatosis-Arthritis Syndrome F
5. Rheumatoid Neutrophilic Dermatosis F
6. Behçet Disease F

vii. Lymphocytic Dermatoses
1. Polymorphic Eruption of Pregnancy (PEP) F
2. Gyrate and Annular Erythemas F
3. Erythema Annulare Centrifugum F
4. Erythema Marginatum F
5. Pigmented Purpuric Dermatoses F

viii. Chronic Lymphocytic Vasculitis
1. Malignant Atrophic Papulosis (Degos Disease) F
2. Perniosis F

ix. Vasculitis with Granulomatosis C
1. Granulomatosis with Polyangiitis AR
2. Lymphomatoid Granulomatosis AR
3. Eosinophilic Granulomatosis with Polyangiitis AR
4. Giant Cell (Temporal) Arteritis AR
5. Takayasu Arteritis AR

## 2. The Epidermis

a. Disorders of Epidermal Maturation and Keratinization
i. Porokeratosis and Variants AR
ii. Acanthosis Nigricans AR
iii. Ichthyoses F
1. Ichthyosis Vulgaris F
2. X-Linked Ichthyosis F
3. Lamellar Ichthyosis F
4. Epidermolytic Ichthyosis F
5. Harlequin Ichthyosis F
6. Acquired Ichthyosis F

iv. Palmoplantar Keratodermas

1. Punctate Palmoplantar Keratoderma F
2. Acquired Keratoderma F
3. Pachyonychia Congenita F

v. Hyperkeratosis Lenticularis Perstans F
vi. Xeroderma Pigmentosum F
vii. Ectodermal Dysplasia F
1. Anhidrotic (Hypohidrotic) Ectodermal Dysplasia F
2. Hidrotic Ectodermal Dysplasia F

viii. Granular Parakeratosis F
ix. Circumscribed Acral Hypokeratosis F
x. Confluent & Reticulated Papillomatosis F

b. Disorders of Pigmentation

i. Disorders Characterized by Hypopigmentation
1. Vitiligo AR
2. Oculocutaneous Albinism F
3. Tuberous sclerosis (Ash Leaf Spots) F
4. Idiopathic Guttate Hypomelanosis F
5. Hypomelanosis of Ito F

ii. Disorders Characterized by Hyperpigmentation
1. Postinflammatory Melanosis AR
2. Melasma F
3. Ephelis (Freckle) F
4. Café-au-lait Spots F
5. Laugier-Hunziker Syndrome F
6. Peutz-Jeghers Syndrome F
7. Becker Nevus F
8. Dowling-Degos Disease F
9. Notalgia Paresthetica F

## 3. The Dermis

a. Disorders of Collagen

i. Hypertrophic Scars and Keloids C
ii. Morphea AR
iii. Eosinophilic Fasciitis AR
iv. Radiation Dermatitis AR
v. Chondrodermatitis Nodularis Helicis AR
vi. Scleroderma F
vii. Mixed Connective Tissue Disease F
viii. Atrophoderma F
ix. Sclerodermoid Disorders F
x. Sclerodermoid Graft-versus-Host Disease F
xi. Chemical and Drug-Related Disorders F
xii. Nephrogenic Systemic Fibrosis F

| | | |
|---|---|---|
| xiii. | Connective Tissue Nevi | F |
| xiv. | Weathering Nodules of the Ear | F |
| xv. | Aplasia Cutis Congentia | F |
| xvi. | Focal Dermal Hypoplasia | F |
| xvii. | Corticosteroid Atrophy | F |
| xviii. | Reactive Perforating Collagenosis | F |
| b. | Disorders of Elastic Tissue | |
| i. | Increased Elastic Tissue | |
| 1. | Solar Elastosis | C |
| 2. | Elastofibroma | AR |
| 3. | Elastoderma | F |
| 4. | Elastoma | F |
| 5. | Elastosis Perforans Serpiginosa | F |
| 6. | Pseudoxanthoma Elasticum | F |
| 7. | Nodular Elastosis with Cysts and Comedones (Favre-Racouche) | F |
| 8. | Elastotic Nodules of the Ears | F |
| 9. | Collagenous and Elastotic Plaques of the Hands | F |
| 10. | Penicillamine Induced Alteration | F |
| ii. | Decreased Elastic Tissue | |
| 1. | General Considerations | |
| 2. | Anetoderma | F |
| 3. | Cutis Laxa | F |
| 4. | Mid-Dermal Elastolysis | F |
| 5. | Acrokeratoelastoidosis | F |
| 6. | PXE-like Papillary Dermal Elastolysis | F |
| 7. | Nevus Anelasticus | F |
| c. | Cutaneous Mucinoses | |
| i. | Pretibial Myxedema | AR |
| ii. | Digital Mucous (Myxoid) Cyst | AR |
| iii. | Mucocele of the Lip | AR |
| iv. | Generalized Myxedema | F |
| v. | Papular Mucinosis and Scleromyxedema | F |
| vi. | Reticular Erythematous Mucinosis (REM) | F |
| vii. | Scleredema | F |
| viii. | Focal Mucinosis | F |
| ix. | Follicular Mucinosis | F |
| d. | Cutaneous Deposits | |
| i. | Calcinosis Cutis | C |
| 1. | Idiopathic Scrotal Calcinosis | AR |
| 2. | Tumoral Calcinosis | AR |
| 3. | Dystrophic Calcification | AR |
| 4. | Calciphylaxis | AR |
| 5. | Subepidermal Calcified Nodule | F |

