Dermatopathology

We’ve Only Just Begun!

Basic Histopathology

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Acantholysis

- Loss of cohesion between epidermal or adnexal keratinocytes
- Grover’s disease, Pemphigus, Darier’s disease, Hailey-Hailey
Acanthosis

• The increase in the thickness of the stratum malpighii

• Acanthosis nigricans, Pale cell acanthoma
Apoptosis

- Dropping off of colloid bodies from the epidermis into the dermis
- Occurs in disorders in which basal cell damage occurs, such as lichenoid tissue reactions
- Lichen planus, LPLK, DLE
Bulla

- Cavity of at least 5 mm in diameter forming within or below the epidermis

- Bullous pemphigoid, EBA, DH
Cornoid Lamella

- The cornoid lamella is tilted toward the center of such a lesion
- Peripherally migrating clone of abnormal keratinocytes forming the cornoid lamella
- Porokeratosis
Epidermolytic Hyperkeratosis

- Vacuolation of the keratohyaline granular layer
- Rule out Congenital Ichthyosiform erythroderma
- Association with dysplastic nevi
Lichenoid (Interface)

- Epidermal basal cell damage manifested with cell death or liquefactive degeneration (basal vacuolar change)

- Interface sometimes applied only to poikilodermatous reactions with mild basal damage with vacuolar change

- Lichen planus, Fixed drug eruption, LPLK
Parakeratosis

- Retention of nuclei in the stratum corneum
- Normal finding on mucous membranes
- Spongiotic dermatitis (Eczema)
Psoriasiform

- Epidermal hyperplasia with regular elongation of rete ridges
- Several layers of scale resulting from bouts of activity
- Psoriasis, PRP, Lichen striatus, MF
Spongiotic

- Intraepidermal intercellular edema with widened intercellular spaces and elongation of intercellular bridges
- Subclassify by inflammatory cell type
- Eczema
Ulcer

- Obliteration of a mucosal surface
- Usually fibrinopurulent base
Abscess

- Obliteration of tissue by suppurative necrosis
- May have foreign body giant cells
- Consider correlation with cultures
- Consider special stains
Caseation Necrosis

- Identical to coagulation necrosis and ischemic necrosis
- Affected tissue has lost its structural outline and appears as pale eosinophilic, amorphous and finely granular
- Tuberculosis, Necrobiotic xanthogranuloma
Fibrinoid Necrosis

- Fibrin deposition in the wall of small vessels
- Commonly associated with leukocytoclastic vasculitis
Flame Figure

- Encrustation of eosinophilic granules around collagen
- Frequent in conditions with dermal eosinophilia
- Well’s syndrome, arthropod, drug reactions
Granulation Tissue

- Newly formed dermis arising in healing wounds and characterized by numerous fibroblasts and new capillaries and an infiltrate consisting of lymphoid cells, macrophages, and plasma cells
- Decubitus ulcer
Granuloma

- Chronic proliferative lesion consisting of mononuclear cells and epithelioid cells or multinucleated giant cells or both
- Cells lie in groups and are often surrounded by lymphoid cells
- "Naked" granulomas have few to none of these surrounding lymphoid cells
- Sarcoidosis, foreign body
Grenz Zone

- A narrow area of uninvolved dermis between the epidermis and a dermal inflammatory or neoplastic infiltrate. “Grenz” is German for “border”
- Some lymphomas, granuloma faciale
Necrobiosis

- Altered collagen that loses its normal eosinophilic coloration and fibrillar appearance, becoming slightly bluish and "smudged"
- Necrobiosis lipoidica, some infections
Nuclear Dust

- Fragmented nuclei scattered in the dermis, predominantly around blood vessels
- Leukocytoclastic vasculitis, granuloma faciale, Sweet’s syndrome