

MICOD – 02/08/2024

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MI-COD

MSS INDIA- Case Of the Day

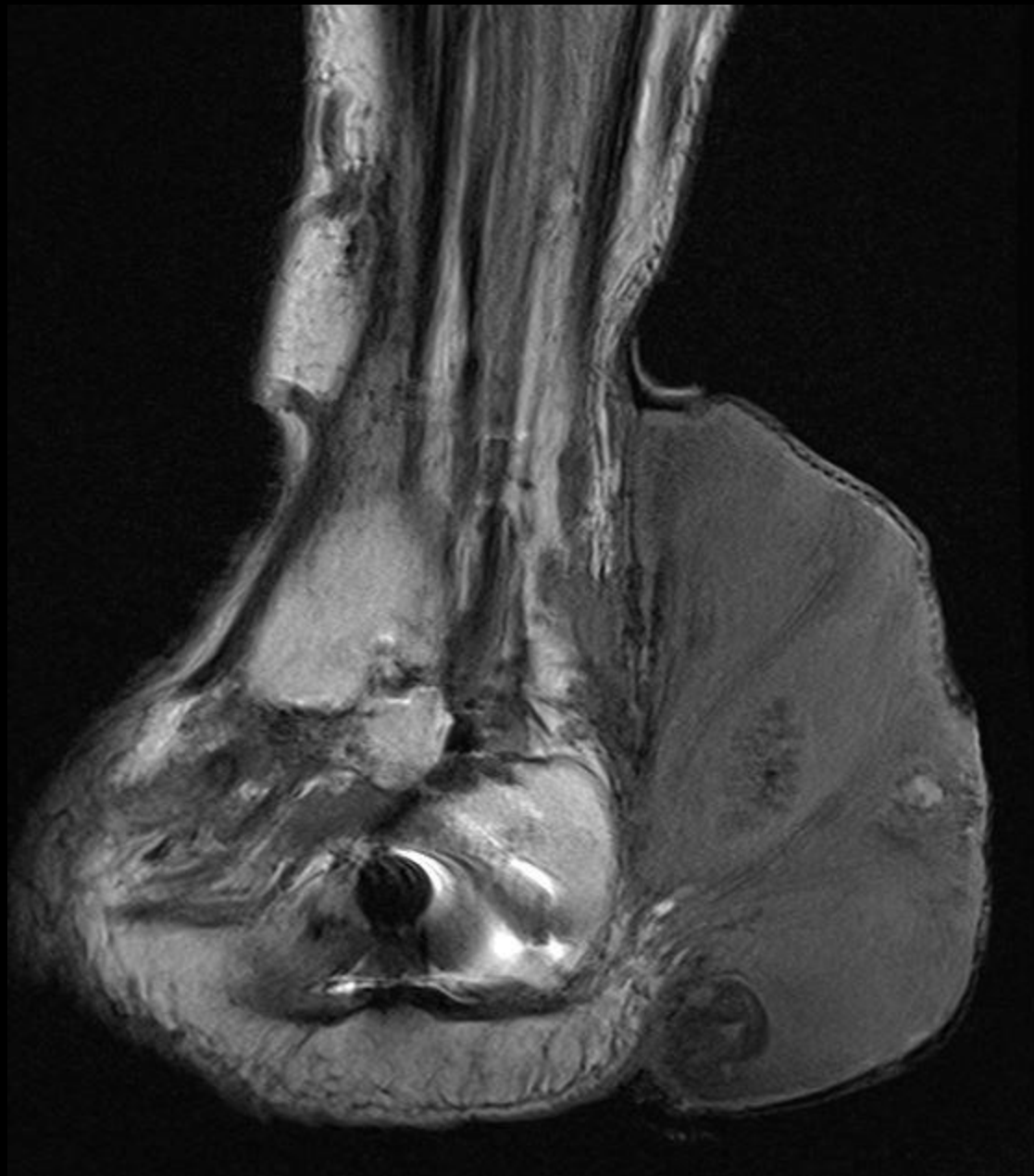




➤ Swelling at posterior aspect of ankle







PR AL



GCT OF TENDON SHEATH (Achilles' tendon)

- Giant cell tumor of the tendon sheath is also known as localized nodular tenosynovitis.
 - These tumors are idiopathic proliferative lesions that can cause bone erosions.
 - Malignant changes are rare, though reports with pigmented villonodular synovitis do exist.
- Clinical findings include soft-tissue swelling and pain.
- ✓ Most giant cell tumors are treated with surgical excision.
 - ✓ Radical excisions with negative margins are not indicated.
 - ✓ In rare aggressive lesions, local recurrence may necessitate resection and radiation therapy.

- GCTTS can be classified as localized (L-) or diffuse (D-) type.
- L-GCTTS primarily occurs in the tendon sheaths of the hand and foot and exhibits clear boundaries, whereas D-GCTTS occurs in large joints with a more aggressive growth pattern and associated high recurrence rate.

- Sonographic appearance of giant cell tumor has been described in a largely anecdotal fashion as both hypoechoic and hyperechoic.
- No calcifications were encountered. Detectable bone erosions were present in few patients.
- It is important to realize that giant cell tumors are superficial lesions usually located within the first centimeter of the field of view. Therefore, the use of high-frequency transducers to optimize imaging is necessary.
- Giant cell tumors typically showed vascularity on color Doppler sonography.

- L-GCTTS typically presents as a well-defined mass eccentrically located in association with or partially/completely enveloping a tendon.
- D-GCTTS is less well-defined and more aggressive than L-GCTTS, growing in a multinodular manner that is more irregular than that of L-GCTTS.
- GCTTS typically exhibits a low signal on T1WIs and T2WIs due to the presence of hemosiderin.
- D-GCTTS is more heterogeneous with larger areas of hypointensity on T1WI and T2WI, with enhanced heterogeneity on contrast-enhanced T1WI compared with L-GCTTS.
- The present study demonstrates that the characteristic internal signals of GCTTS, including L-GCTTS and D-GCTTS, are demonstrated clearly by MRI examination.
- MRI is currently the optimal modality for preoperative assessment of tumor size, extent and invasion of adjacent joint and tenosynovial space.



THANK YOU