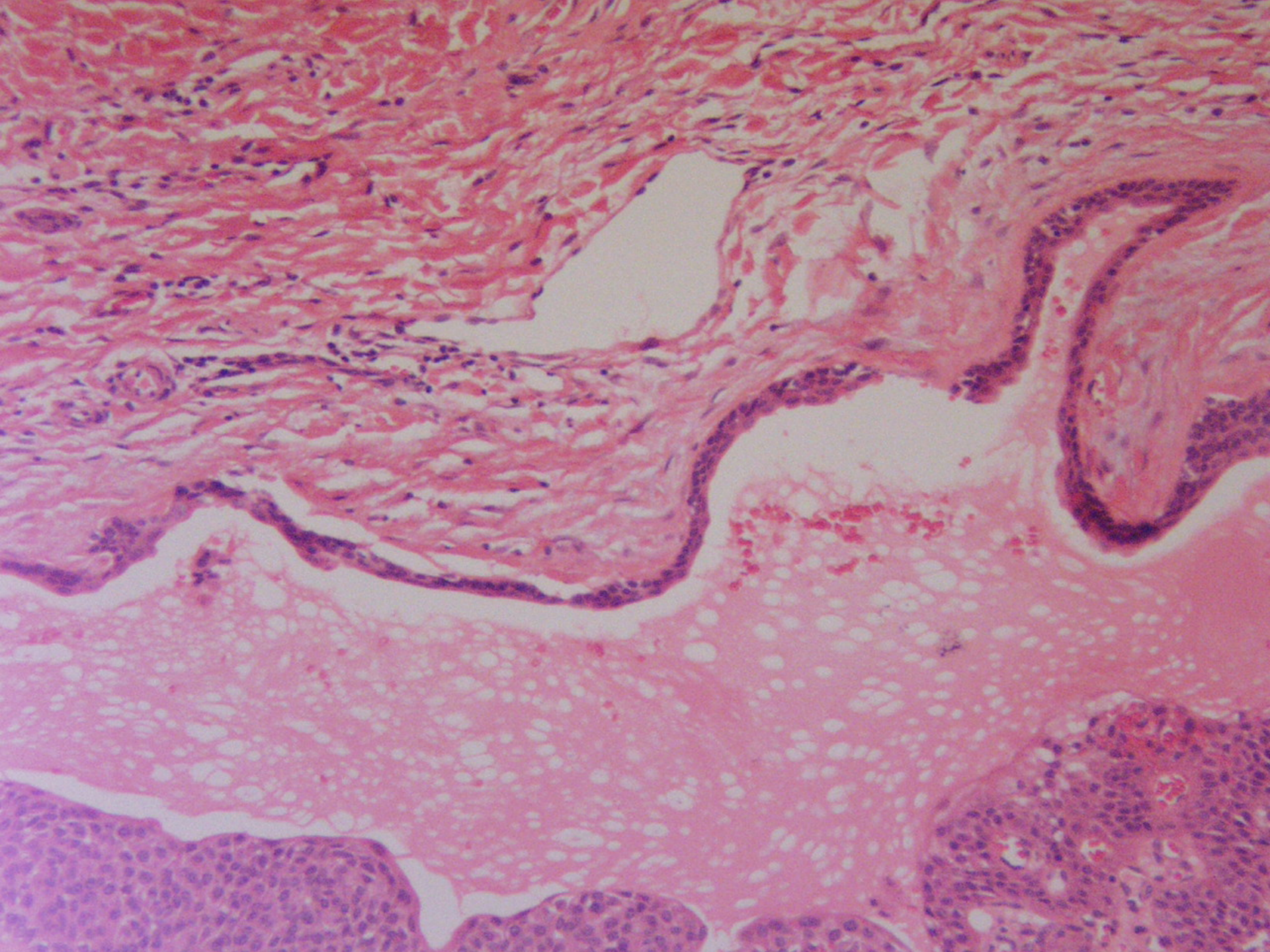


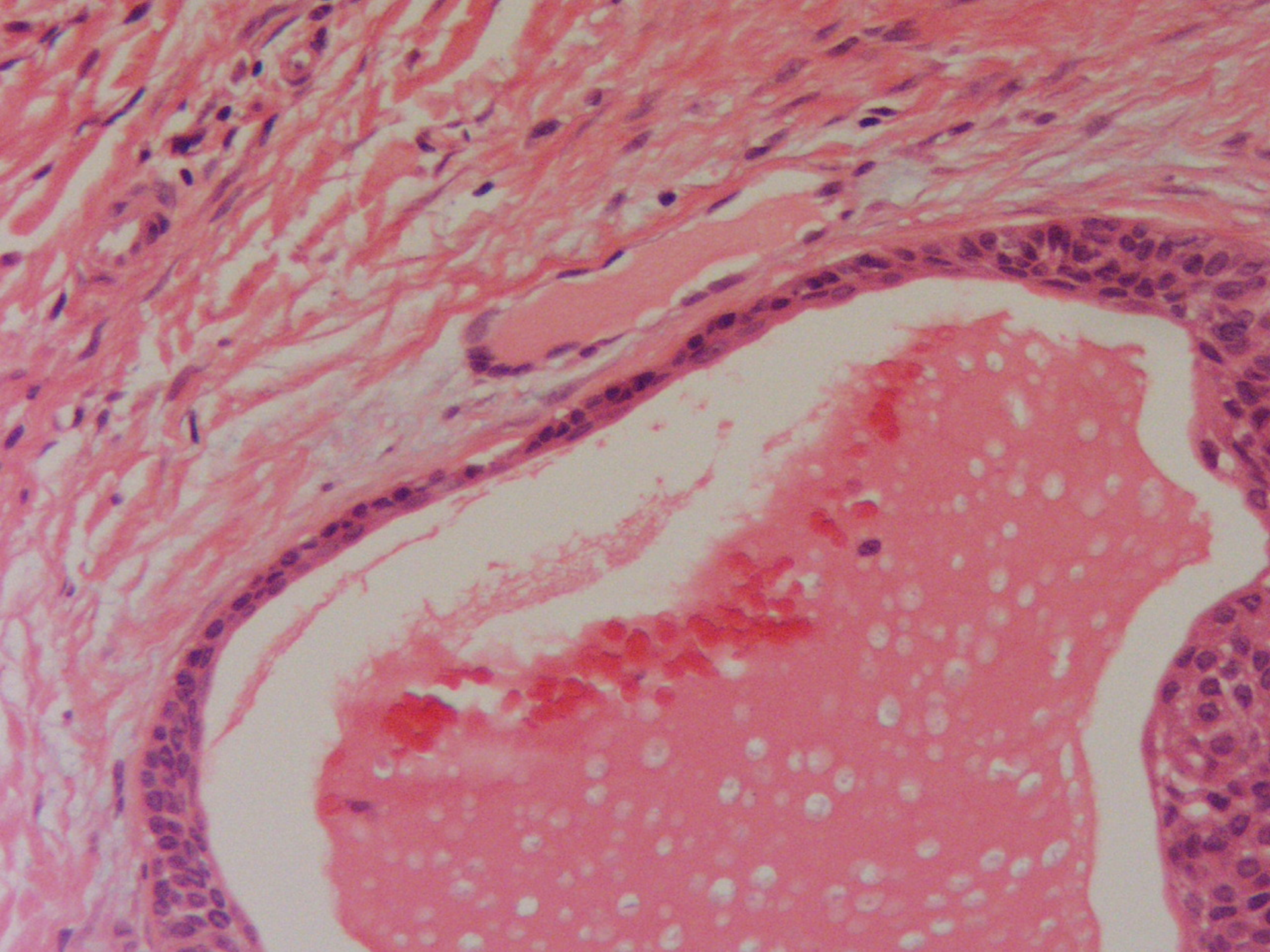
Dermatopathology Slide Review Part 5

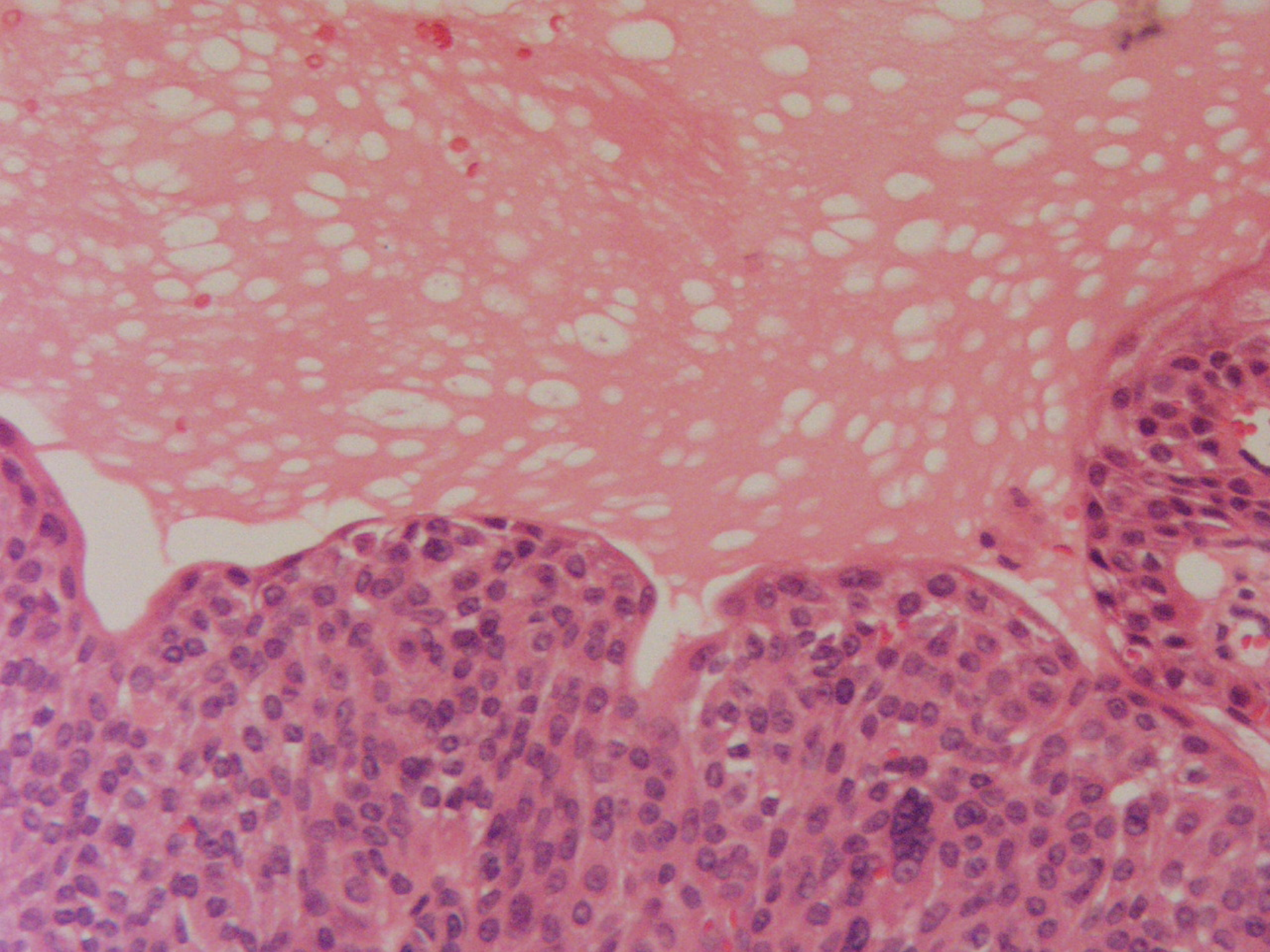
Paul K. Shitabata, M.D.

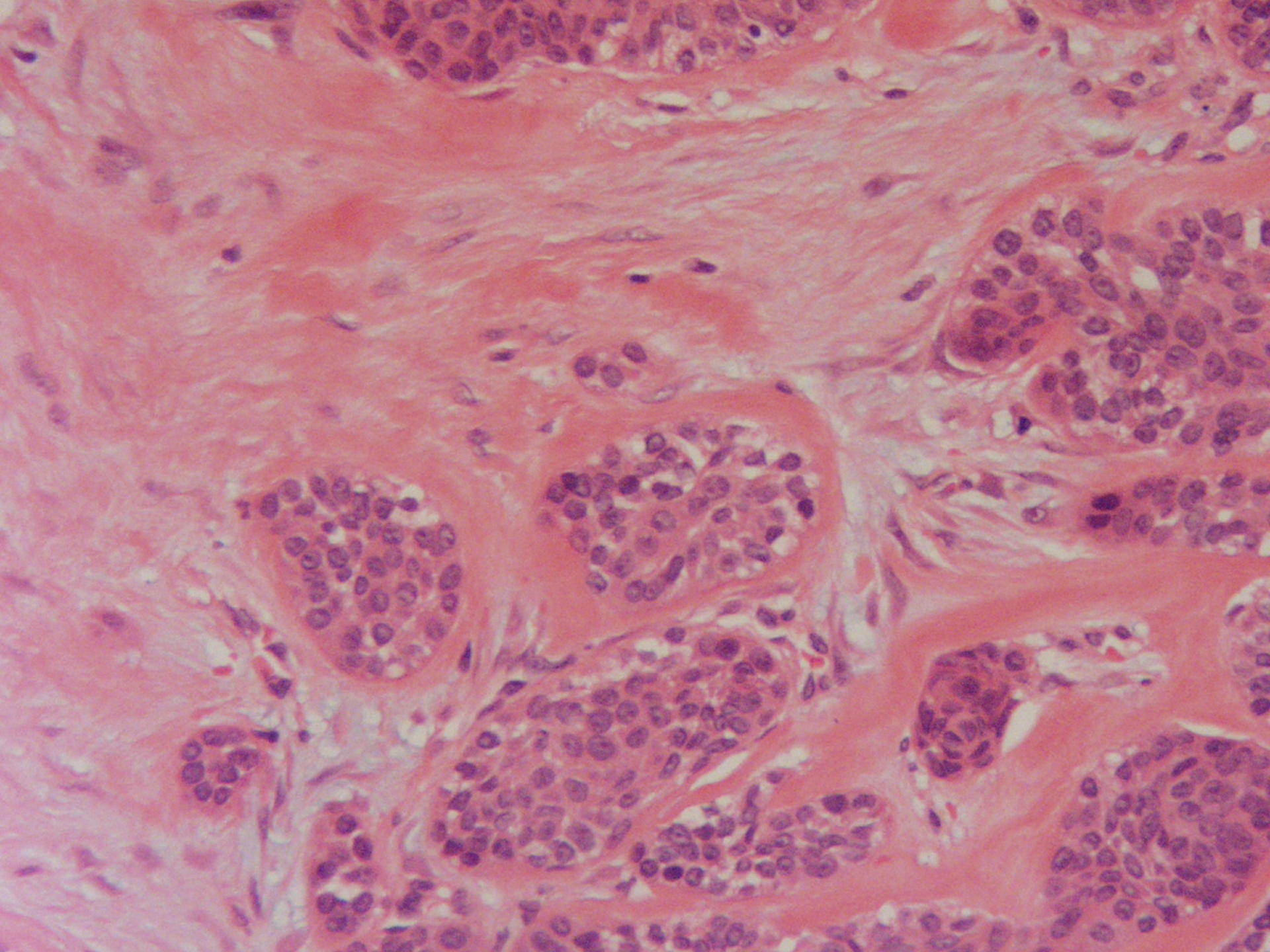
Dermatopathology Institute

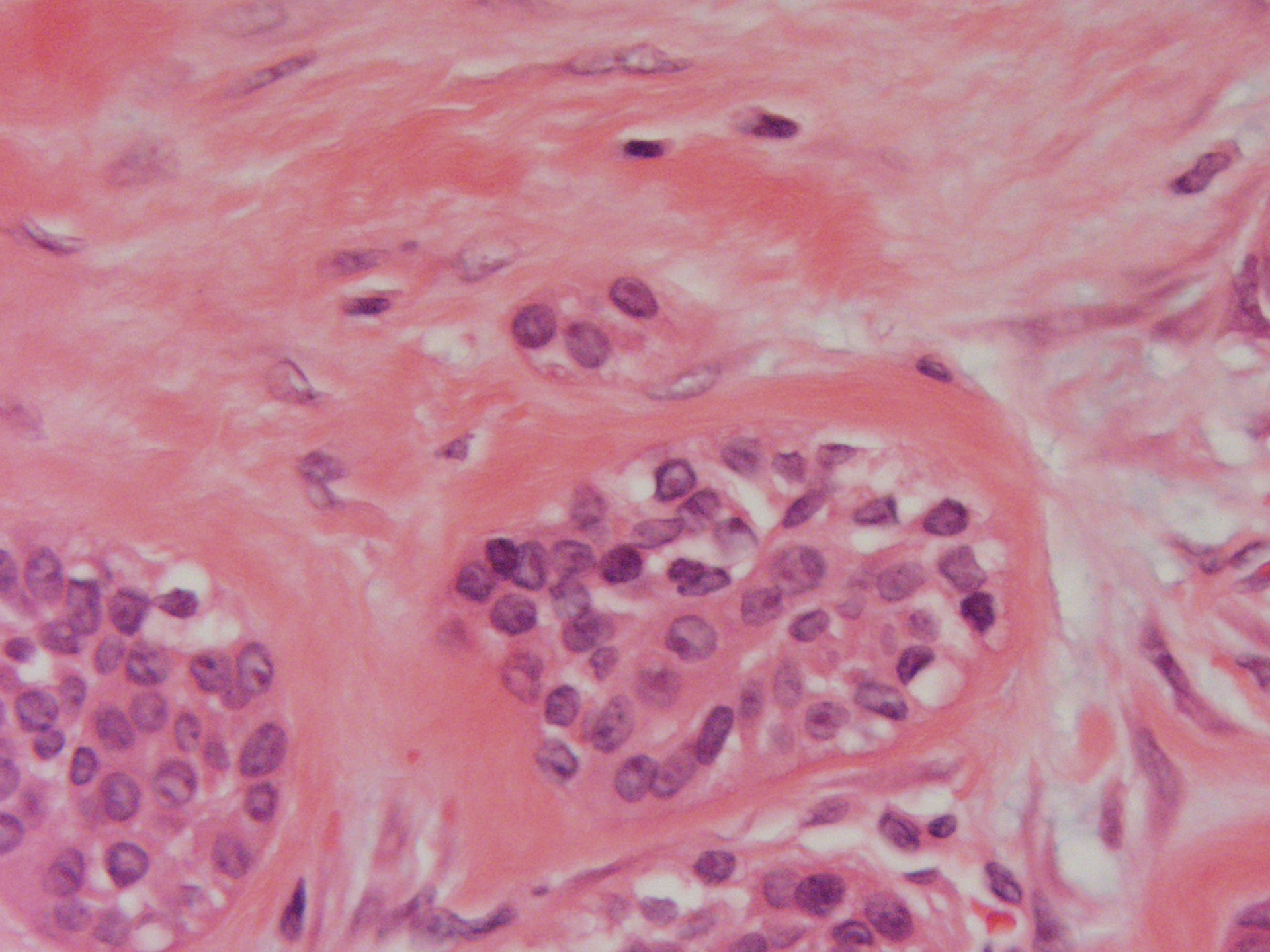
18 y.o. F with painful lesion
on right arm







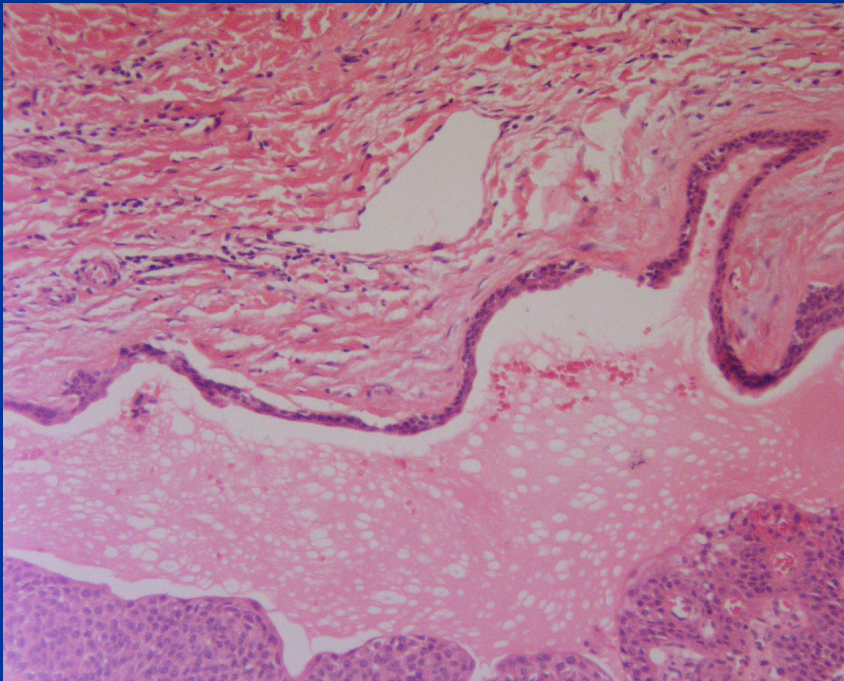




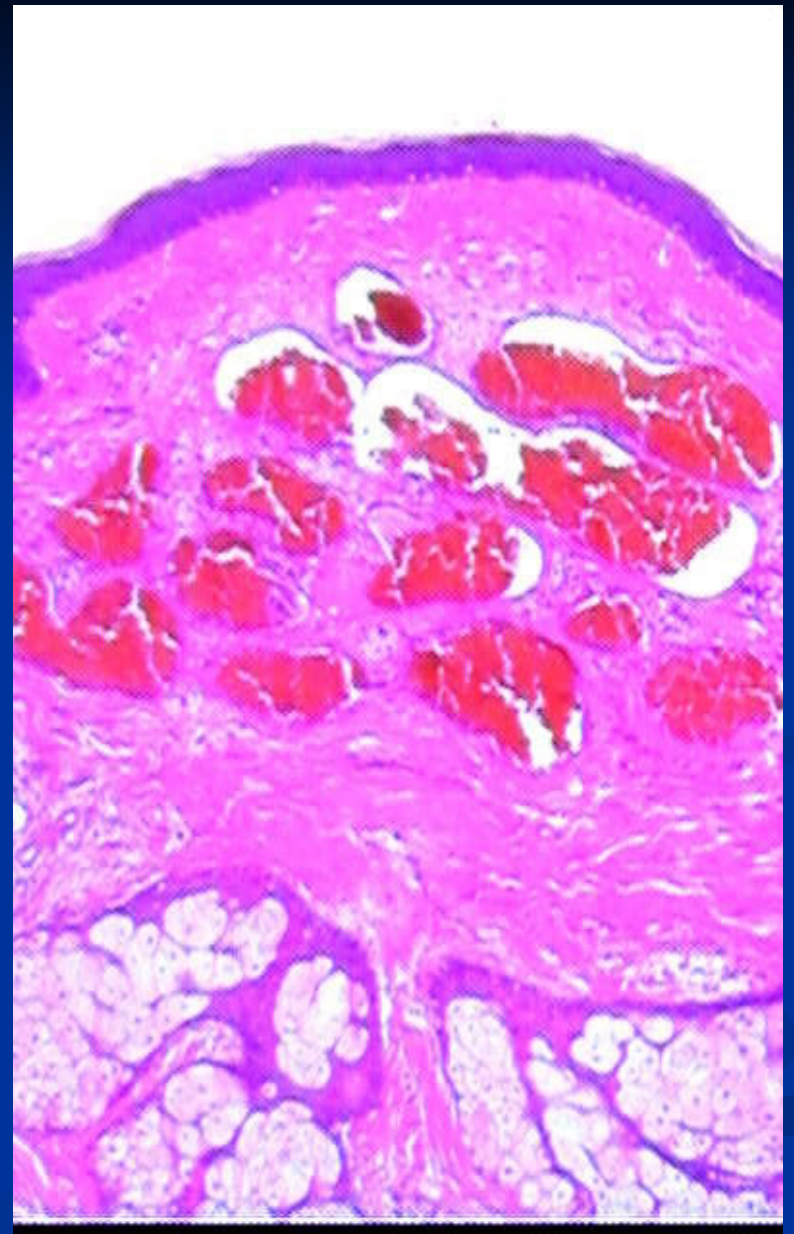
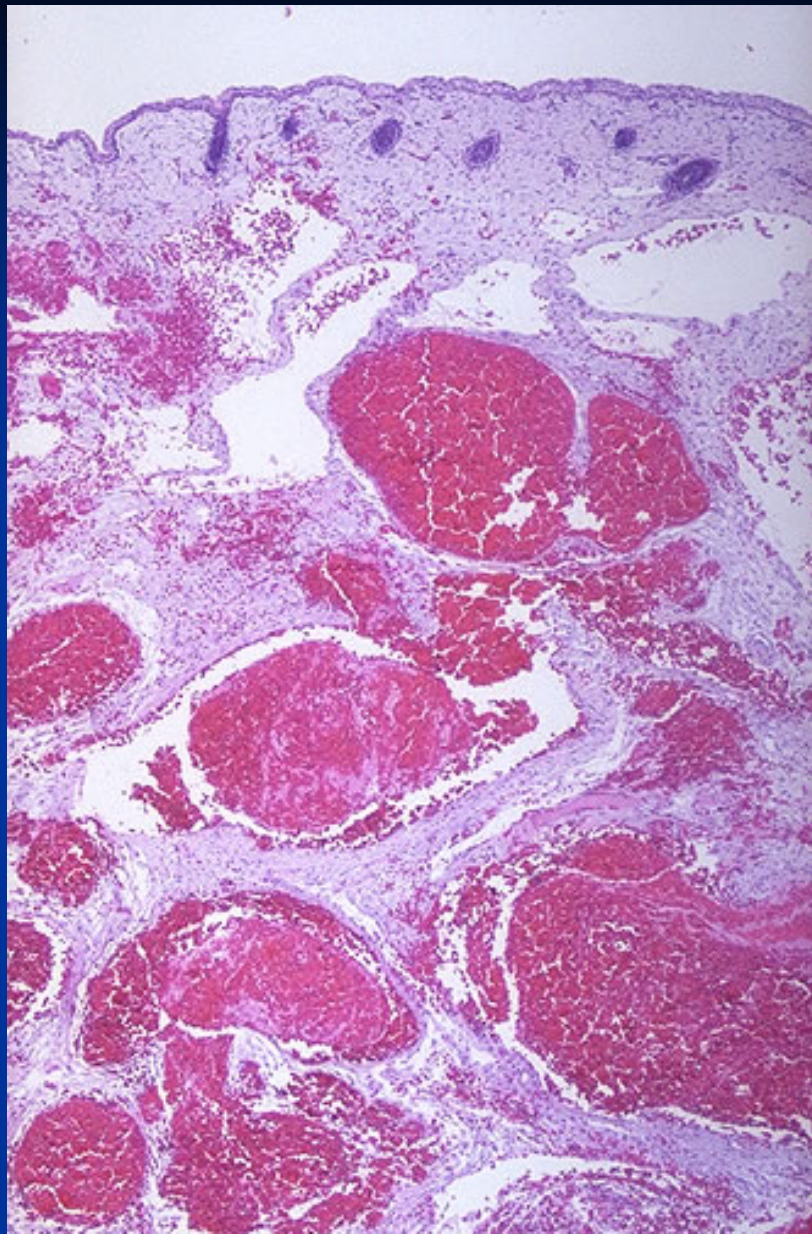
What is your differential
diagnosis and what stains/IHC
would be helpful?

