

Shades of confusion when pigments blur the diagnostic path.

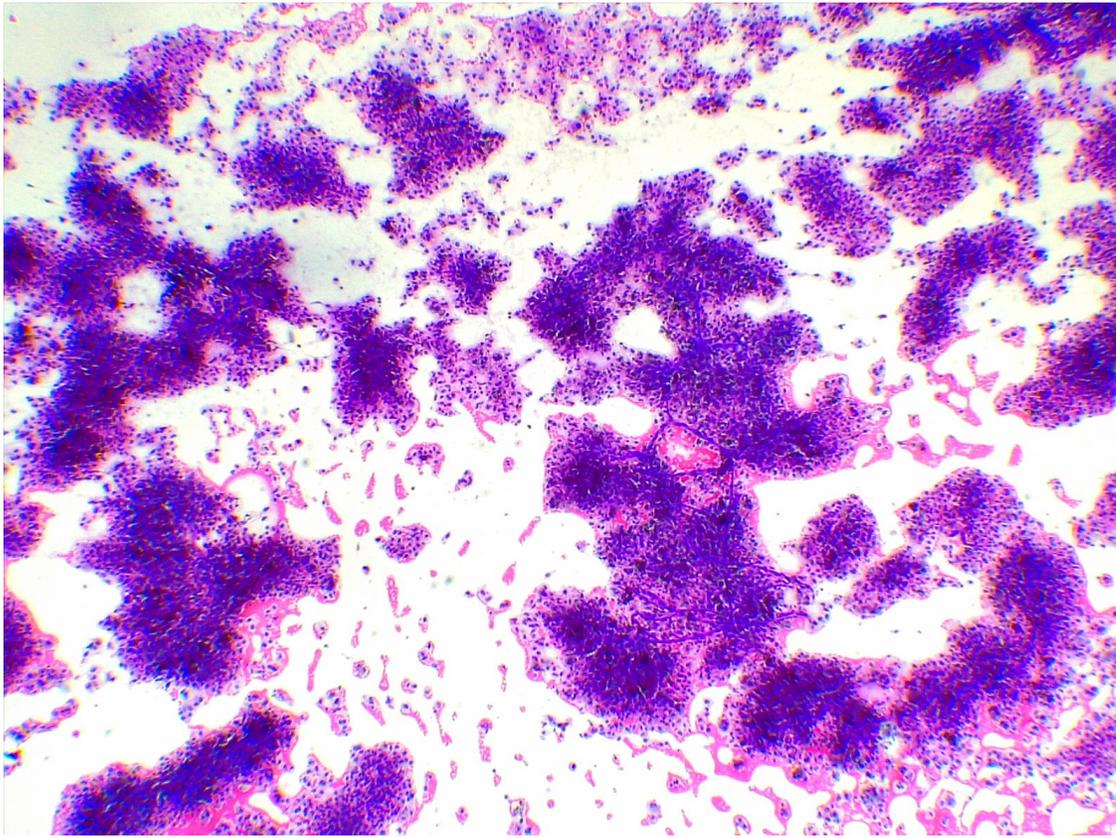
- Dr. Apeksha Sharma

Resident, Department of Pathology.

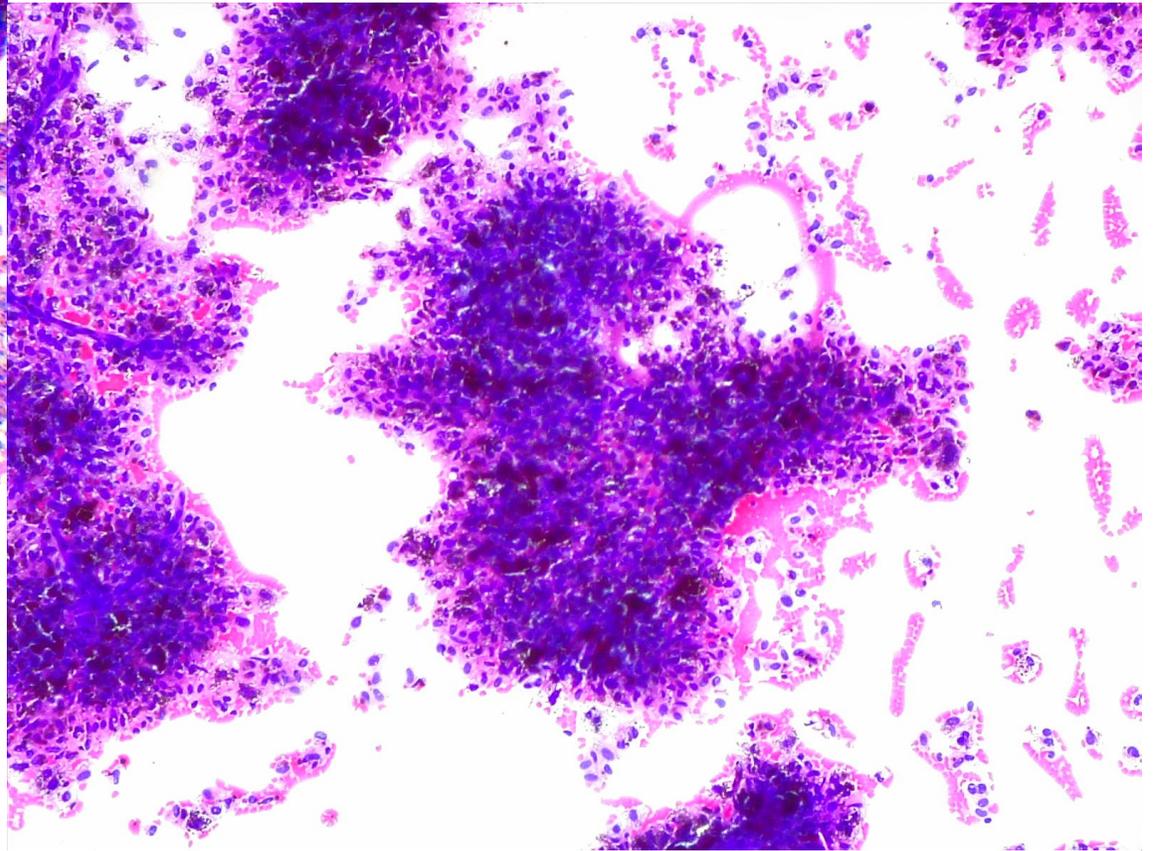
- 49 yrs / male
- Swelling over right leg for the last 2.5 yrs.
- Associated with blackish discoloration of the overlying skin.
- No prior history of trauma, fever or discharge from the swelling.

