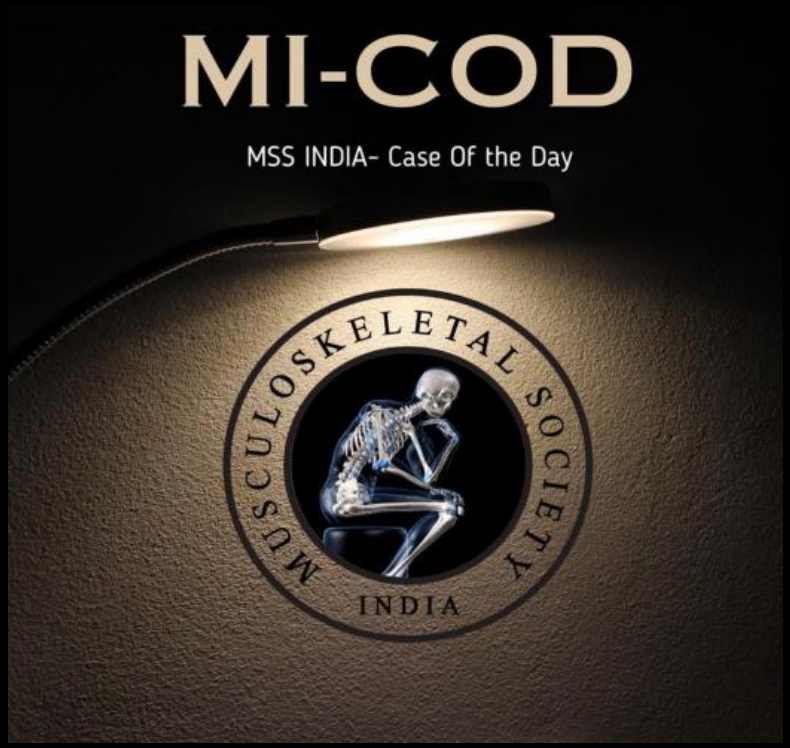
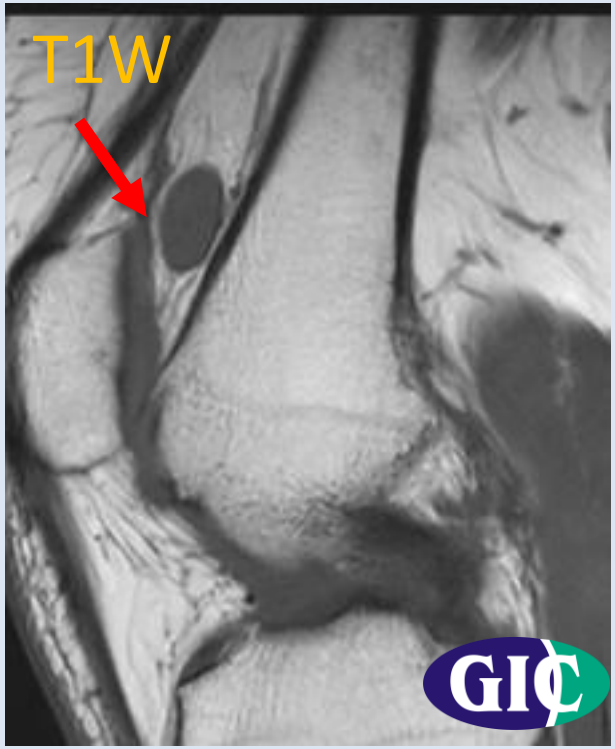
Date: 20-08-2023

