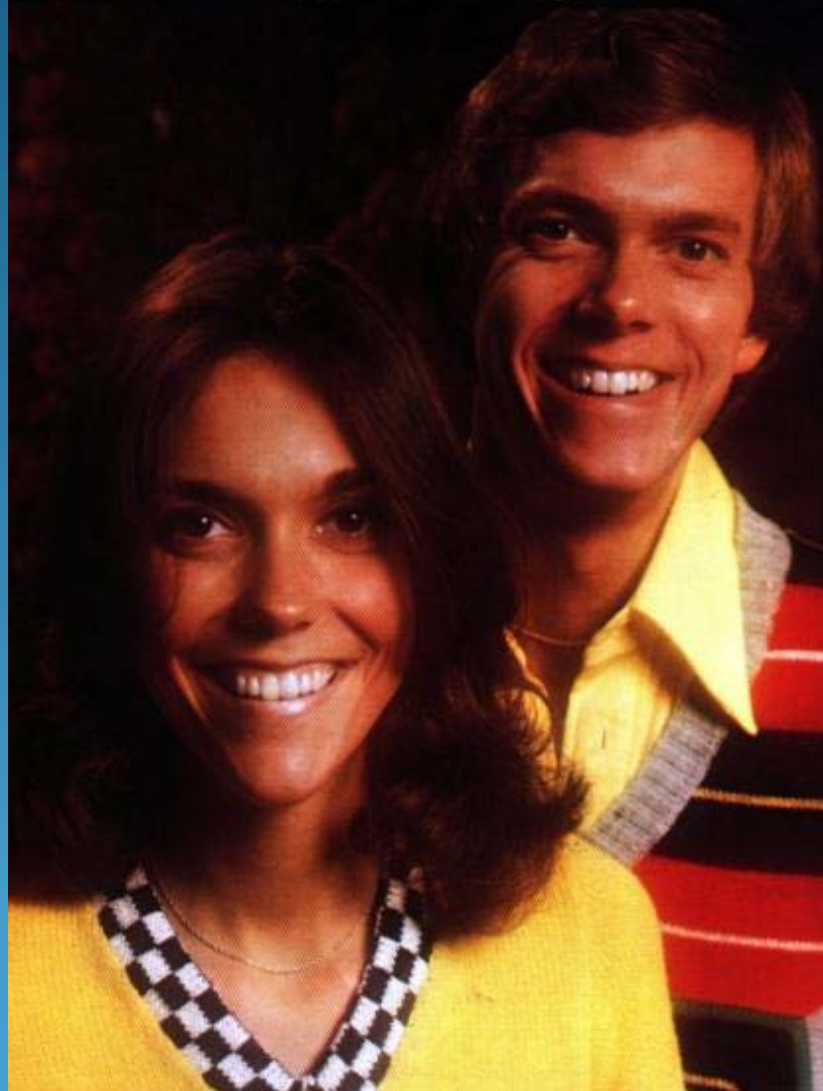


CARPENTERS

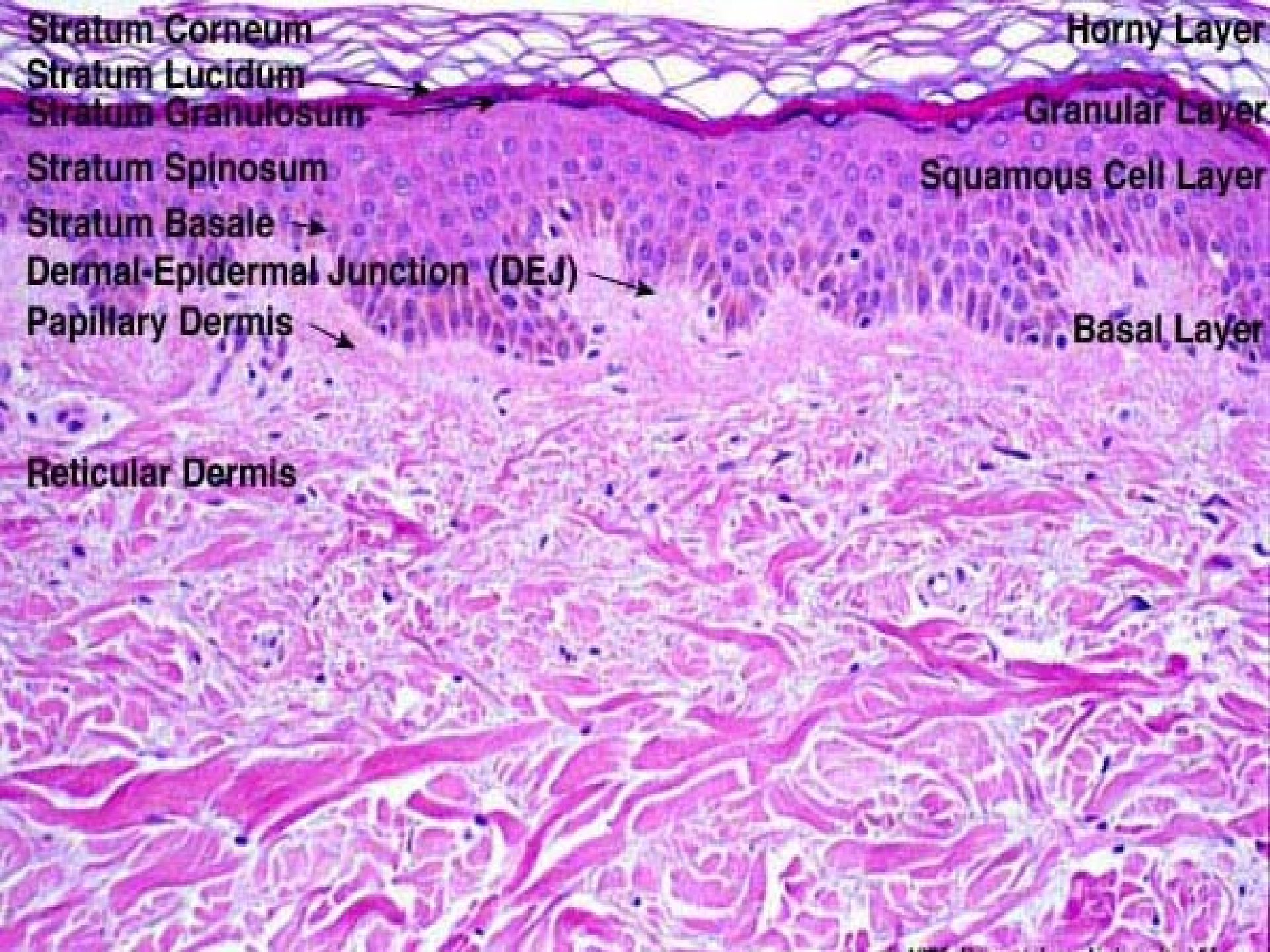


# Dermatopathology

*We've Only Just Begun!*

## Basic Histopathology

Paul K. Shitabata, M.D.  
Dermatopathology Institute



Stratum Corneum

Horny Layer

Stratum Lucidum

Stratum Granulosum

Granular Layer

Stratum Spinosum

Squamous Cell Layer

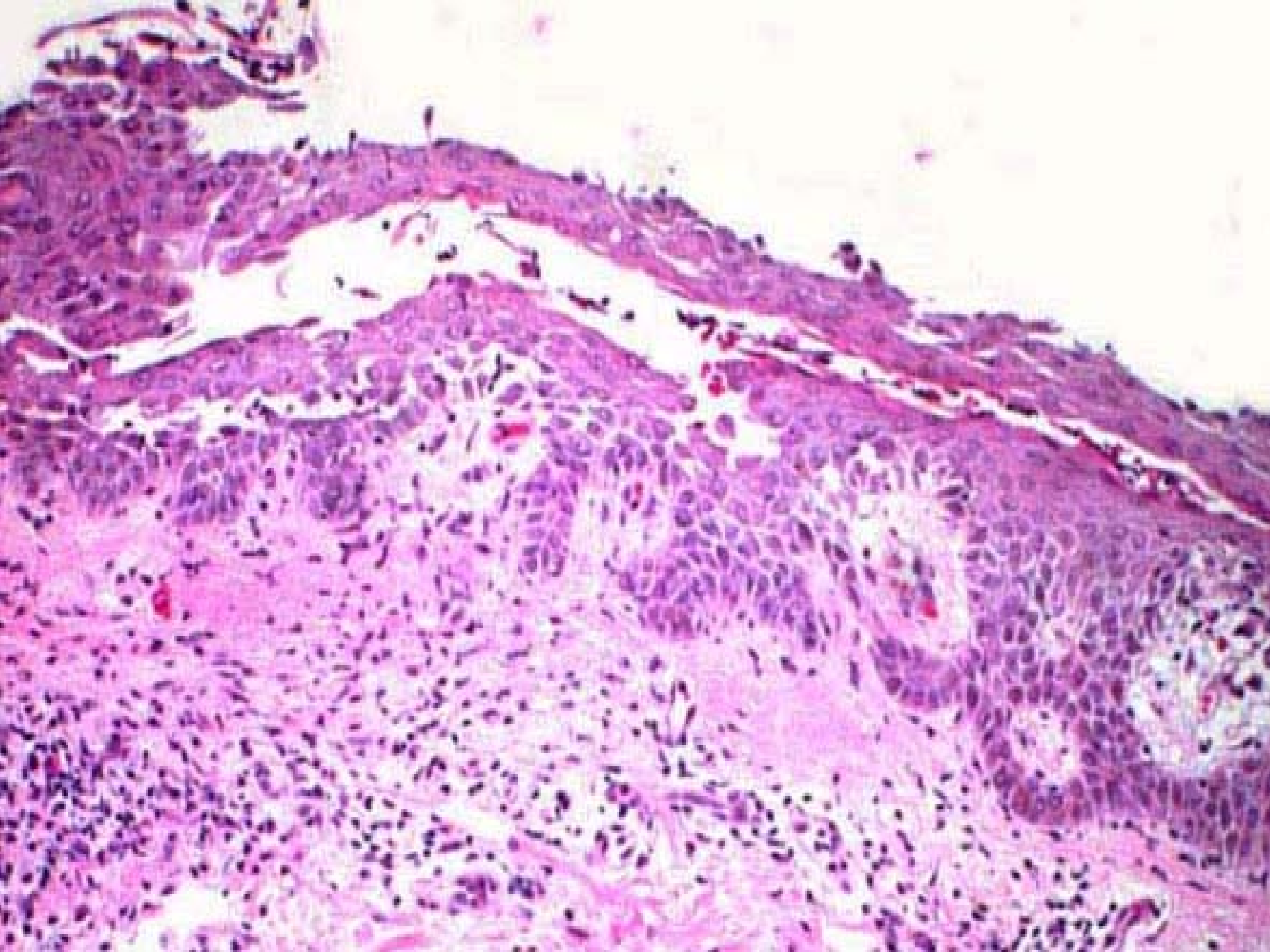
Stratum Basale

Dermal-Epidermal Junction (DEJ)