Cystic Eccrine Acrospiroma

Histopathology



- Low power circumscribed
- Nodules and cysts with possible epidermal attachment
- Usually bland cytology
- Hyalinization around nests-BM



Low Power Diagnosis

Cavernous Hemangioma

What IHC stains are helpful to distinguish between a hemangioma and an AVM?

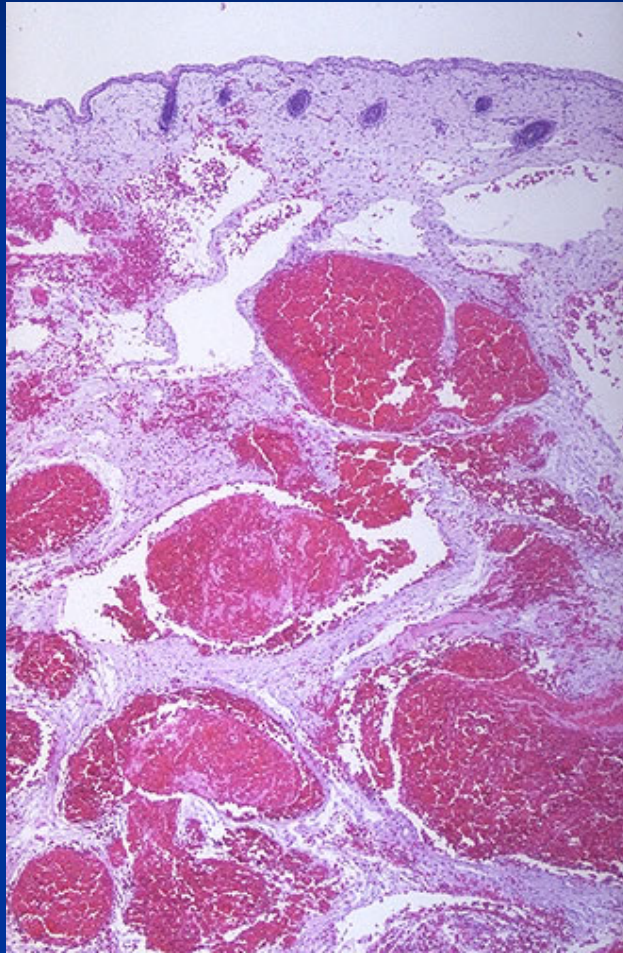
Hemangioma

- Elastic stain with no arterio-venous structures
- S100 with minimal nerve bundles
- GLUT-1 positive
- WT-1 positive (cytoplasmic)

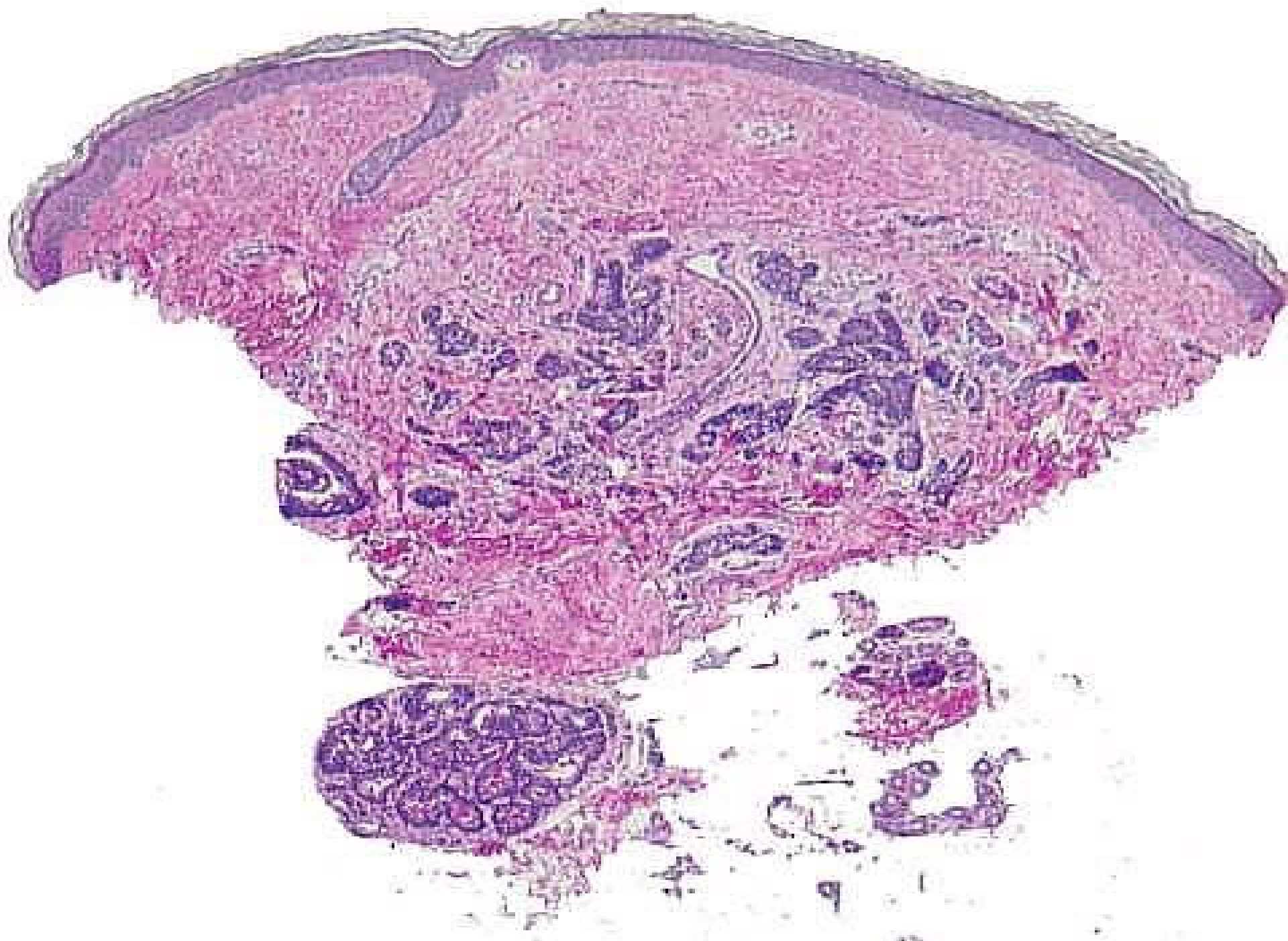
AVM

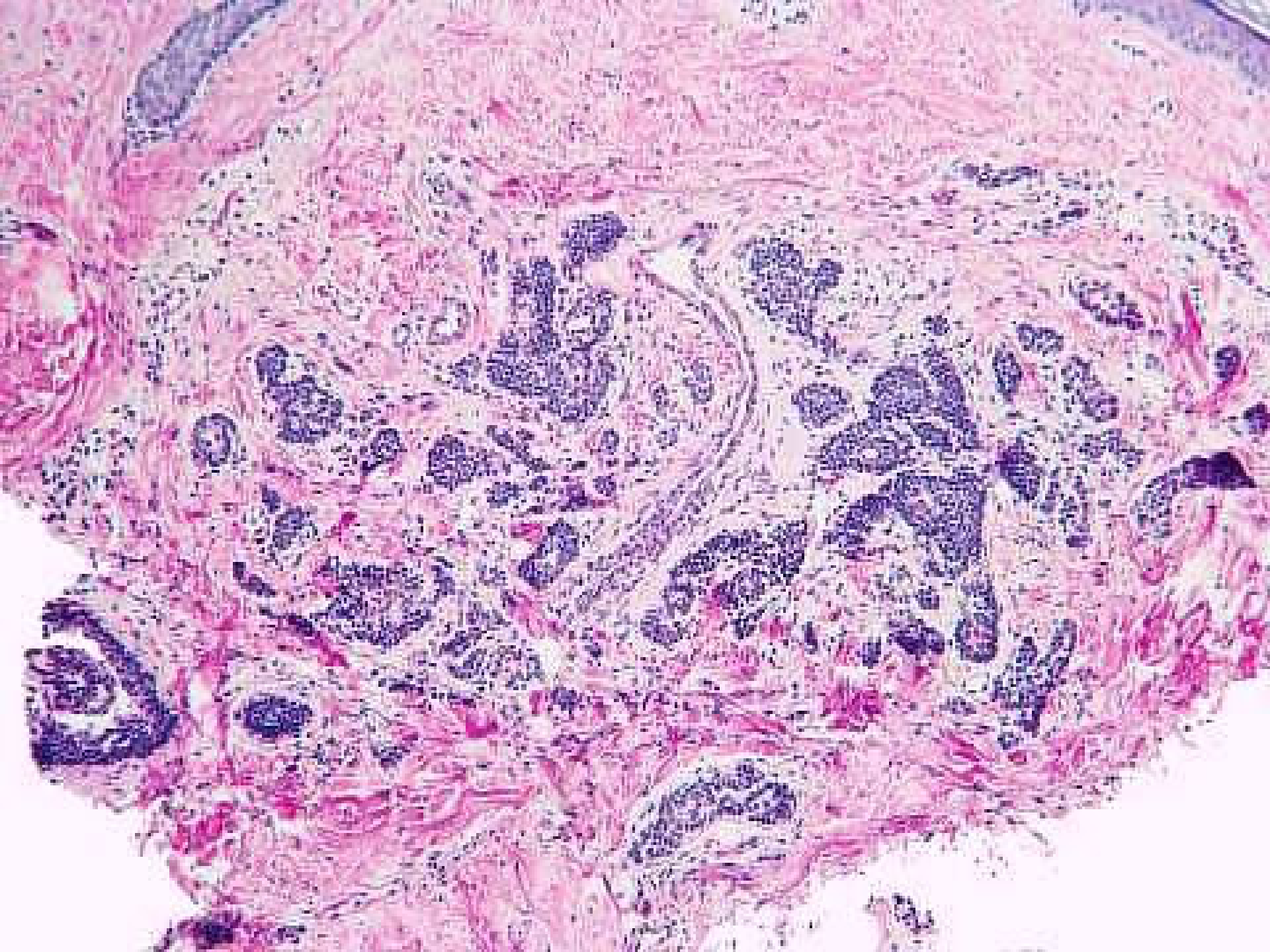
- Elastic stain positive for arterio-venous structures
- S100 positive for increased nerve bundles
- GLUT-1 negative
- WT-1 negative

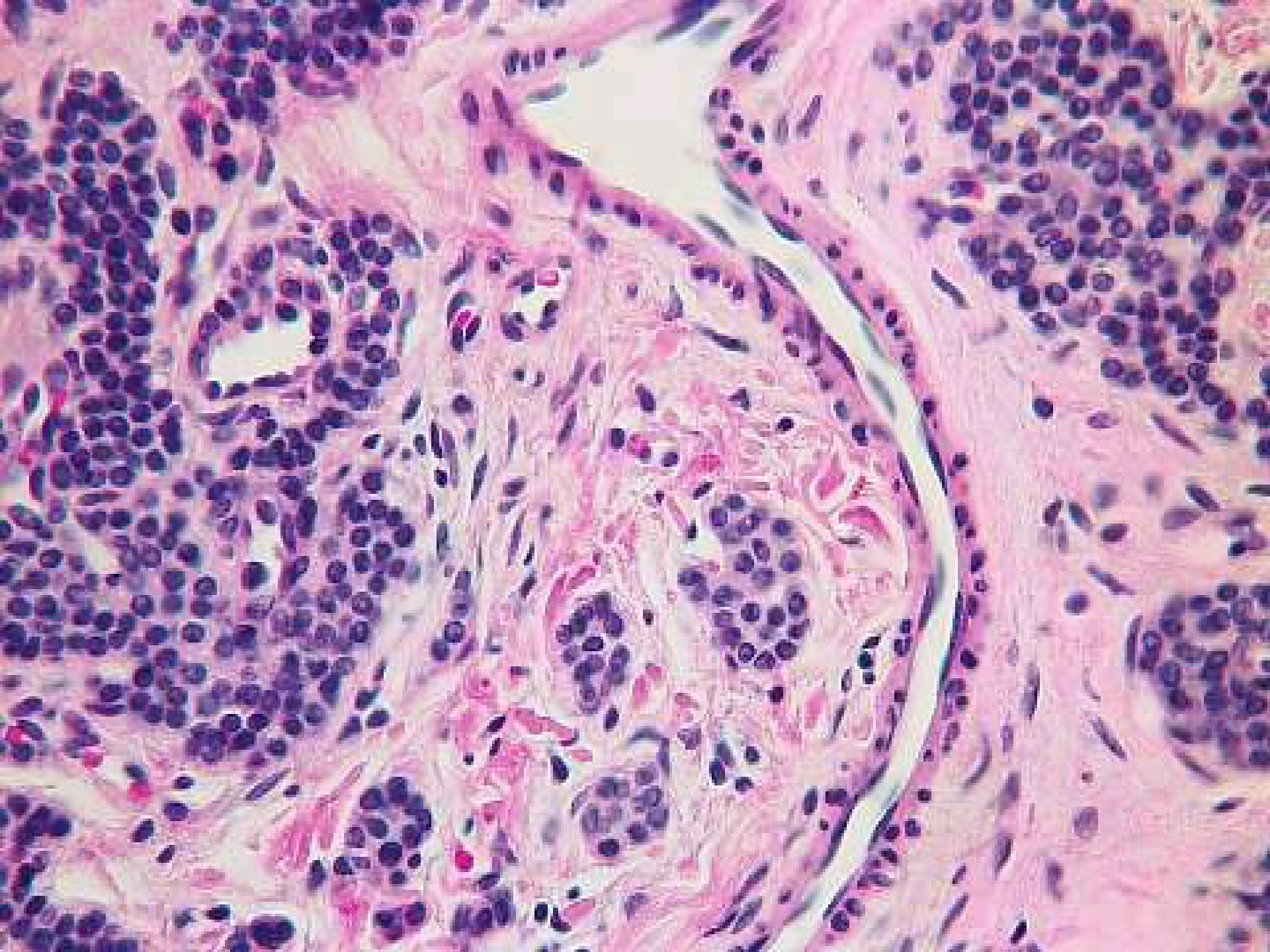
Histopathology

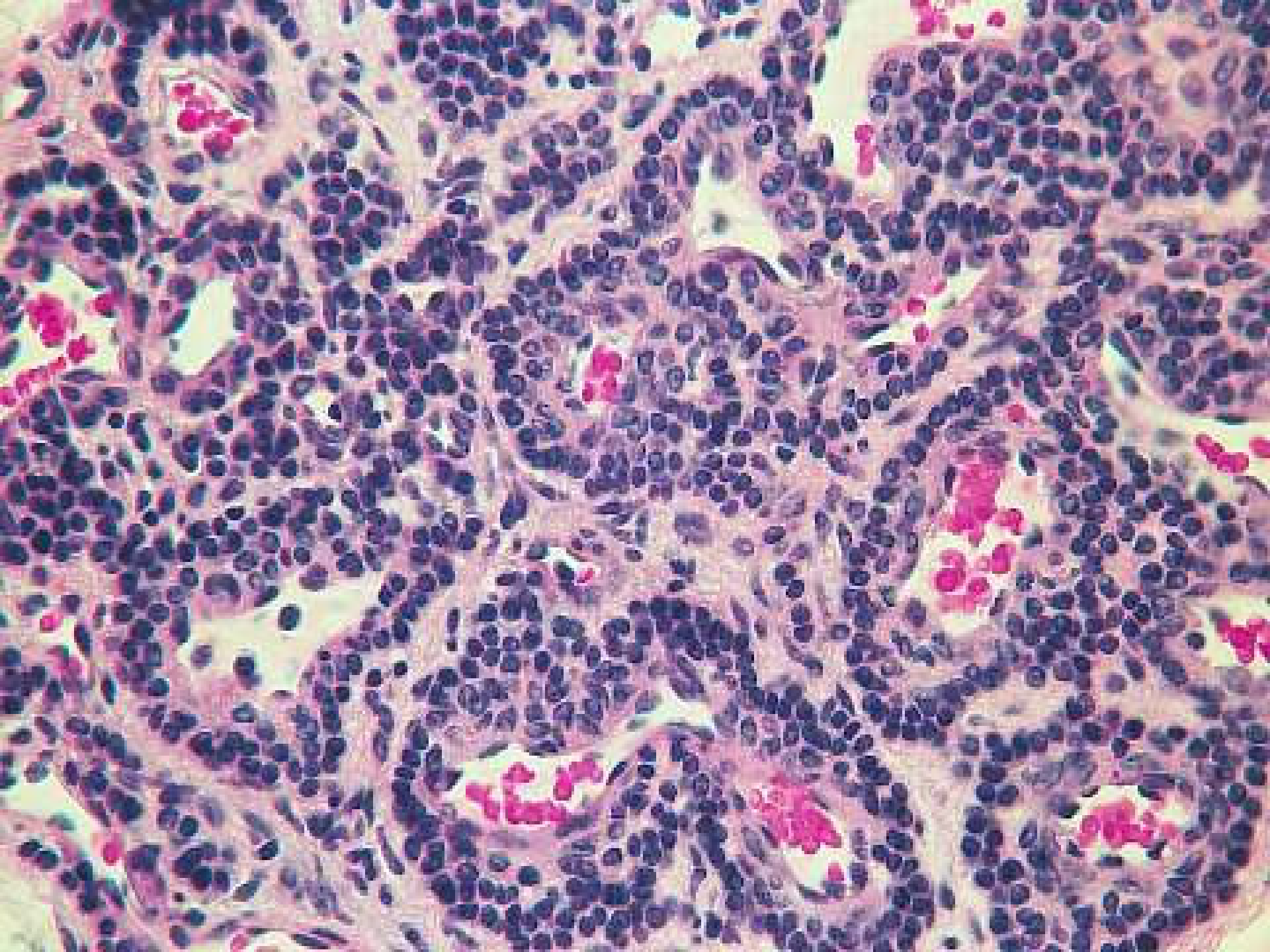


- Ectatic vascular spaces distended by blood
- Bland endothelial cells
- May extend deeply into subcutis







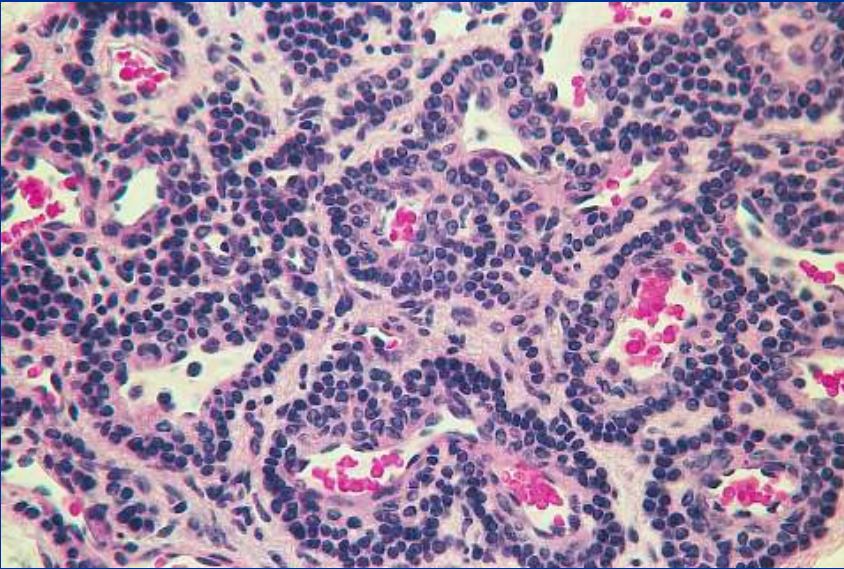


What is your differential
diagnosis and what stains/IHC
would be helpful?