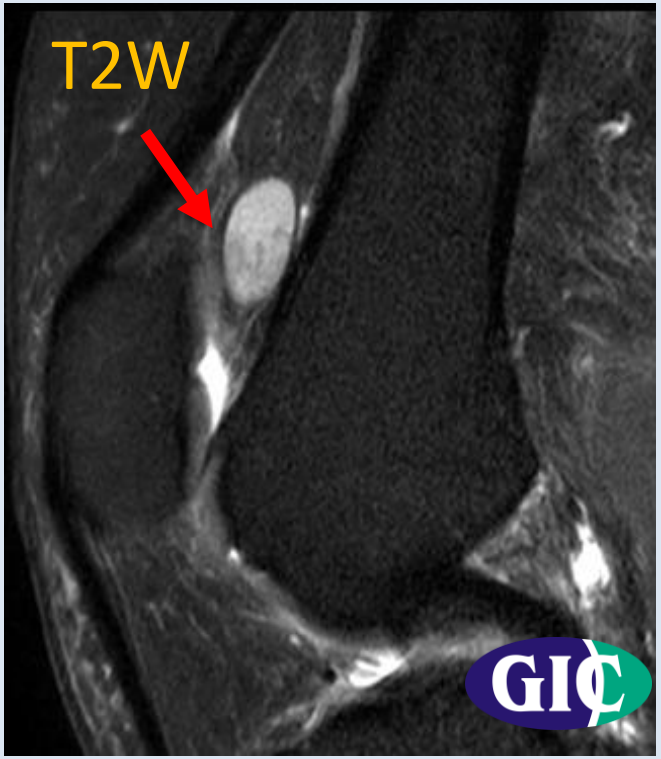
Case courtesy -DR. Drushi Patel, M.D. Consultant Radiologist,
Gujarat Imaging Centre , Samved Hospital , Ahmedabad



CLINICAL PRESENTATION

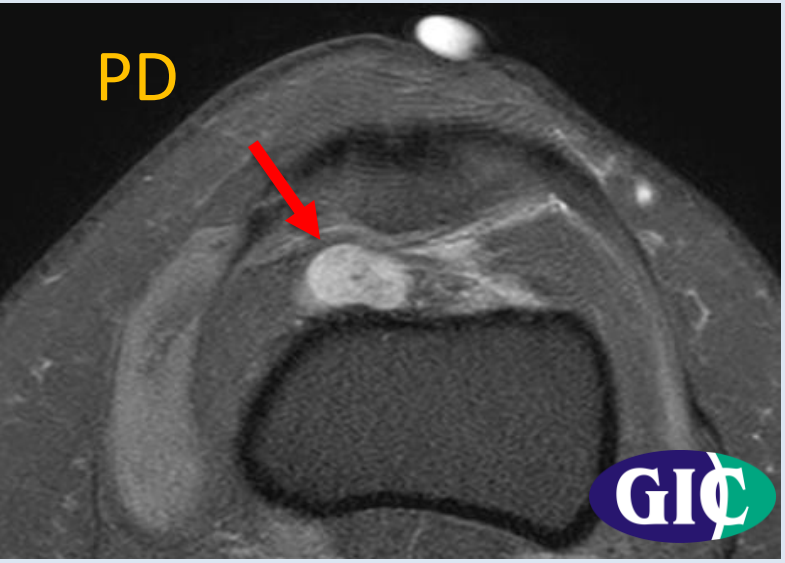
A 48 year old female presented with anterior knee pain since 3 months