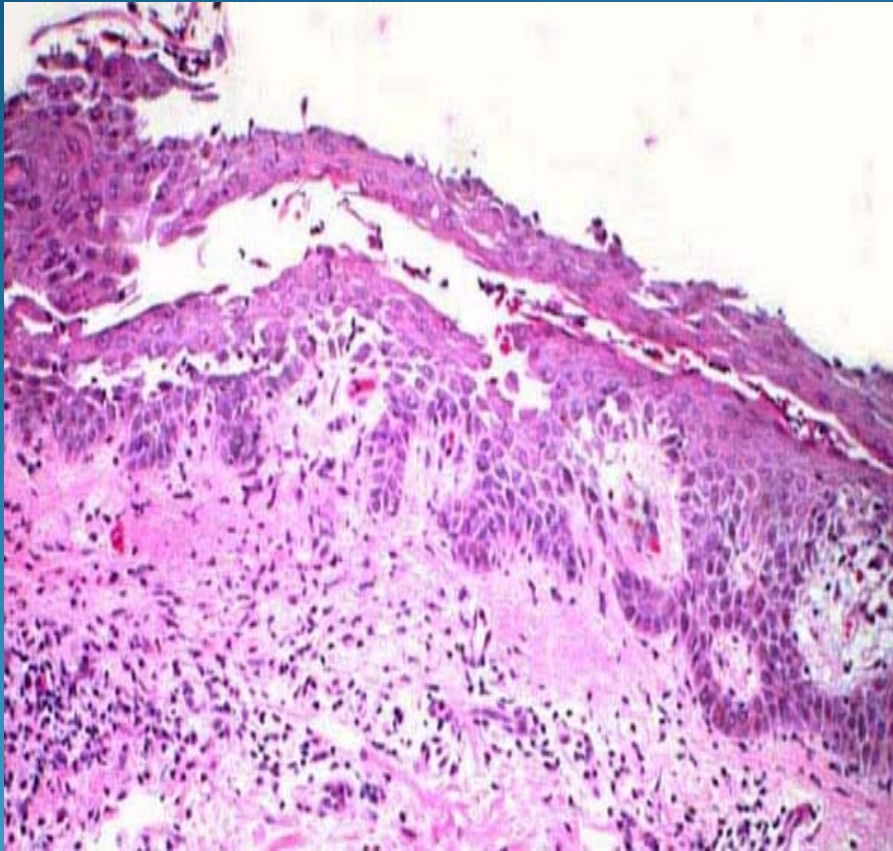
Basal Layer

Papillary Dermis

Reticular Dermis

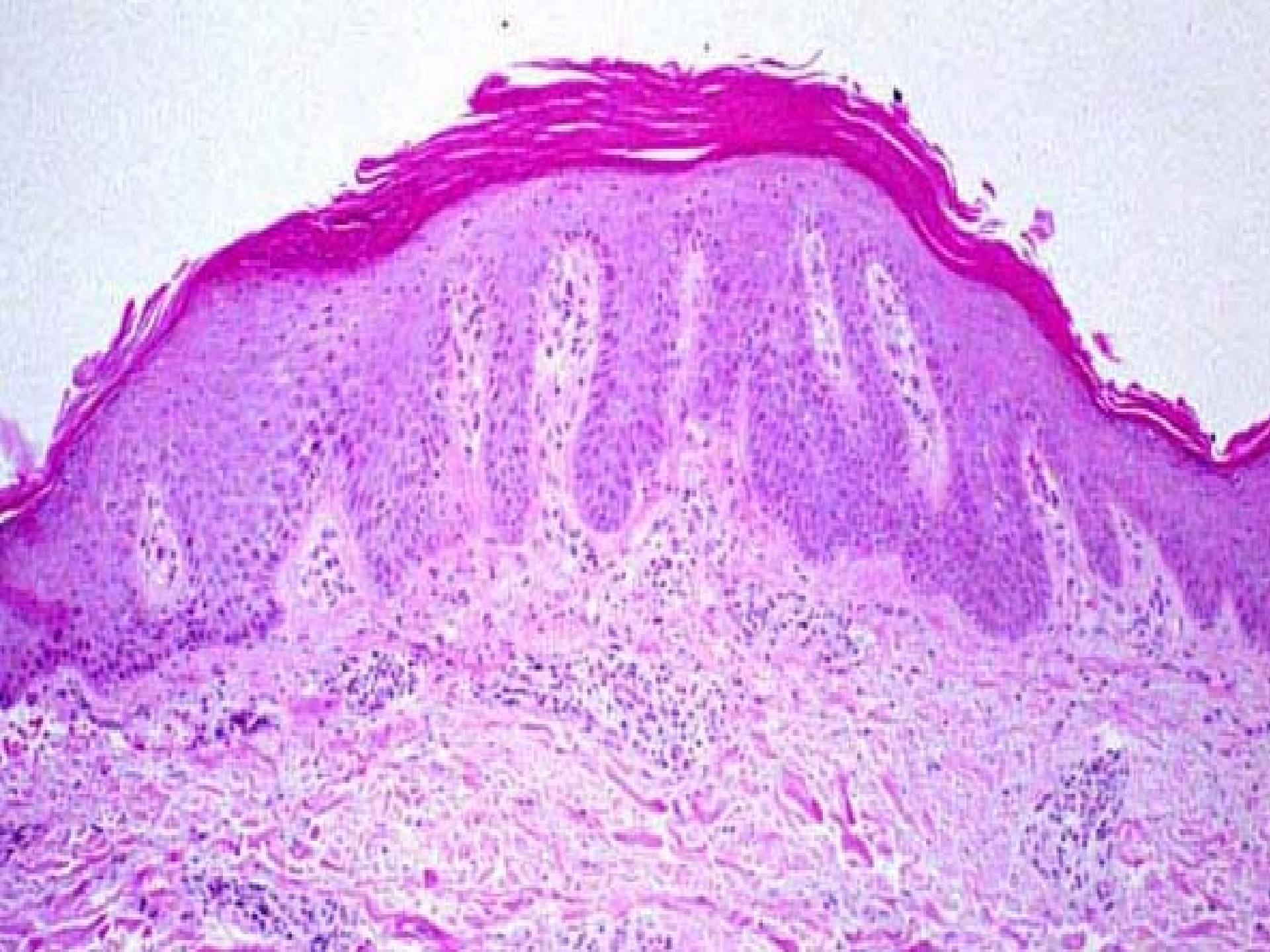


# Acantholysis

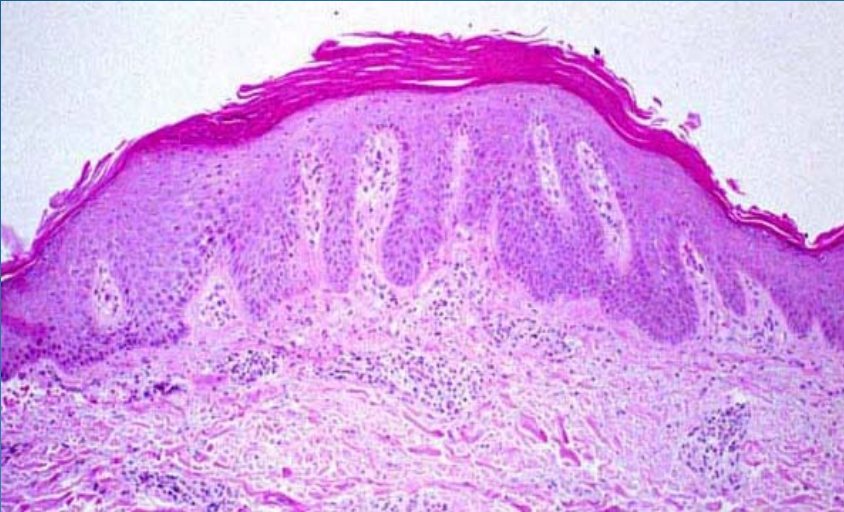


- Loss of cohesion between epidermal or adnexal keratinocytes
- Grover's disease, Pemphigus, Darier's disease, Hailey-Hailey

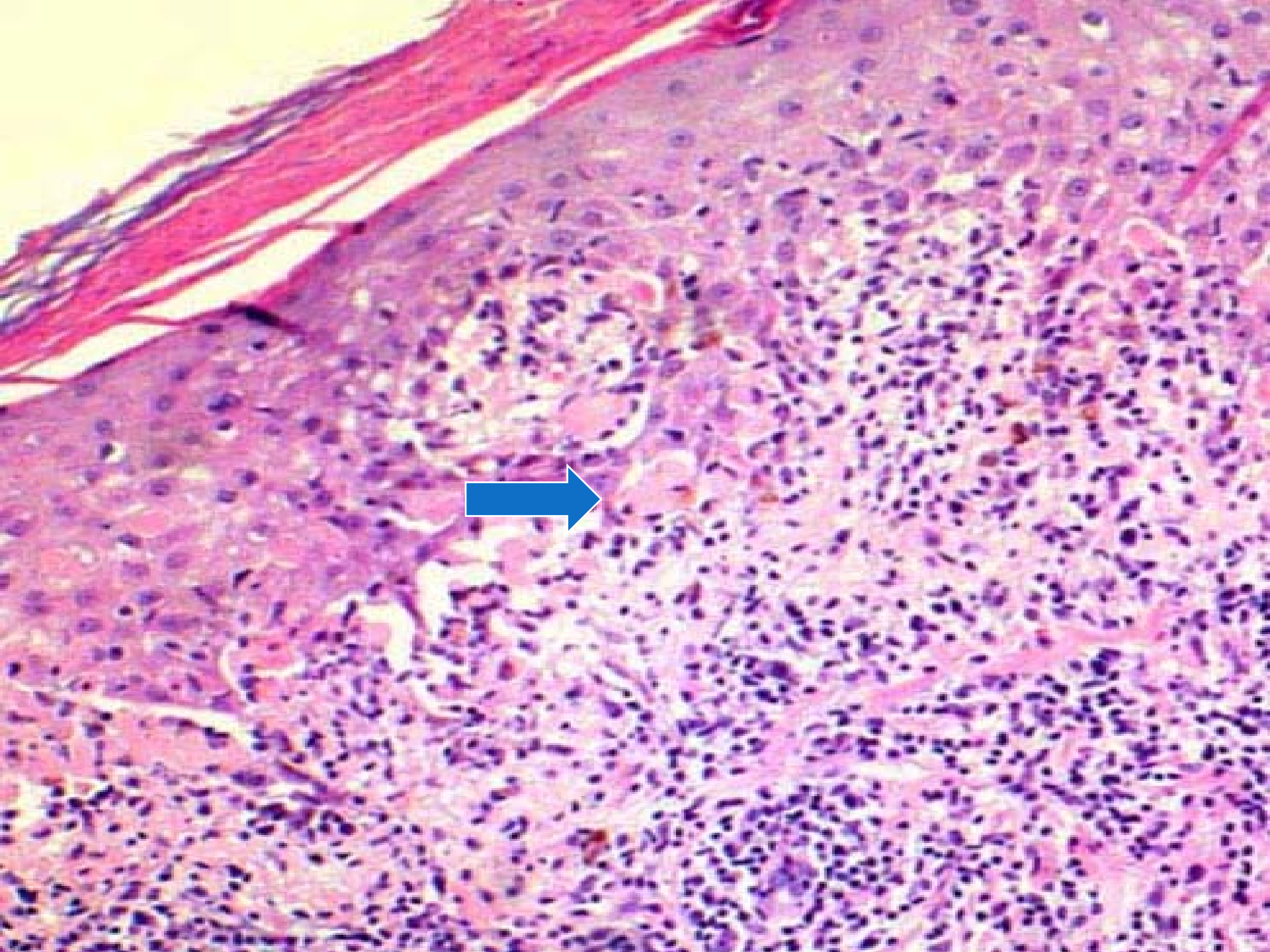




# Acanthosis

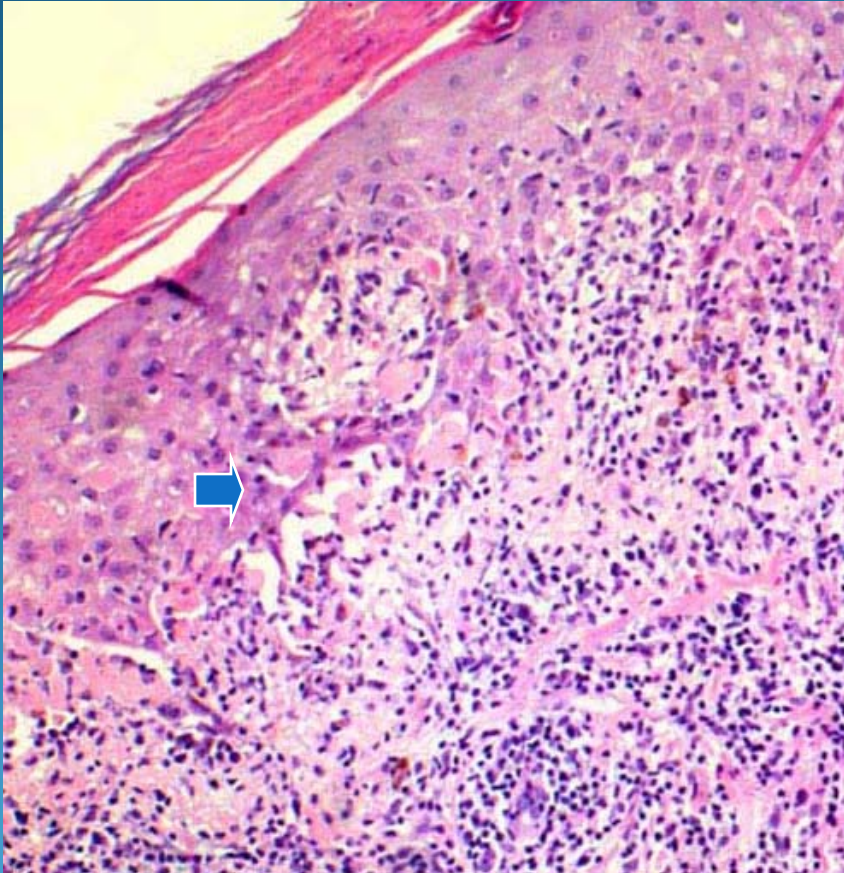


- The increase in the thickness of the stratum malpighii
- Acanthosis nigricans, Pale cell acanthoma