Glomangioma

Histopathology

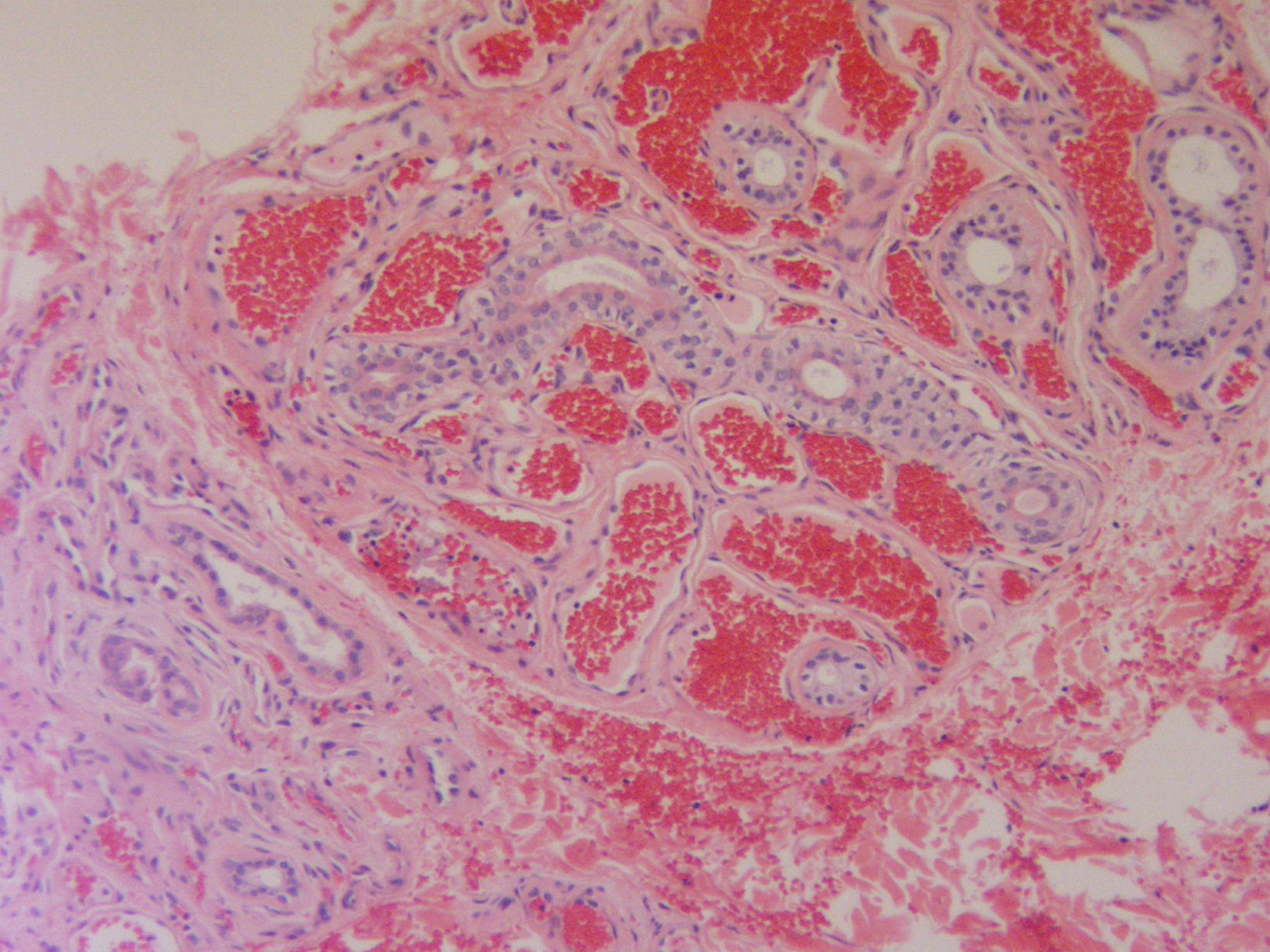
- Round to oval cells with distinct cell borders
- Perivascular, may have hemangiomatous component
- May have smooth muscle proliferation

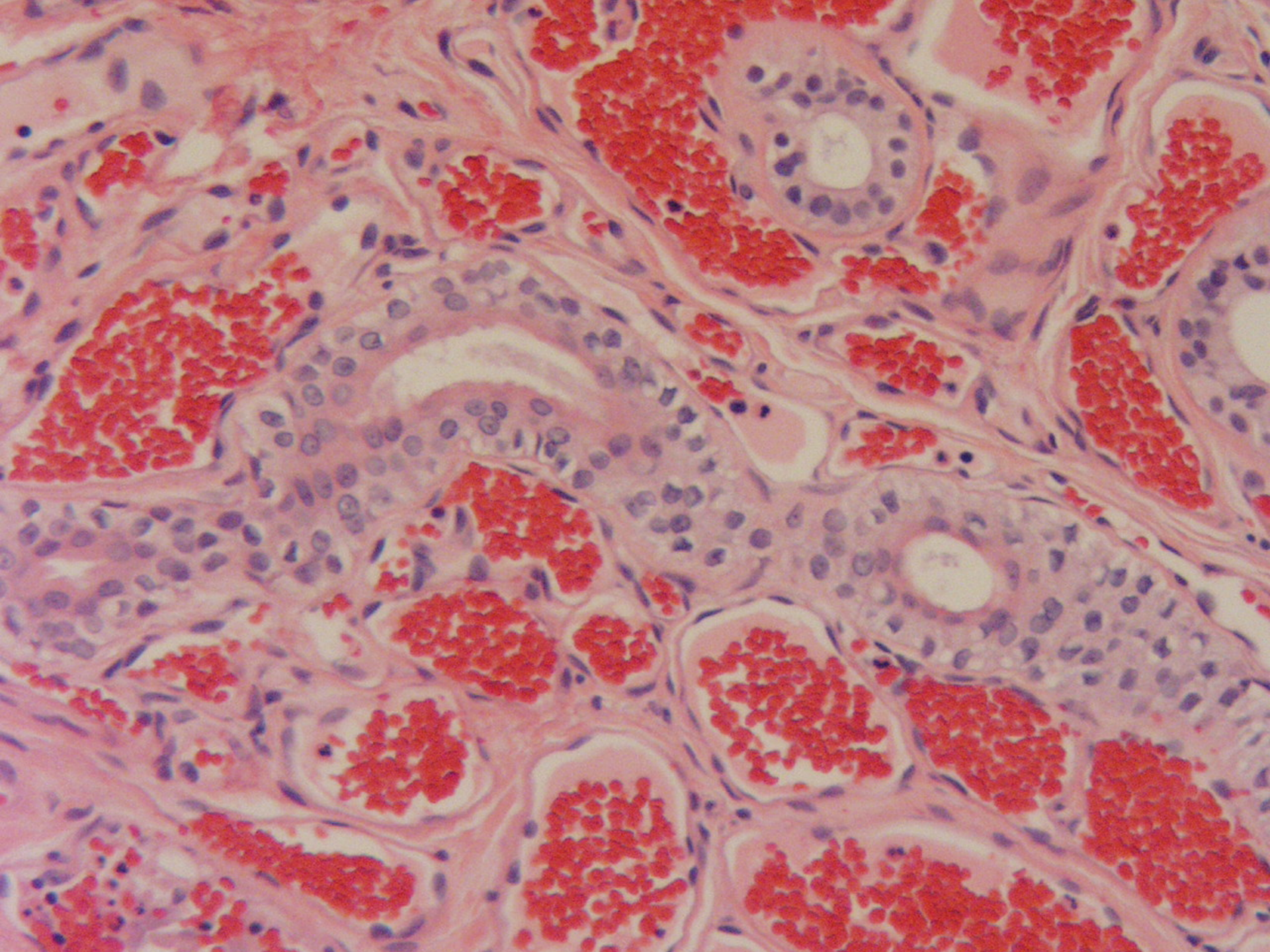


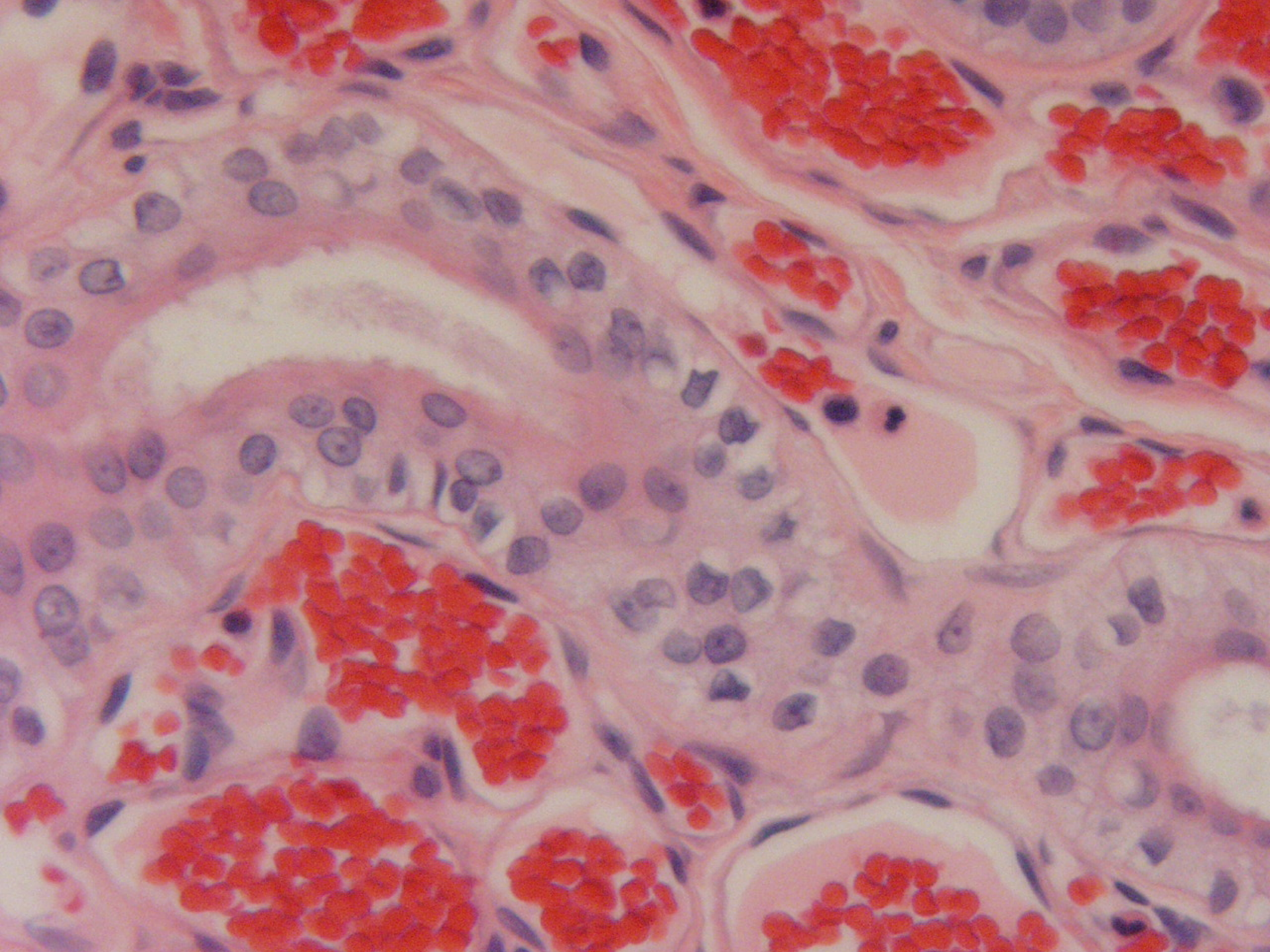
What are the histopathologic
prognostic factors for Glomus
Tumors?

Prognostic Histopathologic Factors for Glomus Tumors

- Benign tumors have a small chance for recurrence if incompletely excised
- Uncertain malignant potential
 - Deep location, size > 2 cm and the presence of atypical mitotic figures
 - Necrosis, mitotic activity $> 5/50$ high powered fields
- Malignant
 - Marked nuclear atypia and any level of mitotic activity
 - Atypical mitotic figures and metastasize in up to 40% of cases







What is your differential
diagnosis and what stains/IHC
would be helpful?

Eccrine Angiomatous Hamartoma

What is the difference between a hamartoma, choristoma, and teratoma?

Definitions

■ Hamartoma

- Benign tumor of a disorganized mix of tissue normally found in that body site

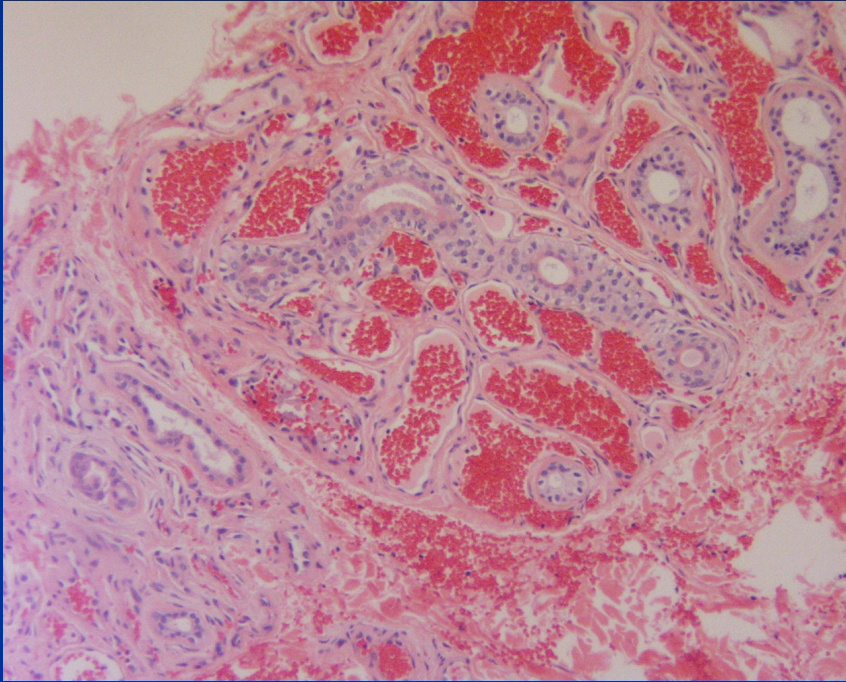
■ Choristoma

- Benign tumor composed of microscopically normal tissue found in that body site

■ Teratoma

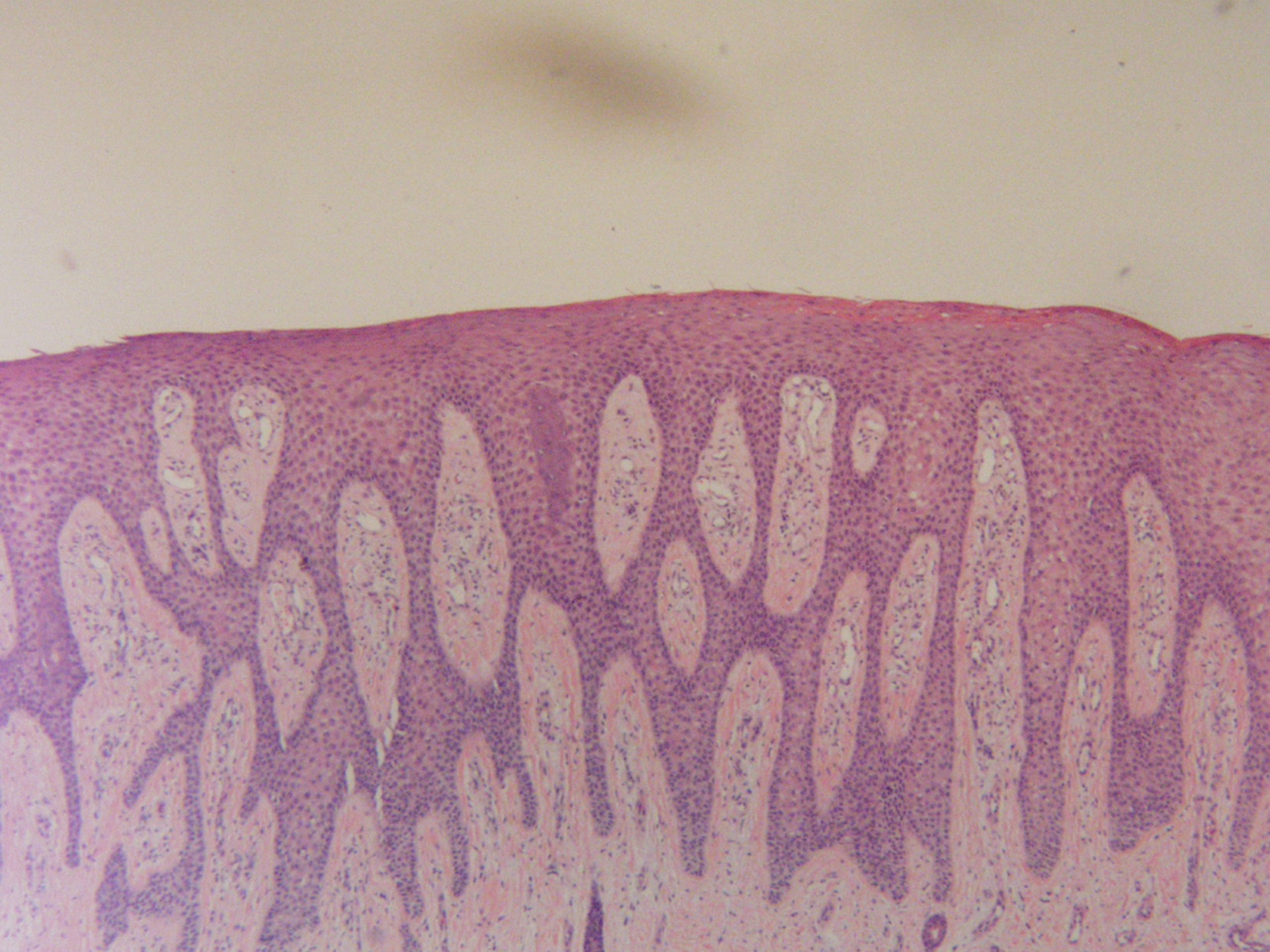
- Tumor composed of tissues not normally present at that body site