6. Metastatic Calcification F

ii. Cutaneous Ossification C
1. Osteoma Cutis AR
2. Multiple Osteomas F
3. Albright Hereditary Osteodystrophy F

iii. Hyaline Deposits
1. Gout AR
2. Amyloidosis AR
a) Systemic Amyloidosis F
b) Lichen, Macular F
c) Nodular Amyloidosis F
3. Lipoid Proteinosis F
4. Waldenström Macroglobulinemia F
5. Colloid Milium and Colloid Degeneration F

iv. Pigment and Related Deposits
1. Recognition of a Pigment/Deposit as Abnormal C
2. Tattoos AR
3. Monsel Solution AR
4. Aluminum Chloride AR
5. Ochronosis F
6. Silver Deposition (Argyria) F
7. Gold Deposition (Chrysiasis) F
8. Arsenic F
9. Aluminum F

v. Drug Deposits and Pigmentation
1. Antimalarial Drugs F
2. Phenothiazines F
3. Tetracycline F
4. Minocycline F
5. Amiodarone F
6. Clofazimine F
7. Chemotherapeutic Agents F

vi. Miscellaneous Deposits
1. Injected Fillers F
2. Oxalate Crystals F
3. Myospherulosis F
4. Gelfoam F
5. Medication F

## 4. Normal Skin and Mucosa

a. Normal Skin from Diverse Anatomic Sites
i. Face, Acral, Mucosa, Trunk, Axillary, Genital, Scalp, and Eyelid/Conjunctiva. C

b. Normal Microanatomy (e.g., Adnexal Structures, Nerve versus Muscle) C

c. Incidental Findings
    i. Pagetoid Dyskeratosis F
    ii. Focal Acantholytic Dyskeratosis F
    iii. Epidermolytic Hyperkeratosis F
    iv. Accessory Nipple F

## 5. Artifacts

a. Freeze, Electrocautery, Formalin Pigment, Floaters/Tissue Carry Over, Poor Fixation, Tissue Folding, Microtomy Artifact, and Crush Artifact AR

## 6. Diseases of Cutaneous Appendages

a. Inflammatory Diseases of the Pilosebaceous Apparatus
    i. Acneiform Lesions AR
    ii. Rosacea AR
    iii. Furuncle AR
    iv. Folliculitis (Acne) Keloidalis Nuchae AR
    v. Hidradenitis Suppurativa AR
    vi. Superficial Folliculitides (General Features) AR
        1. Acne Necrotica F
        2. Eosinophilic Folliculitis F
        3. Infundibulofolliculitis F
    vii. Eosinophilic (Pustular) Folliculitis F
    viii. Keratosis Pilaris F
    ix. Dissecting Cellulitis of the Scalp F
b. Hair Shaft Abnormalities
    i. Trichorrhexis Nodosa F
    ii. Trichoschisis F
    iii. Trichorrhexis Invaginata F
    iv. Trichostasis Spinulosa F
    v. Pili Annulati F
    vi. Monilethrix F
    vii. Tapered Hairs F
    viii. Bubble Hair F
    ix. Pili Torti F
c. Alopecias (General Features)
    i. Non-Scarring Alopecias
        1. Psoriatic Alopecia F
        2. Trichotillomania F
        3. Telogen Effluvium F
        4. Alopecia Areata F
        5. Androgenetic Alopecia F
        6. Temporal Triangular Alopecia F

7. Follicular Mucinosis F
8. TNF-alpha Induced Alopecia F
9. Lupus Alopecia, Non-Scarring F
10. Syphilitic Alopecia F
11. Traction Alopecia F

ii. Scarring Alopecias
1. End-Stage Scarring Alopecia F
2. Lichen Planopilaris F
3. Frontal Fibrosing Alopecia F
4. Folliculitis Decalvans F
5. Central Centrifugal Cicatricial Alopecia F
6. Discoid Lupus Erythematosus (Scarring) F
7. Dissecting Cellulitis F

iii. Apocrine Disorders
1. Apocrine Miliaria (Fox-Fordyce Disease) F

iv. Eccrine Disorders
1. Syringolymphoid Hyperplasia F
2. Neutrophilic Eccrine Hidradenitis F
3. Palmoplantar Eccrine Hidradenitis F
4. Sweat Gland Necrosis F

## 7. Cysts, Sinuses, and Pits

a. Epidermal (Infundibular) Cyst C
i. Gardner Syndrome F
b. Trichilemmal (Pilar, Isthmus-Catagen) Cyst C
c. Proliferating Pilar Tumor AR
d. Steatocystoma AR
e. Developmental Cysts
i. Bronchogenic Cysts AR
ii. Branchial Cleft Cysts AR
iii. Thyroglossal Duct Cysts AR
iv. Thymic Cysts AR
v. Median Raphe Cysts AR
vi. Dermoid Cysts AR
vii. Cutaneous Ciliated Cyst F
viii. Cystic Teratoma F
ix. Omphalomesenteric Duct Cyst F
f. Miscellaneous Cysts
i. Pilonidal Cyst AR
ii. Accessory Tragus AR
iii. Ganglion Cyst/Metaplastic Synovial Cyst AR
iv. Pseudocyst of the Auricle F
g. Onycholemmal Cyst F

h. Vellus Hair Cyst F

## 8. Panniculitis

a. Septal Panniculitis AR
   i. Erythema Nodosum AR
b. Lipodermatosclerosis AR
c. Factitial Panniculitis AR
d. Traumatic Fat Necrosis AR
e. Encapsulated Fat Necrosis AR
f. Lobular Panniculitis (General Features) AR
   i. Erythema Induratum-Nodular Vasculitis F
   ii. Subcutaneous Fat Necrosis of the Newborn F
   iii. Sclerema Neonatorum F
   iv. Cold Panniculitis F
   v. Alpha-1-Antitrypsin Deficiency F
   vi. Pancreatic Panniculitis F
   vii. Connective Tissue Panniculitis F
   viii. Lupus Panniculitis F
g. Lipodystrophy Syndromes F