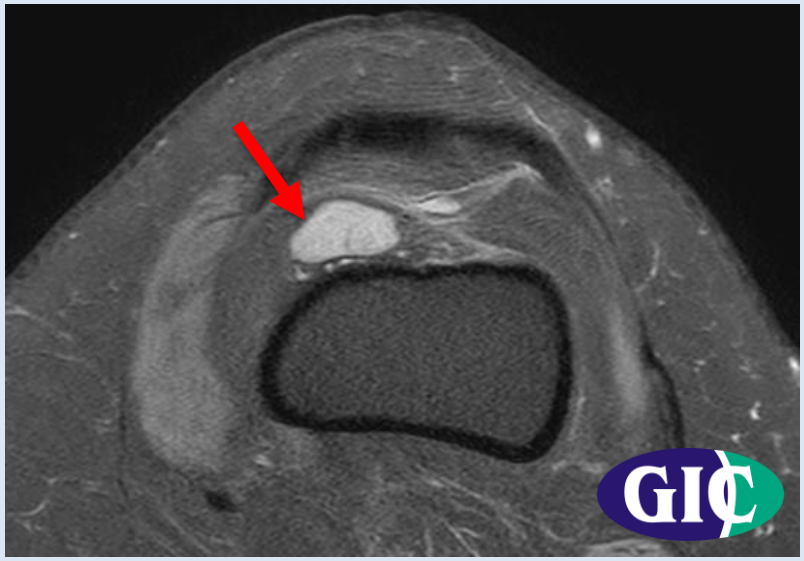




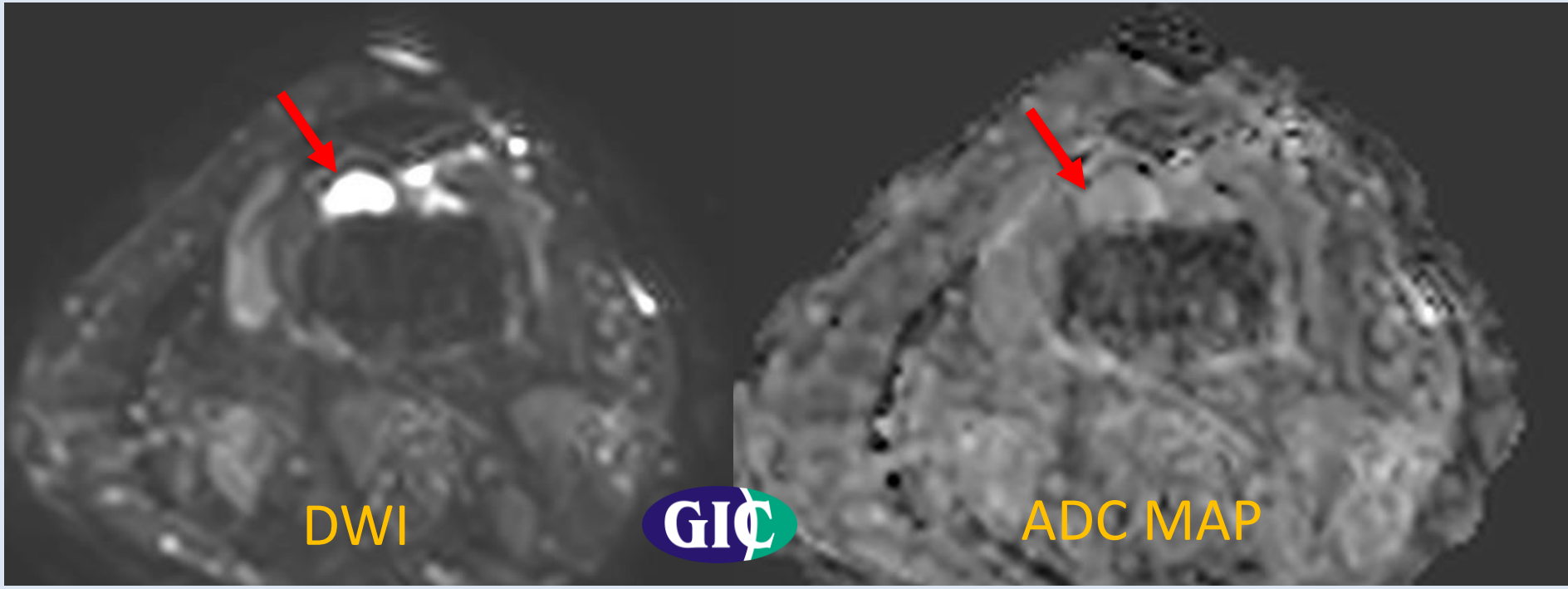
MRI

A well defined ovoid lesion measuring 15 x 8 x 15 mm , involving medial aspect of pre-femoral suprapatellar fat pad showing T2 hyperintense signal with subtle fine internal septae within.

