

Giant Cell Tumor Of The Tendon Sheath Arising From Anterior Cruciate Ligament

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INTRODUCTION:

Giant cell tumor of the tendon sheath usually occurs in the tendon sheath of the hand, fibrous tissue surrounding the joints, mucosal bursa, but rarely in those of the knee. Tenosynovial GCT are rarely intraarticular.

We describe a case of an intra-articular localized Tenosynovial giant cell tumor arising from the anterior cruciate ligament (ACL) in a 30 year female who presented with pain and recurrent swelling of her left knee without prior history of a trauma.

MATERIALS & METHODS:

The case involves a 30 years old female patient. She presented with sudden onset of recurrent left knee swelling for 18 months without any history of preceding trauma. Tests for internal derangement of the left knee yielded negative finding. MRI however was reported as localized extra articular PVNS of left knee joint.

Arthrotomy surgery of the left knee was decided and it revealed a purple colour mass attached to the distal 2/3 of the lateral and posterior lateral of the ACL.

RESULTS:

Histopathology revealed hyper cellular areas, composed of sheets of rounded or polygonal cells with a variable admixture of giant cells containing fat and rimmed hemosiderin pigments. It revealed a benign giant cell tumor of tendon sheath.

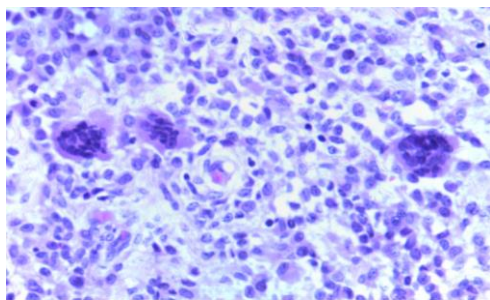


Figure 1: Sections from the left knee intraarticular mass show hypercellular areas, composed of sheets of rounded or polygonal cells with a variable admixture of giant cells.

DISCUSSIONS:

MRI had been reported as the best to diagnose this tumor, however correlation with histopathology is also a must. On MRI, GCTTS appears as a heterogeneous mass in soft parts, with a low T1 and T2 signal which corresponds to the hemosiderin deposit.

Left knee arthrotomy via lateral approach was performed in our case. Another method that can be used is arthroscopic excision, however there is no standard treatment protocol but excision with or without radiotherapy is the treatment option.

CONCLUSION:

GCTTS is a rare tumor involving large joints especially in the knee. Diagnosis can be confirmed with MRI and excision of the tumor can be done via arthrotomy or via arthroscopy.

REFERENCES:

1. Rao AS, Vigorita VJ. Pigmented villonodular synovitis (GCTTS and synovial membrane). A review of eighty one cases. J Bone Joint Surg Am. 1984; 66: 76-94