## 9. Metabolic and Storage Diseases

a. Vitamin and Dietary Disturbances
   i. Scurvy F
   ii. Pellagra F
   iii. Necrolytic Erythemas F
   iv. Acrodermatitis Enteropathica F
   v. Glucagonoma Syndrome F
   vi. Necrolytic Acral Erythema F
b. Porphyria
   i. Erythropoietic Protoporphyria F
   ii. Porphyria Cutanea Tarda F
   iii. Pseudoporphyria F
c. Reactions to Physical Agents
   i. Electrocautery AR
   ii. Cryotherapy Effects AR
   iii. Traumatic/Factitial AR
   iv. Friction Blisters F
   v. Thermal Burns F
   vi. Electrical Burns F
   vii. Frostbite F
   viii. Erythema Ab Igne F
   ix. Pressure Blister/Coma Blister F

x. Suction Blister F

d. Reactions to Light

i. Photoallergic F
ii. Phototoxic F
iii. Hydroa Vacciniforme F
iv. Polymorphic Light Eruption F
v. Actinic Prurigo F
vi. Chronic Actinic Dermatitis F

## **10.** Infections and Infestations

a. Bacterial Infections

i. Superficial Pyogenic Infections

1. Impetigo AR
2. Staphylococcal “Scalded Skin” Syndrome (SSSS) AR
3. Toxic Shock Syndrome (Staphylococcal/Streptococcal) F
4. Ecthyma F
5. Erosive Pustular Dermatosis F

ii. Deep Pyogenic Infections (Cellulitis)

1. Cellulitis AR
2. Necrotizing Fasciitis AR
3. Erysipelas F
4. Erysipeloid F
5. Pseudomonas Folliculitis F
6. Ecthyma Gangrenosum F

iii. Mycobacterial Infections (General Features) AR

1. Tuberculosis F
2. Leprosy F
3. Atypical Mycobacteria F

iv. Botryomycosis and Filamentous Bacteria

1. Actinomycosis AR
2. Nocardiosis F
3. Botryomycosis F

v. Miscellaneous Bacteria

1. Cat-Scratch Disease AR
2. Granuloma Inguinale F
3. Chancroid F
4. Rhinoscleroma F
5. Tularemia F
6. Bacillary Angiomatosis F
7. Verruga Peruana F
8. Anthrax F

vi. Spirochetal Infections

1. Syphilis AR
2. Pinta F
3. Yaws F

4. Borrelioses/Lyme Disease/Erythema Migrans F

vii. Corynebacterial Infections
1. Erythrasma F
2. Trichomycosis Axillaris F
3. Pitted Keratolysis F

viii. Neisseria Infections
1. Meningococcal Infections F
2. Gonococcal Infections F

ix. Rickettsial Infections
1. Spotted Fever Group F
2. Typhus Group F
3. Scrub Typhus Group F

b. Fungi and Algae

i. Superficial Filamentous Fungal Infections
1. Dermatophytoses AR
2. Tinea Capitis AR
3. Majocchi Granuloma AR
4. Onychomycosis AR
5. Favus F

ii. Yeast Infections
1. Candidiasis AR
2. Cryptococcosis AR
3. Pityriasis versicolor AR
4. Sporotrichosis F
5. Pityrosporum Folliculitis F
6. Trichosporonosis and White Piedra F

iii. Systemic Mycoses
1. Blastomycosis AR
2. Coccidioidomycosis AR
3. Histoplasmosis AR
4. Paracoccidioidomycosis F

iv. Infections by Dematiaceous Fungi
1. Chromoblastomycosis AR
2. Phaeohyphomycosis AR
3. Tinea Nigra F
4. Black Piedra F

v. Mycetoma and Related Disorders
1. Eumycetoma AR
2. Actinomycetoma AR

vi. Mucorales Infections AR

vii. Hyalohyphomycosis
1. Aspergillosis AR
2. Fusariosis AR

viii. Lobomycosis (Lobo Disease) F

- ix. Rhinosporidiosis F
- x. Prototheca cosis F

c. Viral Diseases
- i. Poxviridae
  1. Molluscum contagiosum C
  2. Vaccinia F
  3. Variola (Smallpox) F
  4. Monkeypox F
  5. Milker's Nodule F
  6. Orf F
- ii. Herpesviridae
  1. Herpes Simplex Virus C
  2. Herpes Zoster Virus C
  3. Cytomegalovirus AR
  4. Eczema Herpeticum F
  5. Epstein-Barr Virus / Mucocutaneous Ulcer F
- iii. Papillomaviridae
  1. Verruca Vulgaris C
  2. Condyloma acuminatum C
  3. Palmoplantar Warts AR
  4. Verruca Plana AR
  5. Bowenoid Papulosis AR
  6. Epidermodysplasia Verruciformis F
  7. Focal Epithelial Hyperplasia F
- iv. Parvoviridae
  1. Parvovirus B19 F
- v. Picornaviridae
  1. Hand, Foot, and Mouth Disease F
- vi. Retroviridae
  1. Human Immunodeficiency Virus (HIV) F
  2. Human T-Lymphotropic Virus (HTLV1) F

d. Parasitic Infections
- i. Protozoal Infections
  1. Amebae
     a) Amebiasis Cutis F
     b) Acanthamebiasis F
     c) Balamuthia F
  2. Flagellates
     a) Leishmaniasis AR
     b) Trypanosomiasis F
- ii. Helminth Infections
  1. Trematode Infections
     a) Schistosomiasis F
  2. Cestode Infections

a) Cysticercosis F
b) Sparganosis F

3. Nematode Infections
a) Onchocerciasis F
b) Gnathostomiasis F
c) Dirofilariasis F
d) Larva Migrans F

iii. Arthropod-Induced Disease
1. Arthropod Bite Reaction AR
2. Ticks
a) Ixodes, Gross Identification AR
b) Dermacentor, Gross Identification AR
c) Amblyomma, Gross Identification AR
3. Demodex Mites AR
4. Scabies AR
5. Scorpion and Spider Bites F
6. Demodicosis F
7. Human Lice (Pediculosis) F
8. Bedbugs F
9. Myiasis F
10. Tungiasis F