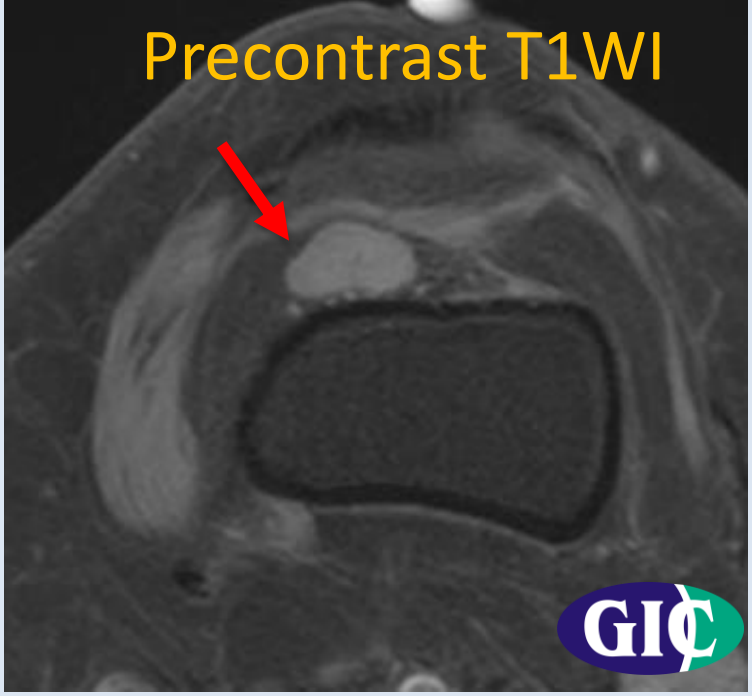


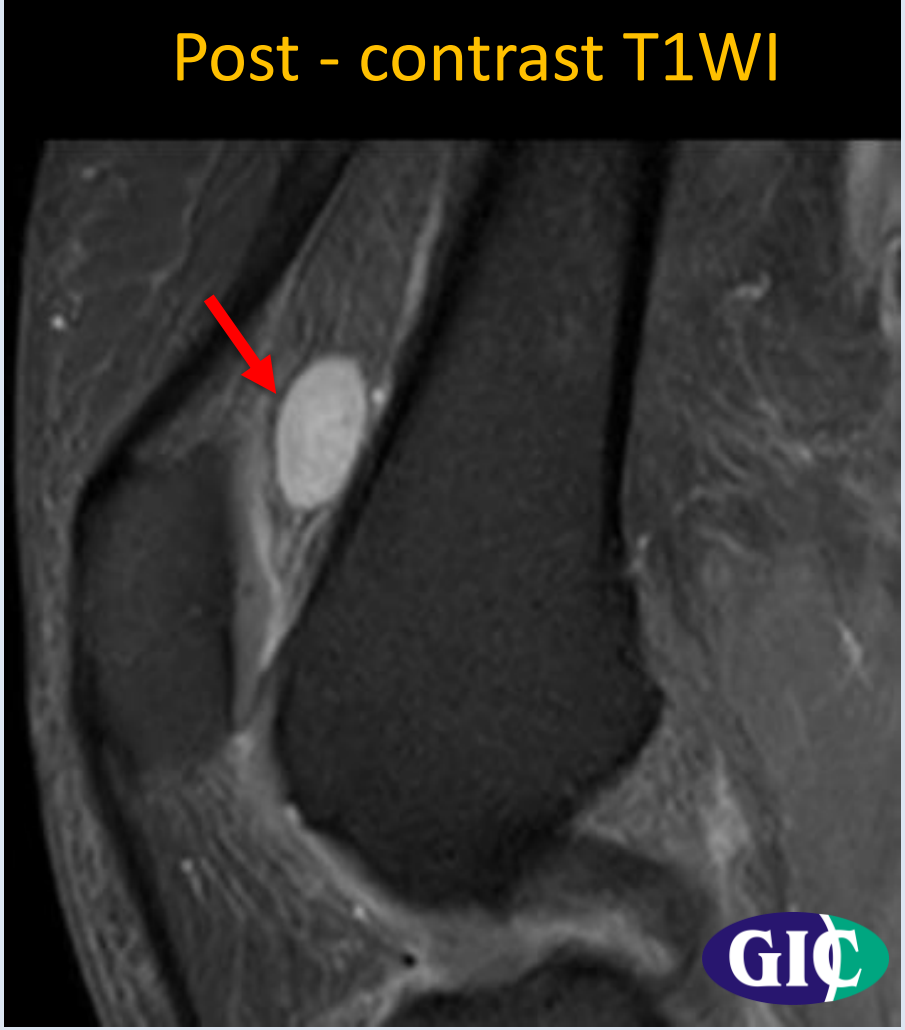


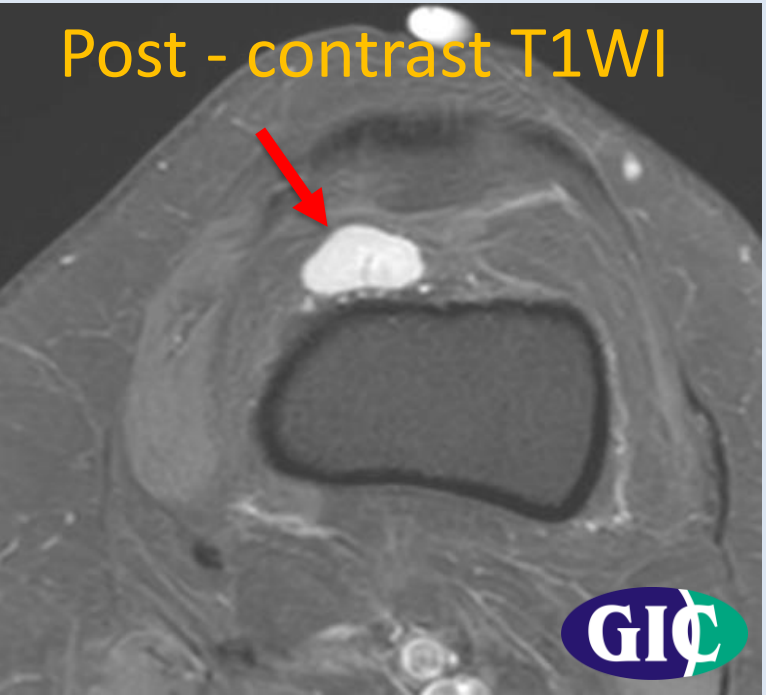
MRI



Diffusion weighted images do not reveal any diffusion restriction.
ADC value measures 2.5 x 10^{-3}mm²/sec.