- On examination – 3 x 2 cm,
 - Situated over the shin of tibia (medial aspect)
 - Immobile, firm and non tender.
- USG-
 - well-defined **3 x 2.5 x 1 cm** size
 - solid cystic lesion in the **subcutaneous plane**
 - findings were suggestive of **epidermal inclusion cyst.**
- FNAC was advised

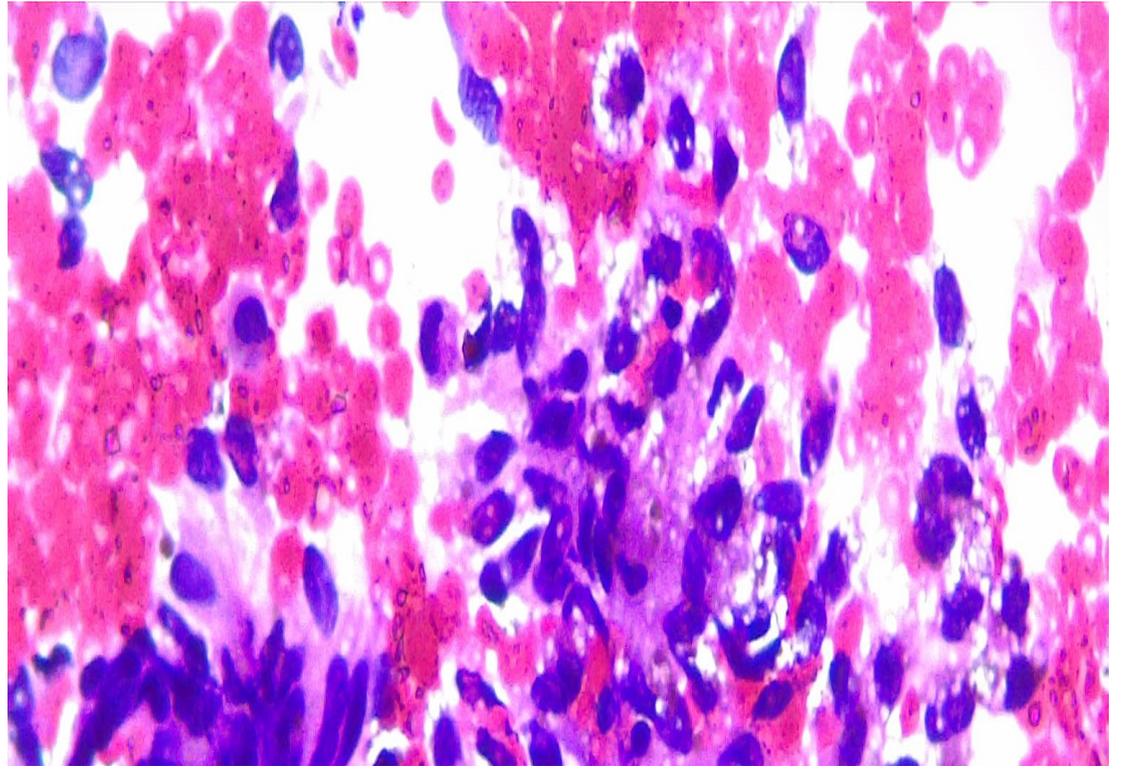
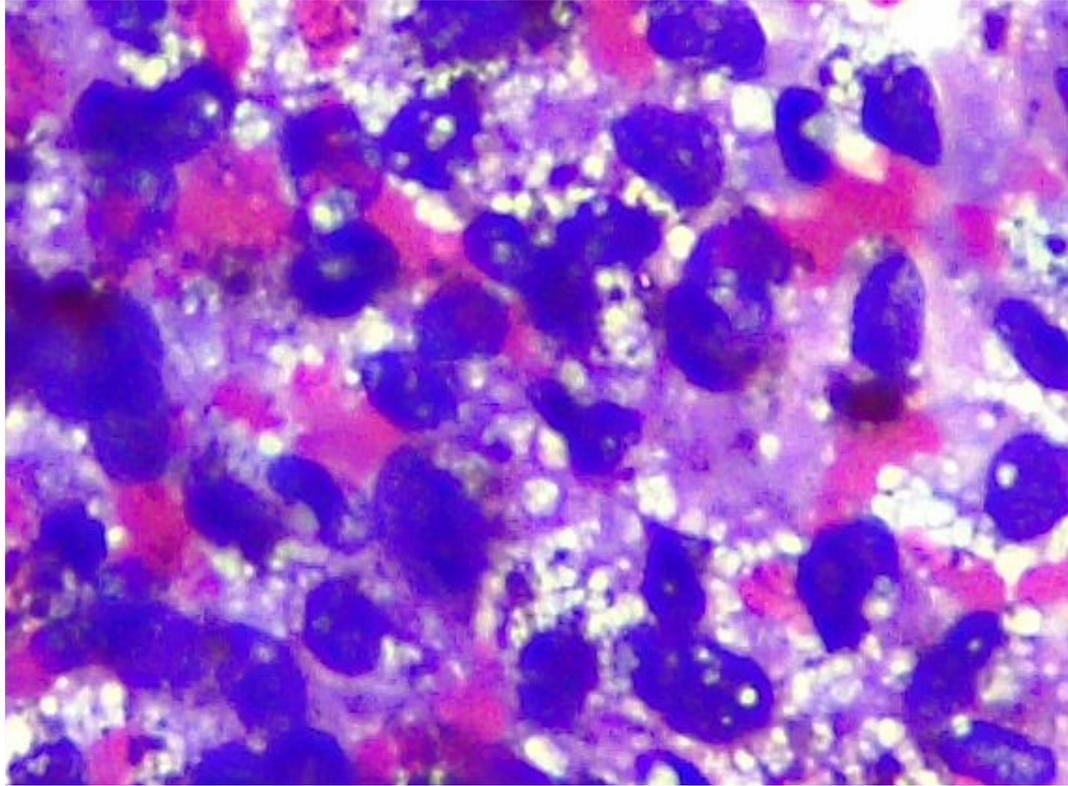