## 11. Tumors

a. Tumors of the Epidermis
i. Benign
1. Acanthomas
a) Seborrheic Keratosis C
b) Warty Dyskeratoma AR
c) Epidermolytic Acanthoma F
d) Acantholytic Acanthoma F
e) Clear Cell Acanthoma F
f) Large Cell Acanthoma F
2. Epidermal Nevus AR
3. Clavus (Corn)/Callus AR
4. Inflammatory Linear Verrucous Epidermal Nevus (ILVEN) F
5. Nevus Comedonicus F
6. Miscellaneous Benign Tumors of the Epidermis
a) Verrucous Keratosis (BRAF-Inhibitor Induced) F
b) Onychomatrixoma F

ii. Epidermal Dysplasias
1. Actinic Keratosis C
2. Actinic Cheilitis F
3. Arsenical Keratosis F

4. PUVA Keratosis F

iii. Malignant Tumors

1. Basal Cell Carcinoma
   a) Basal Cell Carcinoma, Nodular C
   b) Basal Cell Carcinoma, Superficial C
   c) Basal Cell Carcinoma, Infiltrative/Morpheaform AR
   d) Basal Cell Carcinoma, Micronodular AR
   e) Fibroepithelioma of Pinkus AR
   f) Basal Cell Carcinoma, Other Variants F
2. Nevoid Basal Cell Carcinoma Syndrome F
3. Squamous Cell Carcinoma (SCC)
   a) Squamous Cell Carcinoma in situ/Bowen Disease C
   b) Keratoacanthoma C
   c) Conventional C
   d) Spindle-Cell/Sarcomatoid SCC AR
   e) Other Variants of Squamous Cell Carcinoma F
4. Verrucous Carcinoma AR
5. Primary Mammary Paget Disease AR
6. Carcinosarcoma (Metaplastic Carcinoma) F
7. Lymphoeptihelioma-Like Carcinoma F

b. Lentigines, Nevi, and Melanomas

i. Benign

1. Lesions with Basal Hyperpigmentation and/or Melanocyte Proliferation C
   a) Labial, Genial, and Other Melanotic Macules AR
   b) Solar (Senile) Lentigo AR
   c) Multiple Lentigines F
   d) Speckled Lentiginous Nevus (Nevus Spilus) F
   e) PUVA Lentigo F
2. Melanocytic Nevi
   a) Junctional, Compound, and Intradermal Nevi C
   b) Congenital Nevus C
   c) Blue Nevus C
   d) Recurrent Nevus AR
   e) Nevus on a Special Site AR
   f) Ancient Change AR
   g) Halo Nevus AR
   h) Spitz Nevus AR
   i) Pigmented Spindle-Cell Nevus AR
   j) Nodal Nevus AR
   k) Combined Nevus F
   l) Balloon Cell Nevus F
   m) Desmoplastic Nevus F
   n) Blue Nevus Variants F

| | |
|---|---|
| o) Benign Nevus Variants | F |
| 3. Dermal Melanocytic Lesions | |
| a) Dermal Melanocytosis | AR |
| b) Nevus of Ota and Nevus of Ito | AR |
| 4. Dysplastic (Atypical Nevus with Architectural Disorder) | C |
| ii. Melanocytoma | |
| 1. Deep Penetrating Nevus/Melanocytoma | AR |
| 2. Pigmented Epithelioid Melanocytoma | F |
| a) Atypical Spitz Tumor | F |
| b) BAP-1 Inactivated Melanocytic Tumor | F |
| iii. Malignant Melanocytic Lesions | |
| 1. Malignant Melanoma | AR |
| a) Superficial Spreading | AR |
| b) Lentigo Maligna | AR |
| c) Desmoplastic | AR |
| d) Nodular | AR |
| e) Metastatic Melanoma | AR |
| f) Acral Lentiginous | F |
| g) Nevoid Melanoma | F |
| h) Spitzoid Melanoma | F |
| i) Blue Nevus-Like Melanoma | F |
| j) Spindle Cell Melanoma | F |
| c. Tumors of Cutaneous Appendages | |
| i. Hair Follicle Tumor | |
| 1. Benign | |
| a) Trichofolliculoma | AR |
| b) Fibrofolliculoma/Trichodiscoma | AR |
| c) Birt-Hogg-Dube Syndrome | AR |
| d) Trichilemmoma | AR |
| e) Cowden Disease | AR |
| f) Trichoepithelioma | AR |
| g) Desmoplastic Trichoepithelioma | AR |
| h) Trichoblastoma | AR |
| i) Pilomatrixoma | AR |
| j) Hair Follicle Nevus | F |
| k) Trichoadenoma | F |
| l) Dilated Pore of Winer | F |
| m) Pilar Sheath Acanthoma | F |
| n) Tumor of the Follicular Infundibulum | F |
| o) Basaloid Follicular Hamartoma | F |
| p) Cutaneous Lymphadenoma (Trichoblastoma Variant) | F |
| q) Inverted Follicular Keratosis | F |
| r) Melanocytic Matricoma | F |