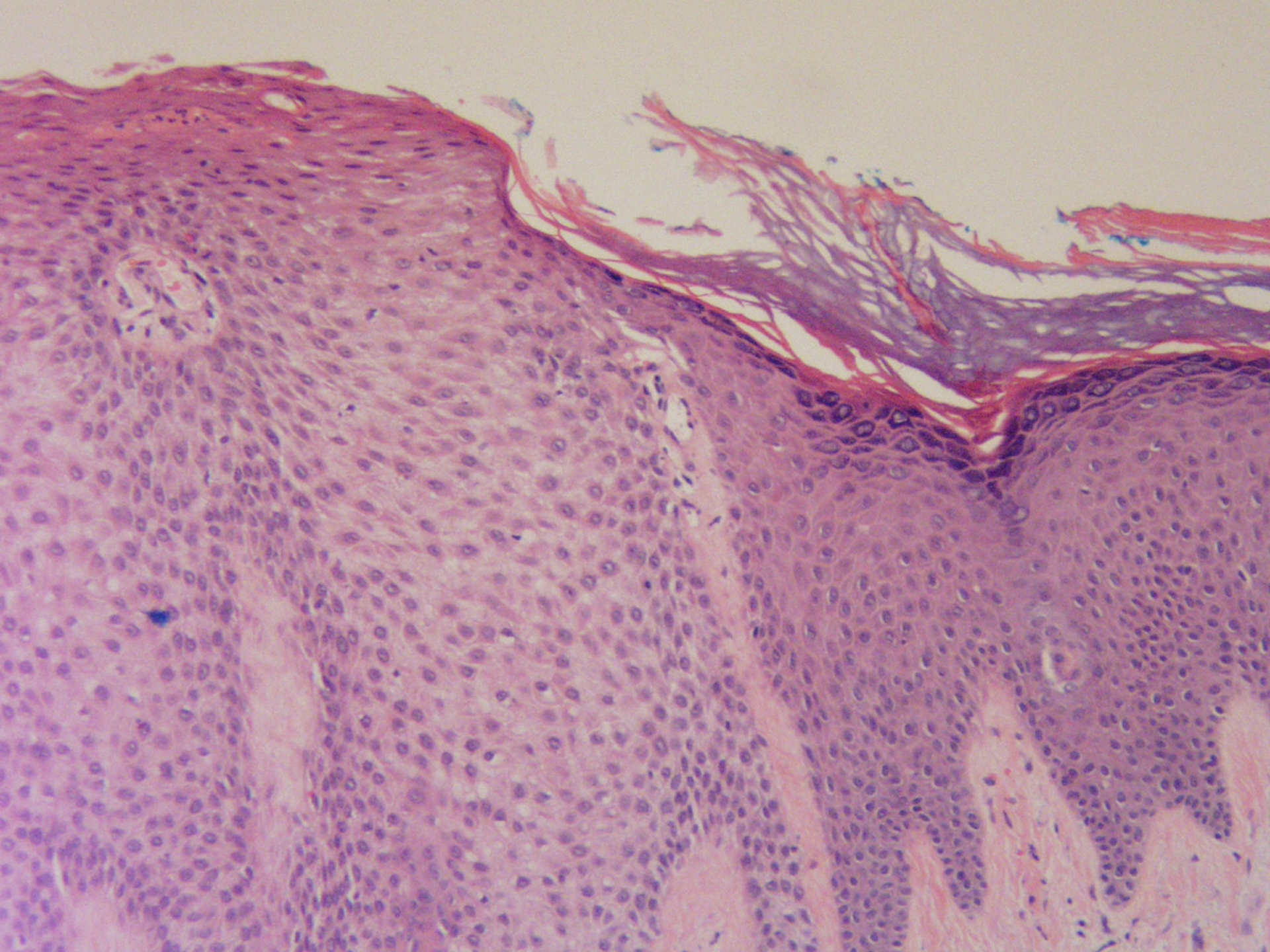
Histopathology

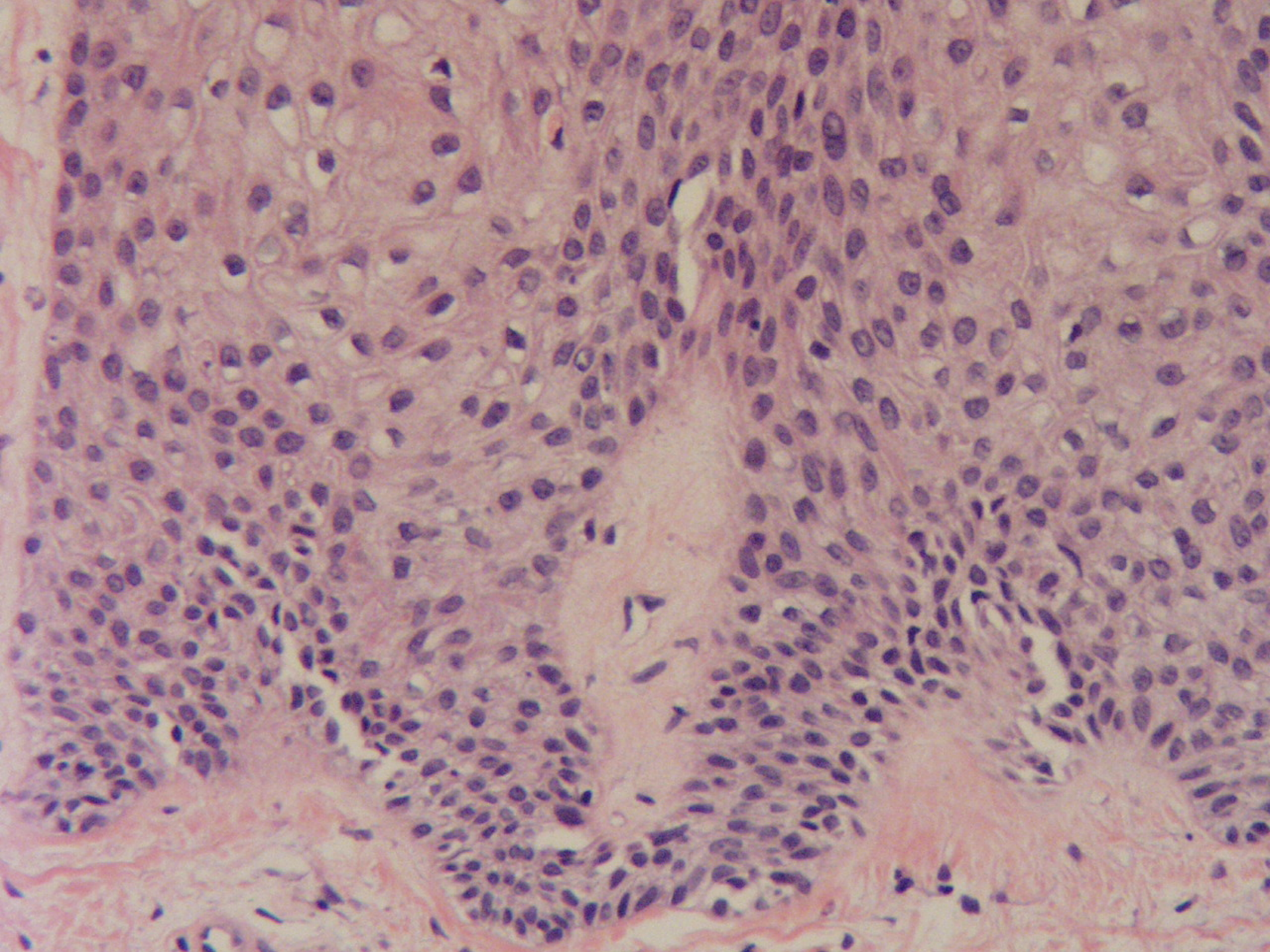


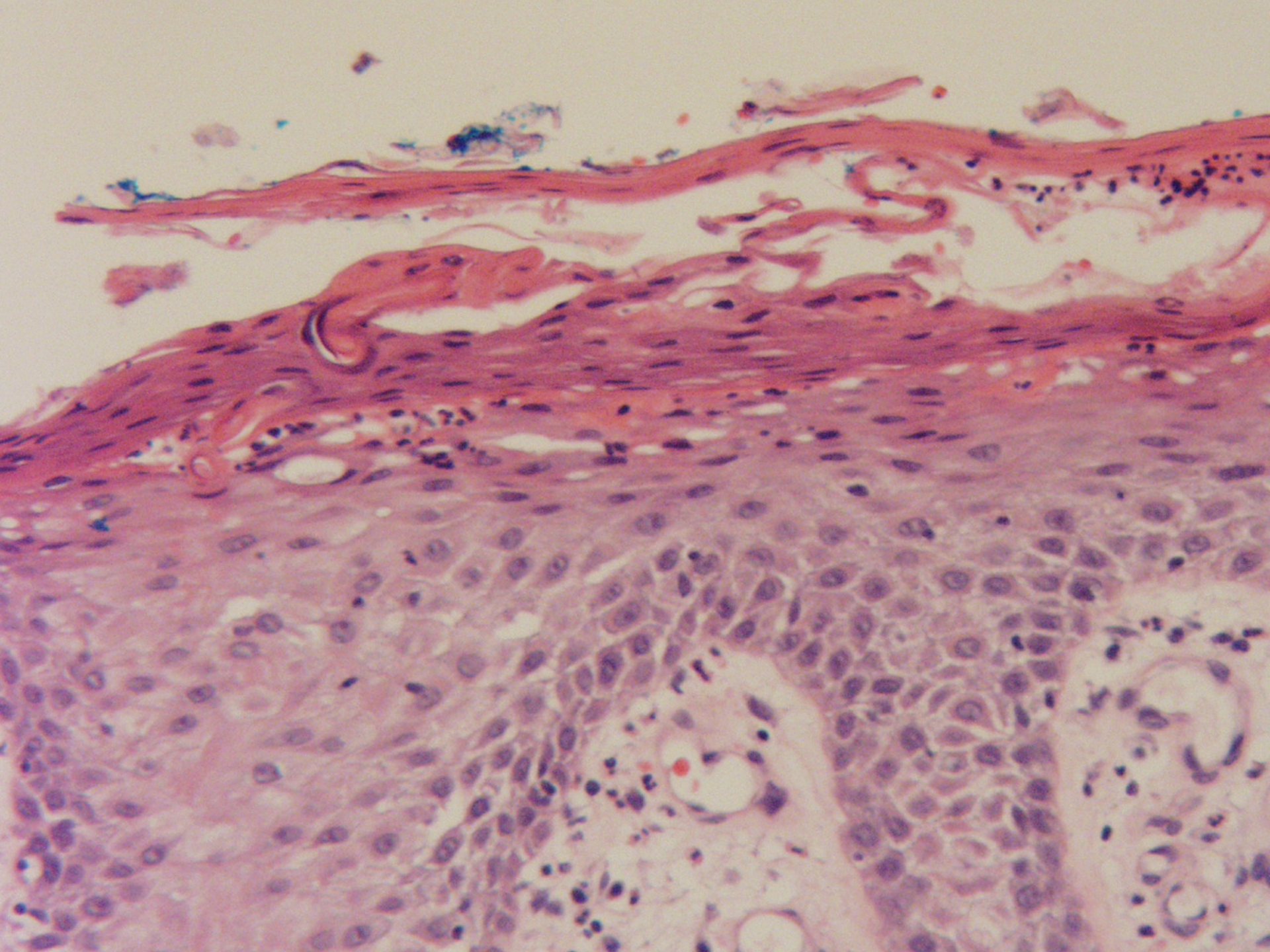
- Haphazard proliferation of benign eccrine ducts admixed with bland capillary sized vessels
- Deep in dermis
- Usually congenital or early childhood, rarely adults
- Preferential acral location

54 y.o. M with erythematous
eroded plaque on left leg









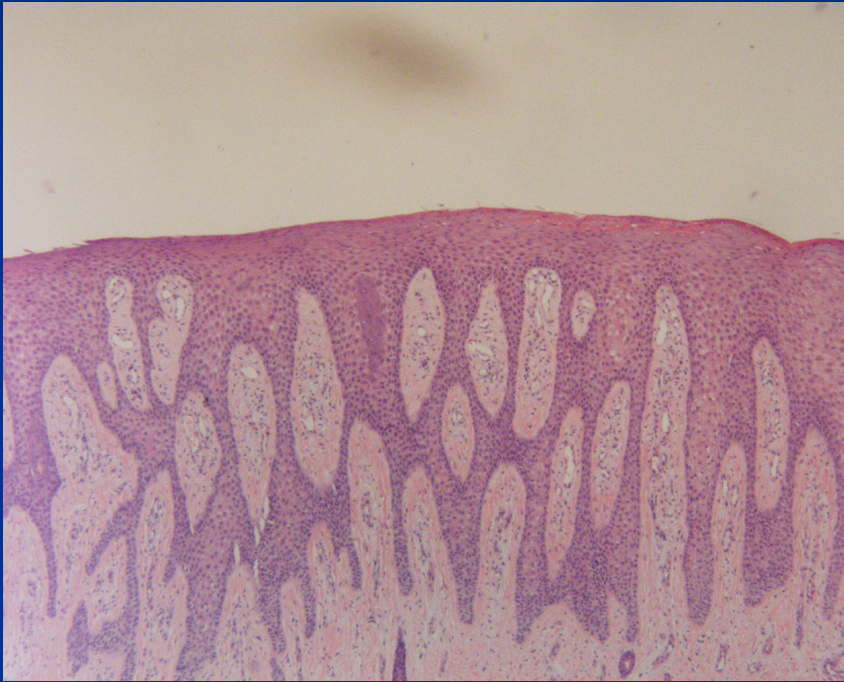
What is your differential
diagnosis and what stains/IHC
would be helpful?

54 yo M with erythematous eroded plaque on left leg

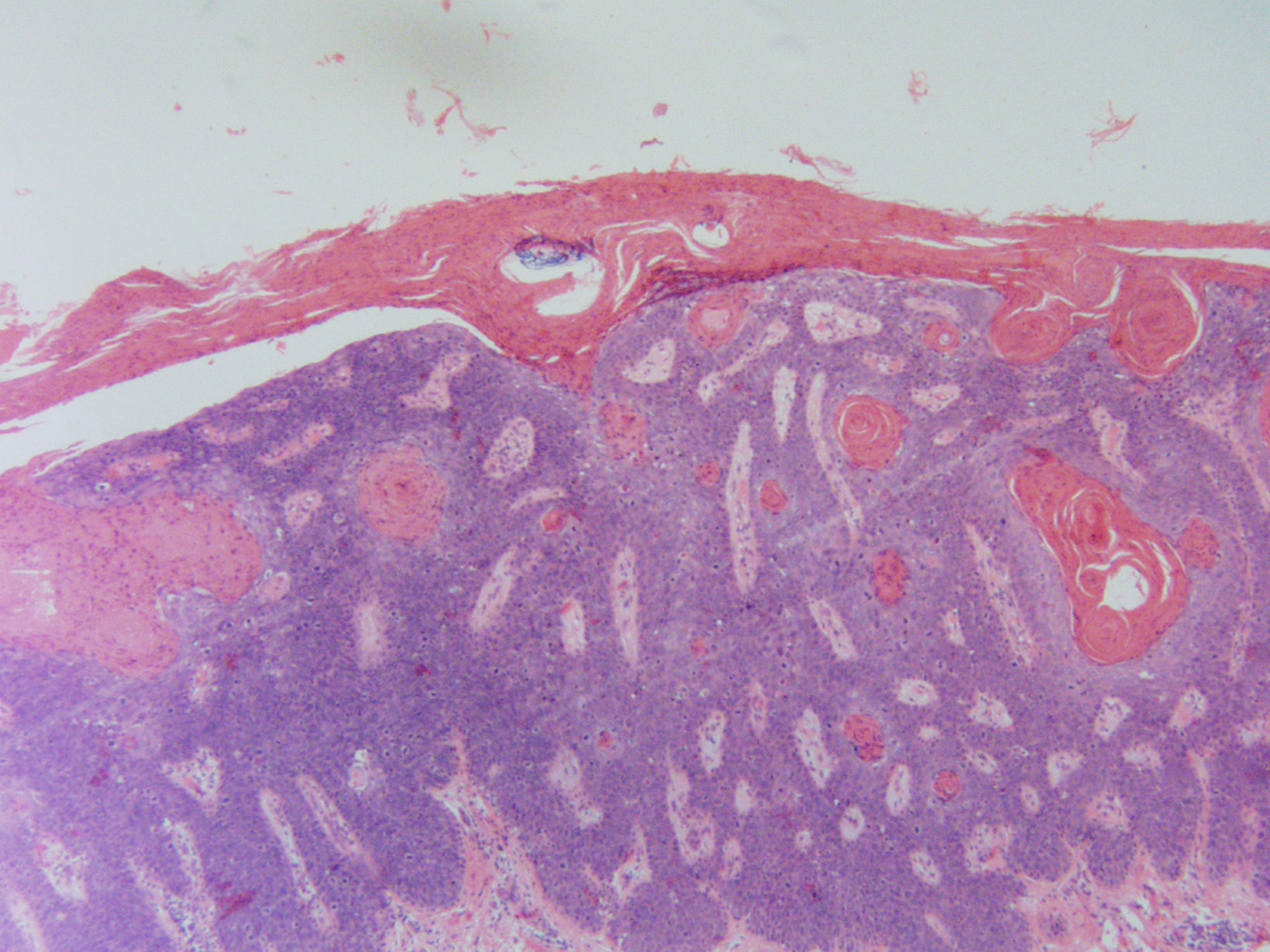
- Clear cell acanthoma
- Bowen's disease
- Eccrine poroma
- Tumor of the follicular infundibulum

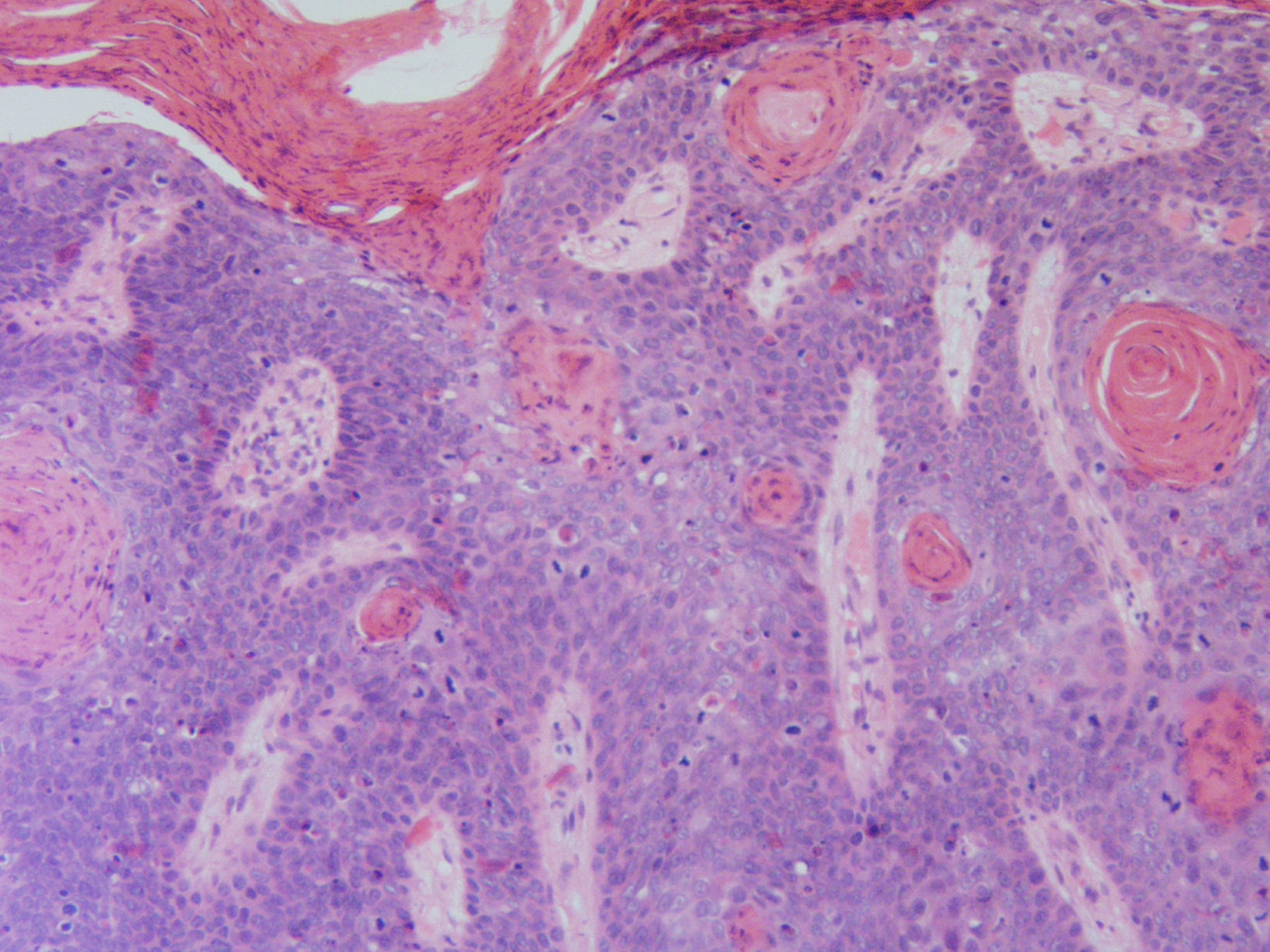
Clear Cell Acanthoma (Pale Cell Acanthoma)

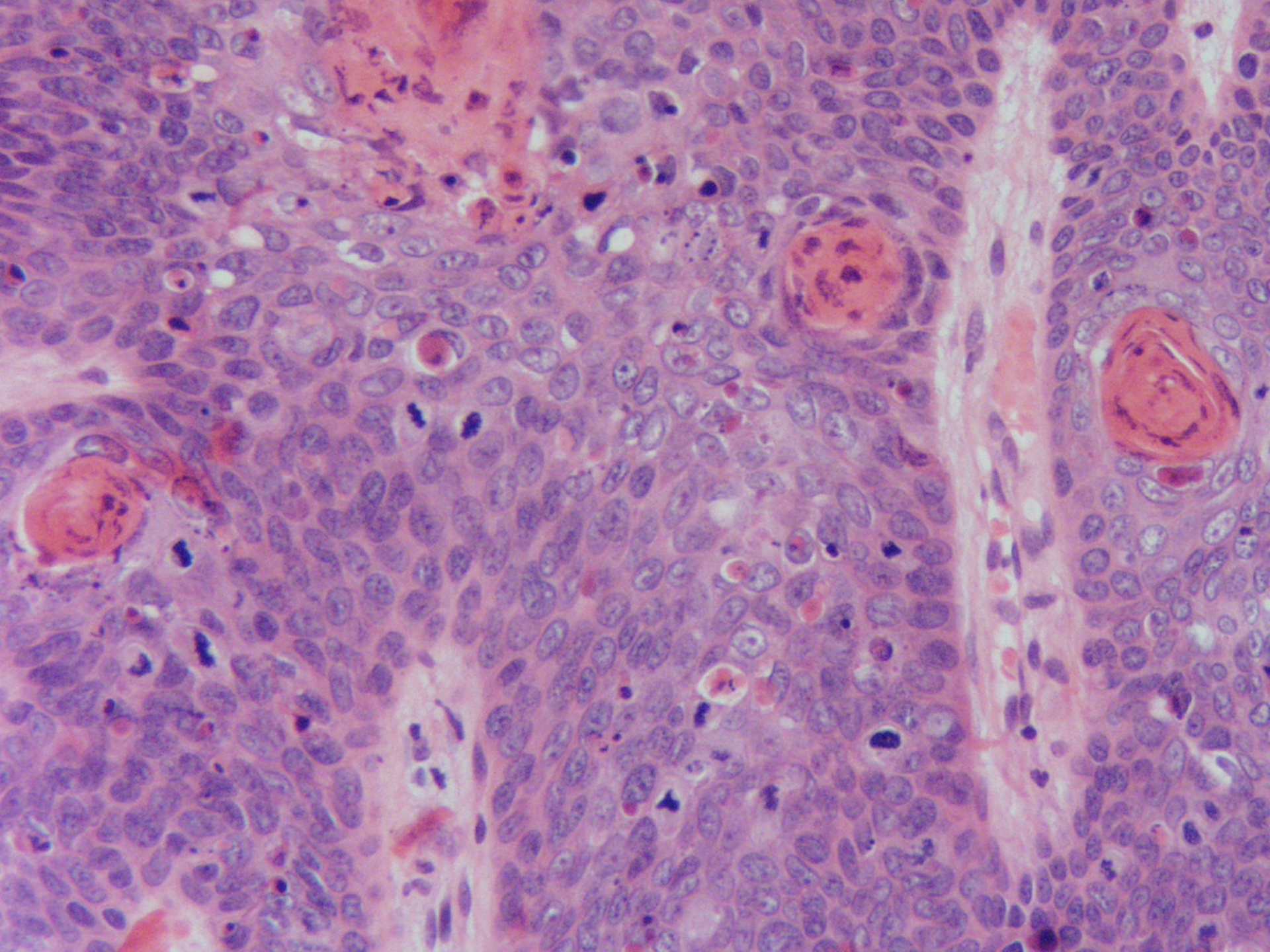
Histopathology

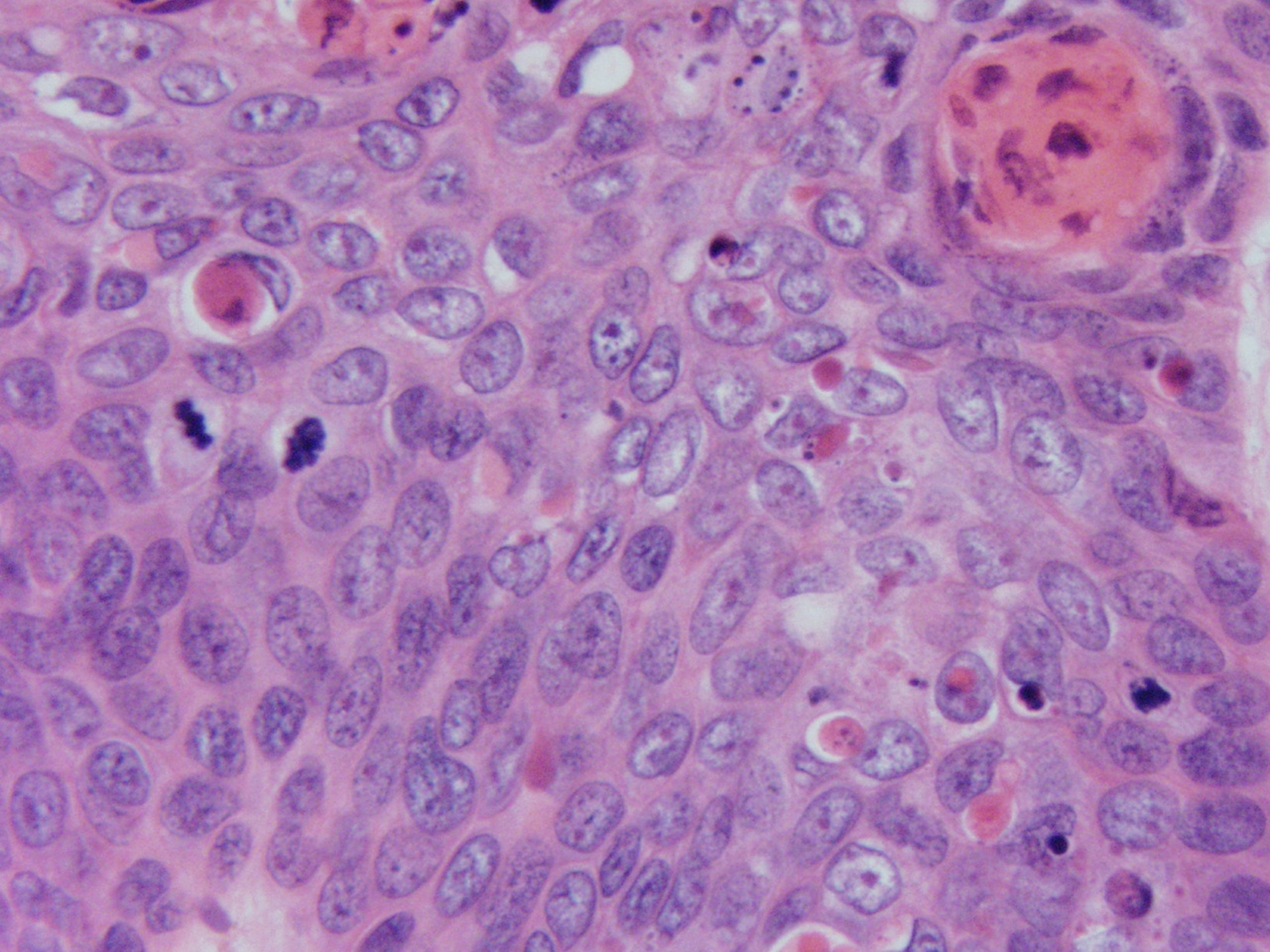


- Epidermal hyperplasia with psoriasiform features
- Paleness of keratinocytes
- PAS+DS
- Occ. Neutrophils in epidermis-Localized psoriasis?





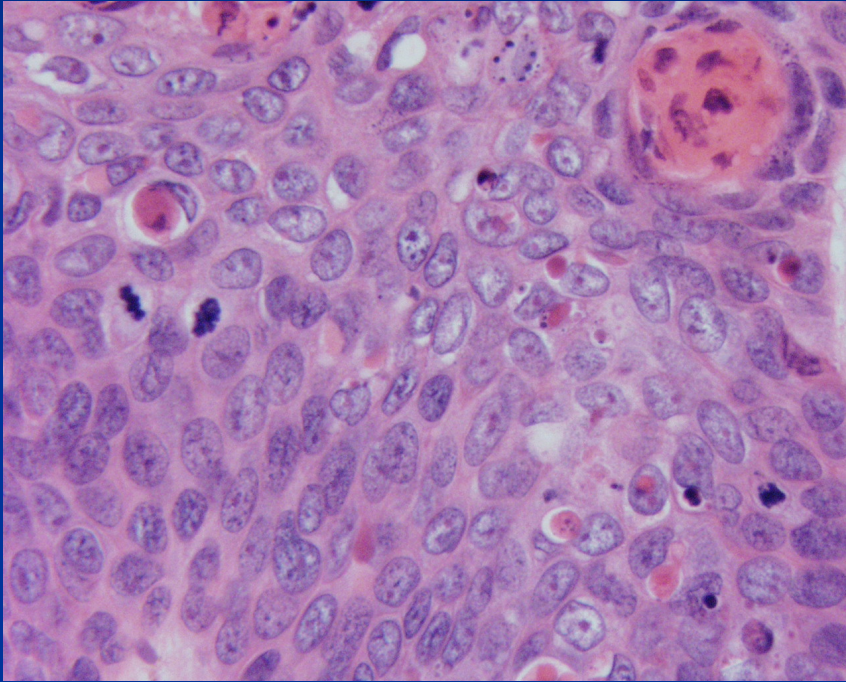




What is your differential
diagnosis and what stains/IHC
would be helpful?