H & E stain, 4x



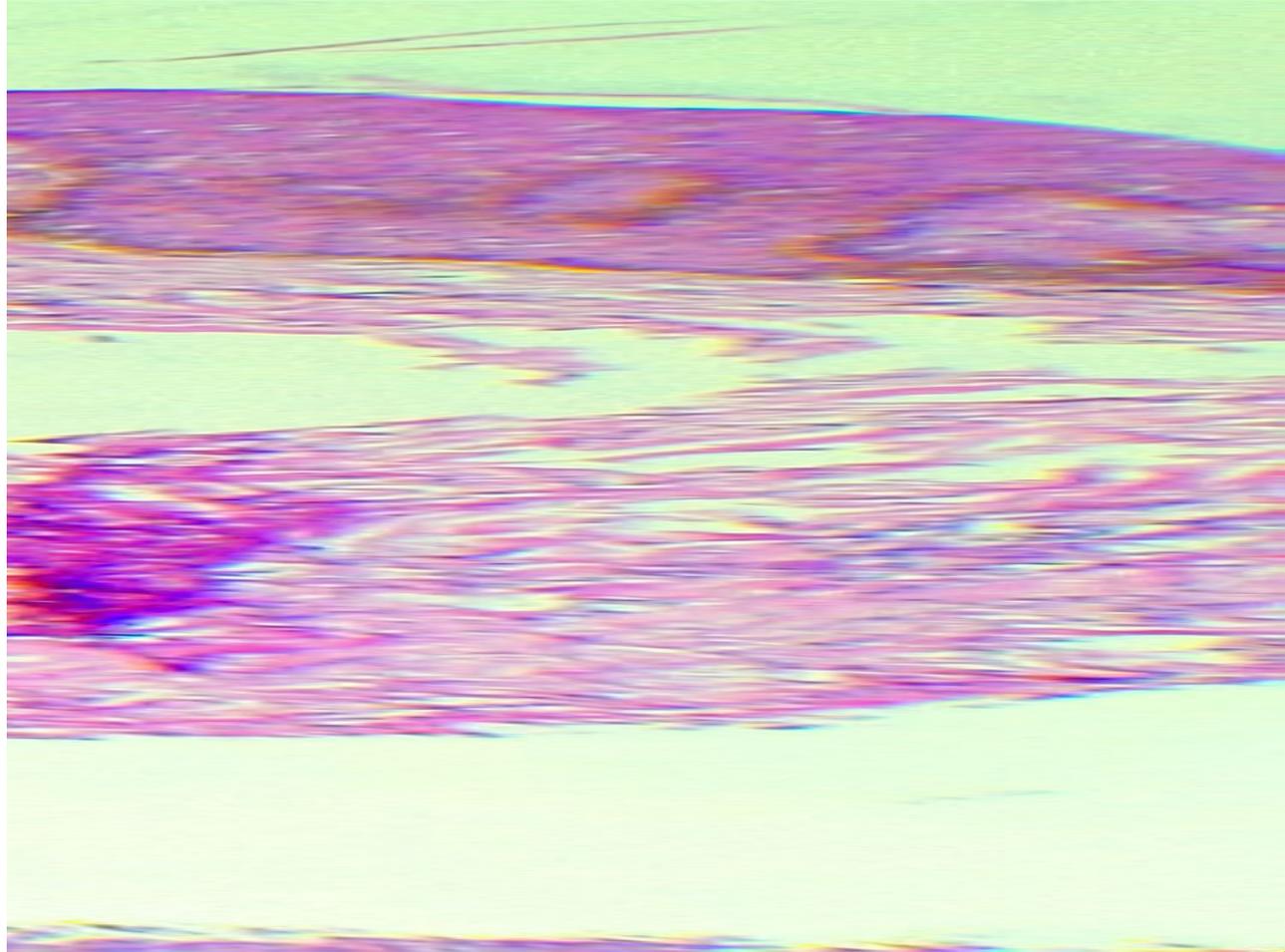
H & E stain, 10x



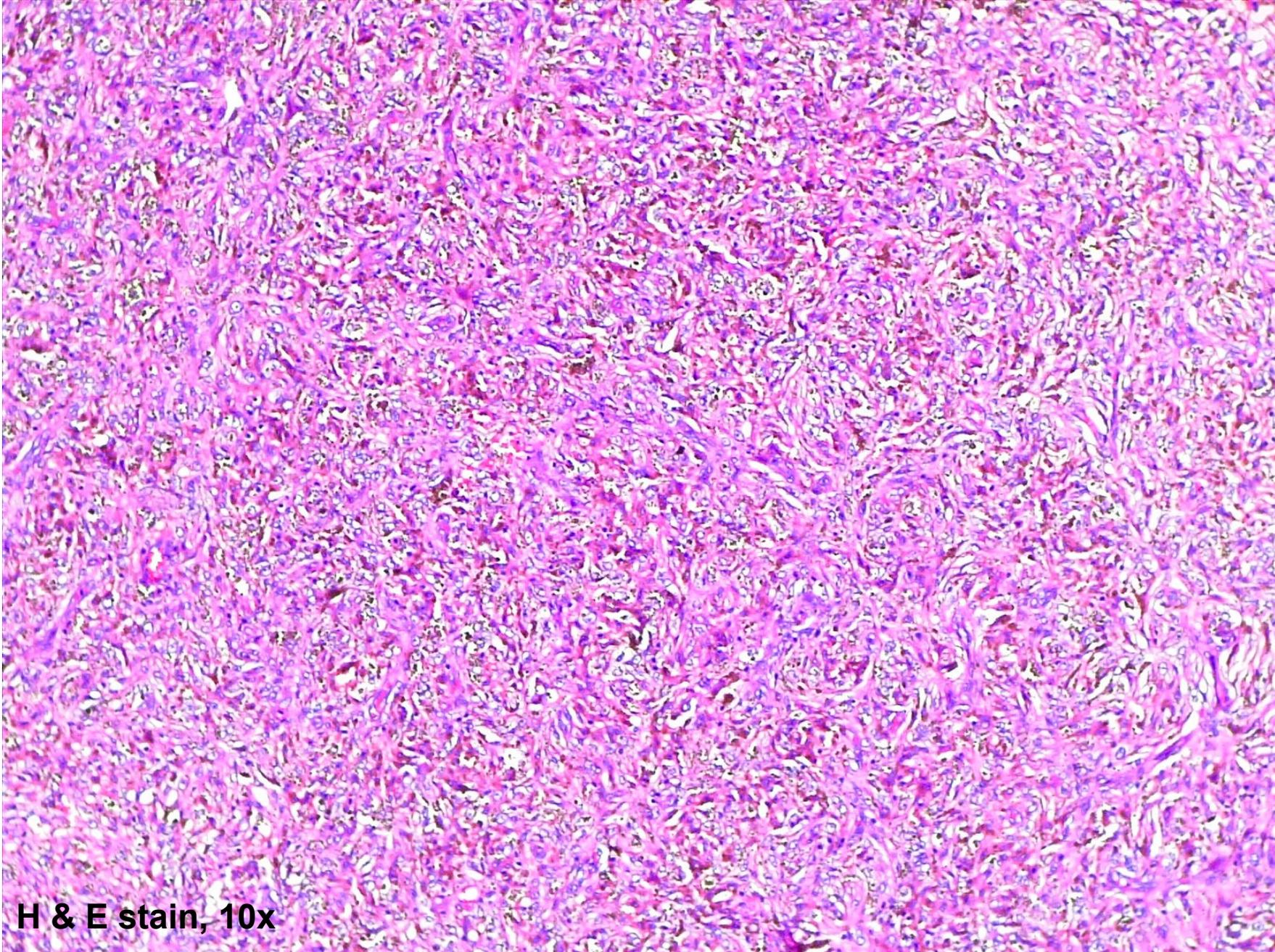
Impression- Suggestive of melanocytic
lesion

Gross description