2. Malignant (General Considerations)
    a) Trichilemmal Carcinoma F
    b) Trichoblastic Carcinoma/Sarcoma/Carcinosarcoma F
    c) Pilomatrical Carcinoma F

d. Sebaceous Tumors
    i. Benign
        1. Sebacaous Hyperplasia C
        2. Organoid Nevus (Nevus Sebaceus) AR
        3. Sebaceous Adenoma AR
        4. Muir-Torre Syndrome AR
        5. Sebaceoma AR
        6. Fordyce Spots and Related Ectopias F
        7. Folliculosebaceous Cystic Hamartoma F
    ii. Malignant
        1. Sebaceous Carcinoma AR

e. Adnexal Tumors of Glandular Origin
    i. Benign
        1. Hidrocystoma AR
        2. Erosive Adenomatosis of the Nipple/Nipple Adenoma AR
        3. Hidradenoma Papilliferum AR
        4. Chondroid Syringoma (Cutaneous Mixed Tumor) AR
        5. Cylindroma AR
        6. Spiradenoma AR
        7. Syringoma AR
        8. Eccrine Poroma AR
        9. Hidradenoma (Nodular, Clear Cell, Eccrine, Acrospiroma) AR
        10. Syringocystadenoma Papilliferum AR
        11. Apocrine Nevus F
        12. Tubular Adenoma (Apocrine Adenoma) F
        13. Papillary Eccrine Adenoma F
        14. Eccrine Hamartomas F
        15. Hidroacanthoma Simplex F
        16. Dermal Duct Tumor F
        17. Syringofibroadenoma F
    ii. Malignant
        1. Microcystic Adnexal Carcinoma AR
        2. Digital Papillary Adenocarcinoma AR
        3. Extramammary Paget Disease AR
        4. Adenoid Cystic Carcinoma AR
        5. Mucinous Carcinoma AR
        6. Endocrine Mucin Producing Sweat Gland Carcinoma AR
        7. Eccrine Carcinoma (Syringoid Carcinoma) F
        8. Porocarcinoma F
        9. Hidradenocarcinoma F

10. Malignant Mixed Tumor (Myoepithelial Carcinoma) F
11. Malignant Cylindroma F
12. Malignant Spiradenoma (Spiradenocarcinoma) F
13. Squamoid Eccrine Ductal Carcinoma F
14. Primary Cutaneous Cribriform Carcinoma/Tumor F

f. Fibrous and Fibrohistiocytic Tumors

i. Benign

1. Skin Tags/Fibroepithelial Polyp/ Acrochoron C
2. Benign Fibrous Histiocytoma
    a) Dermatofibroma C
    b) Dermatofibroma Variants F
3. Angiofibromas
    a) Fibrous Papule of the Face AR
    b) Pearly Penile Papules F
    c) Periungual Fibroma/Koenen Tumor F
    d) Fibrous Papule Variants F
4. Acral Fibrokeratoma (Acquired Digital Fibrokeratoma) AR
5. Fibromatosis AR
6. Desmoid Tumors AR
7. Fibroma of Tendon Sheath AR
8. Giant Cell Tumor of Tendon Sheath AR
9. Digital Fibromatosis of Childhood AR
10. Superficial Angiomyxoma/Cutaneous Myxoma AR
11. Calcifying Aponeurotic Fibroma AR
12. Fasciitis (Nodular, Proliferative, Ischemic, Intravascular) AR
13. Pericytic Tumors
    a) Myofibroma AR
    b) Glomus Tumor AR
    c) Glomuvenous Malformation (Glomangiomyoma) AR
    d) Myopericytoma F
14. Atypical Fibrous Histiocytoma F
    a) Epitheliod Fibrous Histiocytoma F
15. Nuchal Fibroma / Gardner-Associated Fibroma F
16. Pleomorphic Fibroma F
17. Sclerotic Fibroma (Storiform Collagenoma) F
18. Collagenous Fibroma (Desmoplastic Fibroblastoma) F
19. Knuckle Pad F
20. Dermatomyofibroma F
21. Inflammatory Myofibroblastic Tumor F
22. Superficial Acral Fibromyxoma F
23. Cellular Digital Fibroma F
24. Cellular Neurothekeoma F

ii. Fibrohistiocytic Tumors of Intermediate Malignant Potential

1. Dermatofibrosarcoma Protuberans AR

2. Plexiform Fibrohistiocytic Tumor F
3. Giant Cell Fibroblastoma F
4. Soft Tissue Giant Cell Tumor F
5. Angiomatoid Fibrous Histiocytoma F
6. Solitary Fibrous Tumor F

iii. Malignant

1. Pleomorphic Dermal Sarcoma AR
2. Atypical Fibroxanthoma AR
3. Undifferentiated Pleomorphic Sarcoma
   a) (Malignant Fibrous Histiocytoma) AR
4. Soft Tissue of Uncertain Histogenesis
   a) Clear Cell Sarcoma AR
   b) Epithelioid Sarcoma AR
   c) PEComa F
   d) Ossifying Fibromyxoid Tumor F
   e) Pleomorphic Hyalinizing Angiectatic Tumor of Soft Parts F
   f) Synovial Sarcoma F
   g) Malignant Rhabdoid Tumor F
   h) Ewing and Ewing-Like Tumors F
   i) Chordoma F

g. Adipose Tumors

i. Benign

1. Nevus Lipomatosus C
2. Hibernoma AR
3. Piezogenic Pedal Papules F
4. Lipoblastoma F
5. Lipofibromatosis F
6. Lipoma and Lipomatous Lesions
   a) Lipoma C
   b) Angiolipoma AR
   c) Spindle-Cell Lipoma AR
   d) Pleomorphic Lipoma AR
   e) Adenolipoma F
   f) Chondroid Lipoma F
   g) Ossifying Lipoma F
   h) Sclerotic (Fibroma-Like) Lipoma F