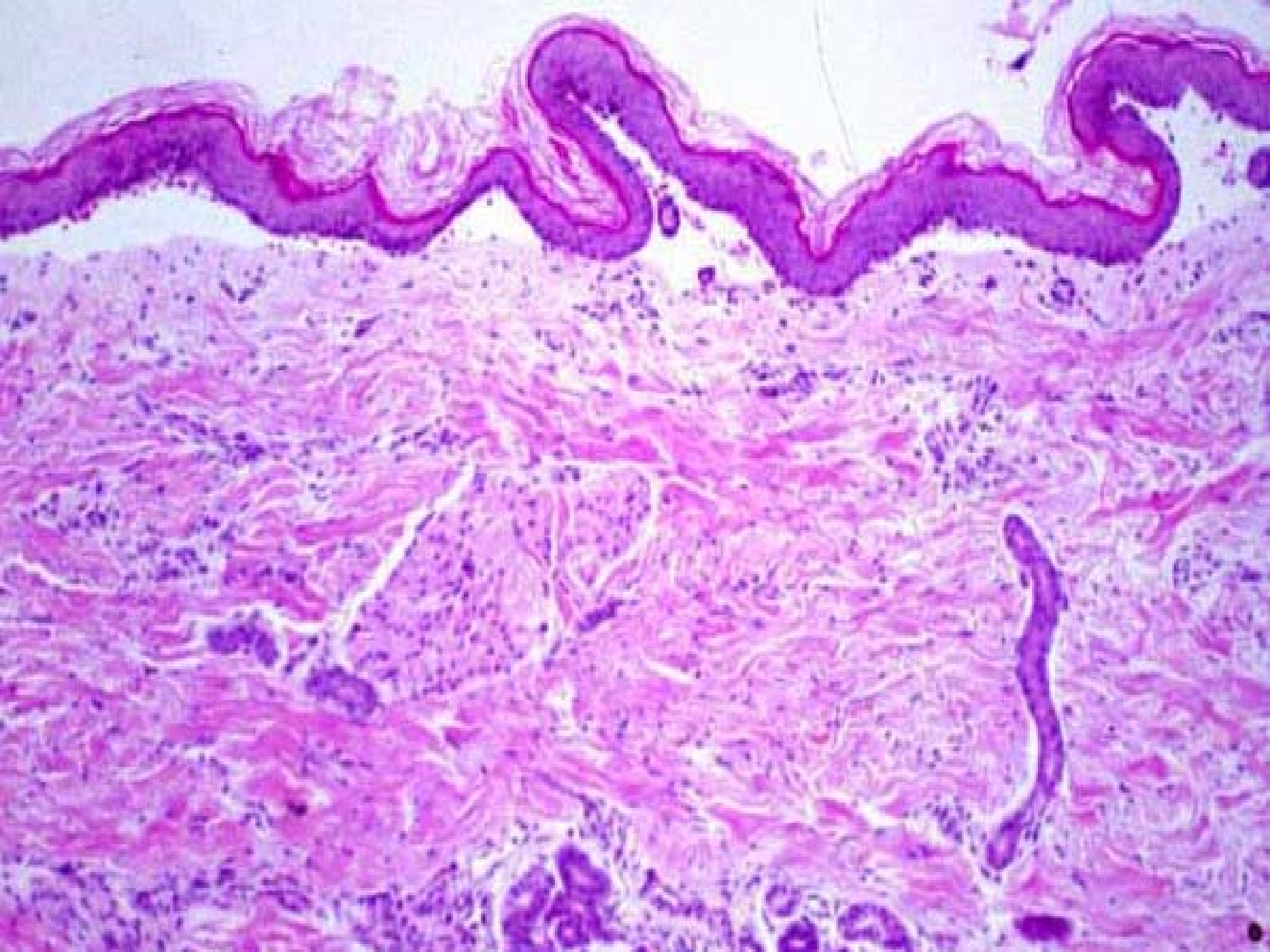




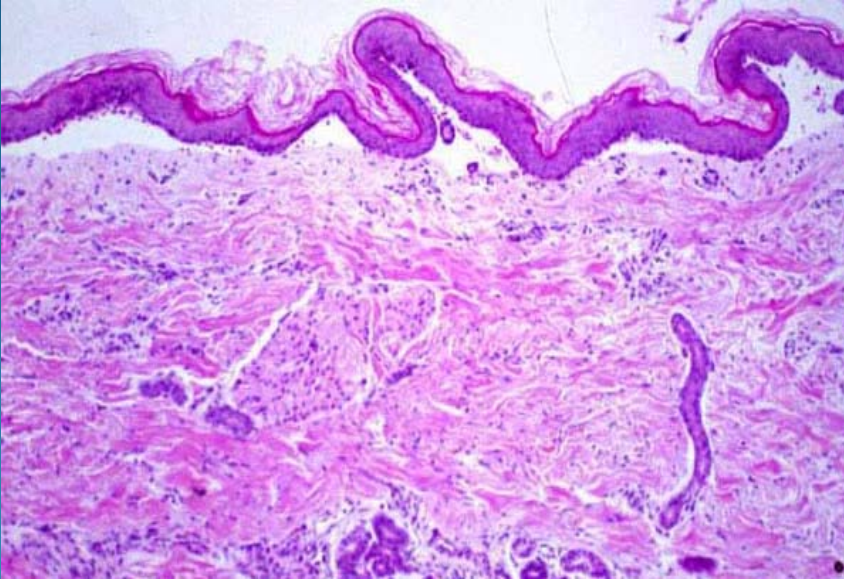
# Apoptosis



- 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

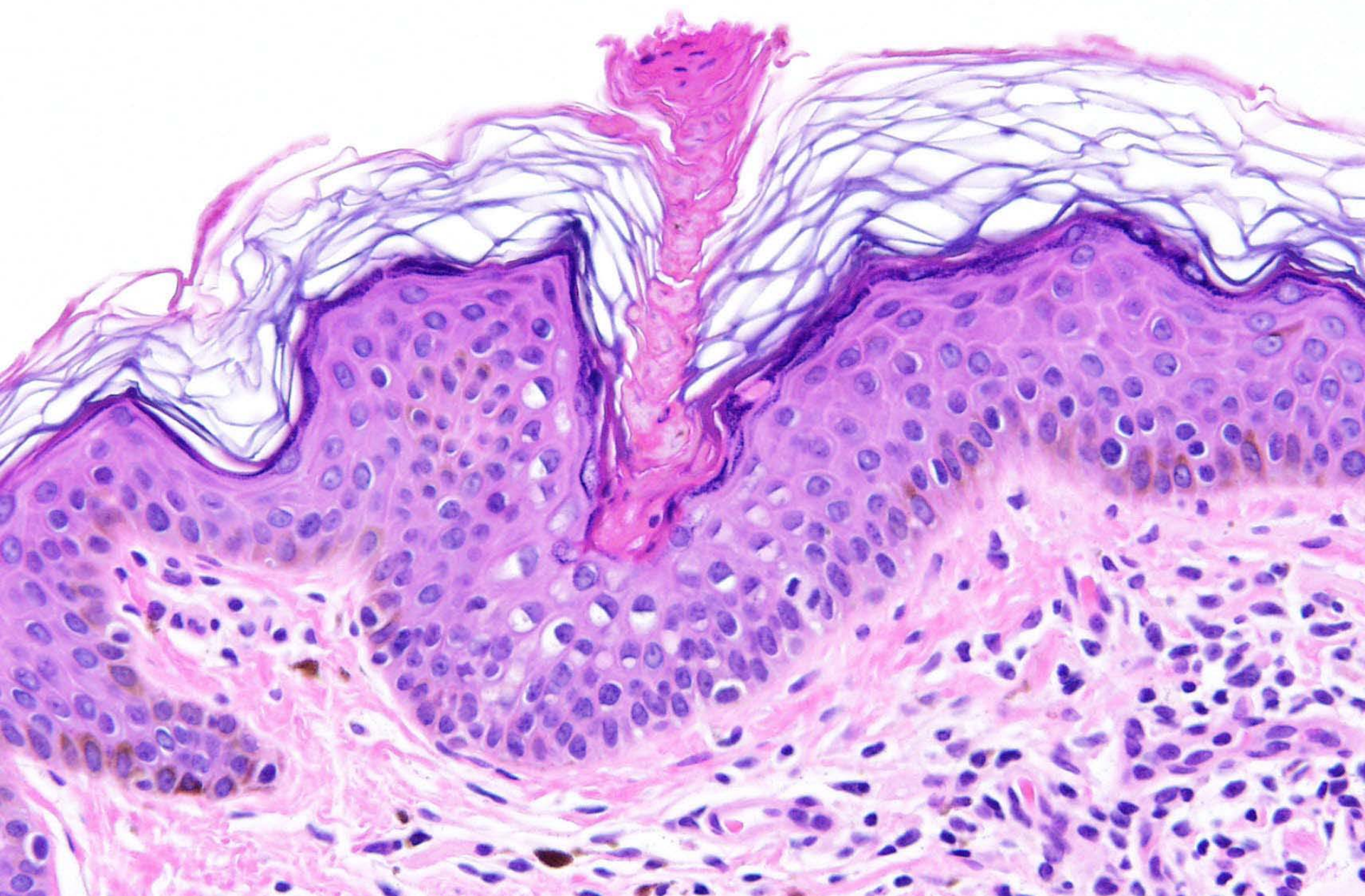


# Bulla



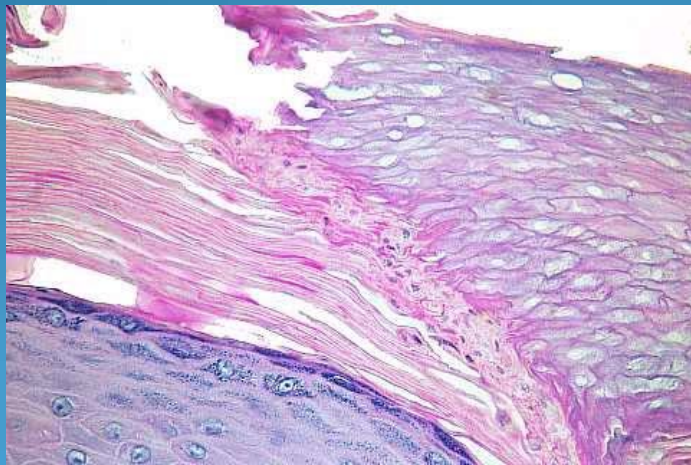
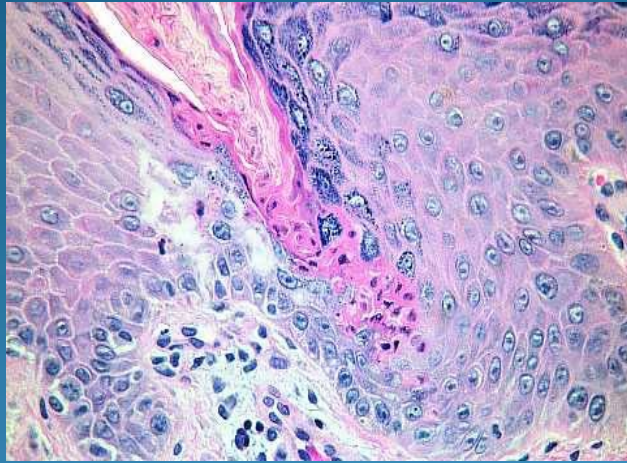
- Cavity of at least 5 mm in diameter forming within or below the epidermis
- Bullous pemphigoid, EBA, DH





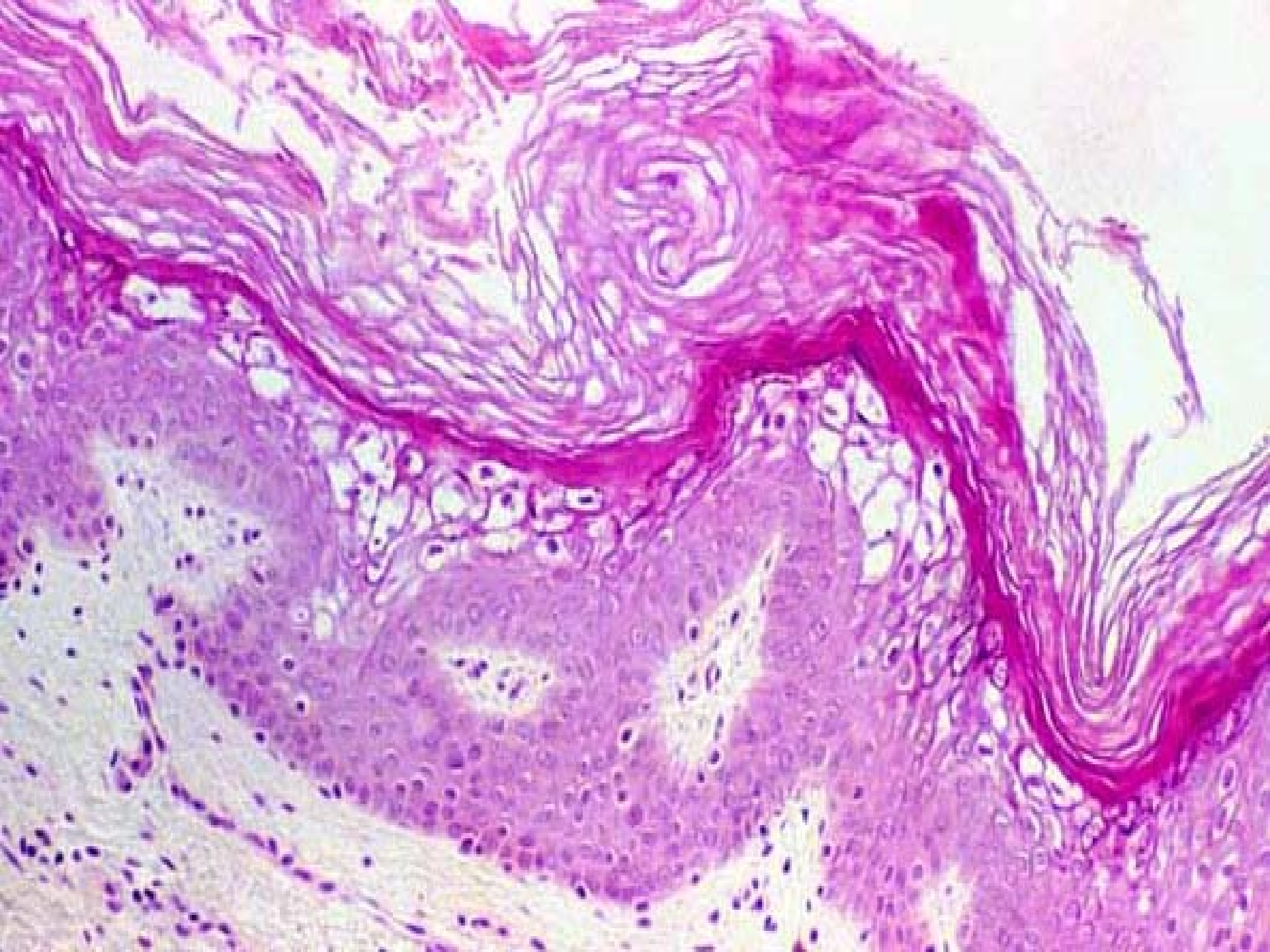


# Cornoid Lamella

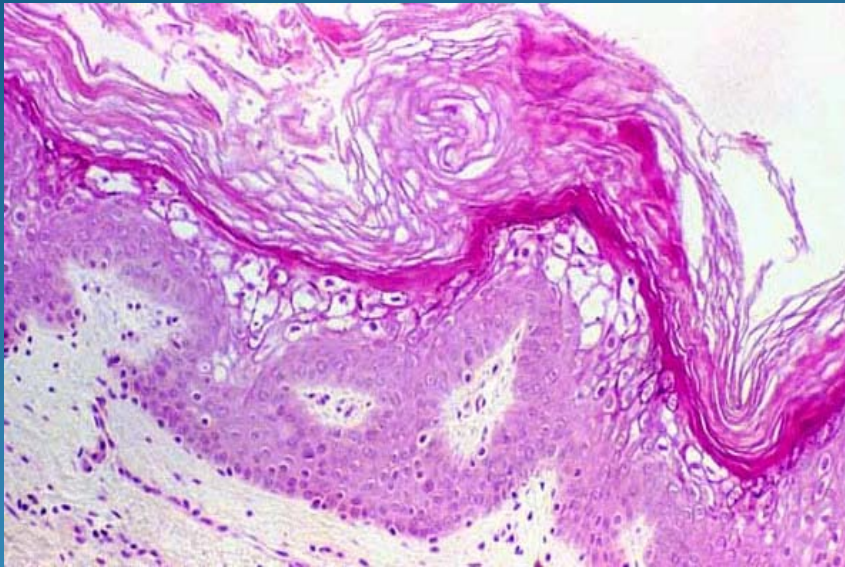


- The cornoid lamella is tilted toward the center of such a lesion
- Peripherally migrating clone of abnormal keratinocytes forming the cornoid lamella
- Porokeratosis

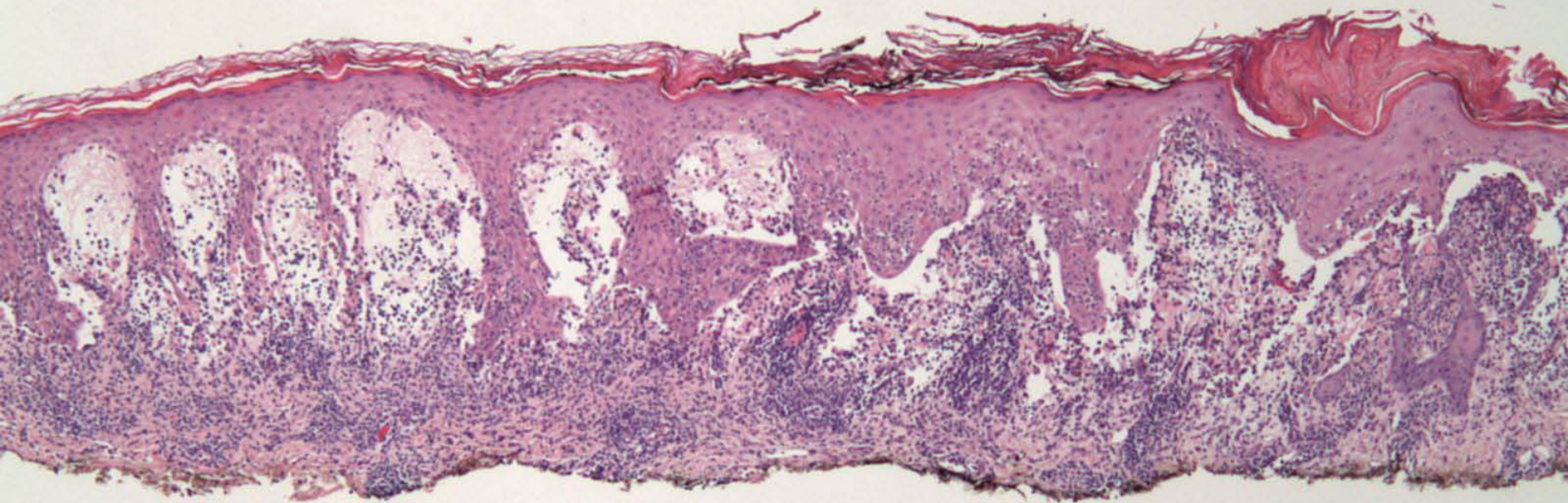




# Epidermolytic Hyperkeratosis

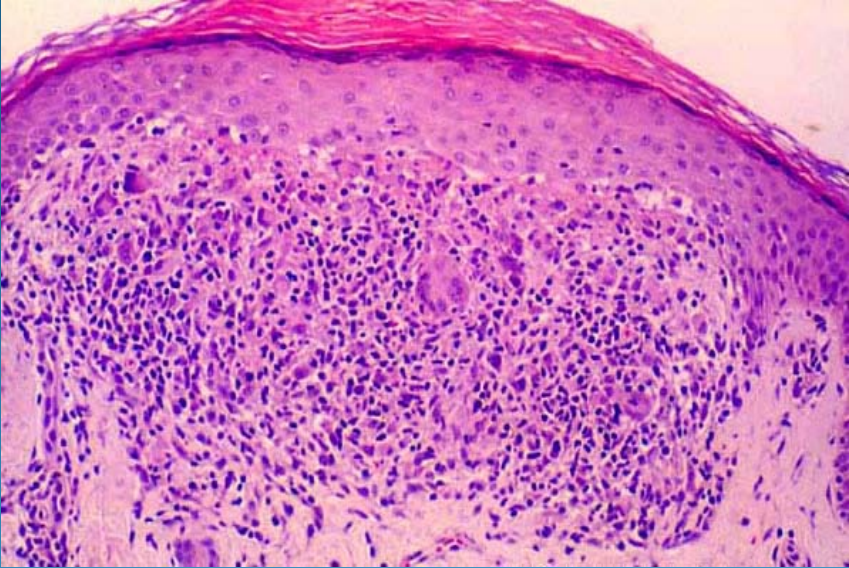


- Vacuolation of the keratohyaline granular layer
- Rule out Congenital Ichthyosiform erythroderma
- Association with dysplastic nevi