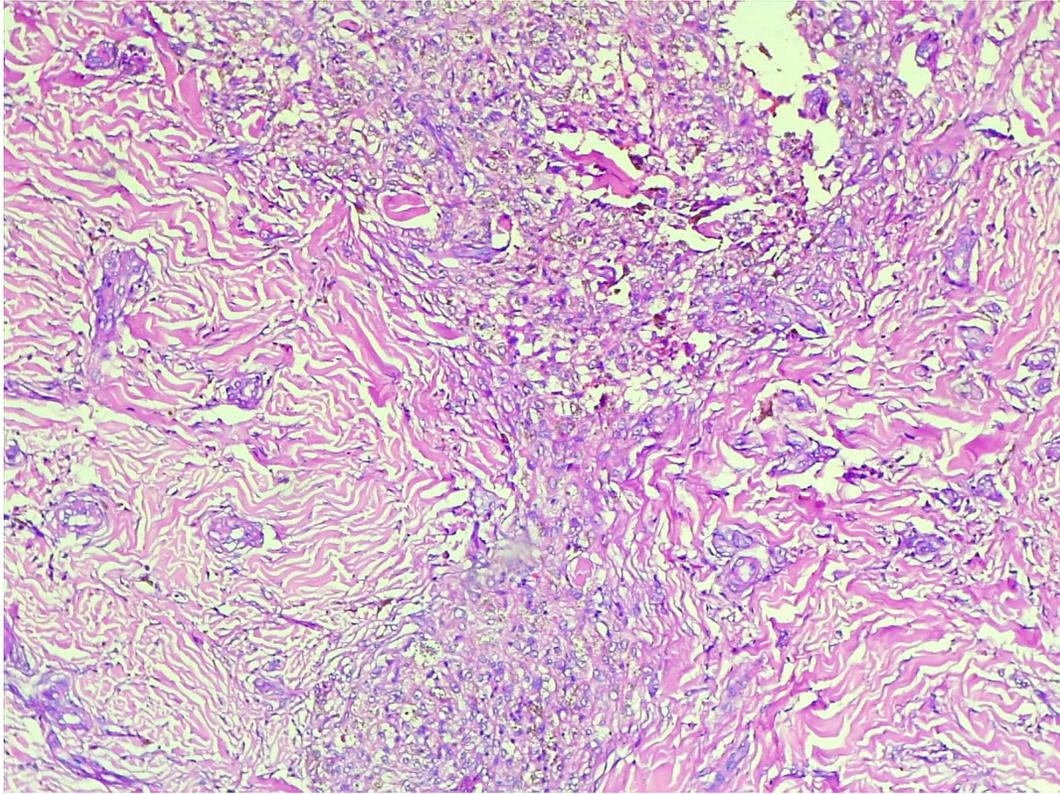
We received a single nodular skin covered tissue of size 3x 1.6 x1 cm. On cut surface, it was grey brown in color with few cystic areas.