ii. Malignant

1. Atypical Lipomatous Tumor (Well Differentiated Liposarcoma) AR
2. Dedifferentiated Liposarcoma AR
3. Myxoid Liposarcoma AR
4. Pleomorphic Liposarcoma AR

h. Tumors of Muscle, Cartilage, and Bone
    i. Benign Tumors of Smooth Muscle
        1. Leiomyoma AR
        2. Angioleiomyoma AR
        3. Smooth Muscle Hamartoma F
        4. Hereditary Leiomyomatosis and Renal Cell Carcinoma F
    ii. Malignant Tumor of Smooth Muscle
        1. Leiomyosarcoma AR
        2. Atypical Intradermal Smooth Muscle Neoplasm F
    iii. Tumors of Striated Muscle
        1. Rhabdomyoma F
        2. Rhabdomyosarcoma F
    iv. Tumors of Cartilage
        1. Chondroma F
        2. Subungual Osteochondroma F
    v. Tumors of Bone
        1. Extraskeletal Osteosarcoma F
i. Neural and Neuroendocrine Tumors
    i. Benign
        1. Neurofibroma and Neurofibromatosis
            a) Neurofibroma C
            b) Plexiform AR
            c) Diffuse F
            d) Pacinioma and Pacinian Neurofibroma F
        2. Neuromas
            a) Traumatic Neuroma AR
            b) Rudimentary Polydactyly AR
            c) Solitary Circumscribed Neuroma (Palisaded Encapsulated Neuroma) AR
            d) Neuromas and Multiple Endocrine Neoplasia Syndromes AR
            e) Ganglioneuroma F
        3. Schwannoma (Neurilemmoma) C
        4. Granular Cell Tumor AR
        5. Perineurioma F
        6. Psammomatous Melanotic Schwannoma F
        7. Dermal Nerve Sheath Myxoma F
        8. Herniations and Ectopias
            a) Nasal Glioma and Neural Heterotopias F
            b) Cutaneous Meningioma F
        9. Other “Hybrid” Nerve Sheath Tumors F
    ii. Malignant
        1. Merkel Cell Carcinoma AR
        2. Malignant Peripheral Nerve Sheath Tumor F

3. Malignant Granular Cell Tumor F
4. Neuroendocrine Tumors F

j. Vascular Tumors

i. Benign

1. Hamartomas and Malformations (General) AR
   a) Eccrine Angiomatous Hamartoma F
   b) Capillary Malformations (Nevus Flammeus) F
   c) Sturge-Weber Syndrome F
   d) Klippel-Trenaunay Syndrome F
   e) Cobb Syndrome F
2. Venous Malformations (General) AR
   a) "Blue Rubber Bleb" Nevus Syndrome F
   b) Maffucci Syndrome F
   c) Cutis Marmorata Telangiectatica Congenita F
3. Lymphangioma (Cystic Lymphatic Malformation)
   a) Superficial Lymphangioma AR
   b) Deep Lymphangioma/Cystic Hygroma F
   c) Lymphangiomatosis F
4. Verrucous Hemangioma AR
5. Vascular Dilatations (Telangiectases) (General) AR
   a) Venous Lake AR
   b) Angiokeratoma AR
   c) Hereditary Hemorrhagic Telangiectasia F
   d) General Essential Telangiectasia F
   e) Cutaneous Collagenous Vasculopathy F
   f) Hereditary Benign Telangiectasia F
   g) Unilateral Nevoid Telangiectasia F
   h) Ataxia-Telangiectasia F
   i) Spider Angioma F
6. Vascular Proliferations (Benign and Hyperplasia)
   a) "Cherry" Angioma C
   b) Pyogenic Granuloma and Variants C
   c) Infantile Hemangioma AR
   d) Arteriovenous Hemangioma AR
   e) Angiolymphoid Hyperplasia with Eosinophilia, (Epithelioid Hemangioma) AR
   f) Rapidly Involuting Congenital Hemangioma F
   g) Noninvoluting Congenital Hemangioma F
   h) Diffuse Neonatal Hemangiomatosis F
   i) Glomeruloid Hemangioma F
   j) Microvenular Hemangioma F
   k) Targetoid Hemosiderotic (Hobnail) "Hemangioma" F
   l) Spindle-Cell Hemangioma (Spindle Cell Hemangioendothelioma) F

m) Acquired Tufted Angioma (Angioblastoma) F
n) Papillary Hemangioma F
7. Radiation Associated Atypical Vascular Lesion AR
8. Intravascular Papillary Endothelial Hyperplasia AR
9. Multinucleate Cell Angiohistiocytoma F
10. Reactive Angioendotheliomatosis F
11. Diffuse Dermal Angiomatosis F
12. Acroangiodermatitis F
13. Lymphangioendothelioma (Acquired Progressive Lymphangioma) F

ii. Intermediate Malignancy (General Considerations) AR
1. Kaposi Sarcoma AR
2. Kaposiform Hemangioendothelioma F
3. Hobnail Hemangioendothelioma F
a) Retiform Hemangioendothelioma F
b) Papillary Intralymphatic Angioendothelioma (Dabska Tumors) F
4. Epithelioid Hemangioendothelioma F
5. Epithelioid Sarcoma-Like Hemangioendothelioma (Pseudomyogenic Hemangioendothelioma) F
6. Composite Hemangioendothelioma F

