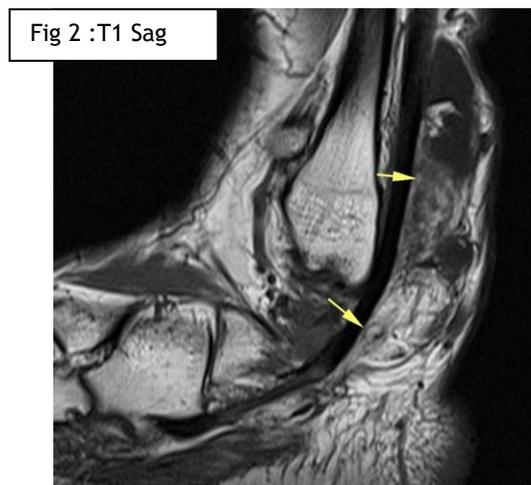
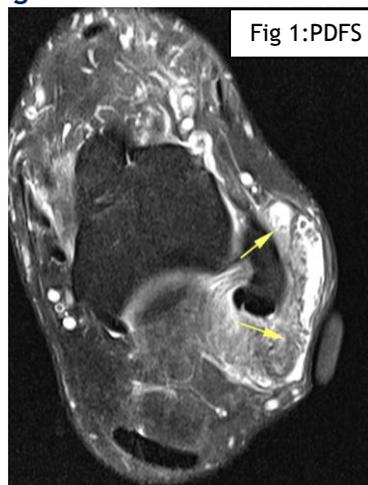


A Rare Case Report: LIPOMA ARBORESCENCE OF PERONEAL TENDON SHEATH

Introduction:

A 29 year old male presented with history of intermittent pain and persistent swelling along the lateral aspect of the left ankle past few months.No history of trauma, skin discoloration seen.No restriction in mobility of the ankle joint.

Imaging findings:



Massive amount of fluid (yellow arrow; Fig. 3) is noted distending the peroneal tendon sheath along the level of distal one-third of fibula to the insertion of peroneus longus and peroneus brevis tendons (Fig 3; pink arrow).Multiple frond like projections are seen from the wall of tendon sheath which shows fat signal intensity (Fig. 1, 2; see arrows).Post contrast MR images show mild enhancement in the periphery of tendon sheath (Fig. 4) which also appears thickened.No tear of the tendons seen. Bones under review appear normal.

Lipoma Arborescence or Synovial Lipomatosis is a rare condition which effects the synovial lining of the joints and bursae with " frond " like projections of fatty tissue.Originally described by HOFFA , the macroscopic "frond" like appearance was felt to resemble " tree in leaf ", hence the Latin name "arborescens" meaning "tree-like" or "tree-forming". The normal synovial tissue is replaced by hypertrophied villi which pathologically demonstrate mature lipocytes with coexistence of congested hyperemic capillaries and chronic inflammatory cells.Synovial fluid is free of cells and crystals.

Typically the affected patients are in their 6th and 7th decade but younger patients are also known to be affected. Clinically the patient presents with swelling which is often painless.Gradual increase in the swelling over a period of time is noted that can be clinically palpable for fluid collection.Pain and limited range of movement may be present at a later course of the disease.

Suprapatellar bursa above the knee joint is commonest location. Less affected joints include shoulder, hip and elbow joints.The involvement of the tendon sheath as in this case is even rarer.Imaging is normally performed with clinical diagnosis of tenosynovitis and MRI stands the imaging modality of choice.High frequency Ultrasonography confirms fluid collection and the floating "frond" like projection can be well demonstrated. Typical CT findings include a frond-like synovial lesion showing attenuation values in range of fat and absence of enhancement after intra- venous contrast material administration and coexistence of joint effusion.MRI shows changes of synovitis like thickening and fluid collection along the tendon sheath.The key findings include the presence of fatty tissue along the wall of tendons sheath.This appear as "frond" like projections showing fat signal on all sequences. Bones remain unremarkable, but may rarely show erosions.The condition is benign with good prognosis after synovectomy. Recurrence is not common.

MRI for its ability of better soft tissue differentiation and the their contents remains the preferred imaging modality.

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N.B: This case is authentic and from the archives of Radiance Diagnostics. For any queries/suggestions/feedback write to us at radiance@radiancediagnostics.in. Case of the month can also be accessed anytime online at **VIEW BOX** at www.radiancediagnostics.in