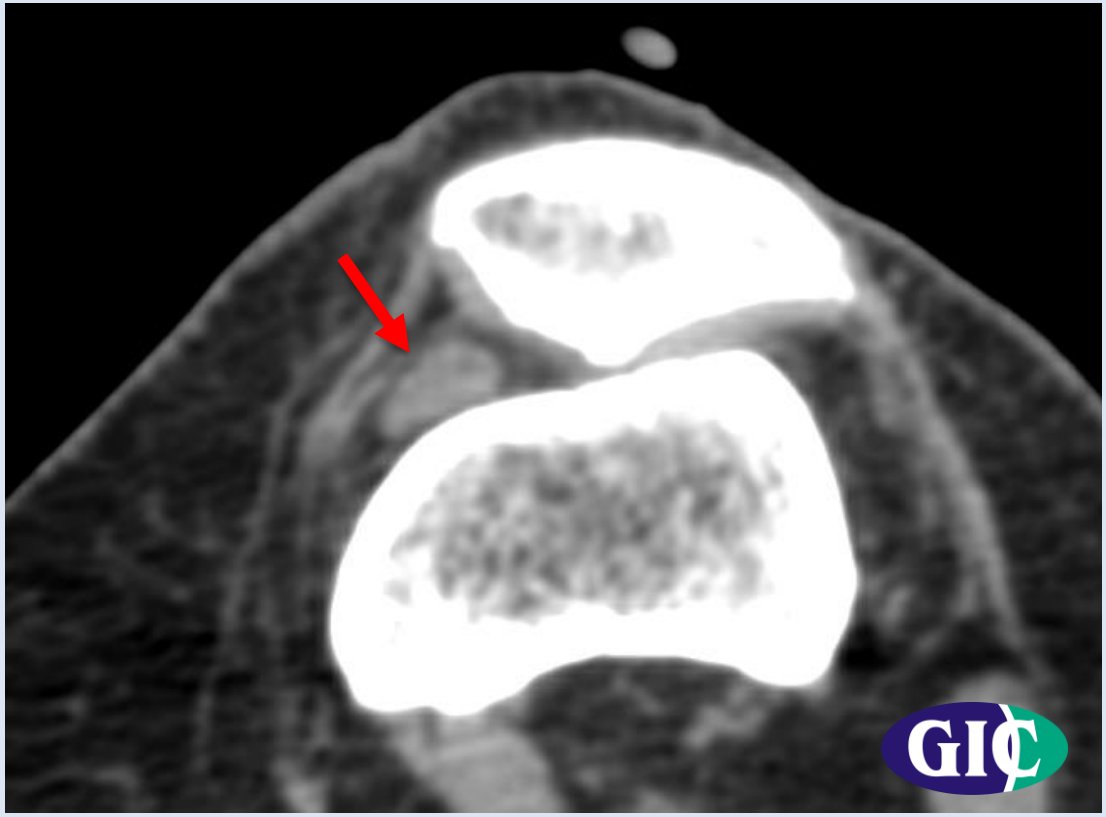


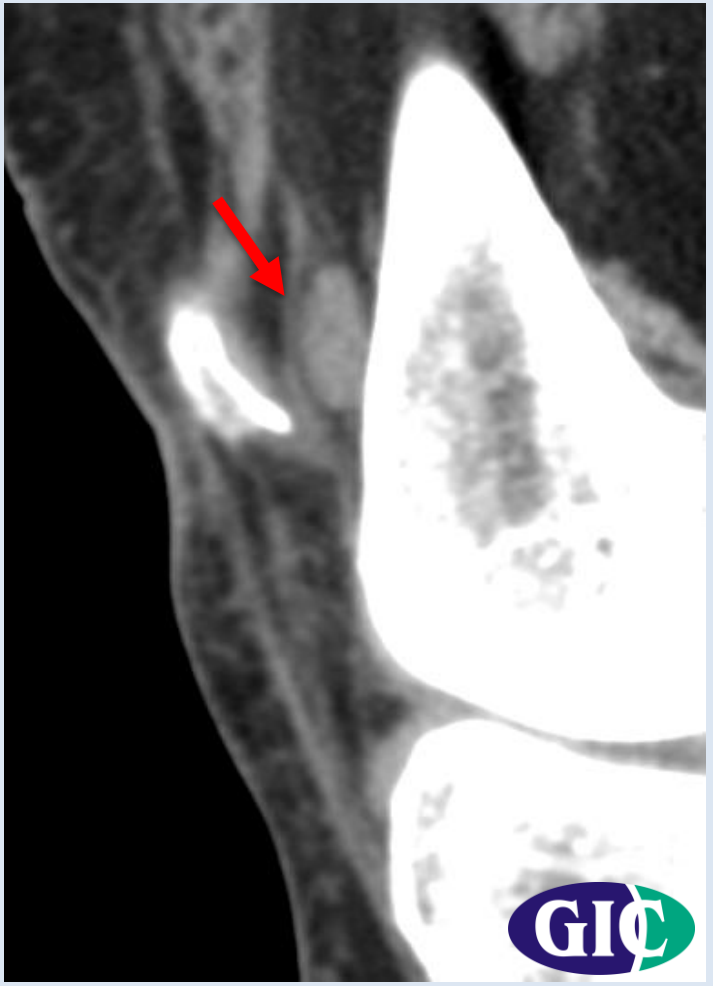




It appears mildly hyperintense on T1W images. Post-contrast study shows intense homogeneous enhancement of the lesion.