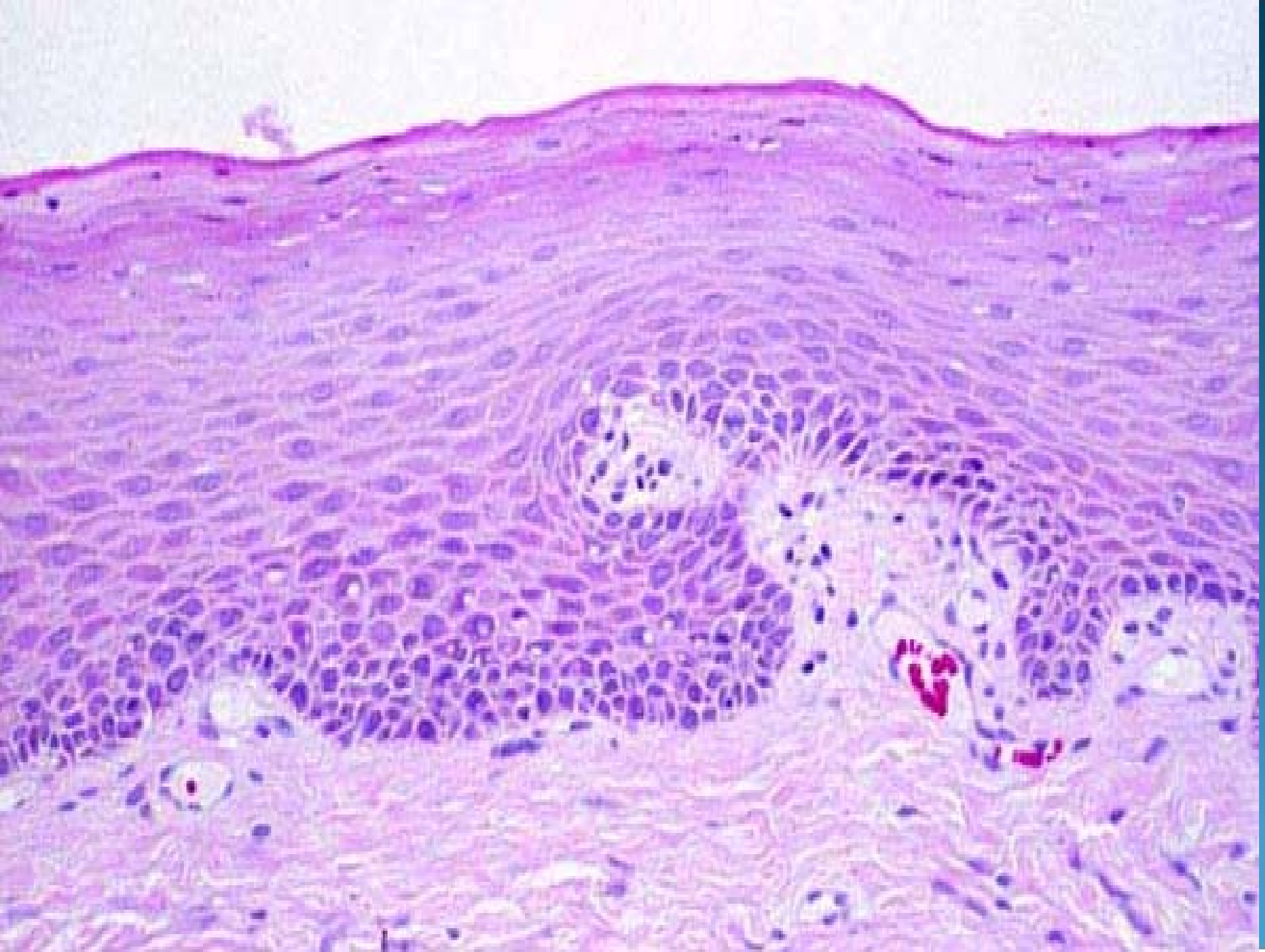




# Lichenoid (Interface)

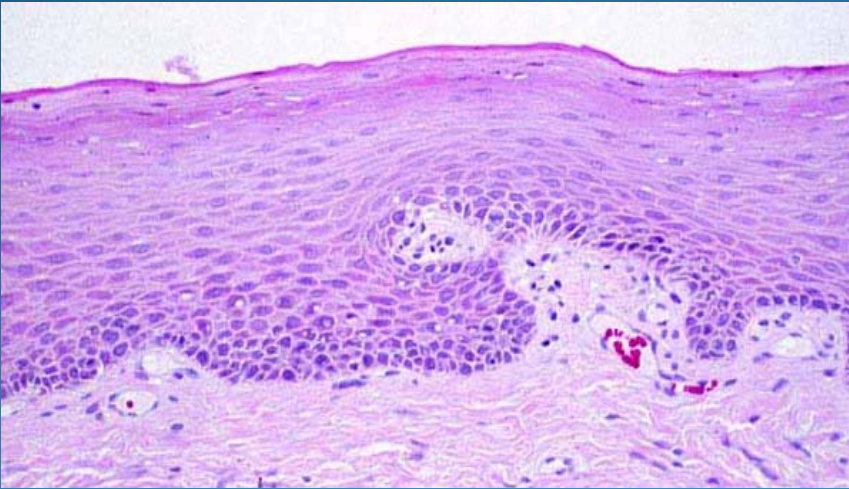


- Epidermal basal cell damage manifested with cell death or liquefactive degeneration (basal vacuolar change)
- Interface sometimes applied only to poikilodermatous reactions with mild basal damage with vacuolar change
- Lichen planus, Fixed drug eruption, LPLK

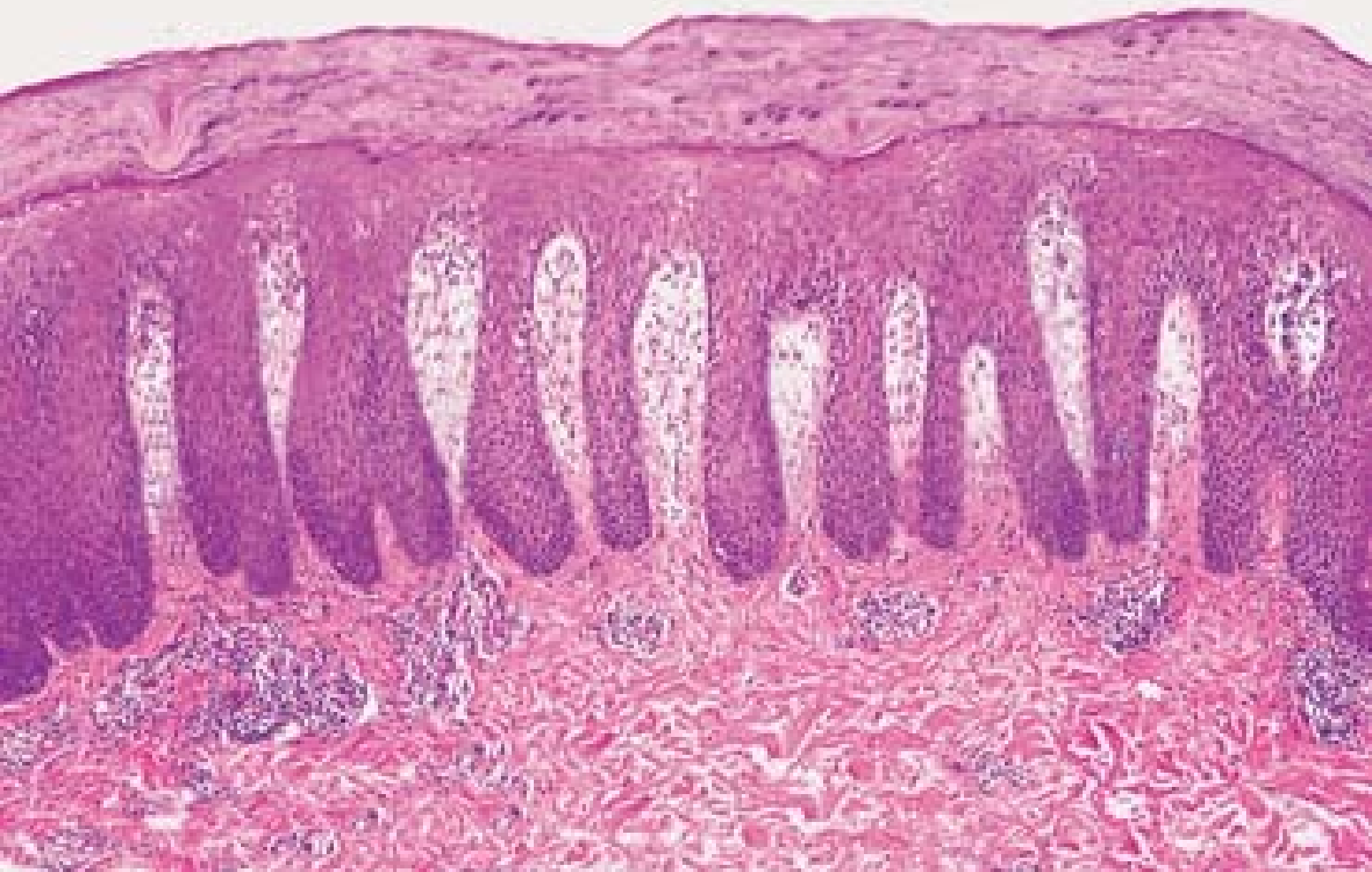




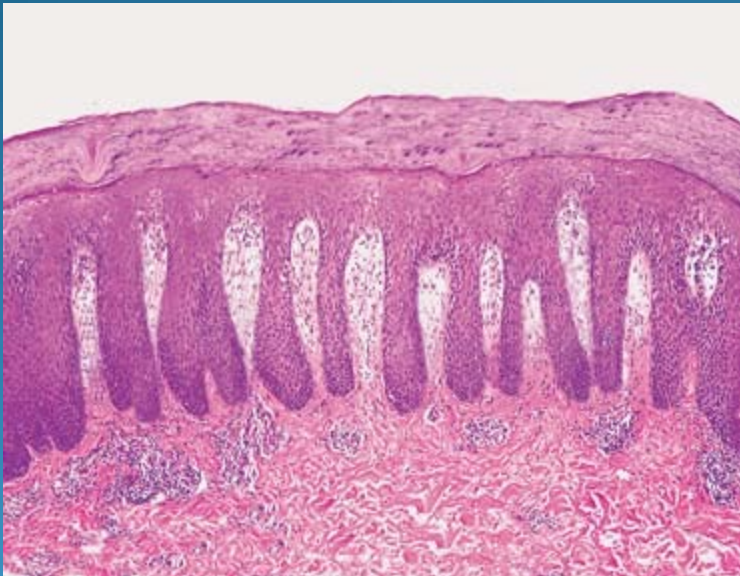
# Parakeratosis



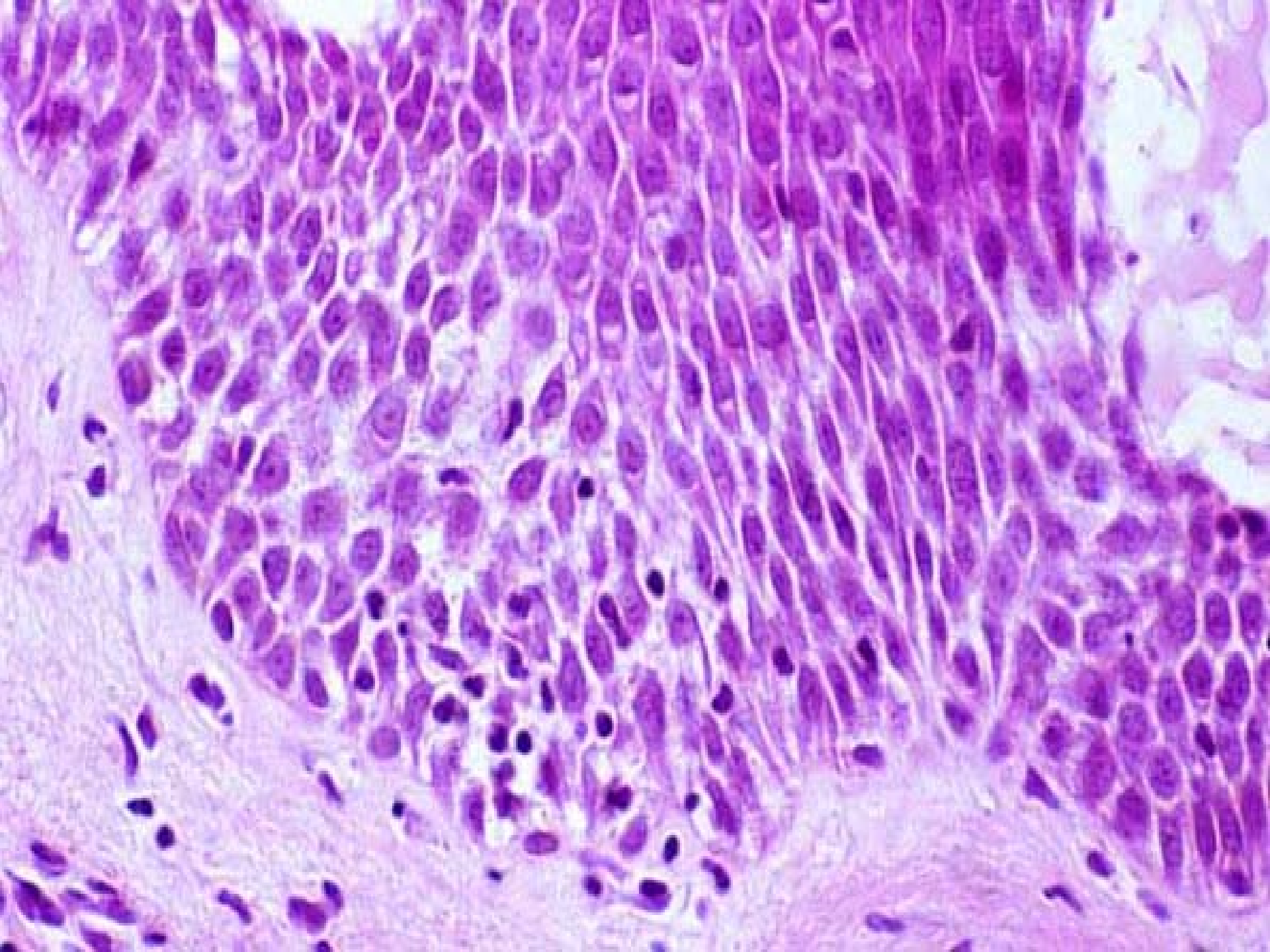
- Retention of nuclei in the stratum corneum
- Normal finding on mucous membranes
- Spongiotic dermatitis (Eczema)



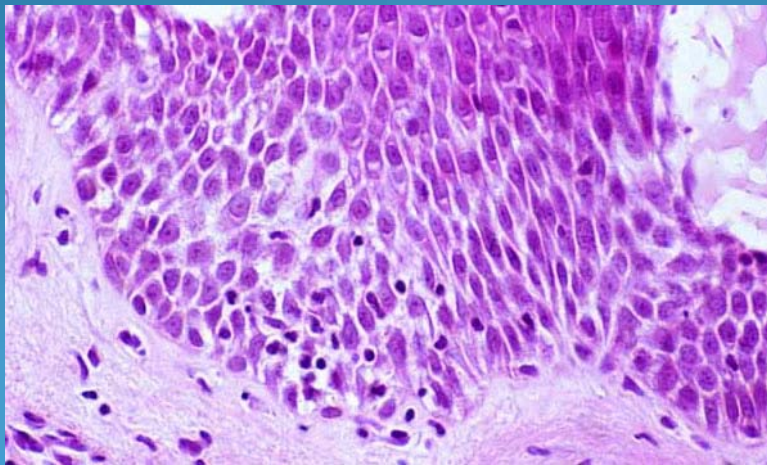
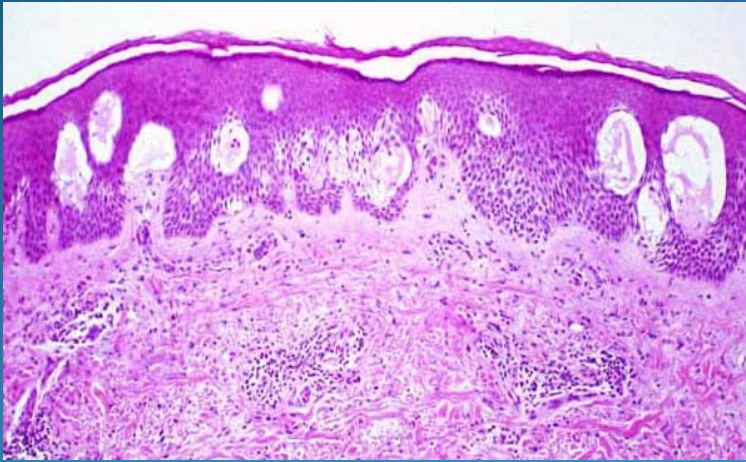
# Psoriasiform