Bowen's Disease

Histopathology

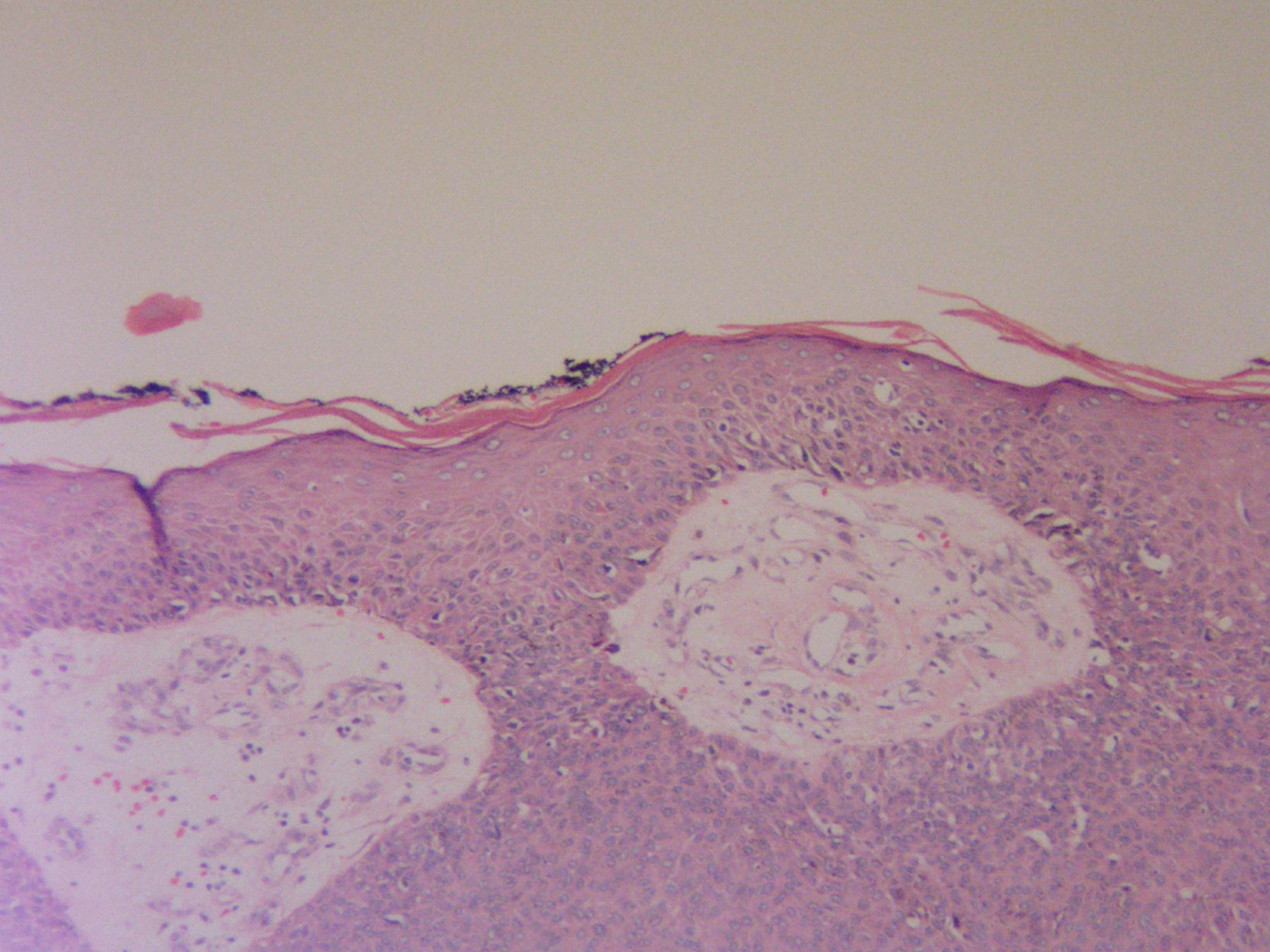


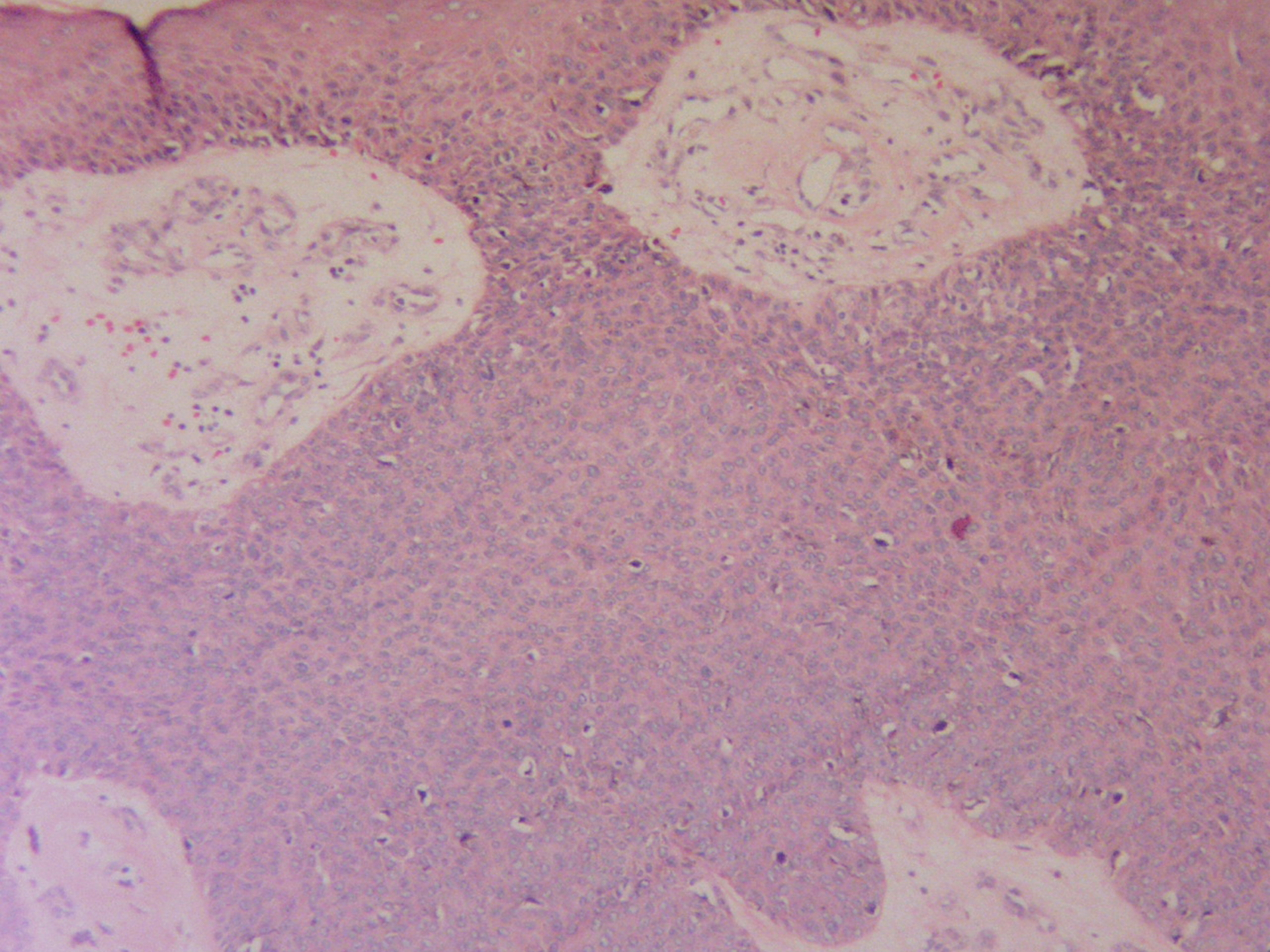
- Full thickness replacement of the epidermis by atypical squamous cell
- Loss of maturation
- Dyskeratosis
- Atypical MF
- No follicular sparing
- Distinguish from SCC in situ

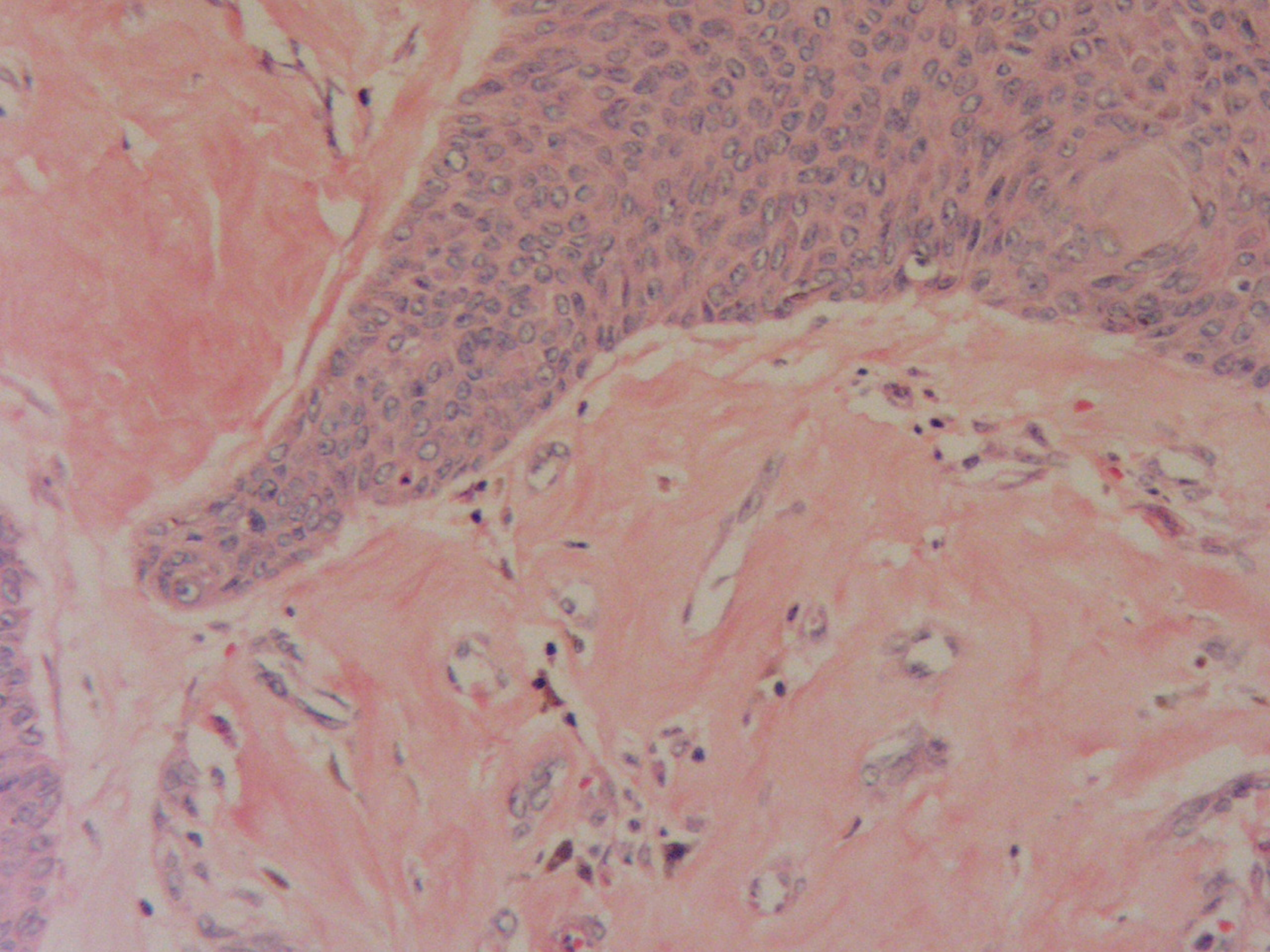
What are clinical variants of
Bowen's disease?

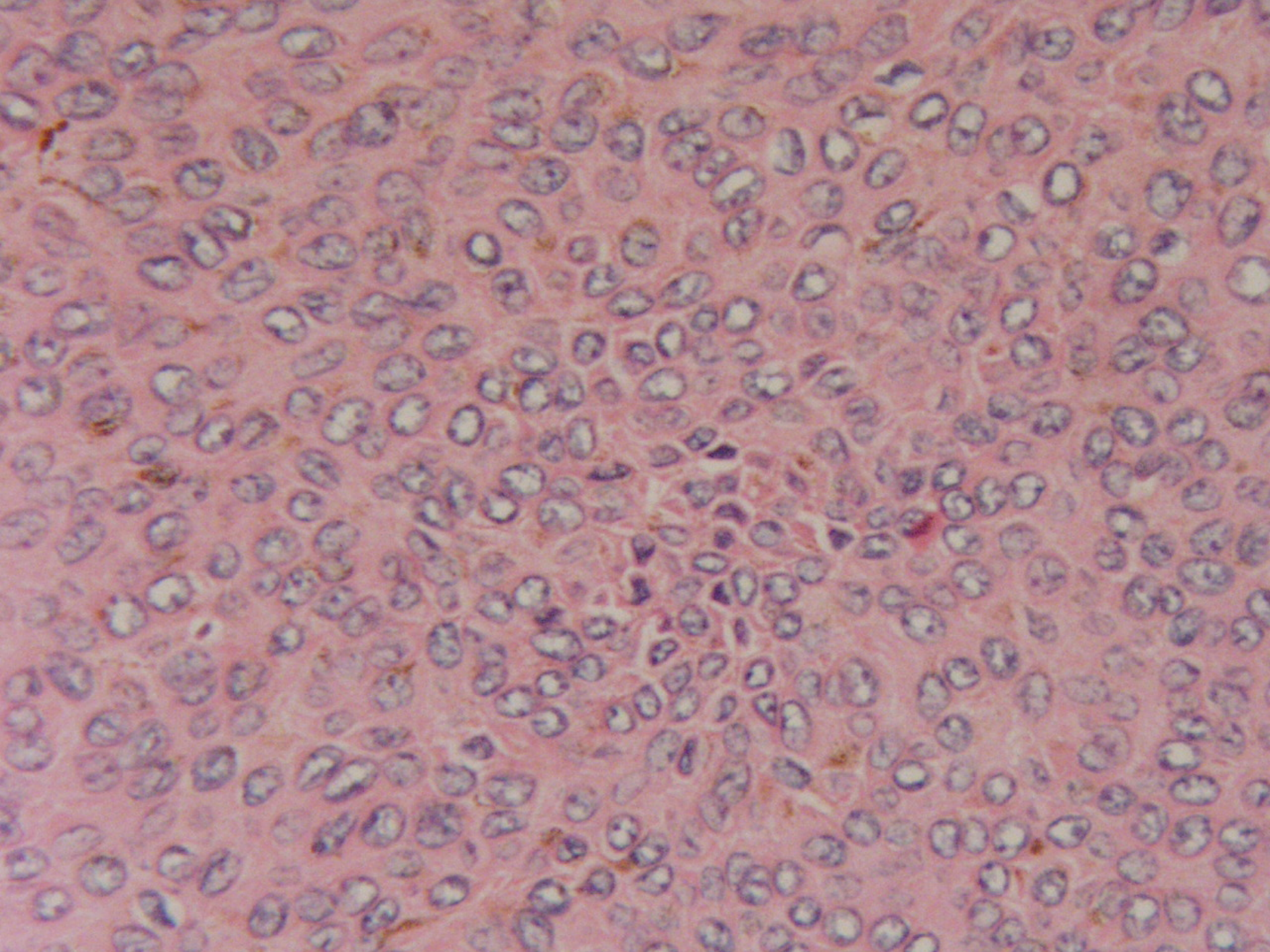
Clinical Variants of Bowen's Disease

- Bowenoid papulosis
- Erythroplasia of Queyrat
- PIN (Penile intraepithelial neoplasia)
- VIN/VAIN (Vulvar/Vaginal intraepithelial neoplasia)







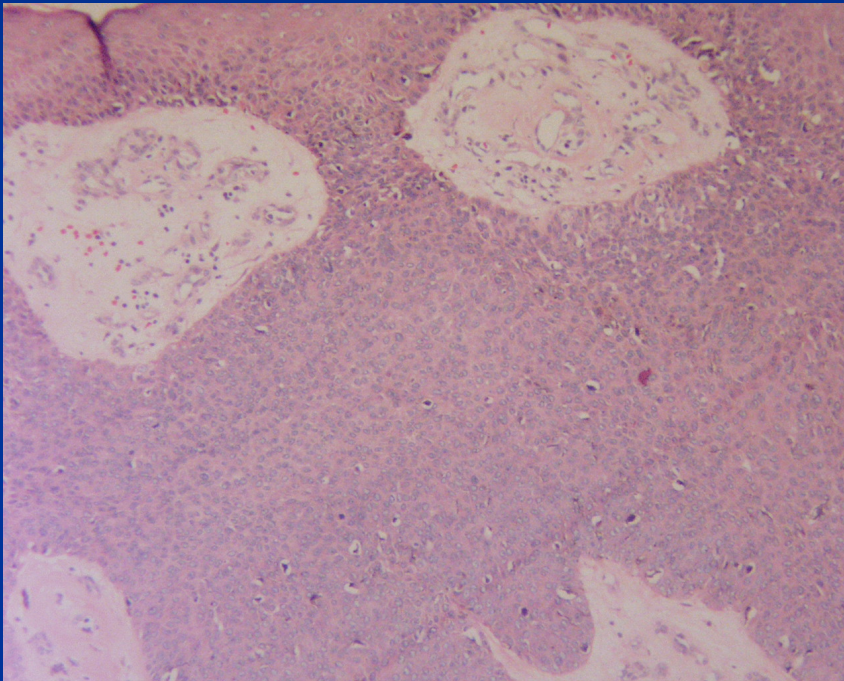


What is your differential
diagnosis and what stains/IHC
would be helpful?