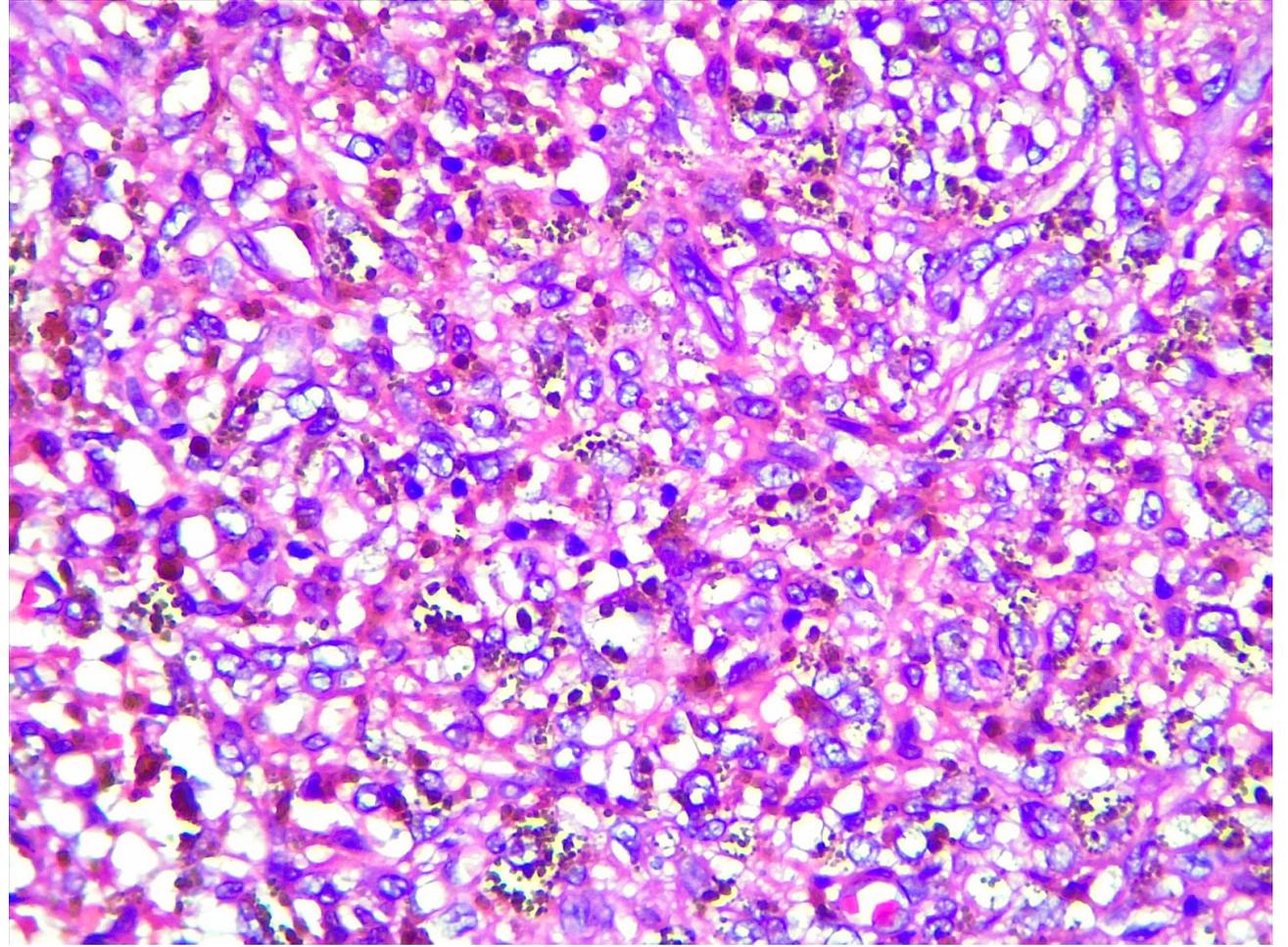
H & E stain, 4x



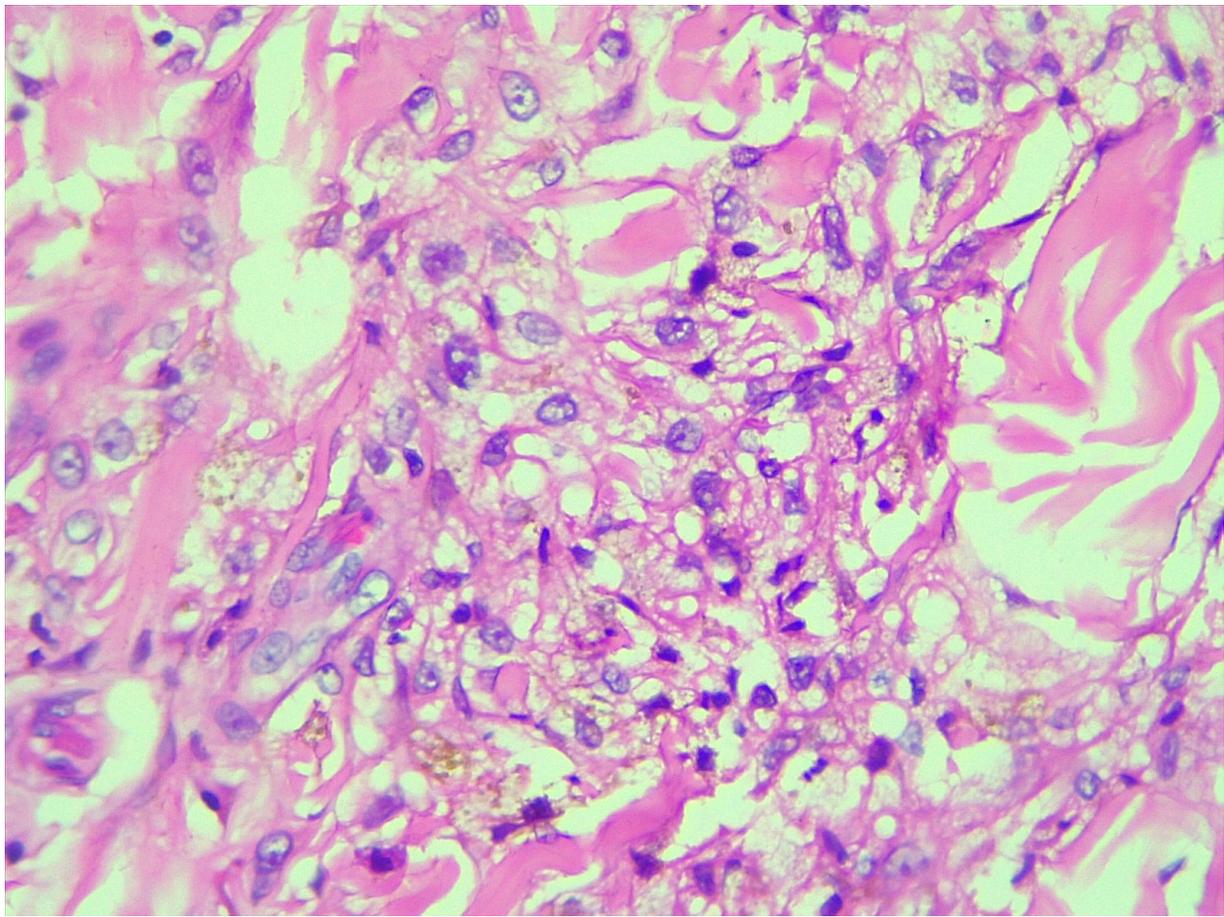
H & E stain, 10x



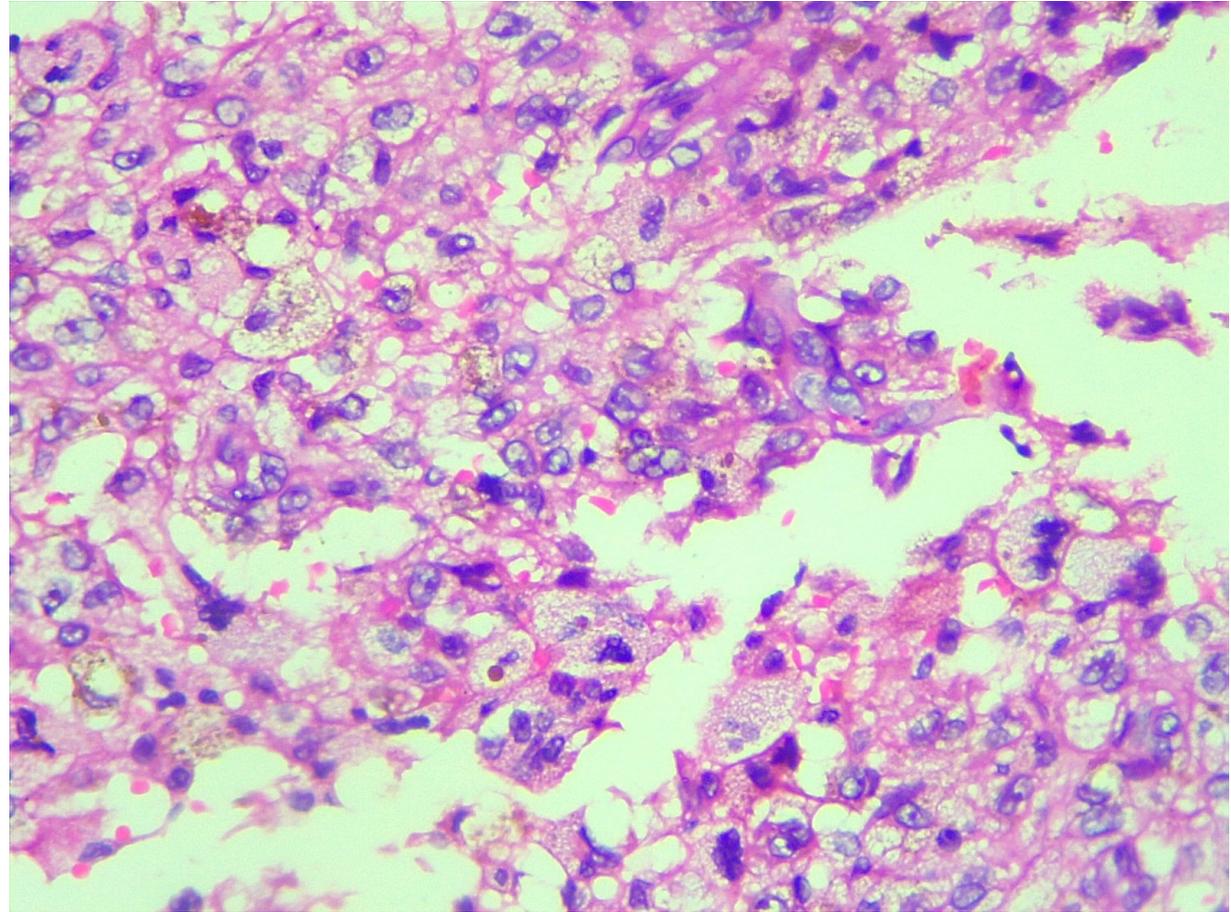
H & E stain, 10x



H & E stain, 40x



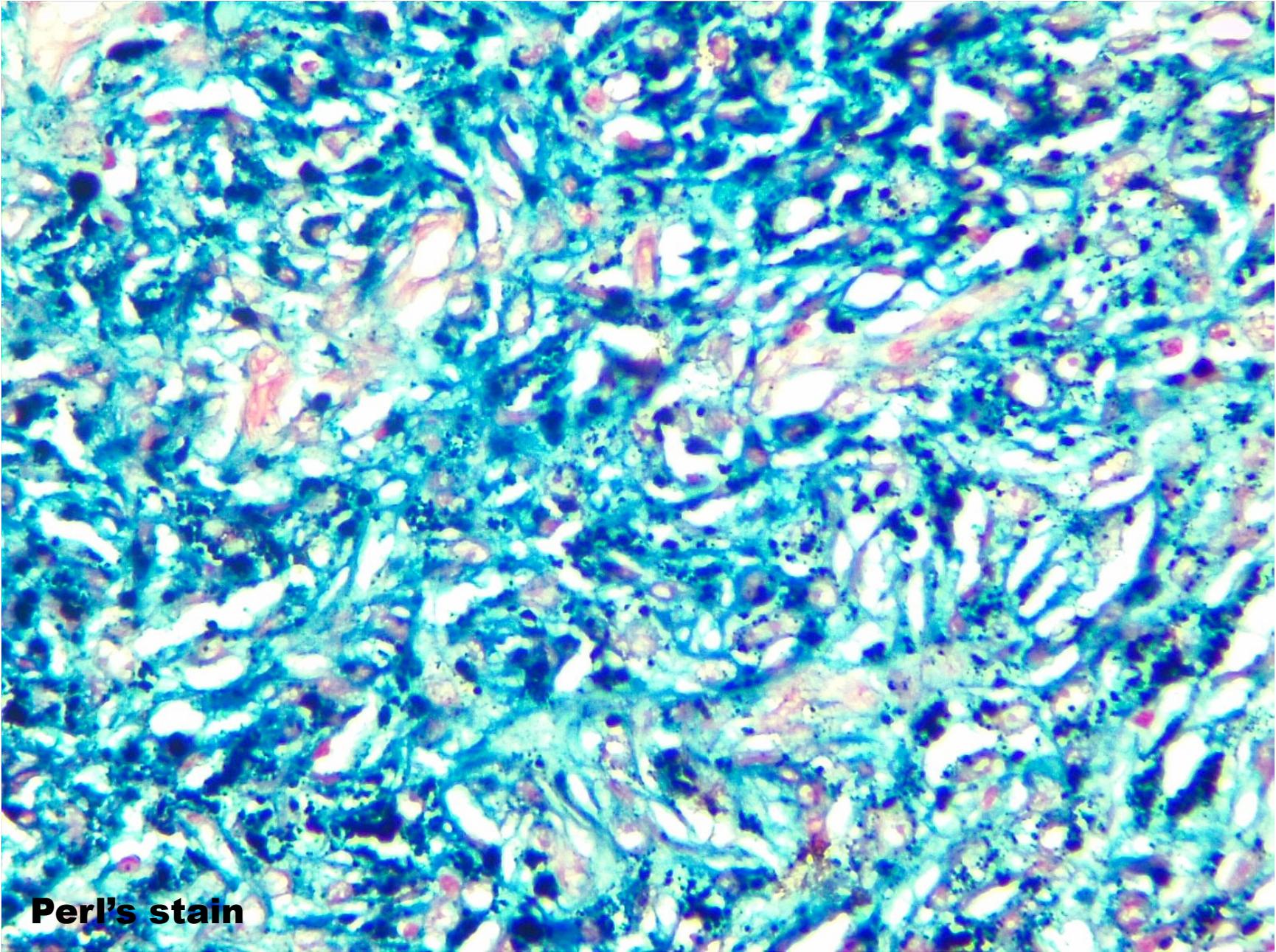
H & E stain, 40x



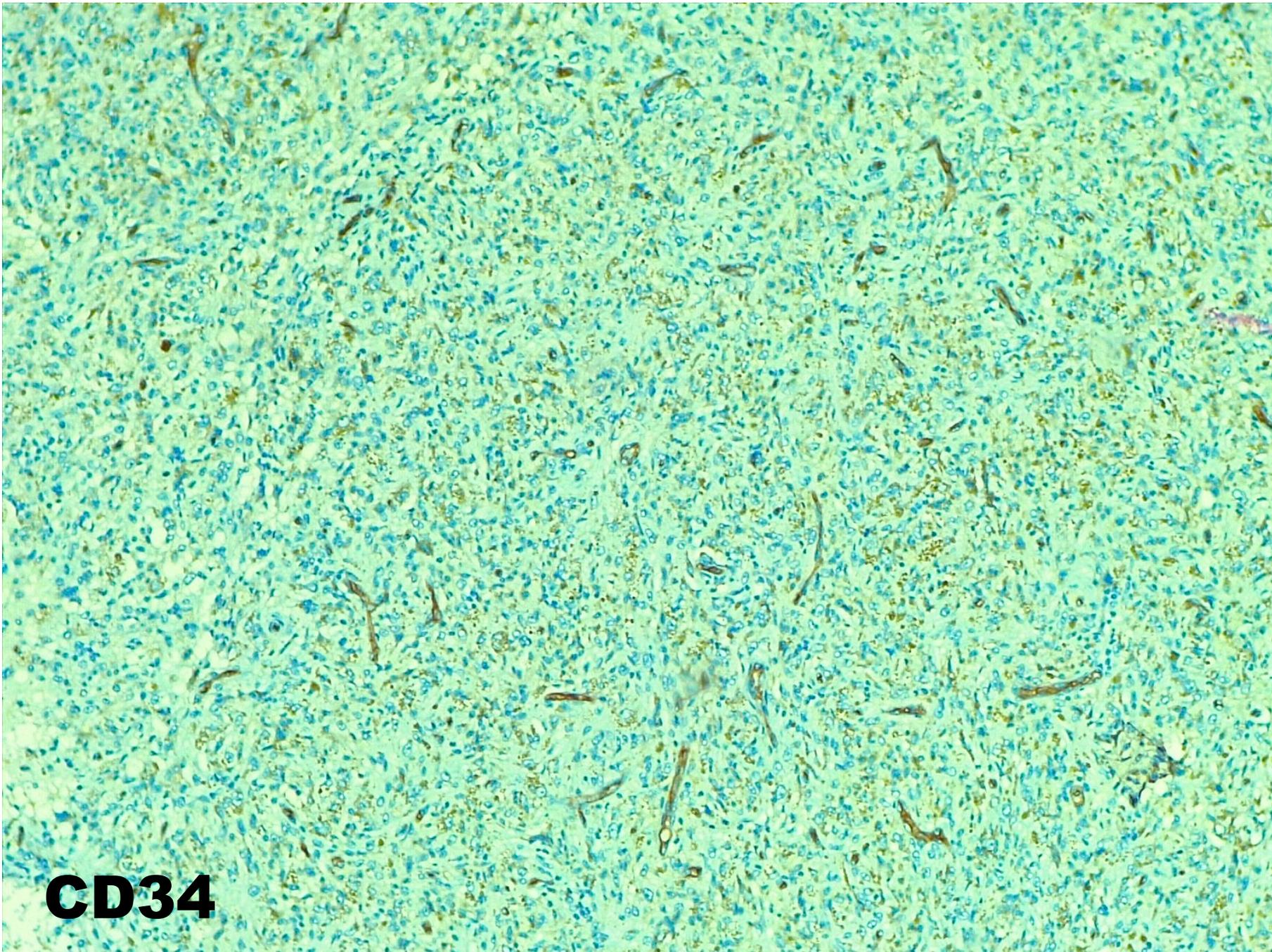
H & E stain, 40x

Differential diagnosis

1. Dermatofibrosarcoma protruberans (DFSP)
2. Dermatofibroma/Fibrous Histiocytoma
3. Melanotic lesions.



Perl's stain



CD34

Hemosiderotic Dermatofibroma