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

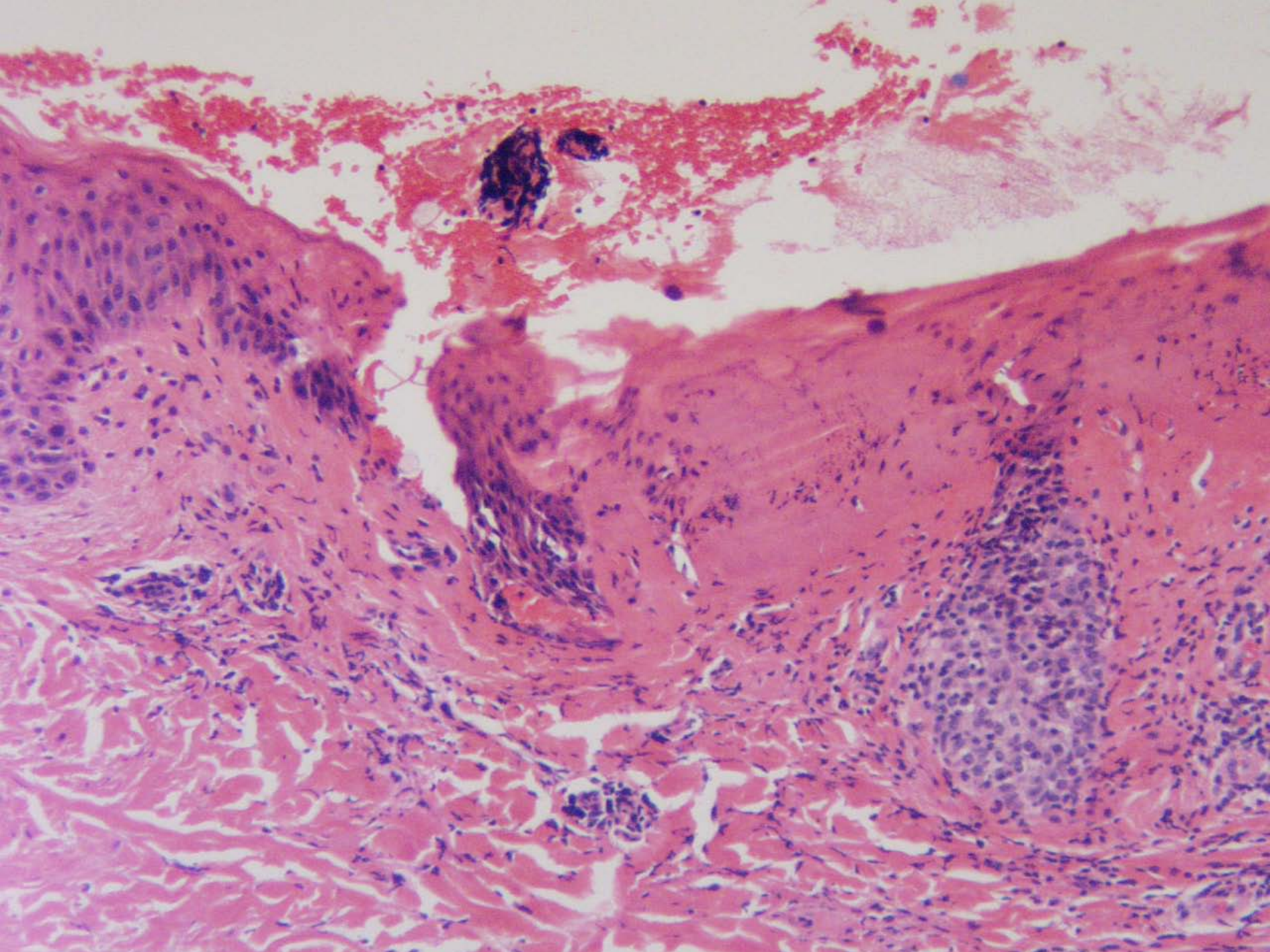


# Spongiotic

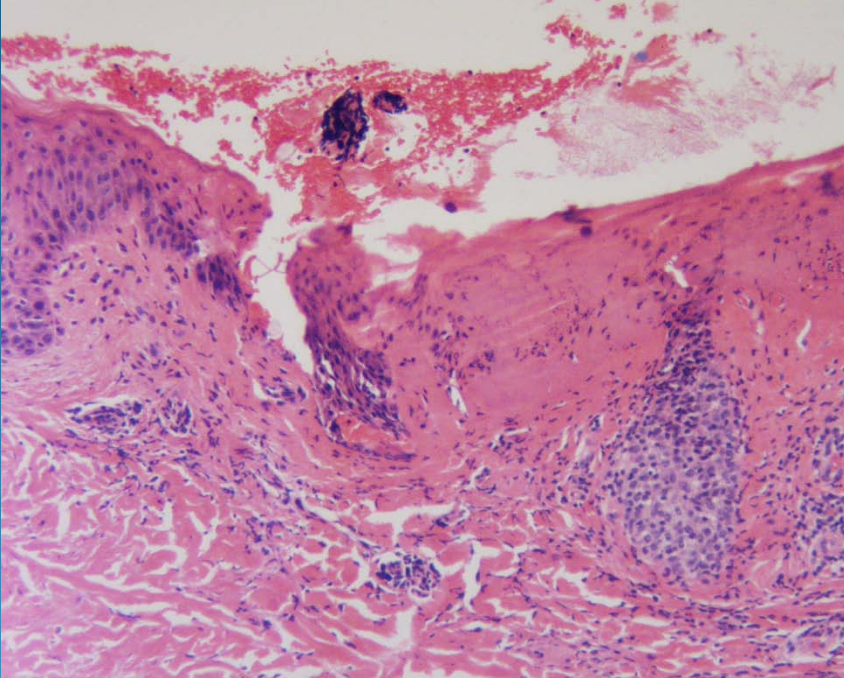


- Intraepidermal intercellular edema with widened intercellular spaces and elongation of intercellular bridges
- Subclassify by inflammatory cell type
- Eczema



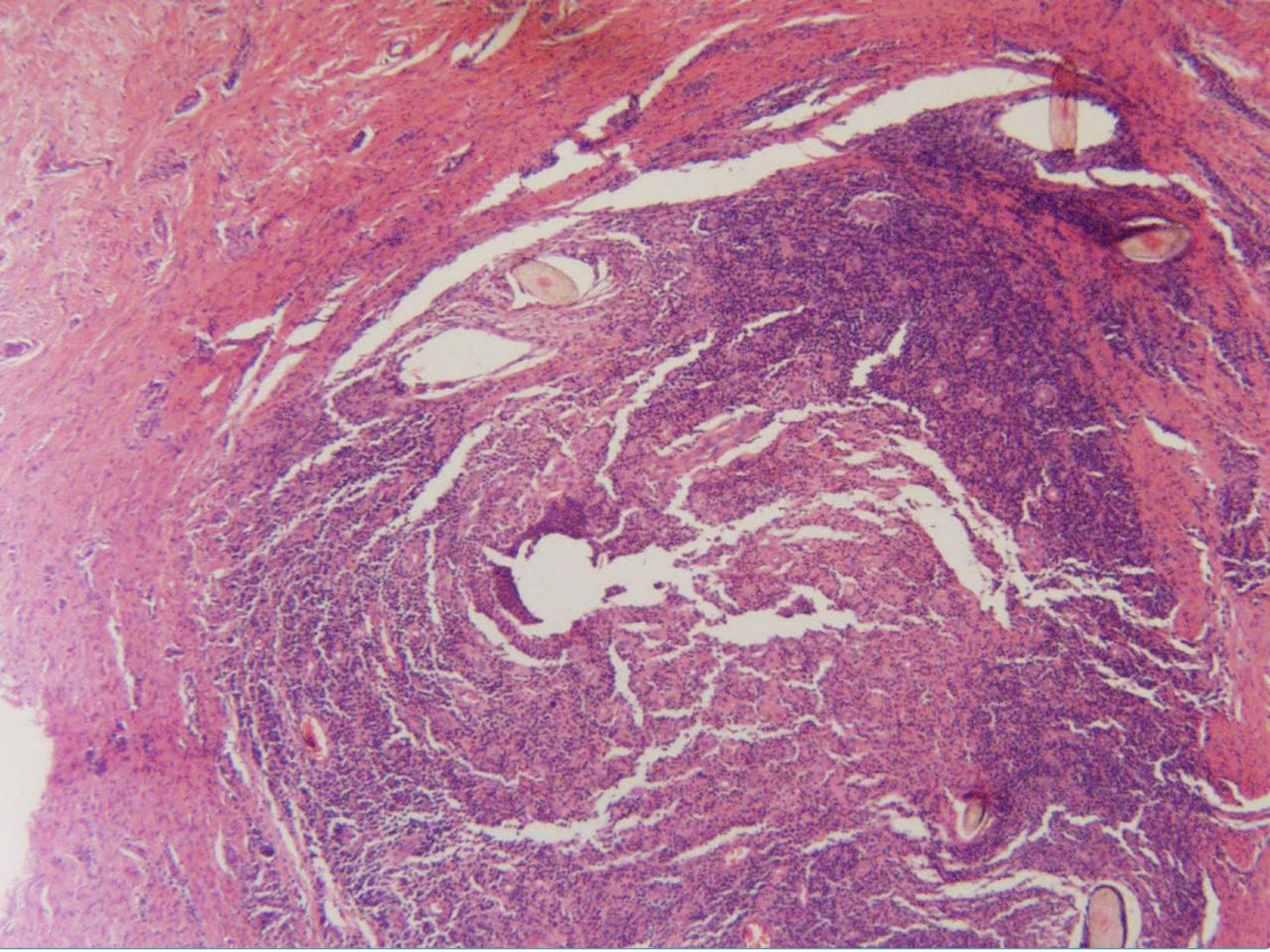


# Ulcer

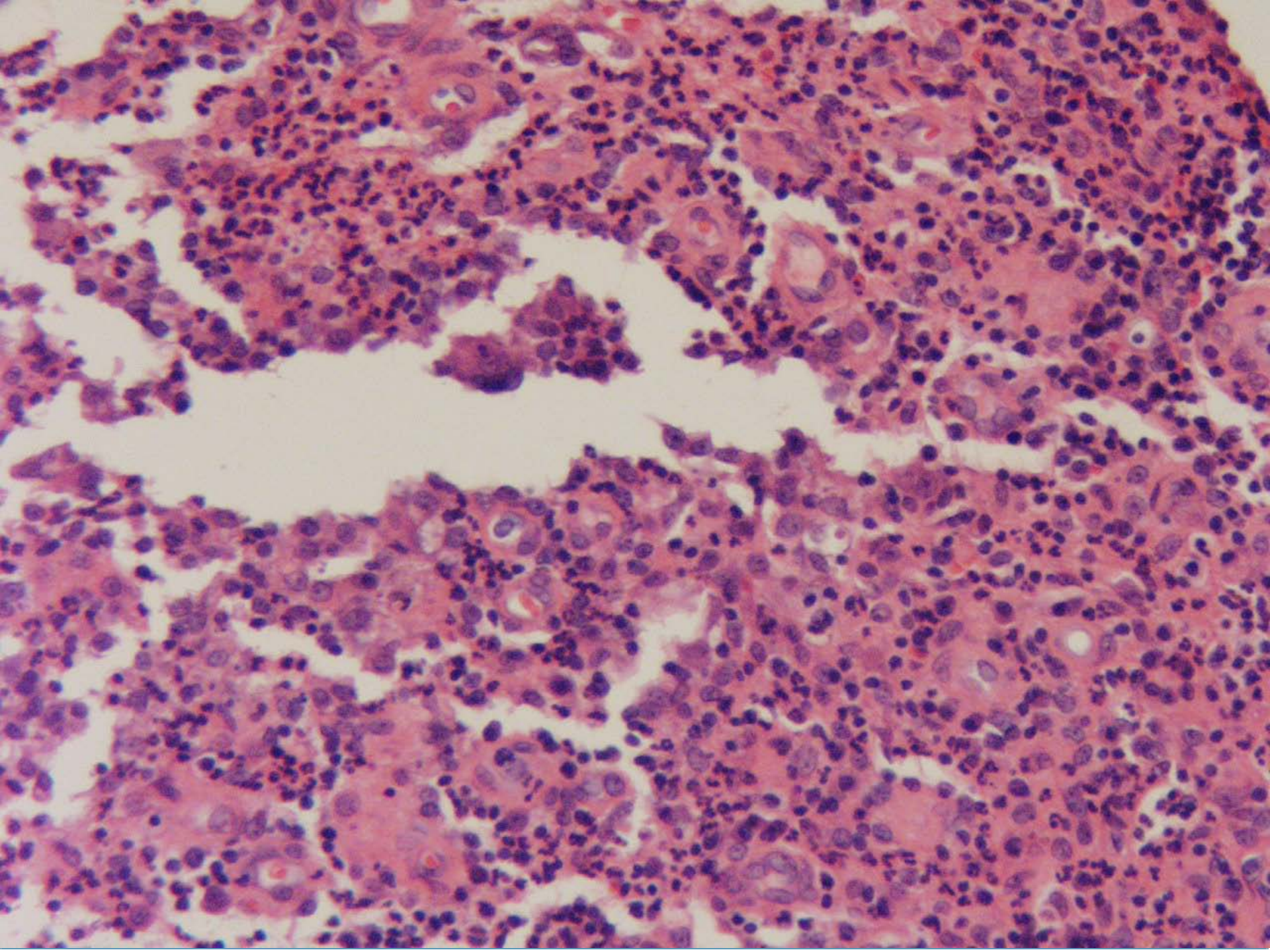


- Obliteration of a mucosal surface
- Usually fibrinopurulent base

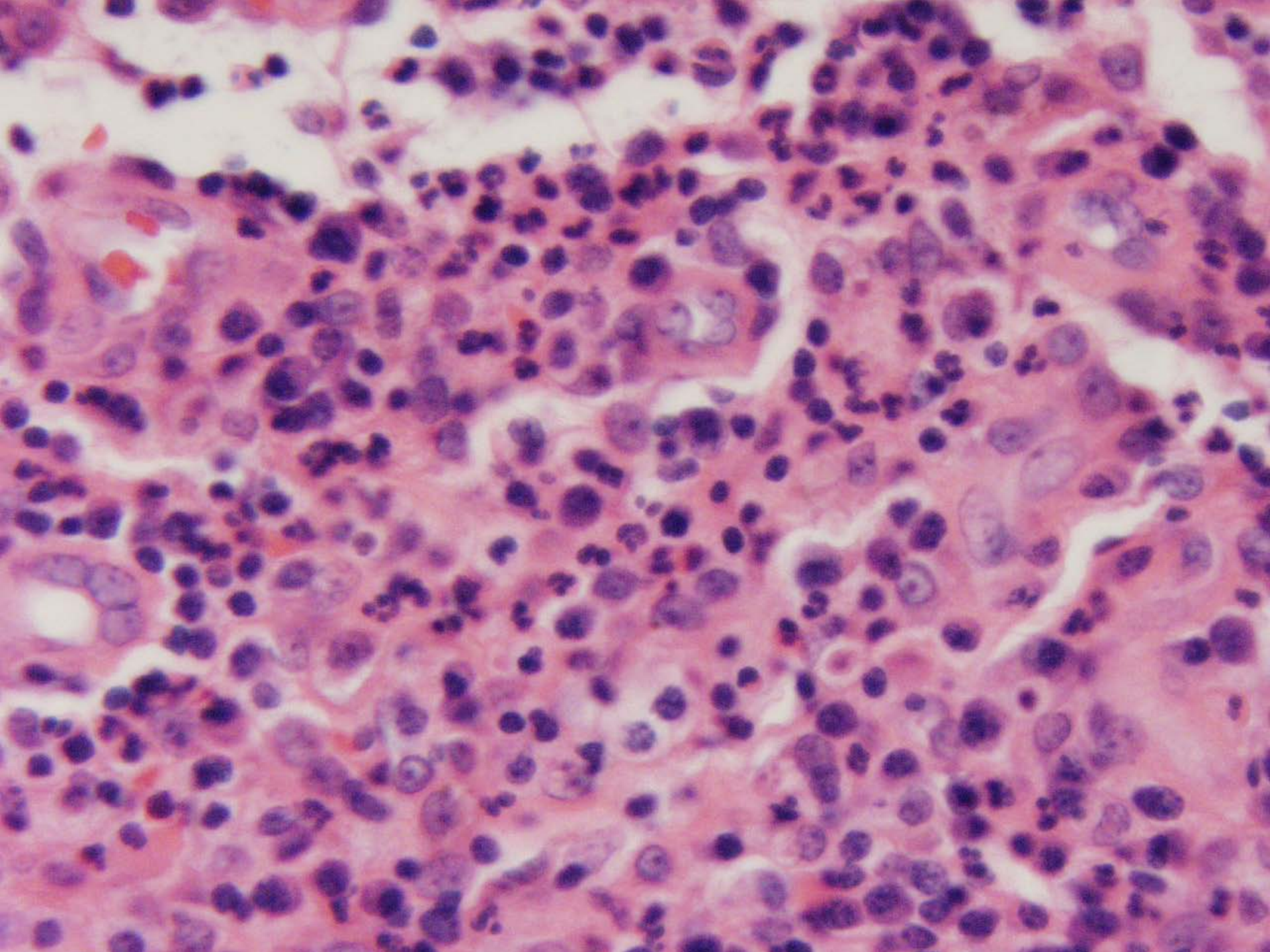






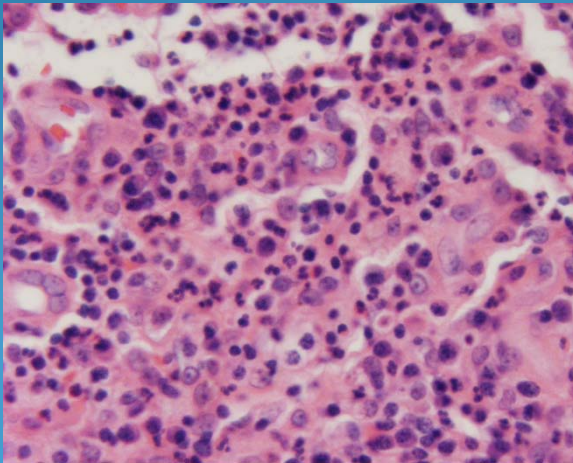
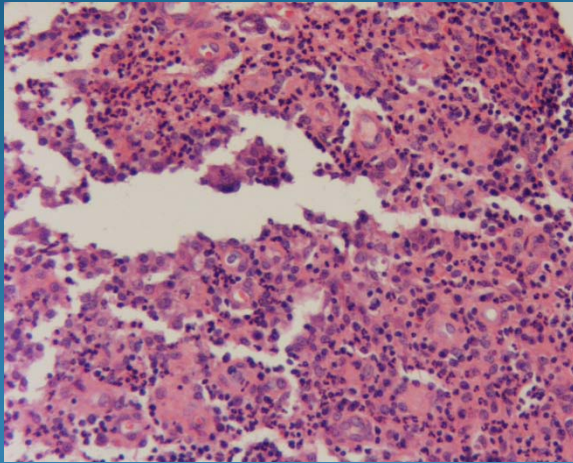