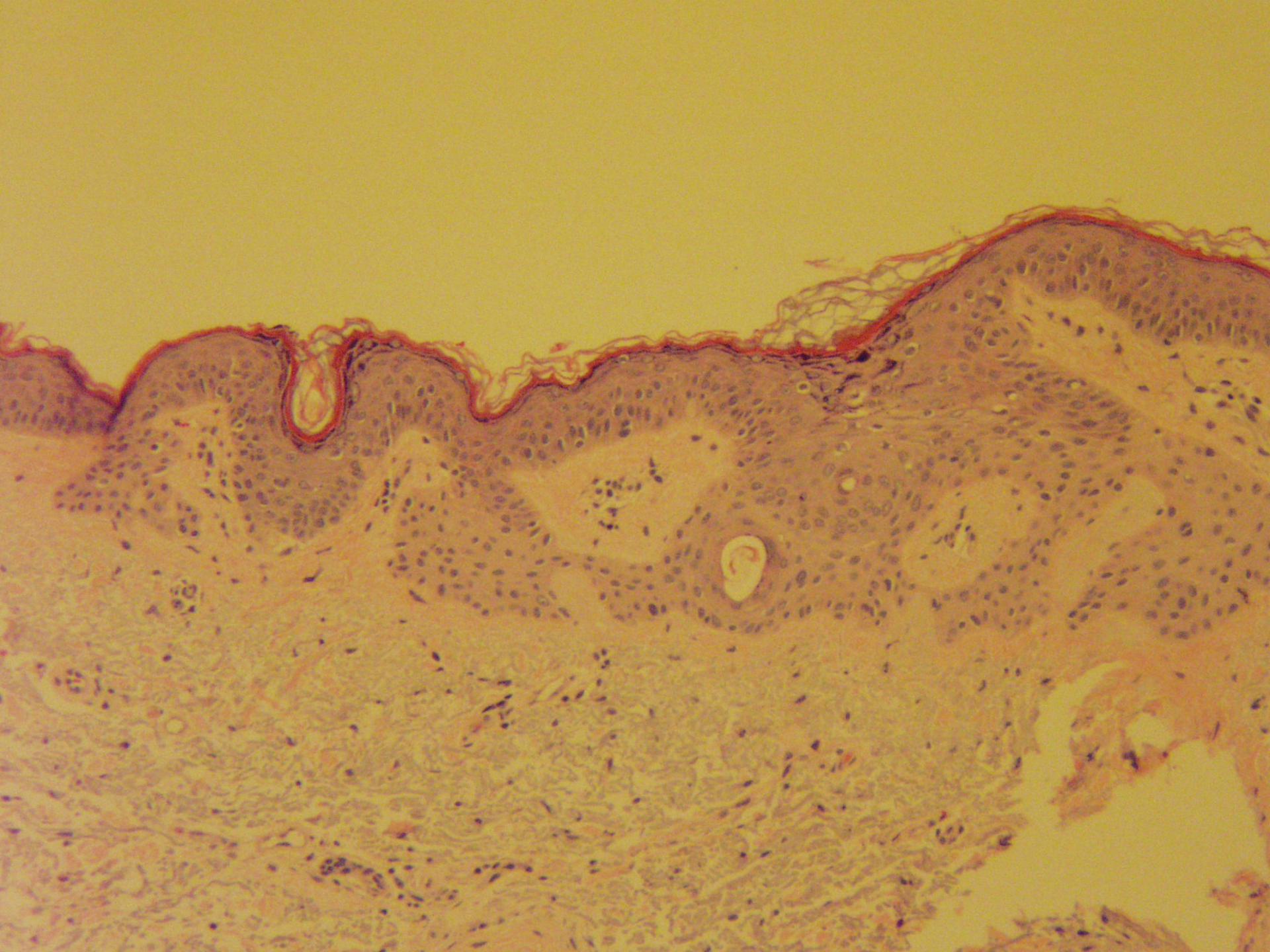
Eccrine Poroma

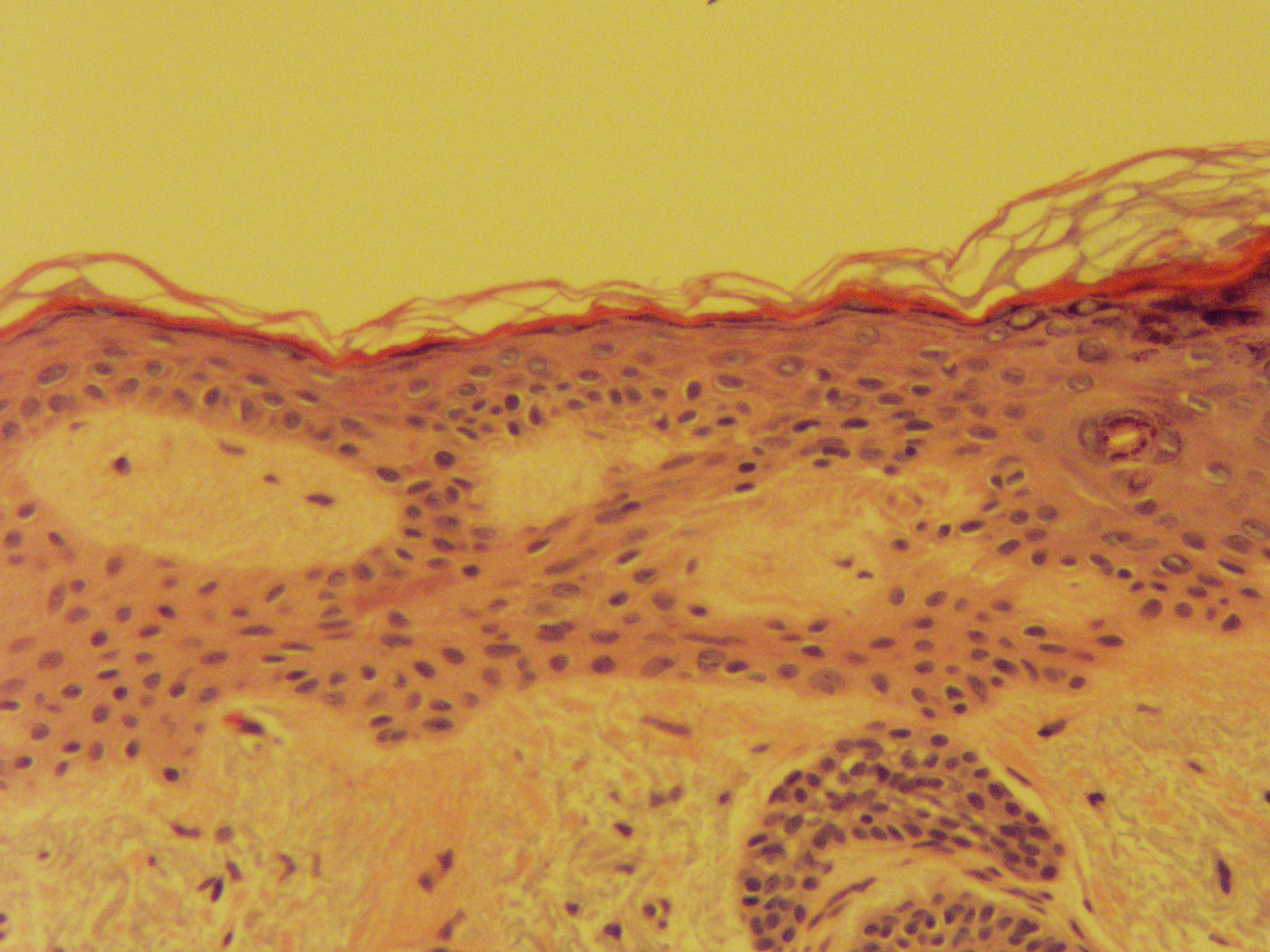


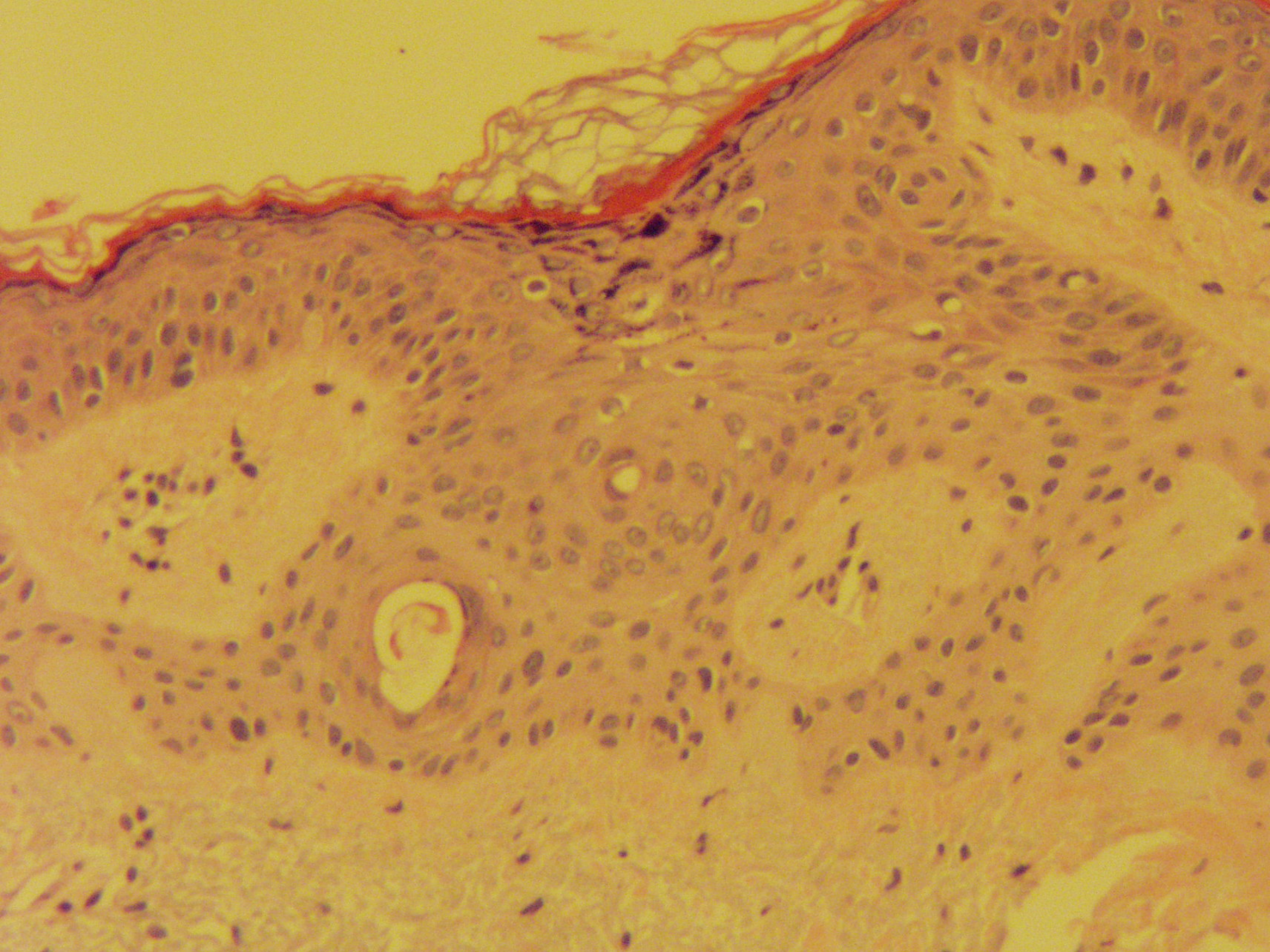
Histopathology

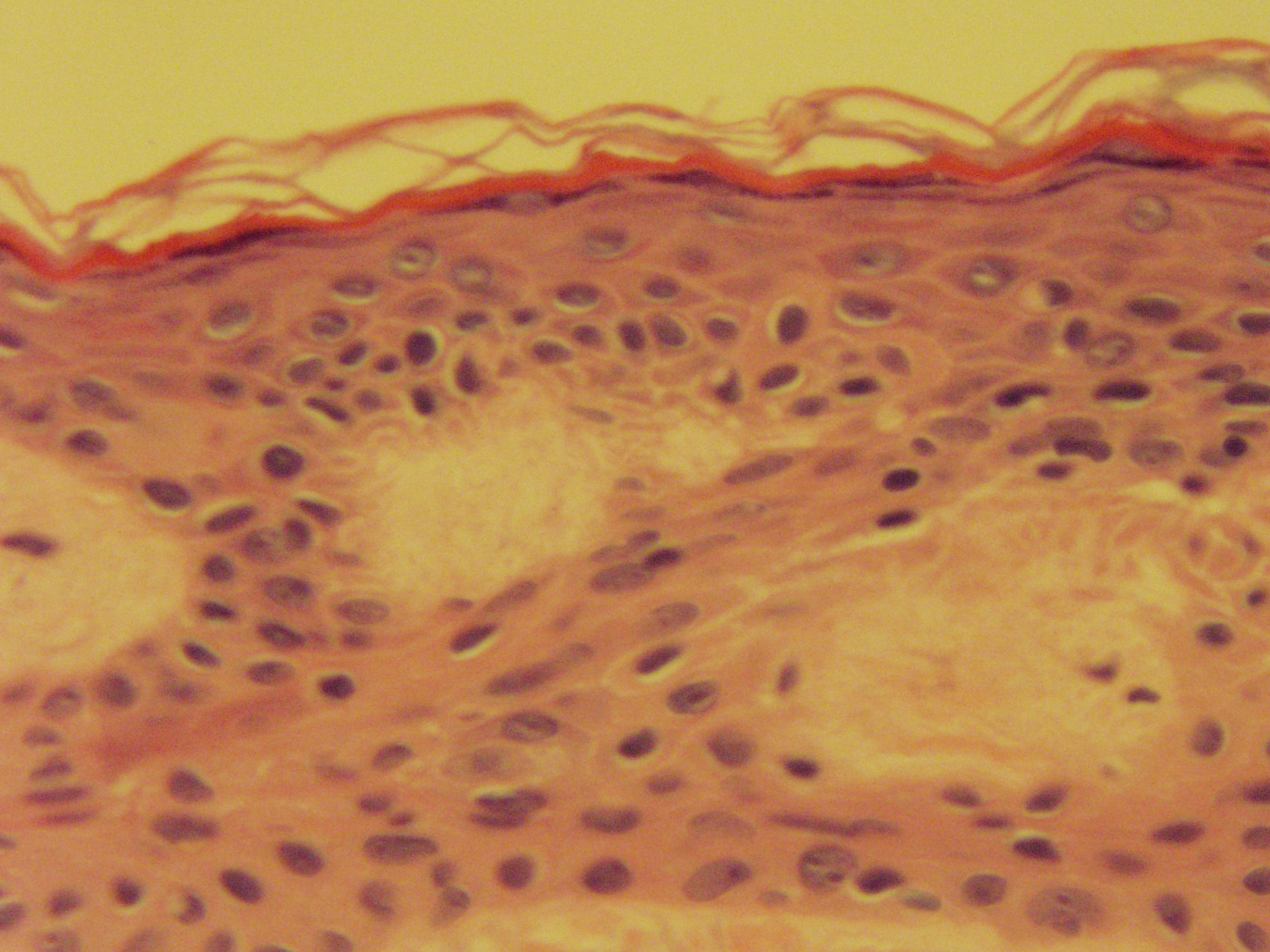


- Plate-like proliferation of bland squamous cells arising from the epidermis
- May extend deeply into dermis
- Focal ductal differentiation
- Hyalinization around BV





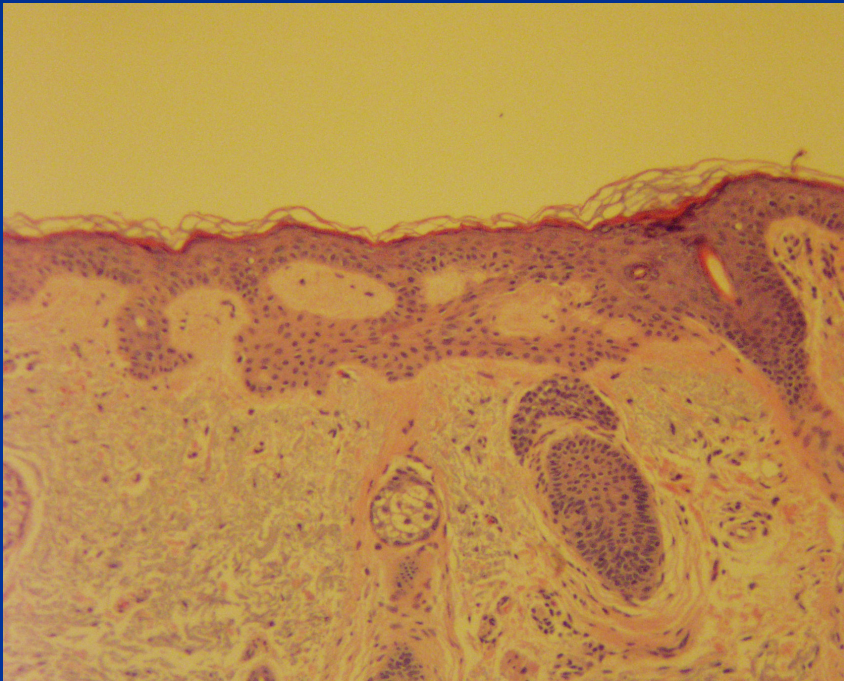




What is your differential
diagnosis and what stains/IHC
would be helpful?

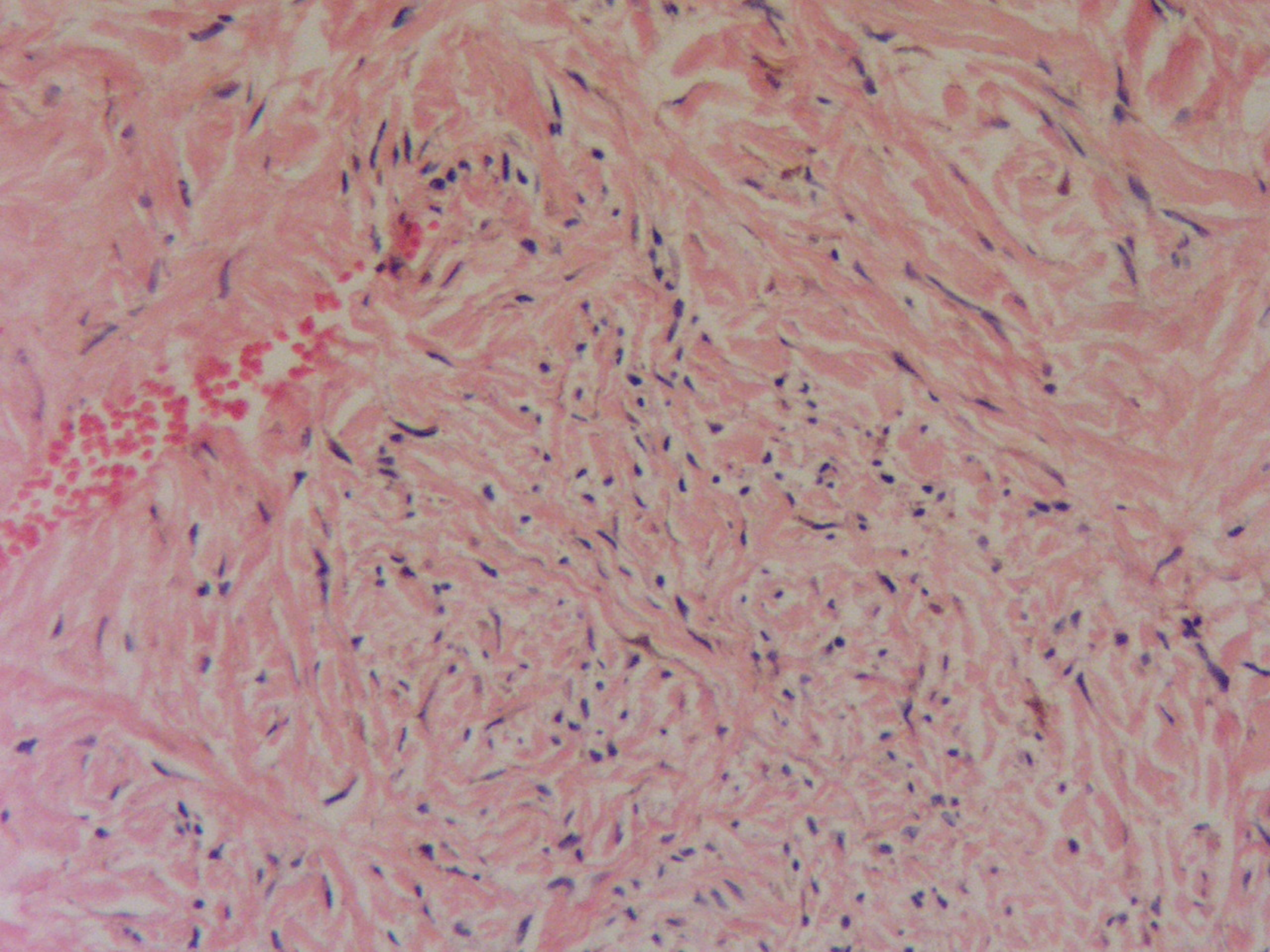
Tumor of the Follicular Infundibulum

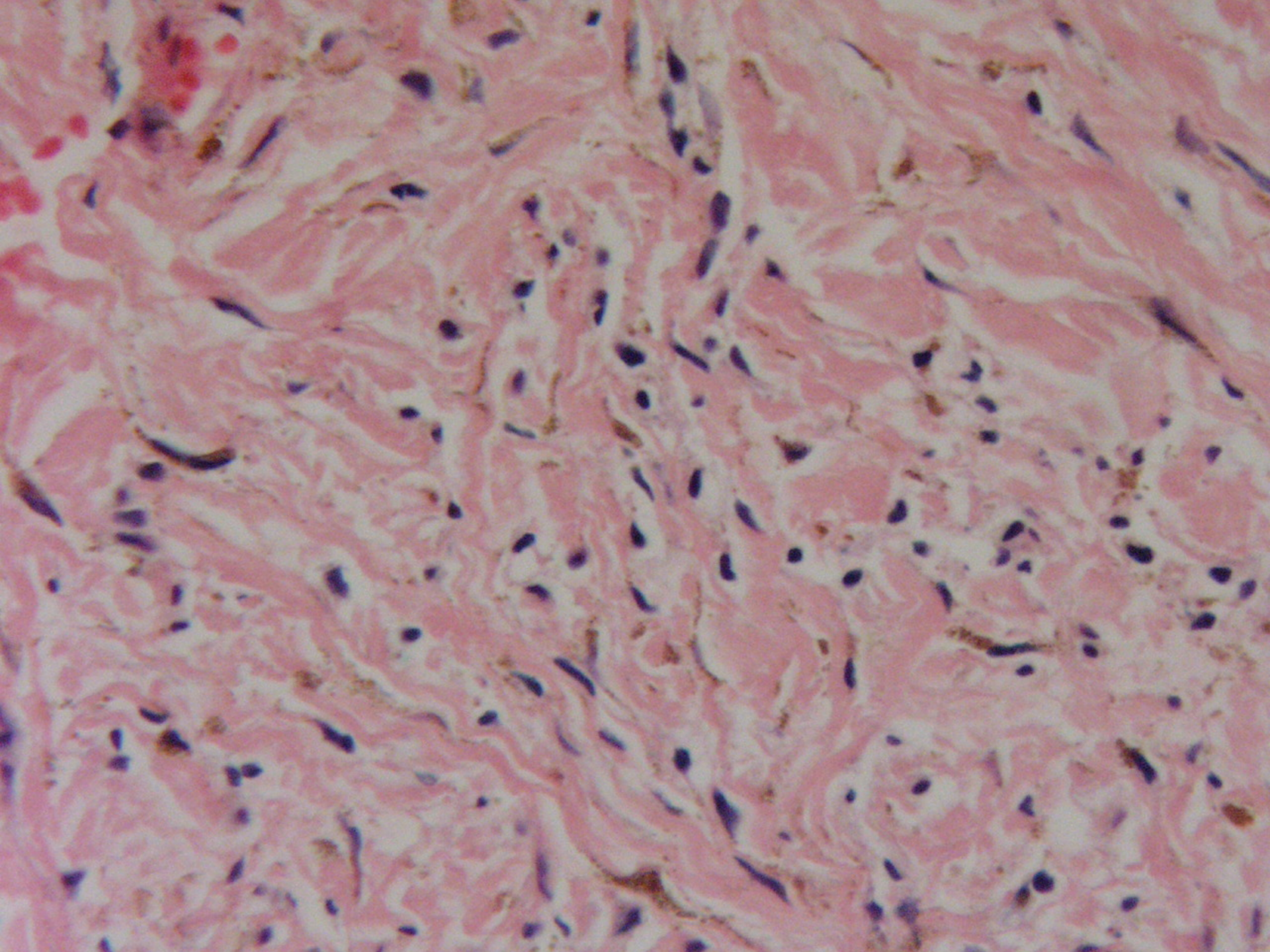
Histopathology

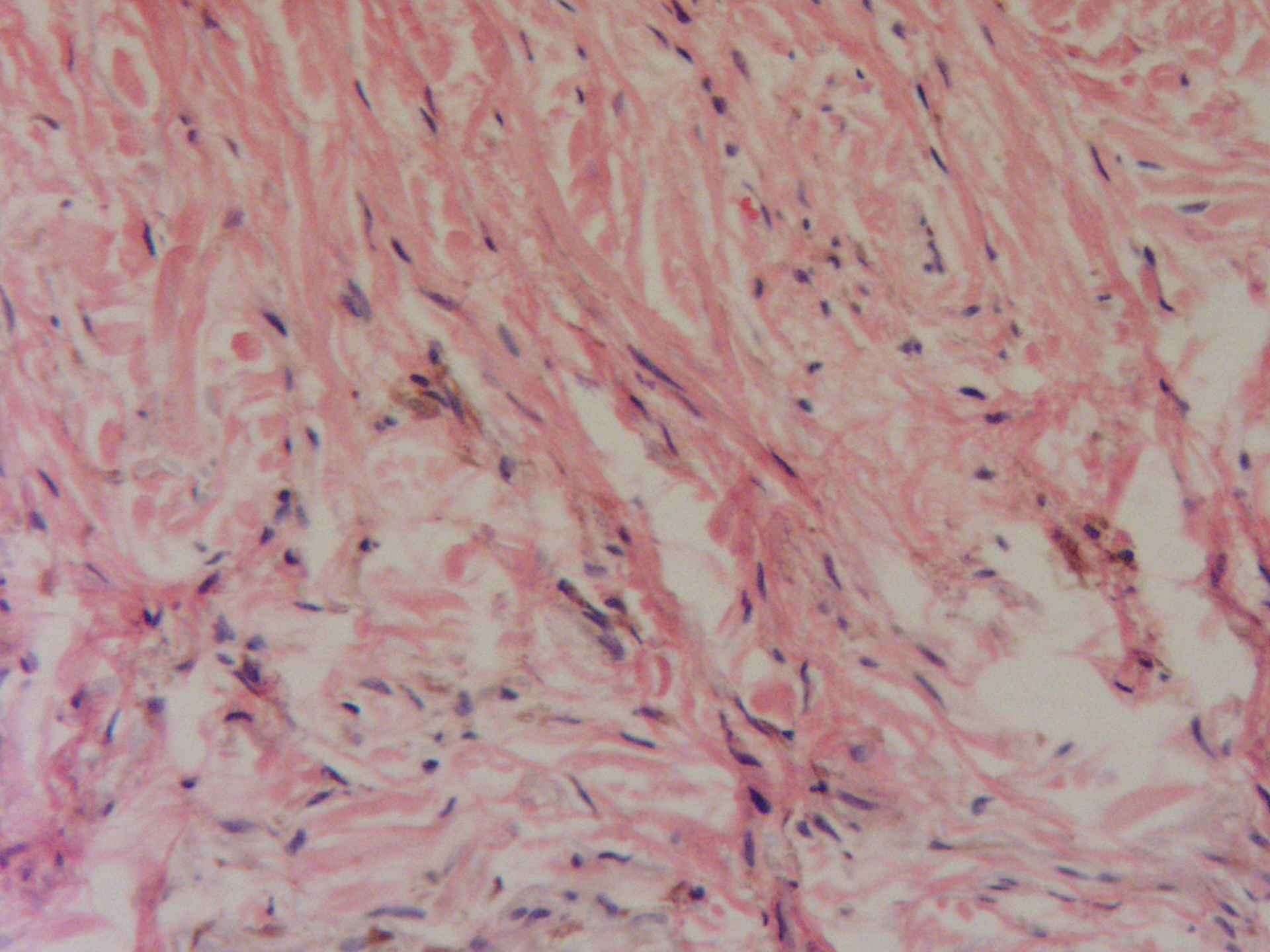


- Follicular proliferation at DE junction
- Pallor of keratinocytes
- No atypia
- No stromal-epithelial clefting
- Clinical appearance

11 y.o. F with left
posterior shoulder lesion







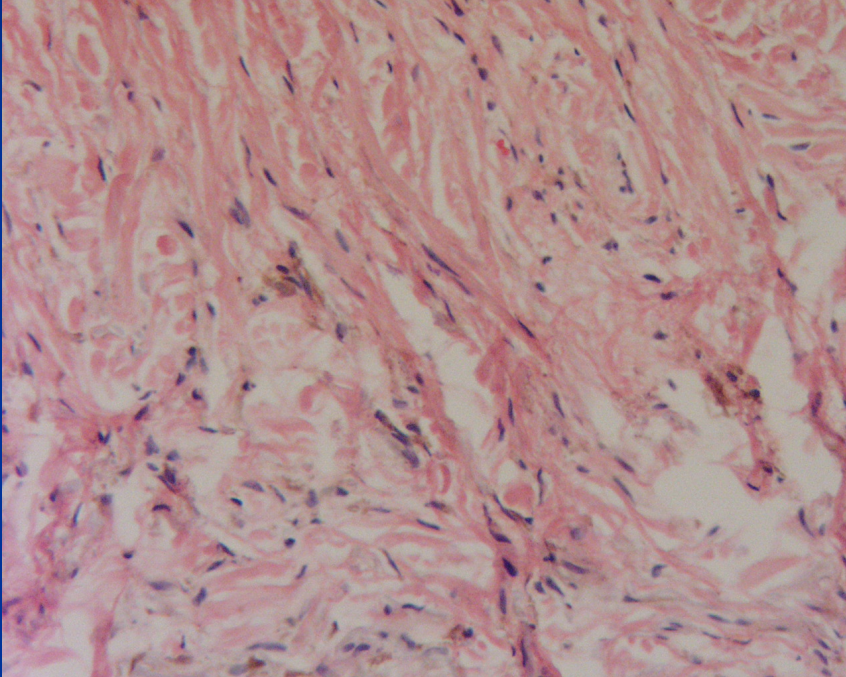
What is your differential
diagnosis and what stains/IHC
would be helpful?