Discussion:

DERMATOFIBROMAS-

- Extremities or trunk in young adults
- Associated with immunosuppressive therapy , pregnancy, HIV, retroviral therapy
- Few millimeters to 2-3 cm

- Small, firm, solitary nodule- red to brown in color
(melanin/hemosiderin)- clinically suggest a melanocytic lesion, cut
surface- yellow/ brown (fibrous tissue/lipid/pigment)
- Variants- Cellular FH, Aneurysmal FH, Atypical FH, Epithelioid FH,
Deep FH

HEMOSIDEROTIC DERMATOFIBROMA

- Rare, <2% of DF.
- It is believed that erythrocytes extravasate from small vessels with subsequent hemosiderin production which are then engulfed by tumor cells.
- Slow and continuous extravasation of blood from intramural capillaries form vascular spaces.
- Eventually loss of stromal support and increased intratumoral pressure causes formation of dilated cavities lacking endothelial lining forming aneurysmal FH.

References:

- 1) Lagziel T, Sylvester S, Hultman CS, Asif M. Hemosiderotic Dermatofibroma: A Rare and Atypical Variant Capable of Clinically Resembling Melanoma. *Cureus*. 2020 Jan 22;12(1):e6736. doi: 10.7759/cureus.6736. PMID: 32133258; PMCID: PMC7034752.
- 2) Villarreal DJ, Luz AT, Buçard AM, Abreu L, Cuzzi T. Hemosiderotic dermatofibroma. *An Bras Dermatol*. 2017 Jan-Feb;92(1):92-94. doi: 10.1590/abd1806-4841.20173563. PMID: 28225963; PMCID: PPMC5312185.
- 3) *Lever's Dermatopathology: Histopathology of the Skin*. Edition: 12. Author(s): **David E Elder MB, ChB, FRCPA**.

Thank you