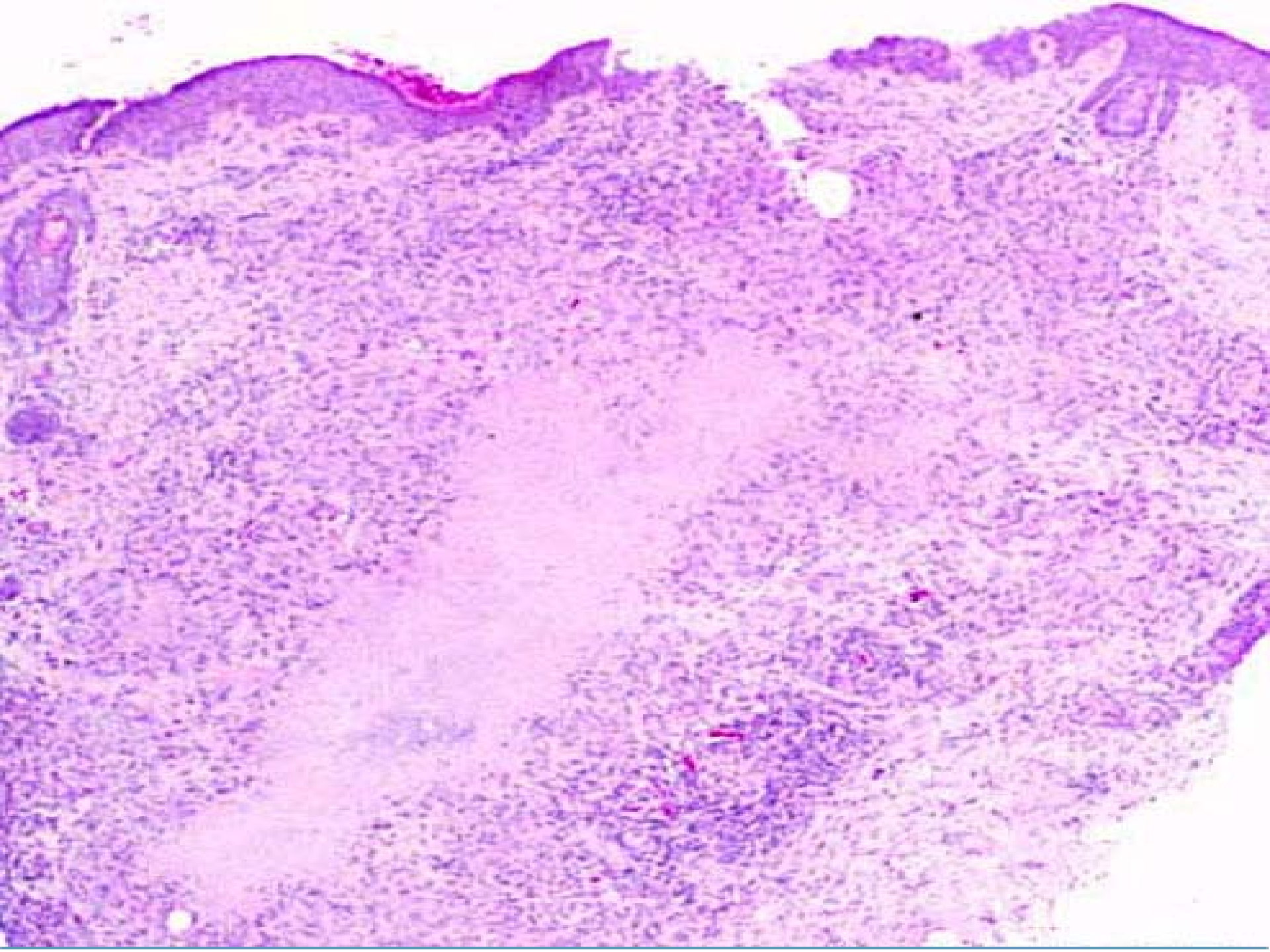




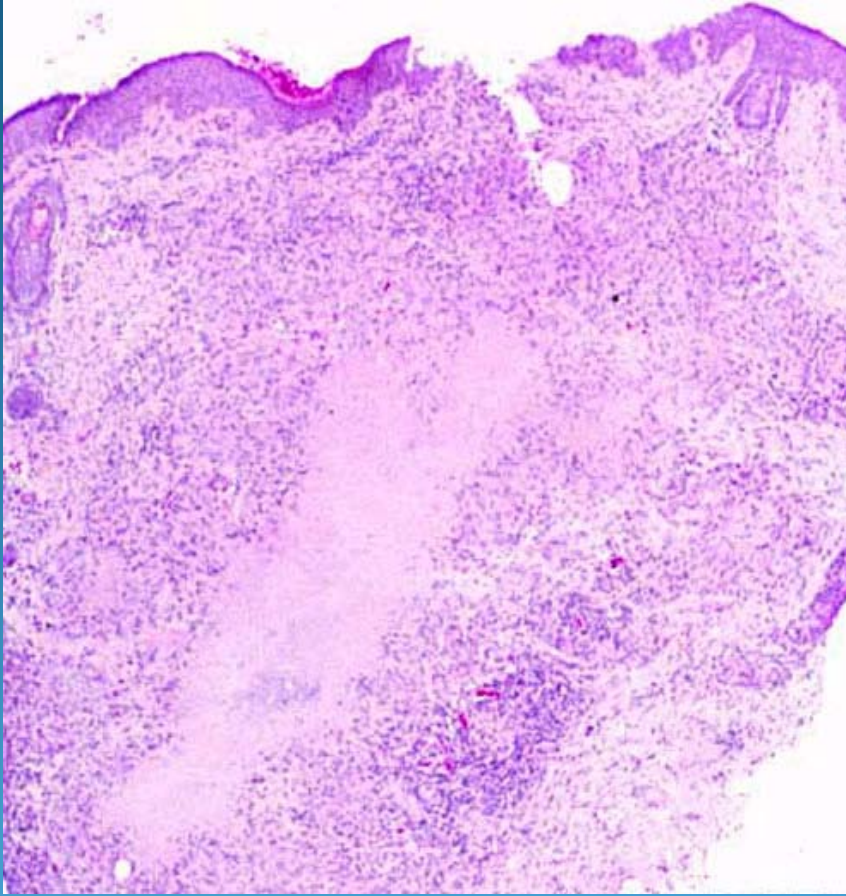
# Abscess



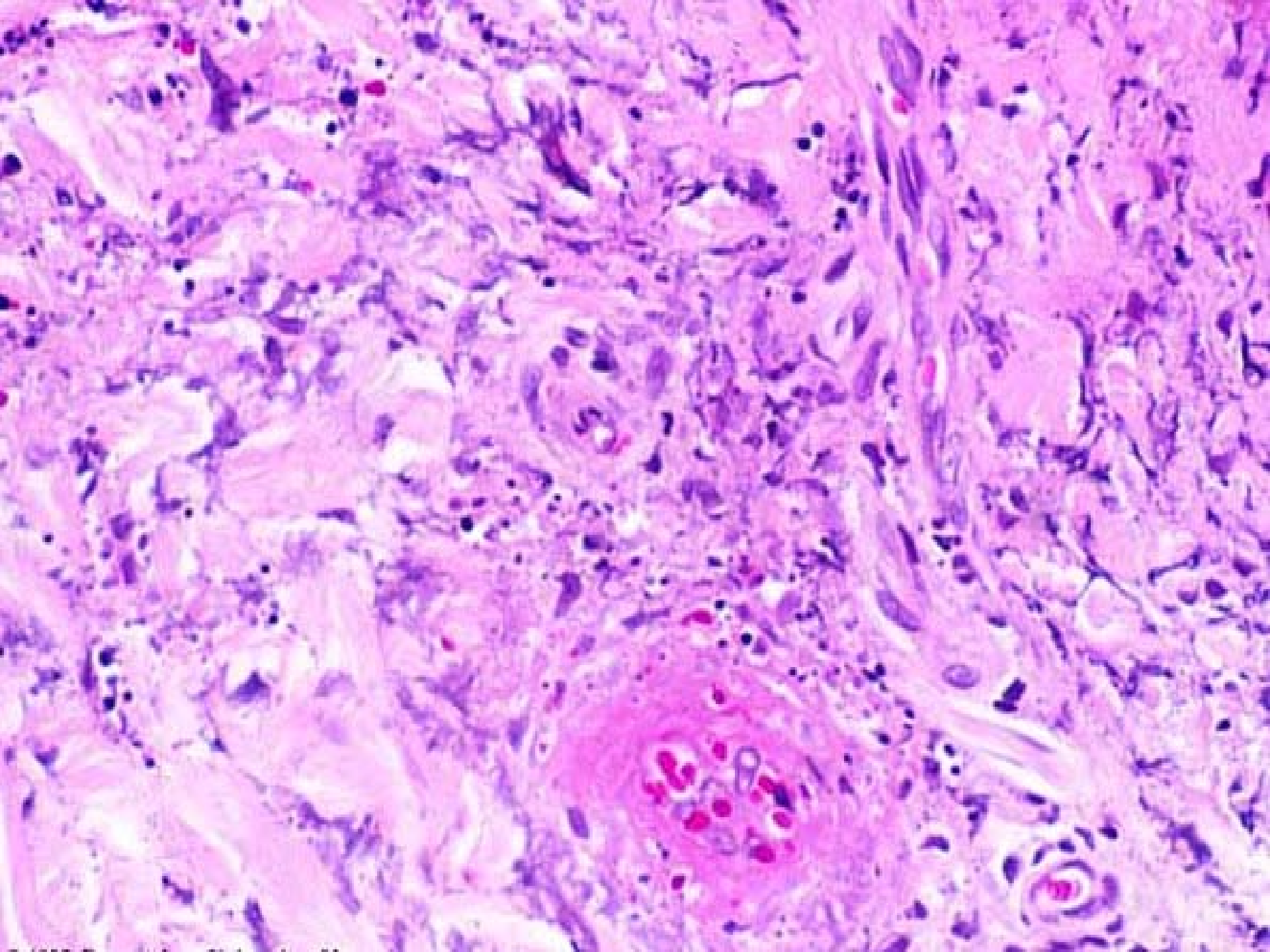
- Obliteration of tissue by suppurative necrosis
- May have foreign body giant cells
- Consider correlation with cultures
- Consider special stains



# Caseation Necrosis

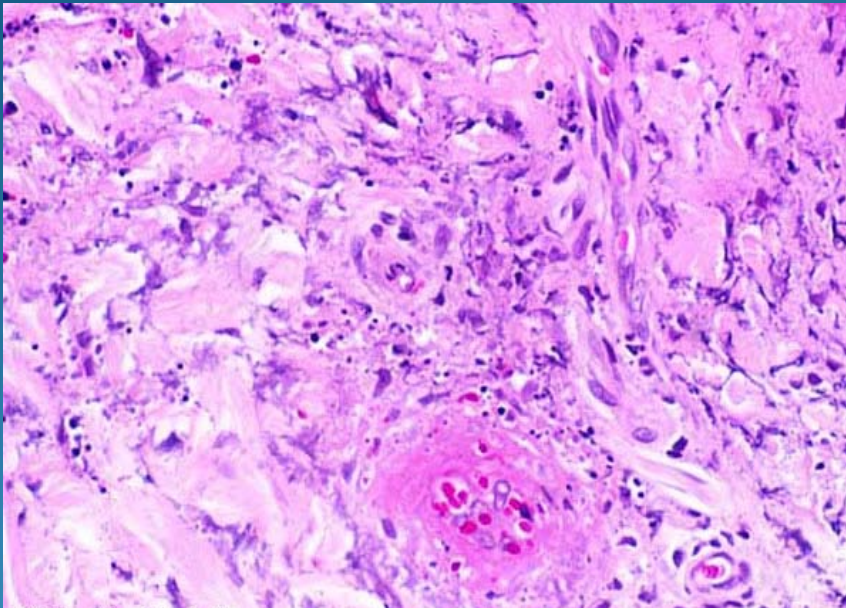


- Identical to coagulation necrosis and ischemic necrosis
- Affected tissue has lost its structural outline and appears as pale eosinophilic, amorphous and finely granular
- Tuberculosis, Necrobiotic xanthogranuloma

