Case 32

39 year old woman presented with a right breast lesion at the 2 o’clock position, located next to a breast implant which was otherwise intact.
Factor XIIIa
**Other stains**

- D2-40 diffusely positive
- CD34 decorates blood vessels but spindle cells are negative
- SMMS highlights a few blood vessels but spindle cells are negative
  - LCA negative
- Ki67 proliferation of about 40%

**Negative immunohistochemical stains**

- S100
- MNF116, CK14, EMA
  - CD30
  - ALK-1
  - Clusterin
Diagnosis

Spindle cell xanthogranuloma
Spindle cell xanthogranuloma

• Spectrum of xanthogranulomatous reactions in tissue.
• Predominance (> 90%) of spindle-shaped histiocytes arranged in a storiform pattern.
• Other mononuclear (vacuolated, xanthomatous) and multinucleate (Touton) histiocytes are also regularly seen.
• Positive immunohistochemical staining for ~
  • Vimentin
  • CD68
  • Factor XIIIa
• Negative immunohistochemical staining for ~
  • S-100 protein
  • CD1a
Spindle cell xanthogranuloma

• Cases of xanthogranuloma in the breast are rare.
• Report of a case presenting in the breast ~


- Adult xanthogranuloma in a 74-year-old woman who presented with ipsilateral breast masses and also found to have prior cutaneous lesions.
- First reported case of cutaneous and extracutaneous adult JXG where the latter manifested in the breast as a **spindle cell xanthogranuloma**.
- Lesion composed predominantly of spindle cells with associated multinucleated giant cells and a chronic inflammatory cell infiltrate.
- Spindle cells immunoreactive for various histiocytic markers and negative for cytokeratins, S-100, CD34, factor XIIIa, and CD1a.
- In the breast, morphologic features of JXG evoked differential diagnoses of spindle cell metaplastic carcinoma, inflammatory pseudotumour, fibromatosis, myofibroblastoma, and phyllodes tumour.
Mitotic activity in spindle cell xanthogranuloma

• This case (case 32) has brisk mitotic activity.
• ‘mitotically active xanthogranuloma’.


~ mitotically active intramuscular juvenile xanthogranuloma of the upper arm in a 28-year-old woman; mitotic rate varied from 15 to 20 typical mitotic figures per 10 high-power field (HPF).