iii. Malignant
1. Angiosarcoma and Lymphangiosarcoma AR
2. Malignant and Atypical Glomus Tumors F

k. Cutaneous Metastases
i. Breast, Lung, Oral Cavity, and Gastrointestinal System AR
ii. Liver, Pancreas, Gallbladder, and Genitourinary AR
iii. Male and Female Reproductive System, including Endometriosis AR
iv. Thyroid, Carcinoid, Neuroblastoma, Melanoma AR
v. Metastasis from Cutaneous Neoplasms AR
vi. Lymph Node Evaluation AR

l. Cutaneous Infiltrates, Non-Lymphoid
i. Eosinophilic Infiltrates
1. Dermal Hypersensitivity Reaction AR
2. Wells Syndrome (Eosinophilic Cellulitis) F
3. Hypereosinophilic Syndrome F
4. Eosinophilic Pustulosis/Erythema Toxicum Neonatorum F

ii. Plasma Cell Infiltrates
1. Plasmacytosis Mucosae, including Zoon Balanitis/Vulvitis AR
2. Castleman Disease AR
3. Cutaneous and Systemic Plasmacytosis F
4. IgG4-Related Disease F

iii. Mast Cell Infiltrates (General) AR
1. Mastocytoma F

2. Urticaria Pigmentosa F
3. Telangiectasia Macularis Eruptiva Perstans (TMEP) F
4. Systemic Mastocytosis F
5. Malignant Mast Cell Disease F

iv. Histiocytic Infiltrates (Non-Langerhans Cell)

1. Xanthogranuloma C
2. Rosai-Dorfman Disease AR
3. Benign Cephalic Histiocytosis F
4. Progressive Nodular Histiocytosis F
5. Xanthoma Disseminatum F
6. Generalized Eruptive Histiocytoma F
7. Multicentric Reticulohistiocytosis F
8. Reticulohistiocytoma F
9. Necrobiotic Xanthogranuloma F
10. Erdheim-Chester Disease F

v. Xanthomatous Infiltrates

1. Xanthelasma AR
2. Verruciform Xanthoma AR
3. Eruptive Xanthoma F
4. Tuberous Xanthoma F
5. Tendinous Xanthoma F
6. Planar Xanthoma F

vi. Langerhans Cell Histiocytosis AR

vii. Congenital Self-Healing Histiocytosis F

viii. Indeterminate Cell Histiocytosis F

ix. Crystal-Storing Histiocytosis F

m. Lymphomatous and Leukemic Infiltrates

i. Cutaneous T-cell and NK-cell Lymphomas

1. Mycosis Fungoides AR
2. Primary Cutaneous CD30+ Lymphoproliferative Disorders AR
   a) Primary Cutaneous Anaplastic Large Cell Lymphoma F
   b) Lymphomatoid Papulosis F
3. Mycosis Fungoides Variants F
4. Folliculotropic Mycosis Fungoides F
5. Pagetoid Reticulosis F
6. Granulomatous Slack Skin F
7. Sézary Syndrome F
8. Adult T-cell Leukemia/Lymphoma F
9. Subcutaneous Panniculitis-Like T-cell Lymphoma F
10. Extranodal NK/T-cell Lymphoma, Nasal Type F
11. Hydroa Vacciniforme-like T-cell Lymphoma F
12. Primary Cutaneous Peripheral T-cell Lymphoma, Unspecified F
13. Primary Cutaneous Aggressive Epidermotropic,

| | |
|---|---|
| CD8+ Cytotoxic T-cell Lymphoma | F |
| 14. Cutaneous Gamma-Delta T-cell Lymphoma | F |
| 15. Primary Cutaneous CD4+ Small/Medium Pleomorphic T-cell Lymphoproliferative Disorders | F |
| ii. Cutaneous B-cell Lymphomas | |
| 1. Marginal Zone B-cell Lymphoma | AR |
| 2. Follicle Center Lymphoma | AR |
| 3. Primary Cutaneous Diffuse Large B-cell Lymphoma, Leg Type | F |
| 4. Intravascular Large B-cell Lymphoma | F |
| 5. Plasmablastic Lymphoma | F |
| 6. Lymphomatoid Granulomatosis | F |
| 7. CD30+ Large B-cell Lymphoma Associated with EBV | F |
| 8. Post-Transplant Lymphoproliferative Disorder | F |
| 9. EBV-Positive Mucocutaneous Ulcer | F |
| iii. Other B-cell Lymphomas that may involve the Skin | |
| 1. Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma (B-CLL) | AR |
| 2. Mantle Cell Lymphoma | AR |
| 3. Precursor B-Lymphoblastic Leukemia/Lymphoma | F |
| 4. Burkitt and Burkitt-Like Lymphoma | F |
| 5. Plasmacytoma and Myeloma | F |
| iv. Cutaneous Infiltrates from Leukemias | |
| 1. Myeloid Leukemias, Myeloproliferative Diseases, and Myelodysplastic Syndromes | AR |
| v. Lymphoid Hyperplasias Mimicking Primary Lymphoma | |
| 1. Cutaneous Lymphoid Hyperplasia | AR |
| 2. Lymphomatoid Drug Reactions | F |
| 3. T-cell Rich Angiomatoid Polyp Pseudolymphoma | F |
| vi. Precursor Hematologic Neoplasm | |
| 1. Blastic Plasmacytoid Dendritic Cell Neoplasm | F |
| 2. Extramedullary Hematopoiesis | F |
| vii. Precursor T-Lymphoblastic Lymphoma/Leukemia | |
| 1. T-cell Prolymphocytic Lymphoma/Leukemia | F |
| 2. Angioimmunoblastic T-cell Lymphoma (AITL) | F |
| 3. Primary Systemic Anaplastic Large Cell Lymphoma | F |
| 4. Intravascular T- and NK-cell Lymphoma | F |
| 5. Aggressive NK-cell Leukemia | F |
| 6. Other T/NK-cell Lymphoma and Leukemias | F |