11 yo F with left posterior shoulder lesion

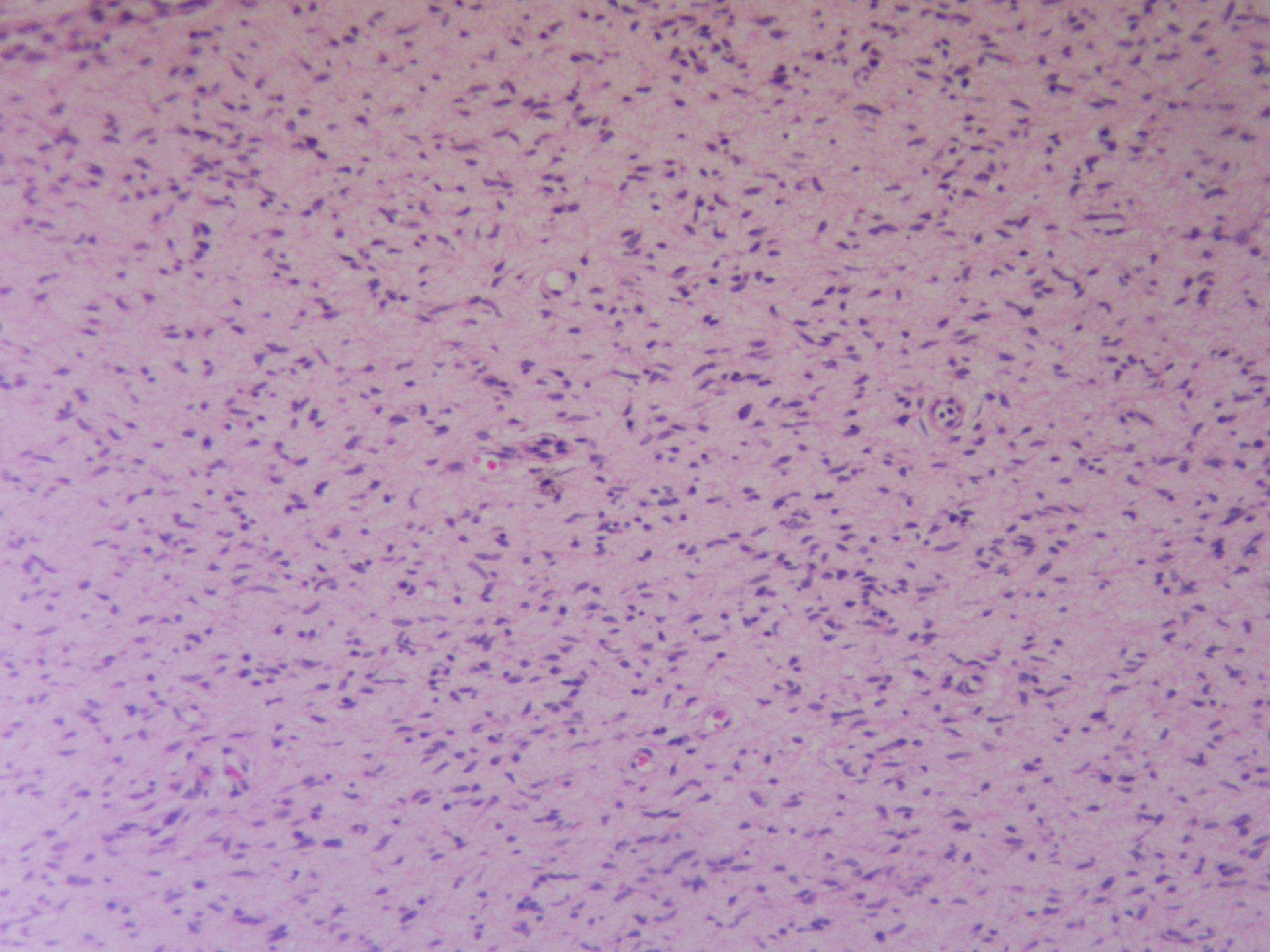
- Hypopigmented blue nevus
- Tattoo
- Neurofibroma
- Leiomyoma
- Dermatofibroma

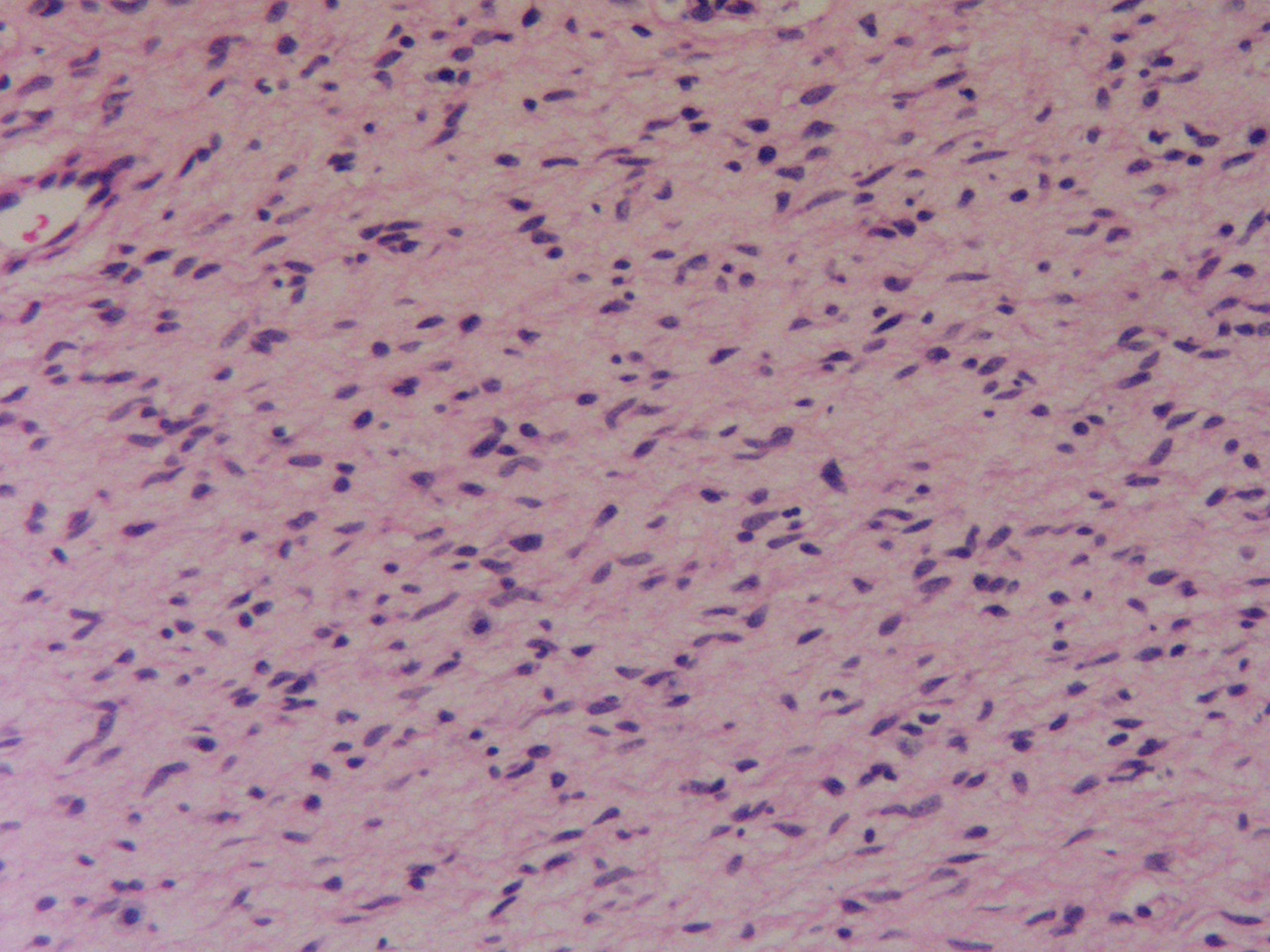
Hypopigmented Blue Nevus

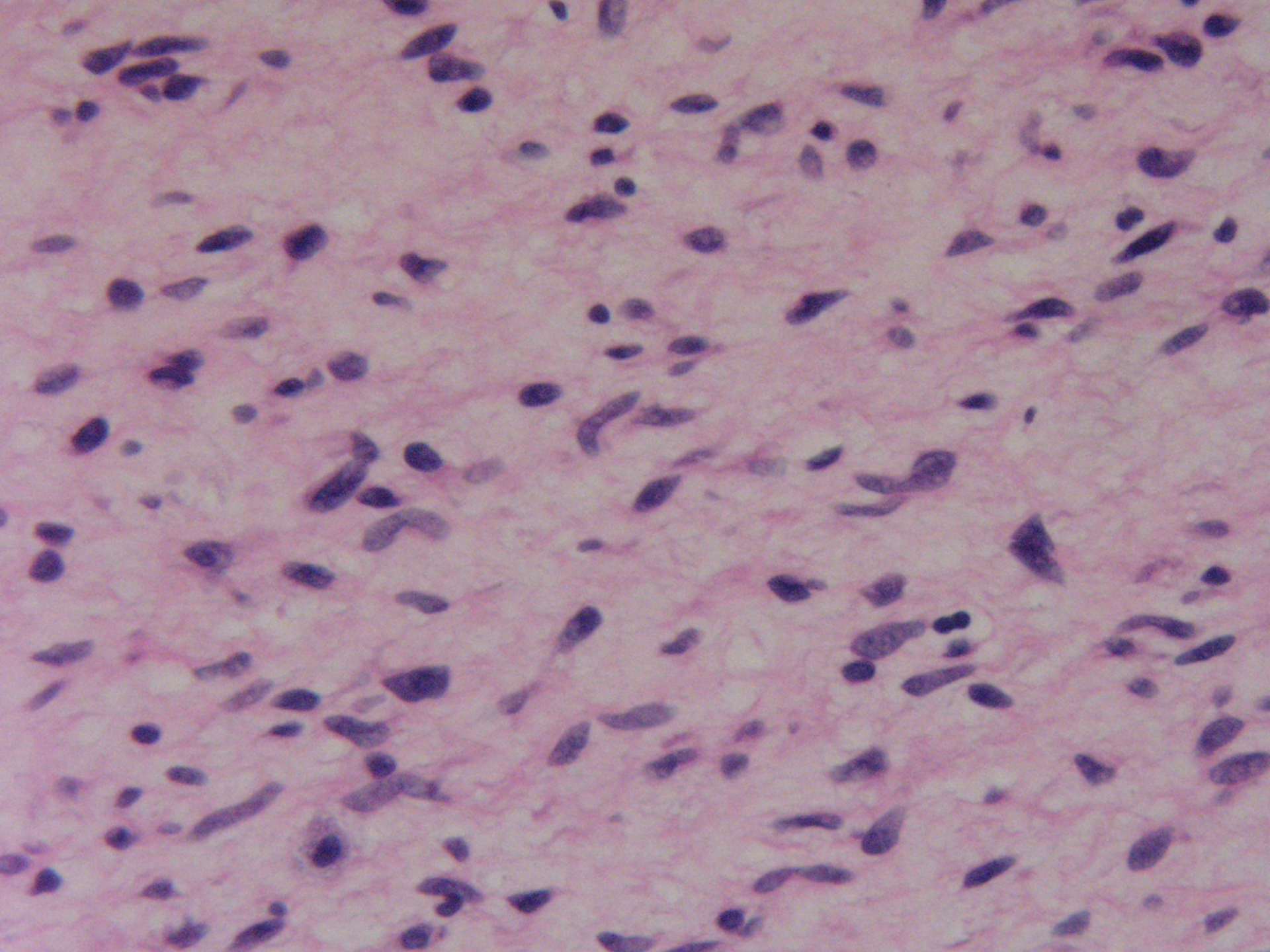
Histopathology



- Hypocellular proliferation of bland spindle cells
- Broad pushing border
- Faint melanin pigment
- Sclerotic background



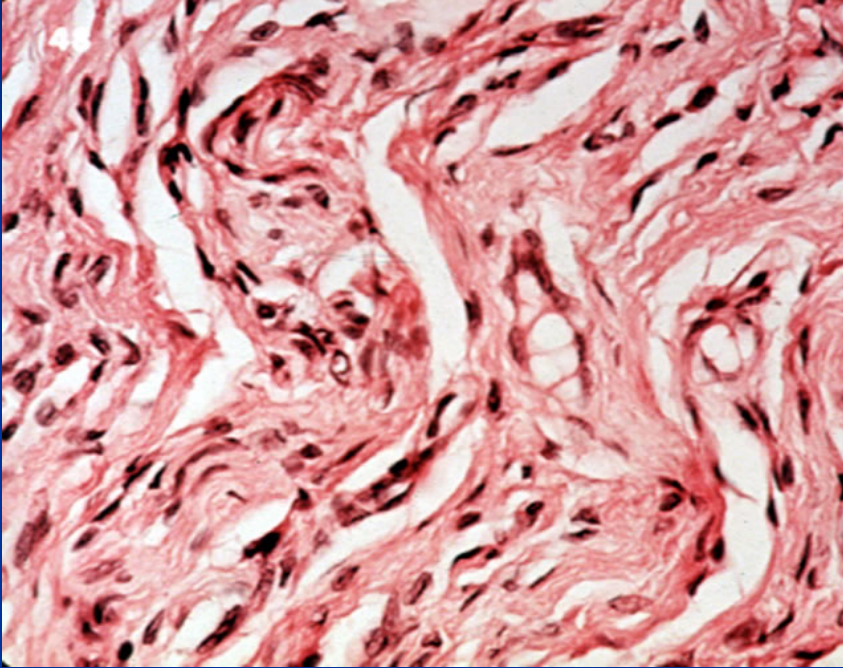




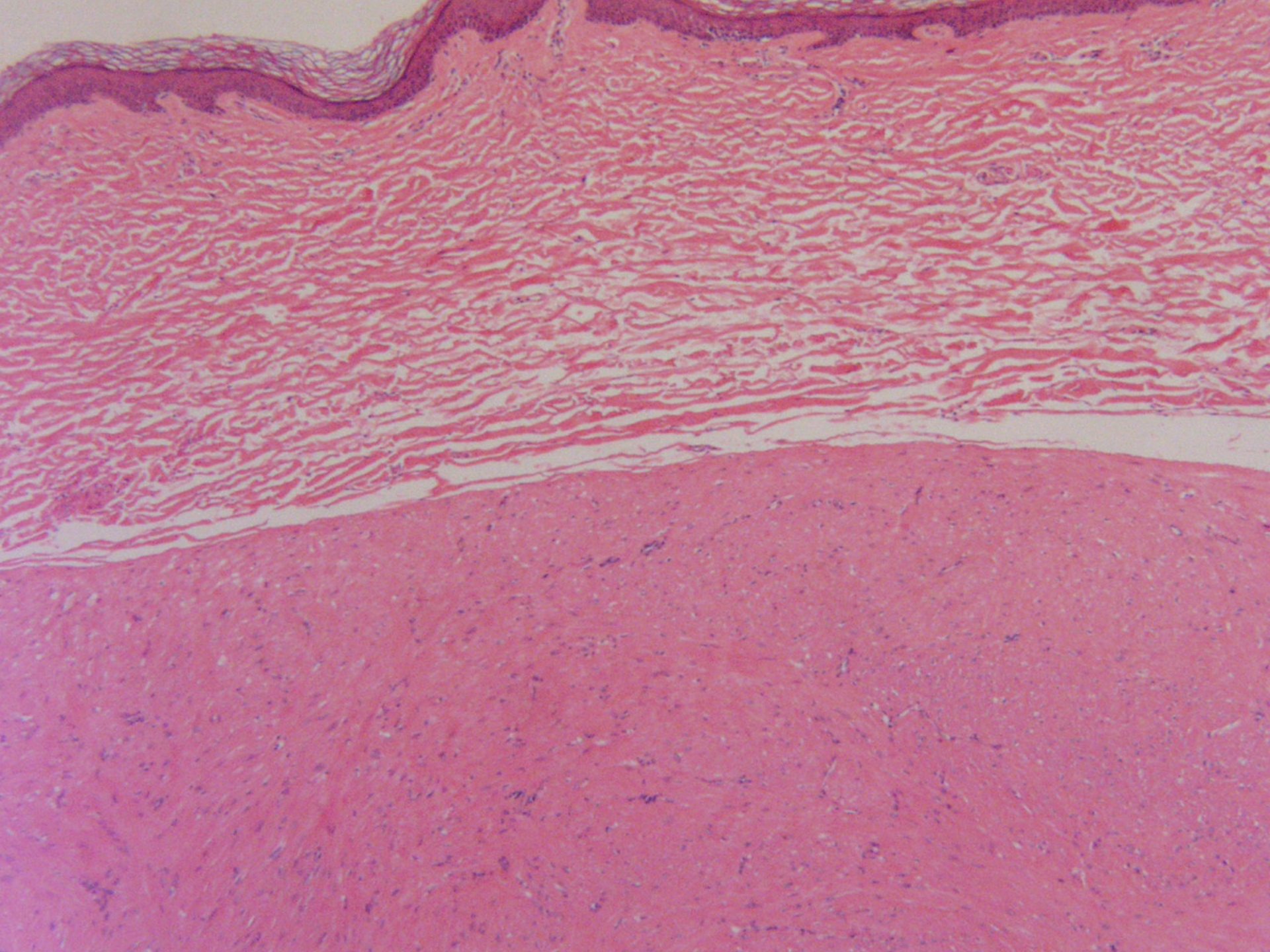
What is your differential
diagnosis and what stains/IHC
would be helpful?