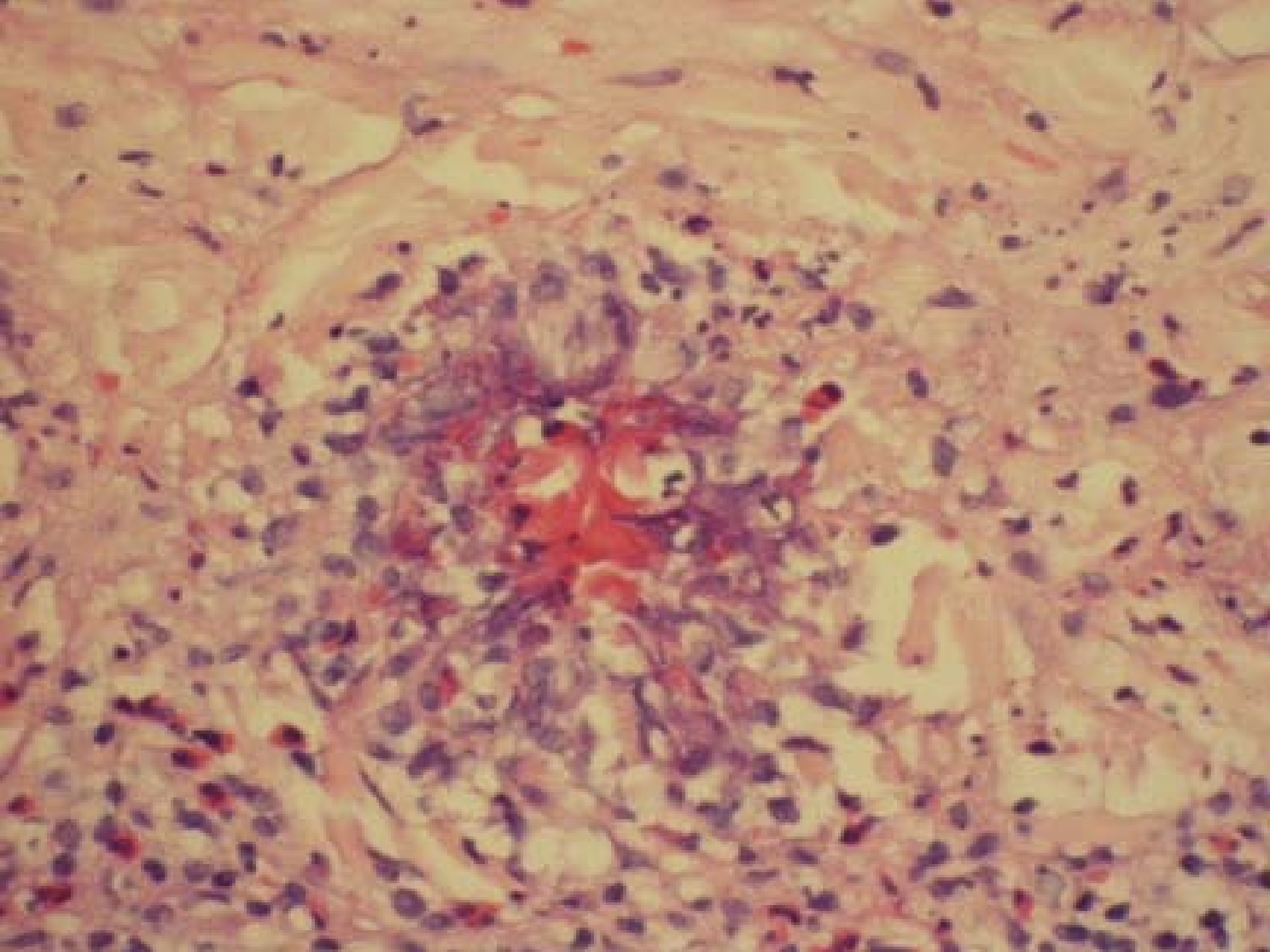




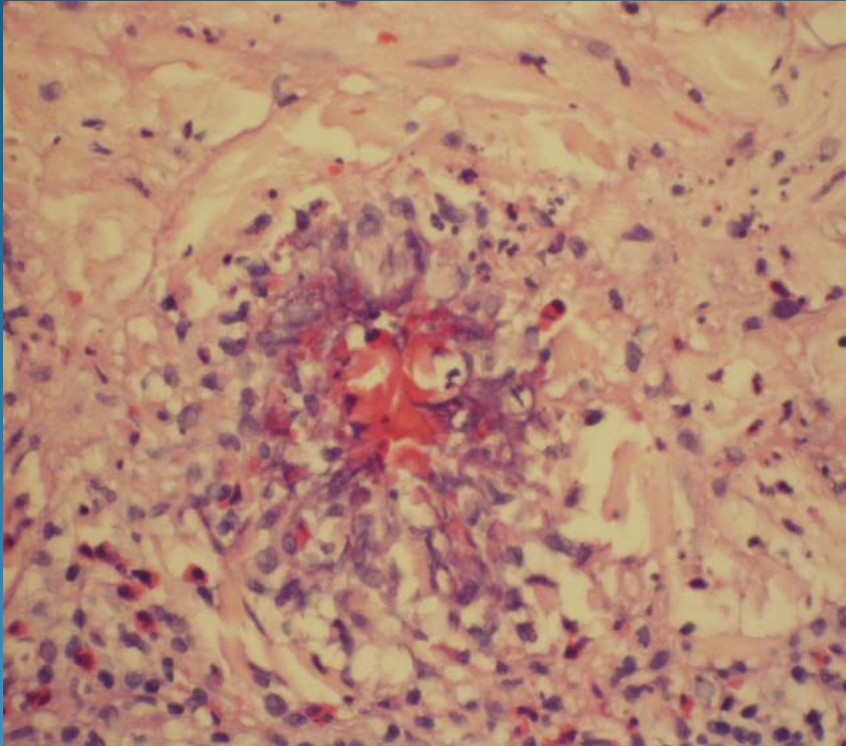
# Fibrinoid Necrosis



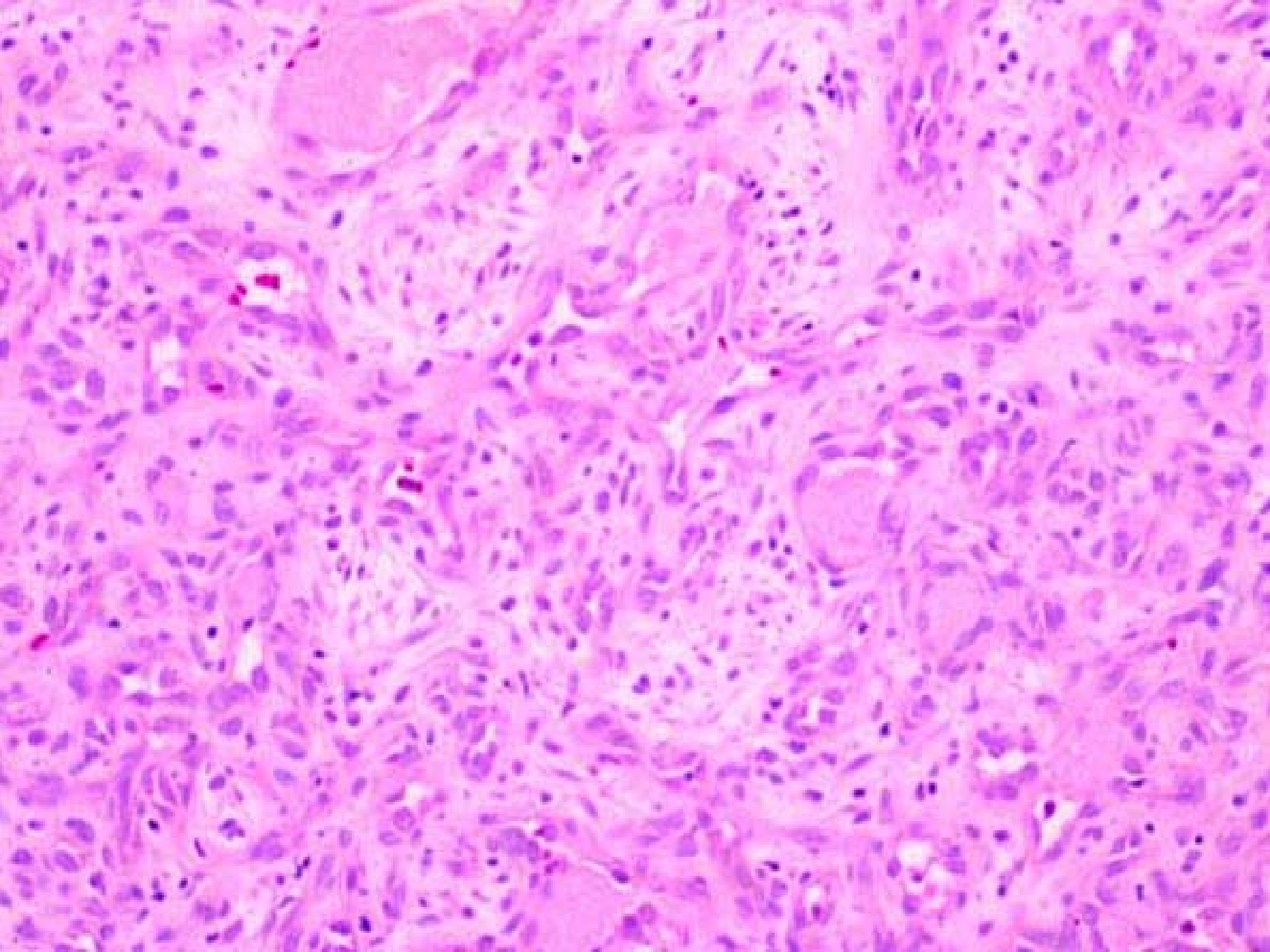
- Fibrin deposition in the wall of small vessels
- Commonly associated with leukocytoclastic vasculitis



# Flame Figure

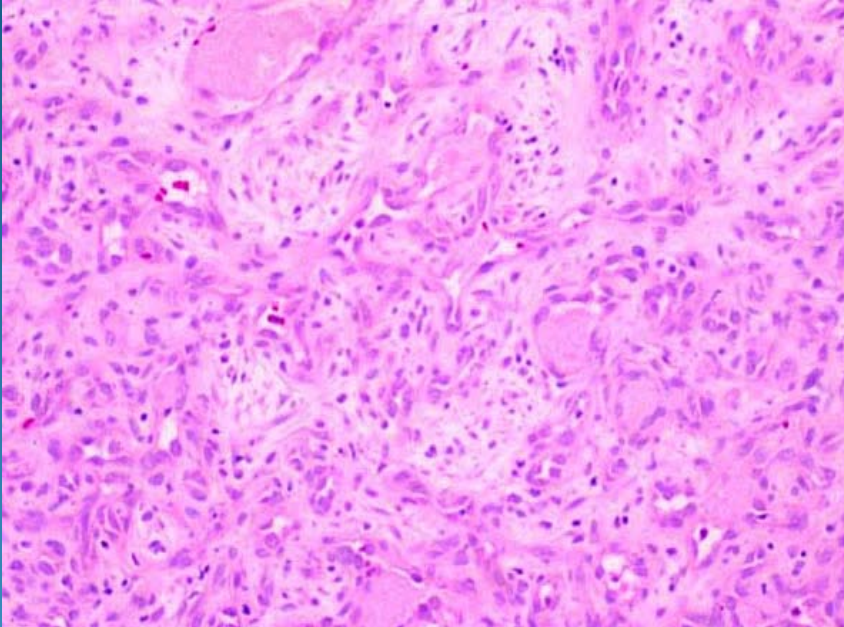


- Encrustation of eosinophilic granules around collagen
- Frequent in conditions with dermal eosinophilia
- Well's syndrome, arthropod, drug reactions



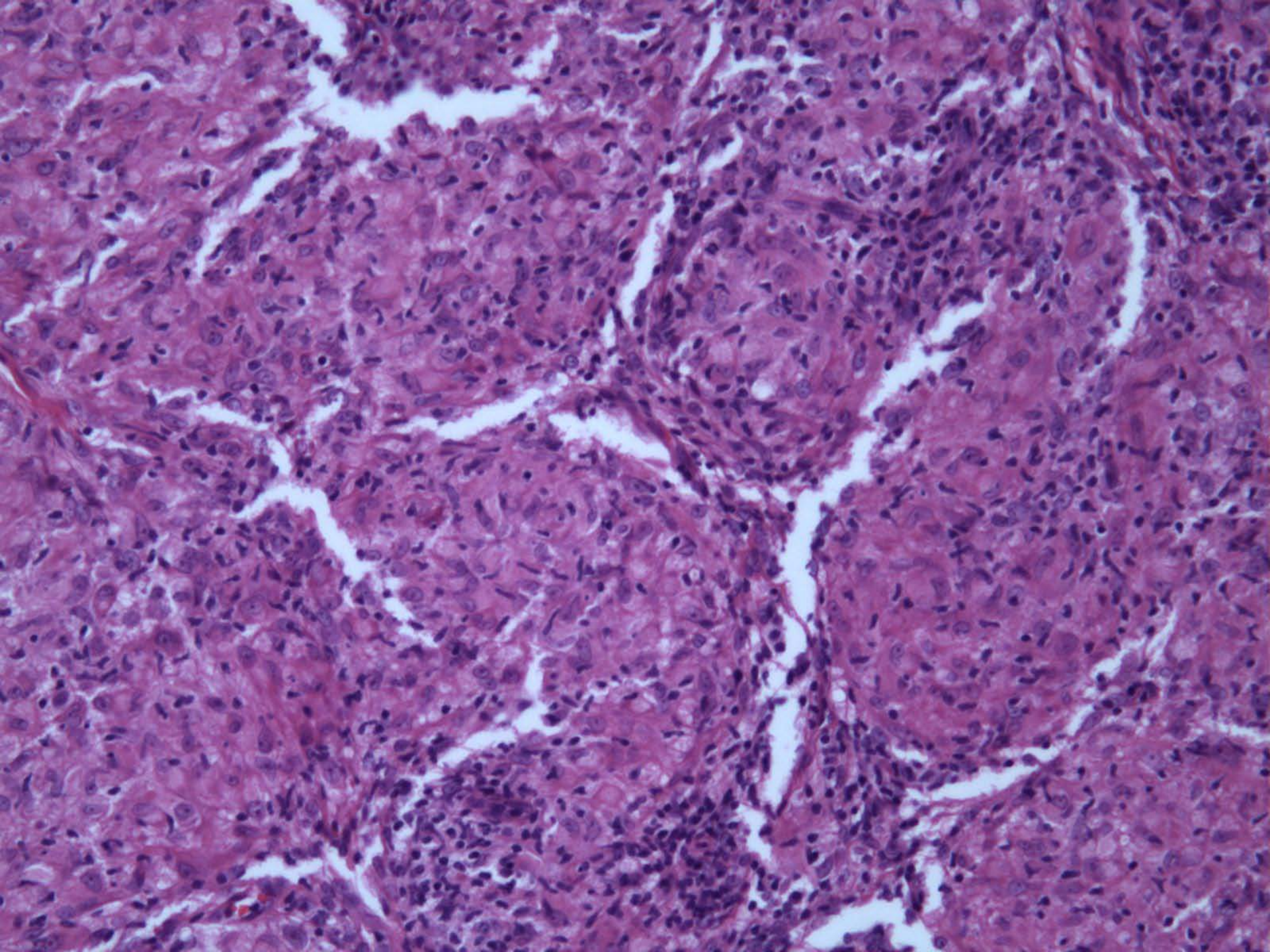


# Granulation Tissue



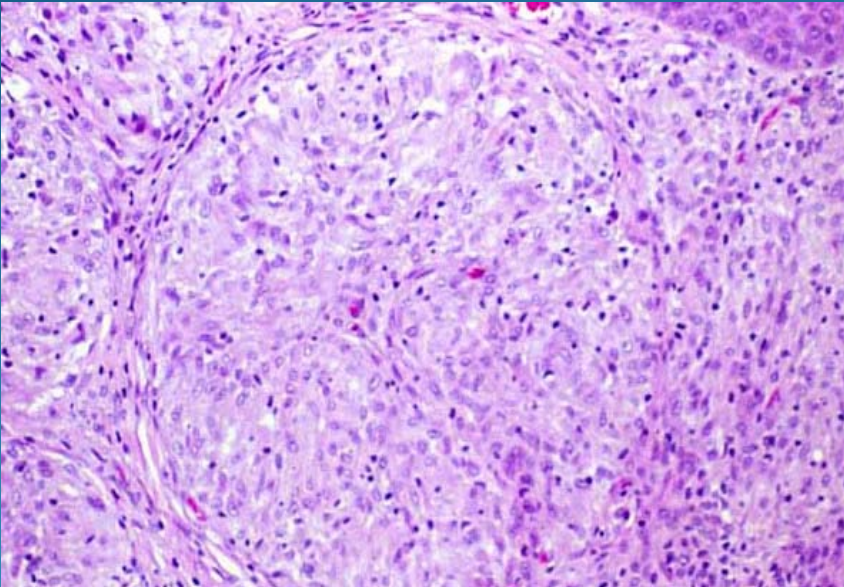
- Newly formed dermis arising in healing wounds and characterized by numerous fibroblasts and new capillaries and an infiltrate consisting of lymphoid cells, macrophages, and plasma cells
- Decubitus ulcer