## **12.** Laboratory Techniques and Management

| | |
|---|---|
| a. Special Staining Procedures | |
| i. Immunohistochemical Stains | AR |
| ii. Chromogenic in situ hybridization | AR |

iii. Histochemistry/Special Stains AR
iv. Fluorescent Microscopy AR

b. Other Techniques
i. Plane Polarization AR
ii. Fluorescence in situ Hybridization AR
iii. T-cell/B-cell Gene Rearrangement AR
iv. Electron Microscopy F
v. Comparative Genomic Hybridization F
vi. Next Generation Sequencing F
vii. SNP Array F
viii. Mutational Analysis F
ix. Gene Expression Profiling / RT-PCR F
x. Mohs Micrographic Surgery F

c. Laboratory Management
i. Coding and Billing AR
ii. CLIA and CAP Regulations AR
iii. Slide and Block Retention AR
iv. Quality Assurance Principles AR
v. Quality Control AR
vi. Root Cause Analysis AR
vii. Appropriate Utilization AR

## **13.** Clinical Pathologic Correlation

a. Clinical Appearance of Common Skin Lesions
i. Inflammatory
1. Lichen Planus AR
2. Psoriasis AR
3. Allergic Contact Dermatitis AR
4. Bullous Pemphigoid AR
5. Pemphigus Vulgaris AR
6. Leukocytoclastic Vasculitis AR
7. Toxic Epidermal Necrolysis, Stevens-Johnson Syndrome, and Erythema Multiforme AR

ii. Infections
1. Herpes Virus Infection AR
2. Molluscum contagiosum AR
3. Verruca Vulgaris AR
4. Condyloma AR
5. Tinea Corporis AR

iii. Neoplasms
1. Basal Cell Carcinoma AR
2. Squamous Cell Carcinoma AR
3. Melanoma AR

4. Congenital Nevus AR
5. Seborrheic Keratosis AR

b. Dermoscopy F

## 14. Diseases of the Nail Unit

a. Inflammatory and Infectious
   i. Onychomycosis AR
   ii. Psoriasis F
   iii. Lichen Planus F

b. Lesions and Tumors
   i. Subungual Hematoma (Talon Noir) AR
   ii. Nail Melanoma F
   iii. Melanocytic Activation/Functional Melanonychia F
   iv. Subungual Lentigo F
   v. Subungual Onycholemmal (Epidermoid) Cysts F
   vi. Onychocytic Acanthoma/Onychocytic Matricoma F
   vii. Onychopapilloma F
   viii. Subungual Keratoacanthoma F
   ix. Subungual Tumors of Incontinentia Pigmenti F
   x. Onychomatricoma F
   xi. Onychocytic Matricoma F
   xii. Carcinoma Cuniculatum F
   xiii. Onycholemmal Carcinoma F
   xiv. Subungual Exostosis F
   xv. Osteochondroma F

## 15. Diseases of the Mucosa (Oral, Ocular, & Anogenital)

a. Ocular
   i. Oncocytoma F
   ii. Congenital Nevus F
   iii. Congenital Primary Acquired Melanosis with/without Atypia F
   iv. Pinguecula/Pterygium F
   v. Conjunctival Papilloma F
   vi. Sebaceous Carcinoma In Situ F

b. Anogenital
   i. Genital Melanosis AR
   ii. HPV-Dependent Squamous Dysplasia and Neoplasia AR
   iii. HPV-Independent Squamous Dysplasia and Neoplasia AR
   iv. Vestibular Papillomatosis F
   v. Genital Papular Acantholytic Dyskeratosis F
   vi. Sclerosing Lymphangitis of the Penis F
   vii. Crohn Disease F

| | | |
|---|---|---|
| viii. | Malakoplakia | F |
| ix. | Sclerosing Lipogranuloma/Paraffinoma | F |
| x. | Mammary-Like Gland Adenoma of the Vulva/Papillary Hidradenoma | F |
| xi. | Bartholin Gland Cyst | F |
| xii. | Fibroepithelial Stromal Polyp | F |
| xiii. | Angiomyofibroblastoma | F |
| xiv. | Aggressive Angiomyxoma | F |
| xv. | Cellular Angiofibroma | F |

c. Oral

| | | |
|---|---|---|
| i. | Oral Fibroma | AR |
| ii. | Actinic Cheilitis | AR |
| iii. | Oral Lichen Planus | AR |
| iv. | White Sponge Nevus | F |
| v. | Oral Lymphoepithelial Cyst | F |
| vi. | Congenital Granular Cell Tumor / Epulis | F |
| vii. | Oral Hairy Leukoplakia | F |
| viii. | Focal Epithelial Hyperplasia | F |
| ix. | Necrotizing Sialometaplasia | F |
| x. | Nicotinic Stomatitis | F |
| xi. | Cheilitis Granulomatosis | F |
| xii. | Morsicatio Mucosaea Oris | F |
| xiii. | Benign Migratory Glossitis | F |
| xiv. | Median Rhomboid Glossitis | F |
| xv. | Pyostomatitis Vegetans | F |
| xvi. | Smokeless Tobacco Keratosis | F |
| xvii. | Traumatic Ulcerative Granuloma | F |
| xviii. | Plasma Cell Gingivostomatitis | F |
| xix. | Amalgam Tattoo | F |
| xx. | Melanoacathoma | F |
| xxi. | Squamous Dysplasia | F |
| xxii. | Squamous Papilloma | F |