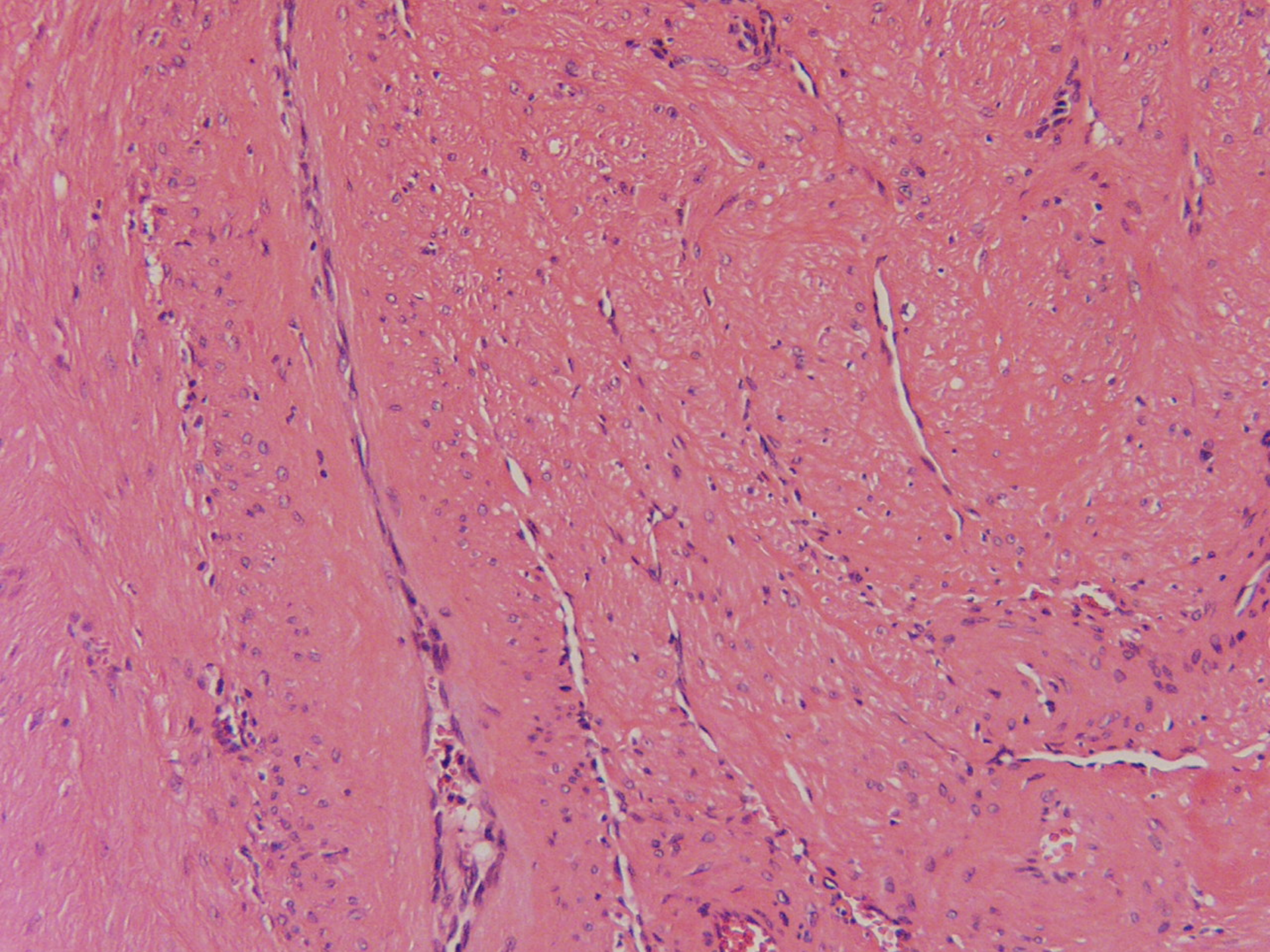
Neurofibroma

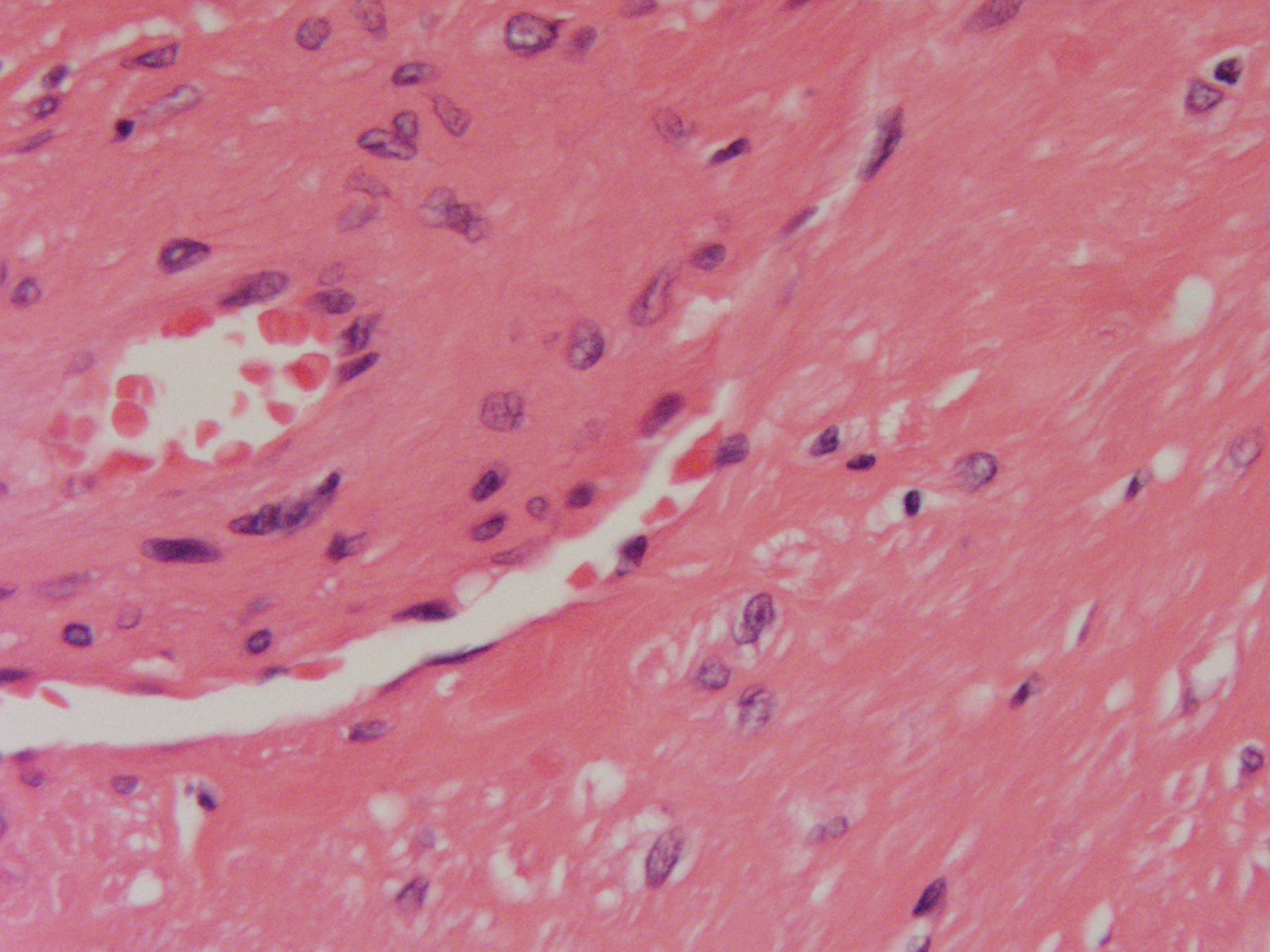
Histopathology

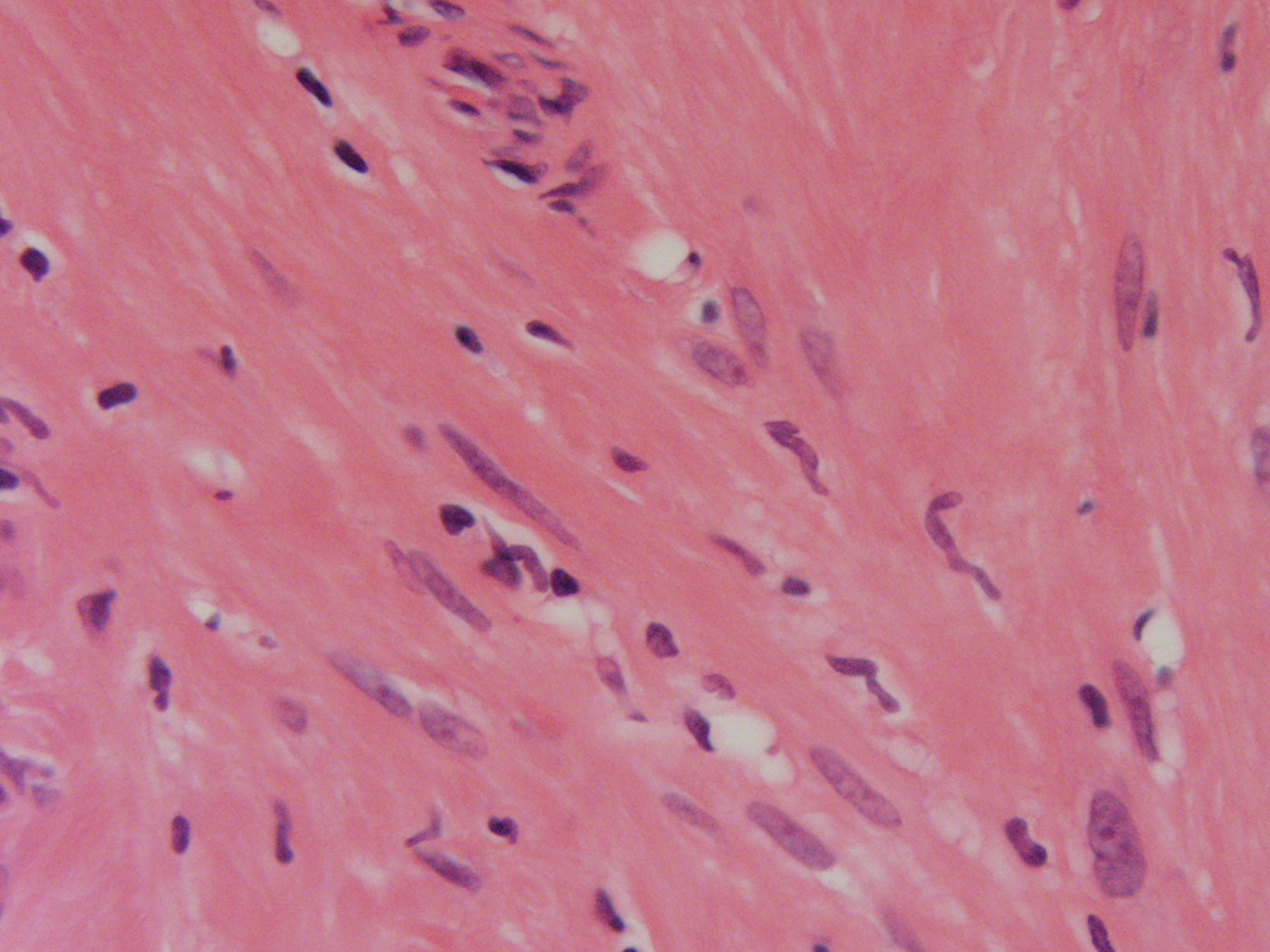


- Partly circumscribed proliferation of wavy bland nuclei
- Myxoid background
- Nerve roots-Bodian positive
- CD34 and S100 positive









What is your differential
diagnosis and what stains/IHC
would be helpful?

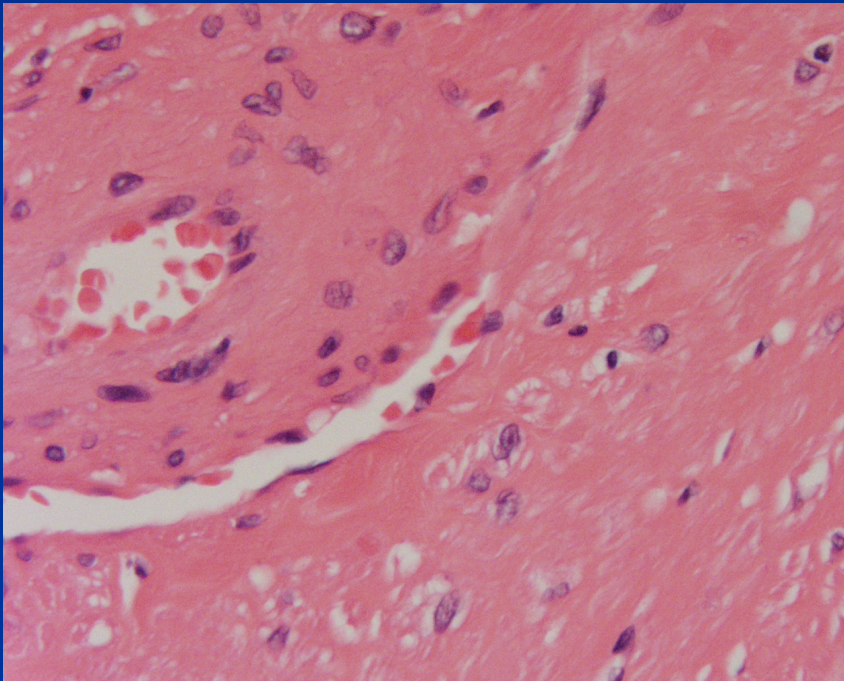
Angioleiomyoma

What are clinical variants of a cutaneous leiomyoma?

Cutaneous Variants of Leiomyoma

- Angioleiomyoma
 - Arising from the media of blood vessels
- Piloleiomyoma
 - Arising from Arrector pilae muscle
- Anogenital

Histopathology

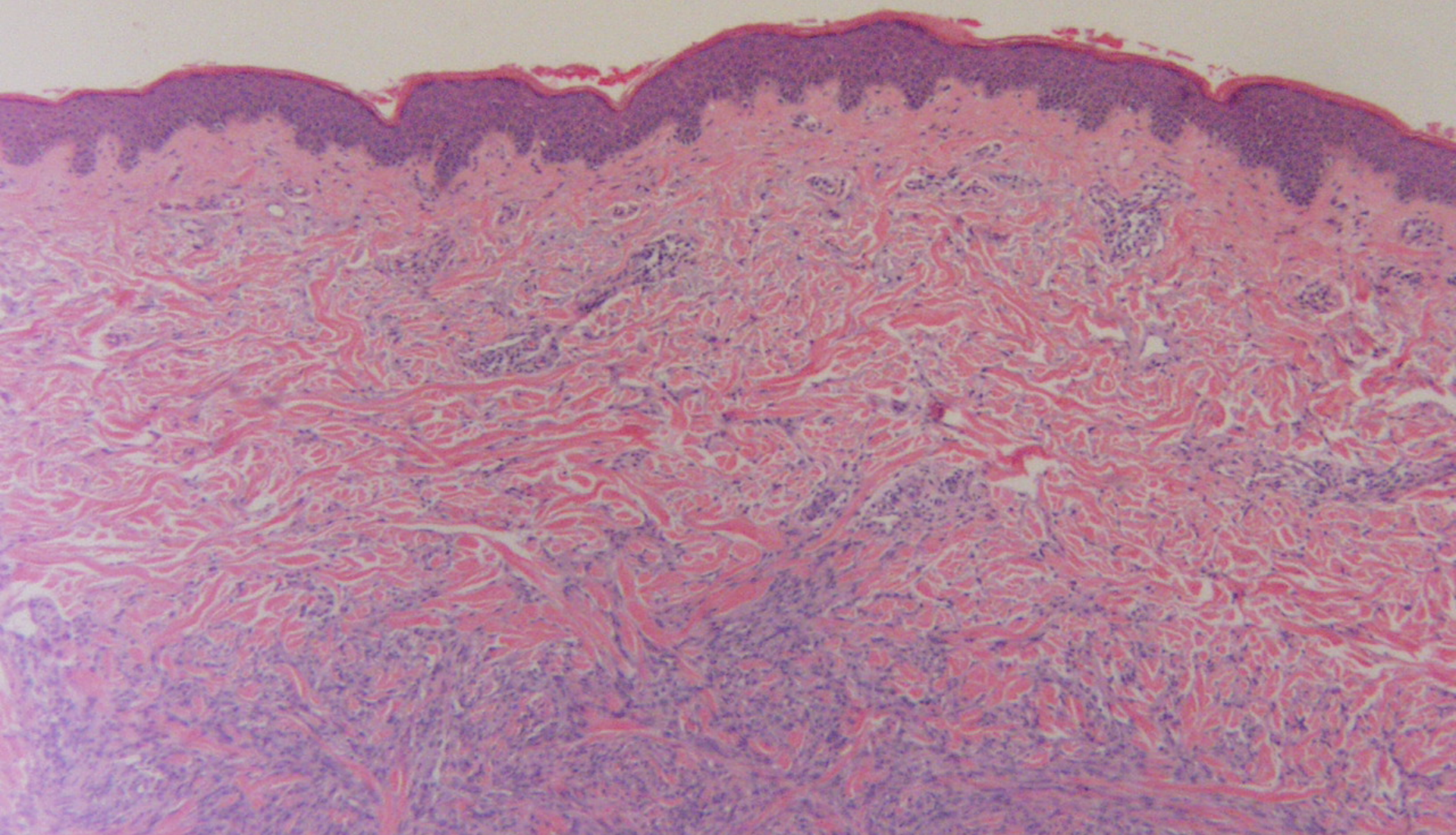


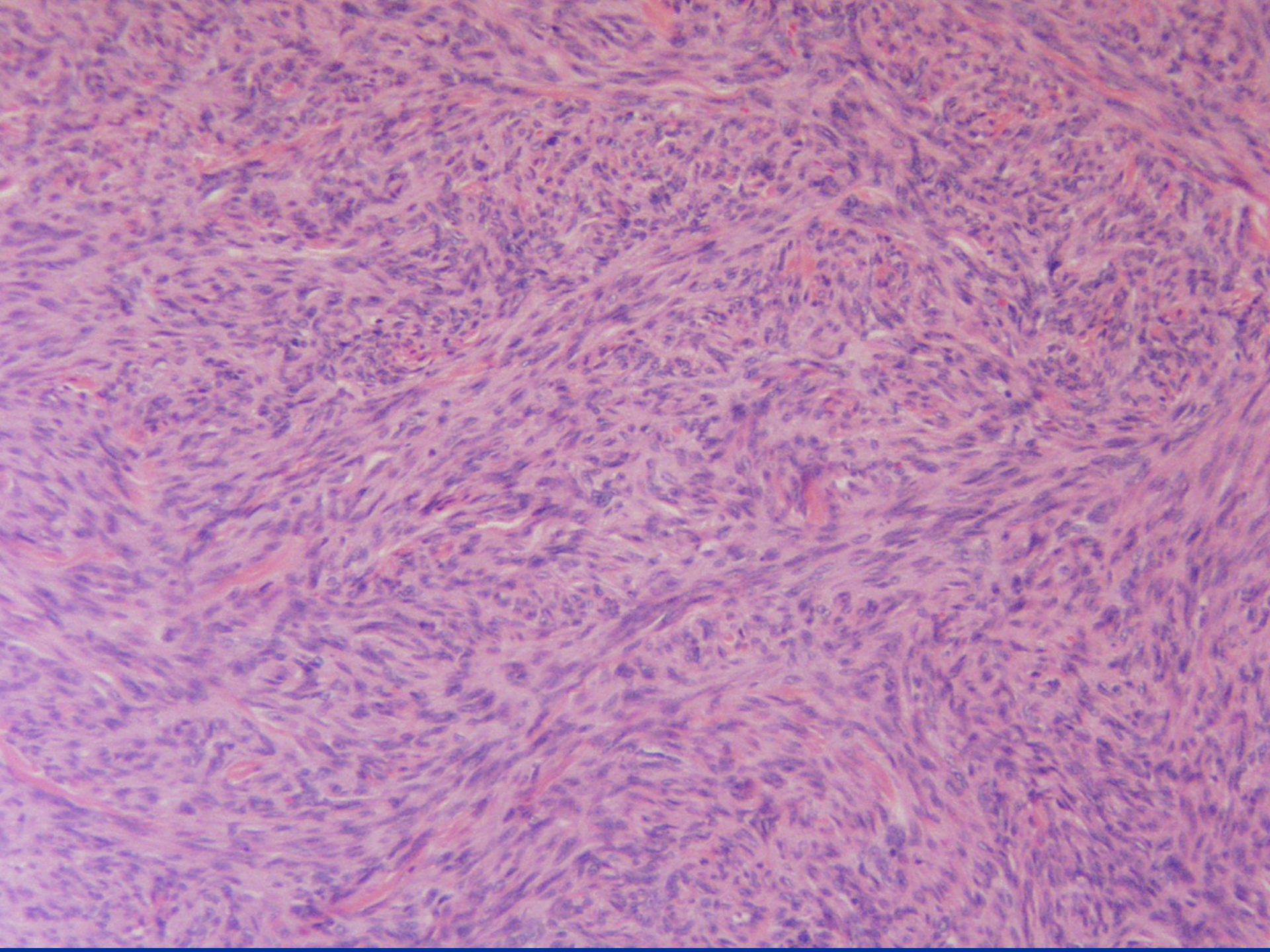
- Circumscribed nodule of smooth muscle cells
- Attachment to vessel wall or pilar arrector muscle depending upon location
- No atypia or MF

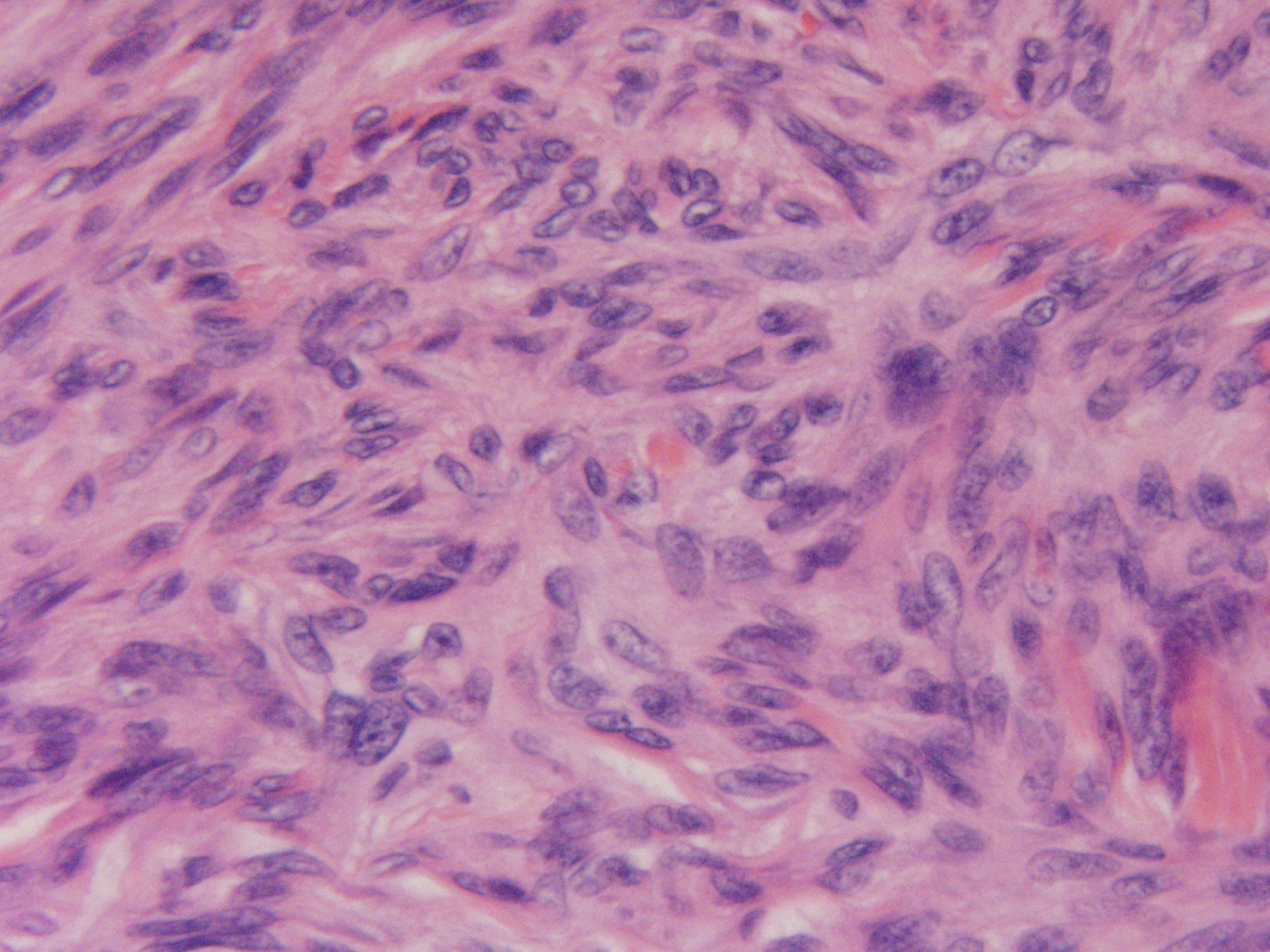
What is Reed Syndrome?

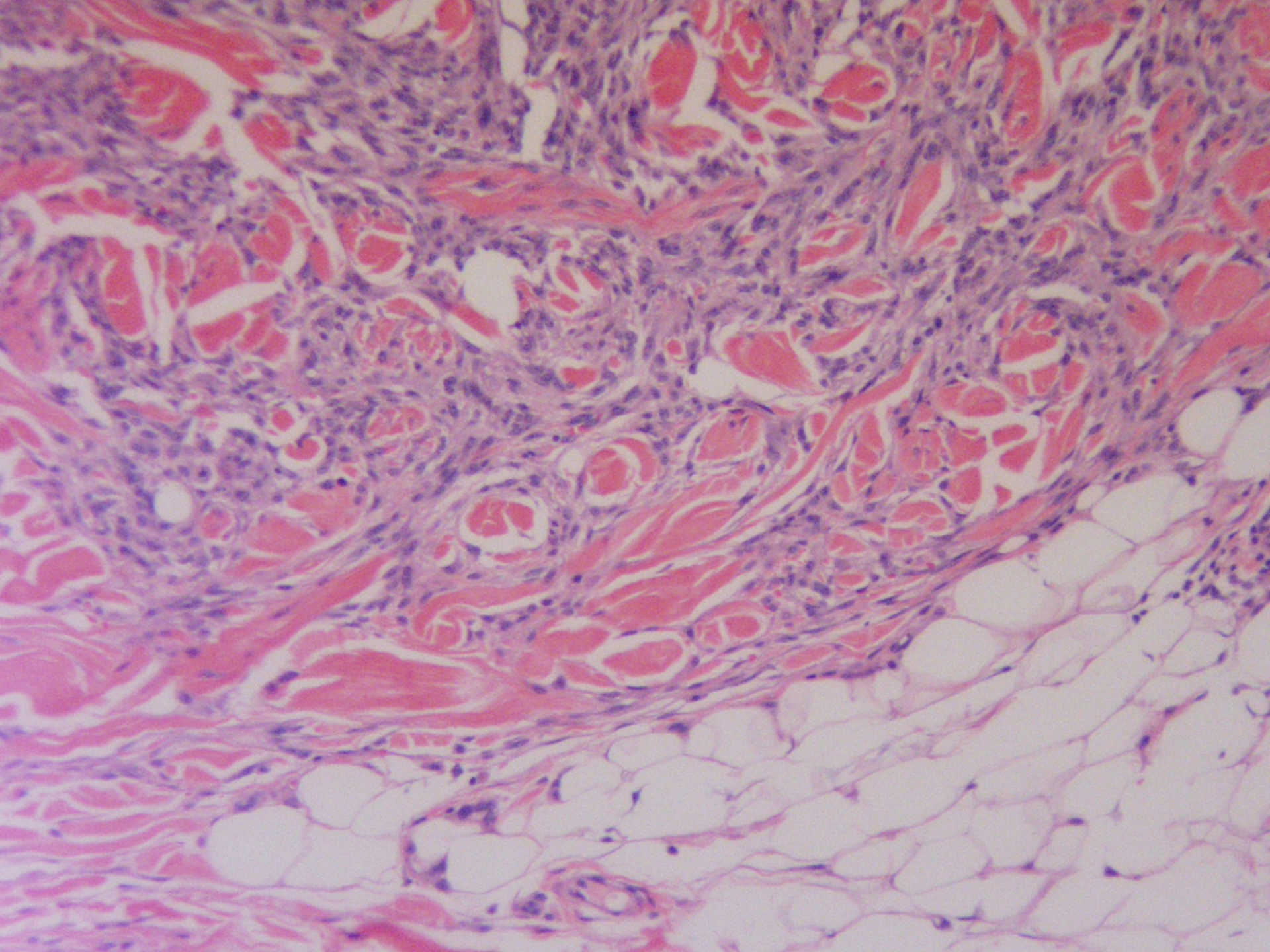
Reed's Syndrome

- AKA Hereditary Leiomyomatosis with Renal Cell Carcinoma (HLRCC)
- Autosomal dominant
- Some may have mutations of the fumarate hydratase gene
- Multiple cutaneous leiomyomas associated with uterine leiomyomas
- Increased risk for renal cell carcinoma
- Increased risk for uterine leiomyosarcoma





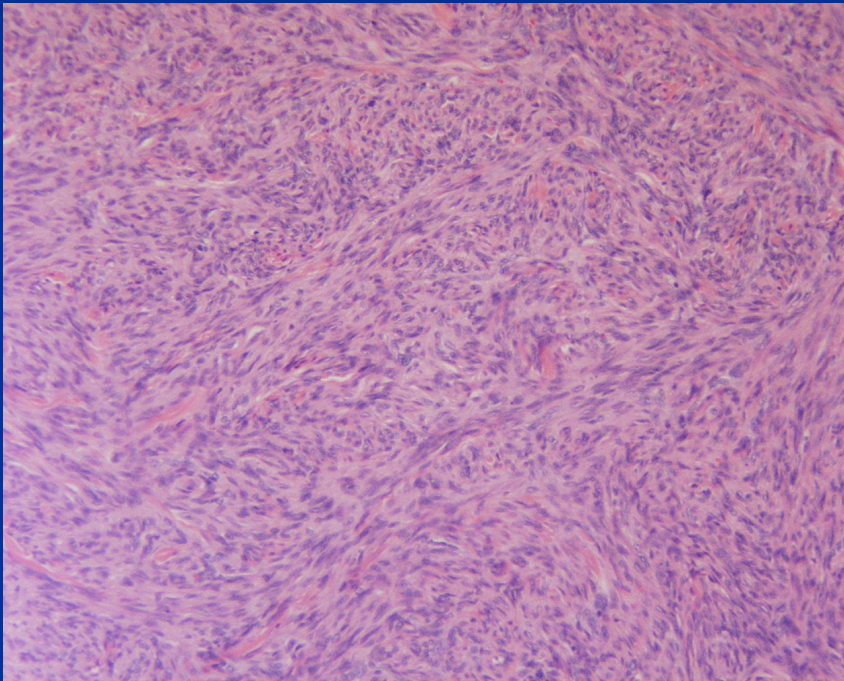




What is your differential
diagnosis and what stains/IHC
would be helpful?

Dermatofibroma

Histopathology



- Central portion may have prominent storiform and MF
- Look to the edge of the tumor and subQ fat interface for characteristic intercalation
- Caution with head and neck lesions
- Diffuse Factor 13a staining, peripheral staining of CD34

Dermatopathology Slide Review Part 5

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