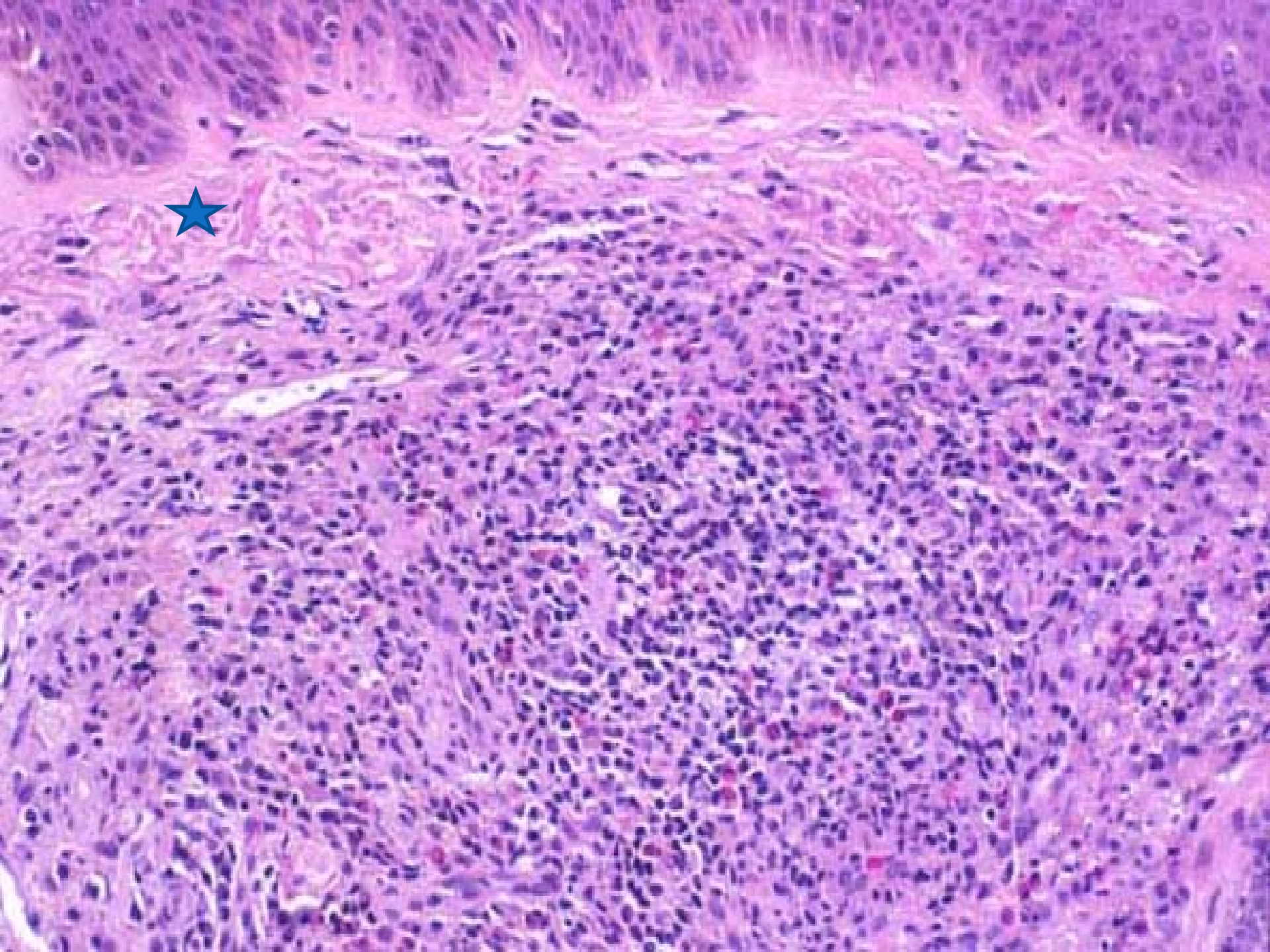




# Granuloma

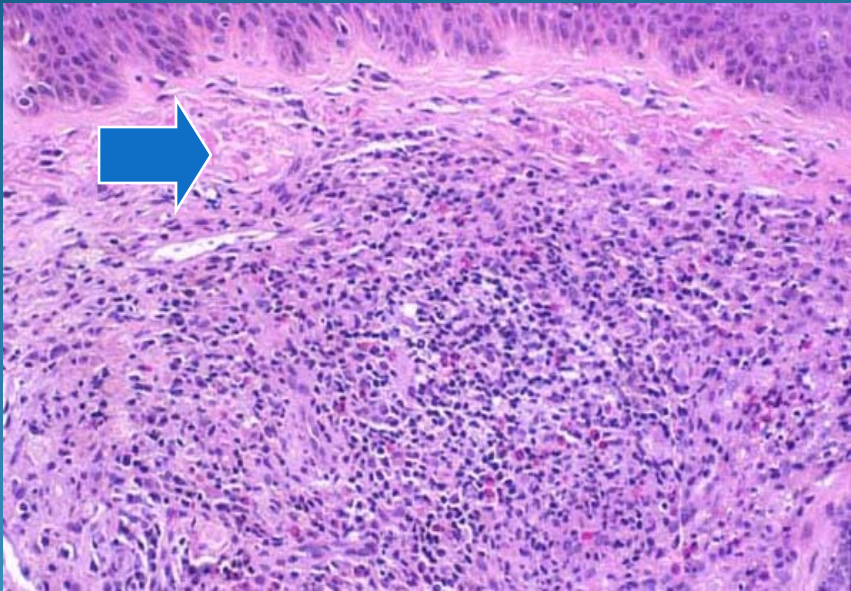


- Chronic proliferative lesion consisting of mononuclear cells and epithelioid cells or multinucleated giant cells or both
- Cells lie in groups and are often surrounded by lymphoid cells
- "Naked" granulomas have few to none of these surrounding lymphoid cells
- Sarcoidosis, foreign body

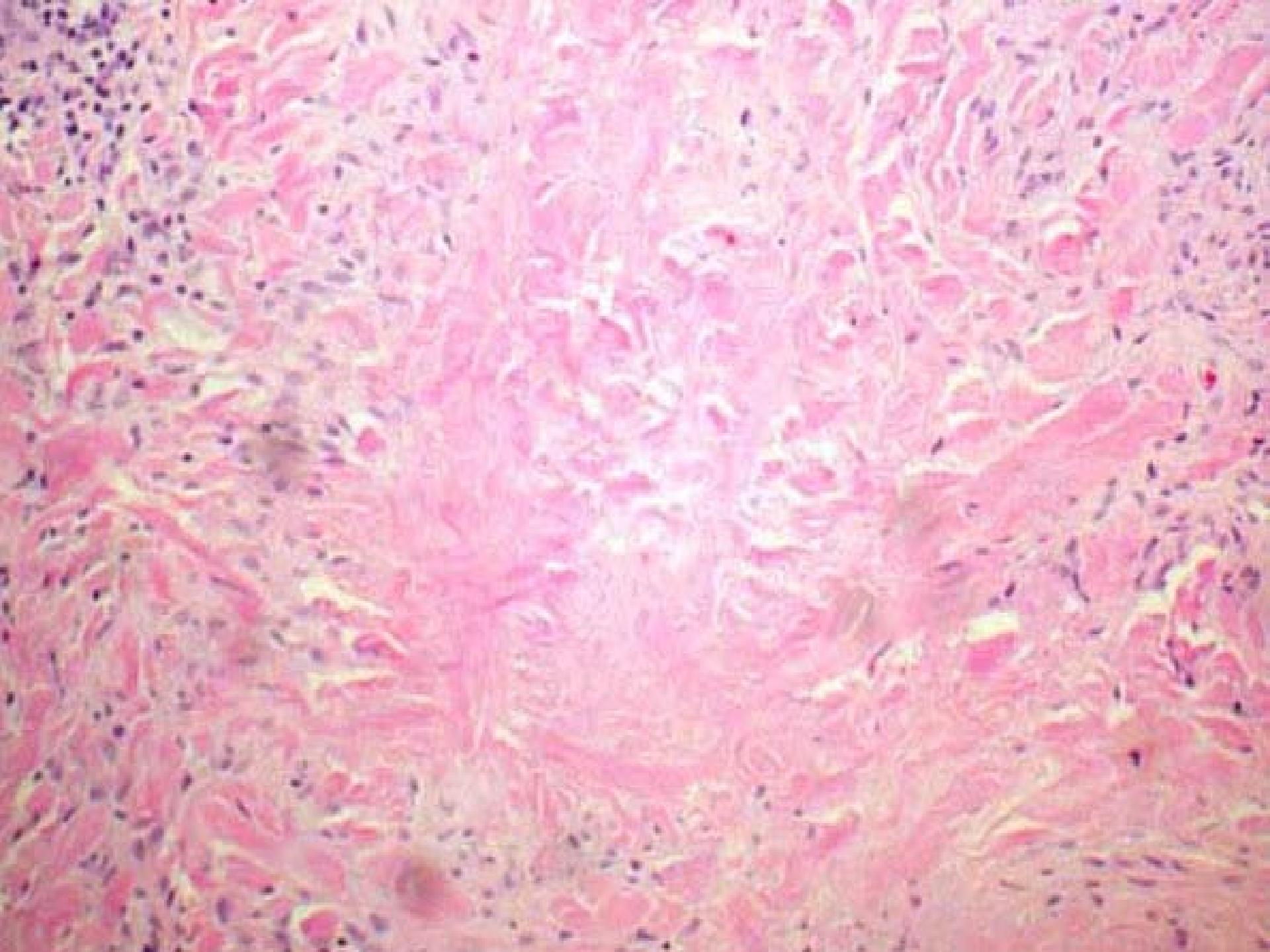




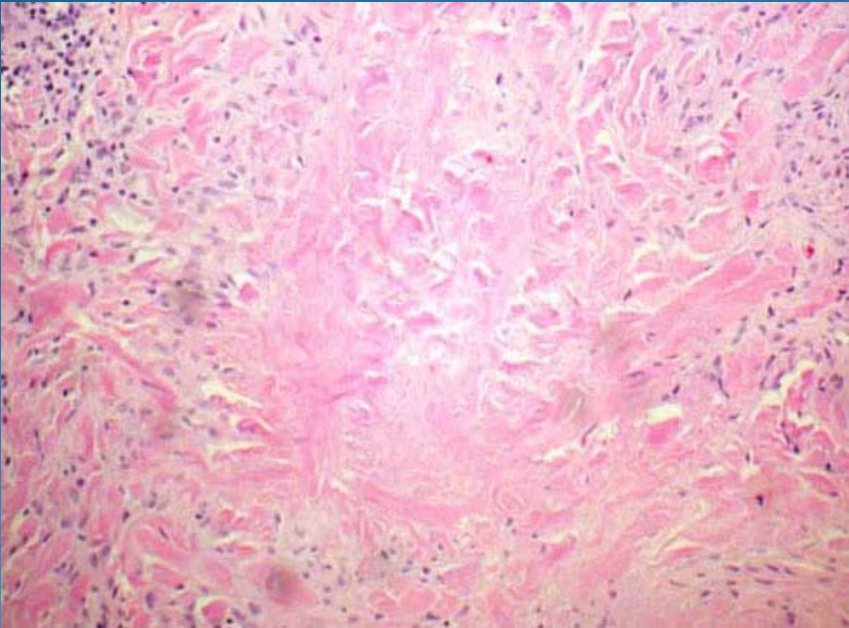
# Grenz Zone



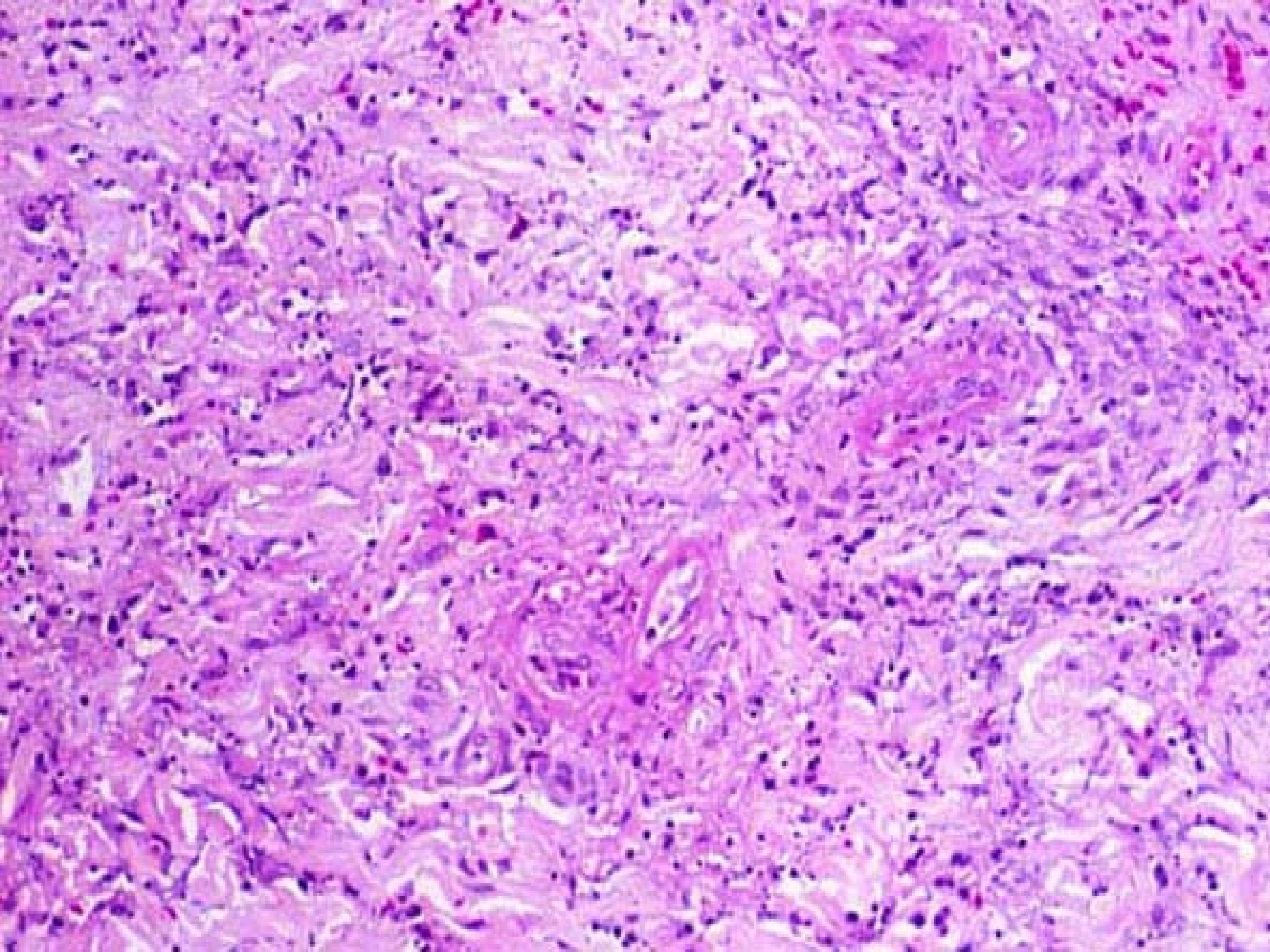
- A narrow area of uninvolved dermis between the epidermis and a dermal inflammatory or neoplastic infiltrate. “Grenz” is German for “border”
- Some lymphomas, granuloma faciale



# Necrobiosis

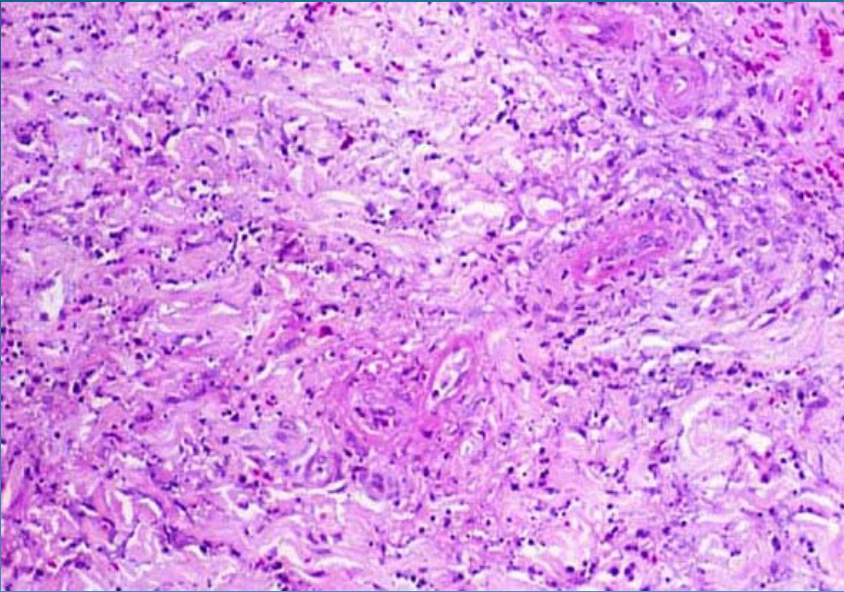


- Altered collagen that loses its normal eosinophilic coloration and fibrillar appearance, becoming slightly bluish and "smudged"
- Necrobiosis lipoidica, some infections





# Nuclear Dust



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

CARPENTERS