CT FINDINGS



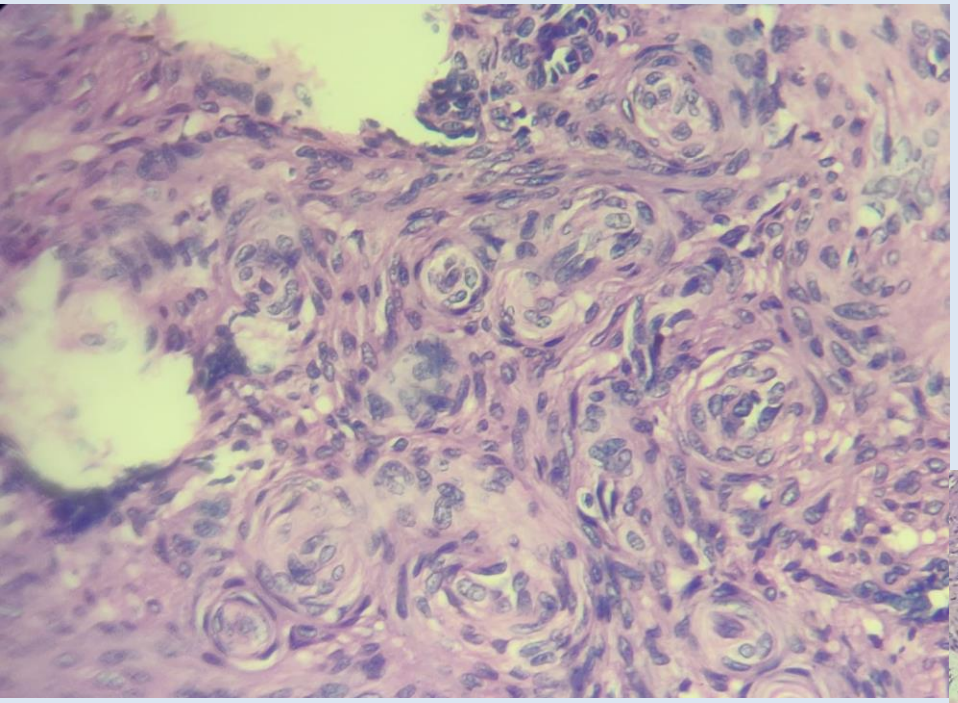


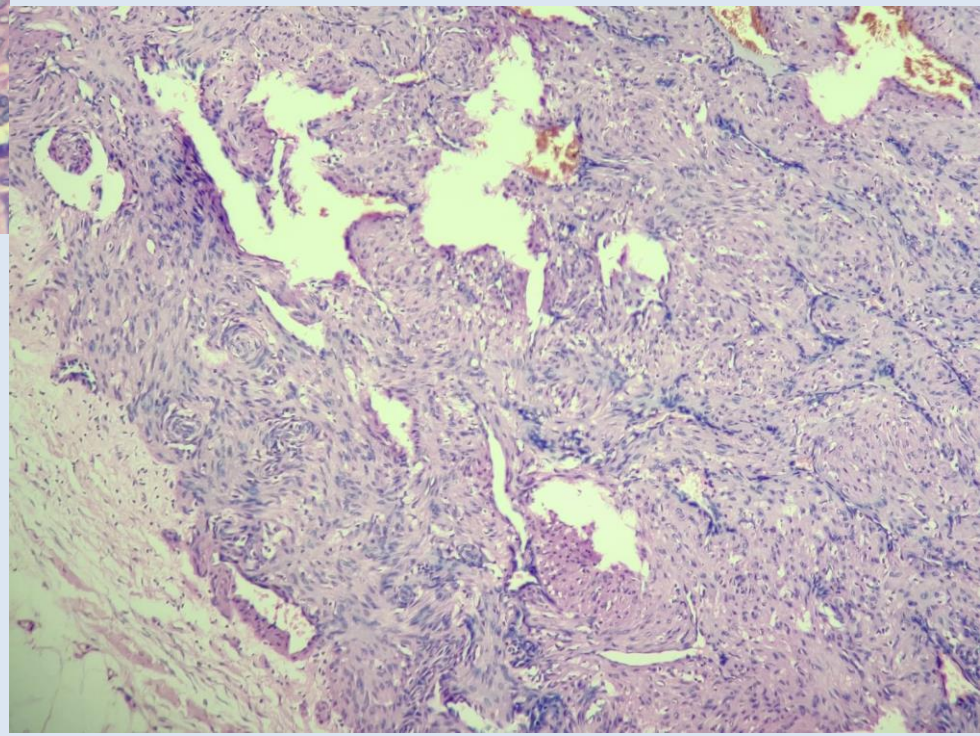
CT confirms a soft tissue density leison. No evident intrinsic calcification / internal matrix mineralization within the lesion.

IMAGING DIFFERENTIAL DIAGNOSIS

- **Myxoid neoplasm**
- **Spindle cell neoplasm / Schwannoma**
- **Extraosseous chondroid lesion**

HISTOPATHOLOGY





HISTOPATHOLOGY REPORT

HISTOPATHOLOGY REPORT

Specimen :
Suprapatellar region.

Clinical Diagnosis :
MRI - Ring enhancing lesion in suprapatellar region.
CT findings - No calcification.
C/o. Severe pain sincere last 5 years off and on in nature.

Gross Description :
Single fibro soft tissue - 5.0x3.2x2.2 cm. Cystic area seen - 3.5x1.5 cm. Cut surface - Yellowish small nodule- 0.8x0..8 cm at sutur site
Representative sections are taken in 4 blocks (A1 to A4, A4 small nodule).

Microscopic Description :
Well defined tumour with ectatic vessels and perivascular spindle cell proliferation.
No mitosis, necrosis or nucler atypia.

Diagnosis :
Myopericytoma

margins are free of tumour.
Synovial and periosteal tissue- Free of tumour.

FINAL DIAGNOSIS

MYOPERICYTOMA

MYOPERICYTOMA

- Myopericytoma is a rare, recently designated, benign perivascular soft tissue neoplasm
- Myopericytoma has only been recognized as a separate entity in the past 2 decades
- Most commonly occurs in young patients within the superficial soft tissues of the lower extremity.
- Deep-seated, visceral, and intracranial sites of disease are extremely rare

MYOPERICYTOMA

- Clinically, myopericytoma most often presents as a solitary, well-demarcated, slow-growing, and non-painful palpable nodule or soft tissue mass present for several years

- D.D – Sarcoma

- Both myopericytoma and synovial sarcoma are most common in young patients, demonstrate avid enhancement of soft tissue elements and often exhibit internal hemorrhage, and may demonstrate mineralization. Further, tumor size and the presence of peritumoral edema are not discriminating features.

MYOPERICYTOMA

- Multiple small clustered nodules histologically appearing as numerous discrete perivascular nodules infiltrating the dermal or subcutaneous tissues have been termed myopericytomatosis

- Excellent prognosis following complete surgical resection.

- very rare - malignant myopericytoma → deep-seated and infiltrative tumors with nuclear pleomorphism, brisk mitotic activity, and internal necrosis. Associated with an aggressive clinical course and often distant metastatic disease

THANK YOU