

Case Study of a Giant Cell Tumour of a Tendon Sheath

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Abstract: Giant cell tumour of tendon sheath of tendo-achillies is not a common tumour, it has high rate of recurrence. In this article we present one such tumour treated by is excision with no recurrence after 6 months of follow up.

Keywords: Giant cell tumour, Tendoachillies, excision

I. Introduction

Giant cell tumour of tendon sheath is an uncommon tumour. Commonly it arises from the tendon of muscles of hand and foot; less common are elbow and ankle. It arises from synovial membrane of large joints like knee, elbow. It has high rate of recurrence. If tumour is excised properly the risk of recurrence is much lower.

II. Case Report

35 year old male presented to outpatient department of our hospital with swelling of right ankle for 3 months. Swelling was painless to start with gradually kept increasing in size and reached the size of golf ball. Patient had dull aching pain at the time of presentation. However there was no limping while walking. No history of fever or trauma.

On examination swelling was firm, cystic, non-tender, had lobulated and well defined margins. Overlying skin was free from swelling. It was moving with Achilles tendon but not along the tendon. On active planter flexion tumour was fixed to tendon. Transillumination test was performed and was however negative, however fluctuation was positive. There was no weight loss.

X ray was done of ankle, which showed no pathology, FNAC was done which showed giant cell tumour with spindle cells.

Biopsy of tumour was done again which showed giant cell tumour with spindle cells. There was no evidence of malignancy on histopathological examination.

Diagnosis of Giant cell tumour of tendon sheath was made. Giant cell tumour was excised from achillies tendon with its capsule and sent for histopathological examination. Histopathology conformed diagnosis. Intraoperatively, tumour was lobulated, firm, capsulated, cystic, and red-brown in colour. Wound healed well and sutures were removed on tenth postoperative day. Patient was able to walk well without any discomfort and was followed regularly every month for 6 months. Till today no recurrence has been seen.

III. Discussion

Giant cell tumour of tendon sheath is an uncommon tumour. It's a benign tumour. Male and female both are affected equally. [1, 9, 6] Tumour mostly arises from tendons flexors of fingers and hand followed by toes, then commonly from tendons of face and tendon around elbow and ankle. Tumour can also arise from joints like knee, ankle, and elbow. [2, 9, 6, 7]

Mostly tumour is benign and arises from synovial membrane. Tumour is painless, non-tender, slow growing. [1, 9] It has well distinct lobulated margins. Tumour has a firm consistency. Plantar flexion is positive but Trans illumination is negative. This differentiates this tumour from ganglion. [1, 2, 6, 9]

Tumour is divided into two types i.e. local and diffuse. Local is mostly common and benign and arises from tendon sheath of fingers of hand. Diffuse tumour arises from intra-articular site. It resembles pigmented villo-nodular synovitis. Hence it is classified as pigmented villo-nodular synovitis. It is more aggressive and chances of recurrence are high. [1, 3, 6 7]

Al quatan devised a classification system for Giant cell tumour of tendon sheath to prognosticate lesions with high chances of recurrence. Tumours were divided into two depending upon whether entire tumour was surrounded by pseudo capsule (Type 1) or not (Type 2), and further subdivided into single, multilobulated and multicentric nodule. [1, 2]

Microscopically it consists of multinodular giant cell inter-spaced in background of polygonal ovoid mononuclear cells. Patches of hyalinised tissue, collagenous fibres xanthomatous foci composed of lipid laden monophages or foam cells are seen with rare or absent cellular or mitotic figure. [1, 3, 4] It has high risk of

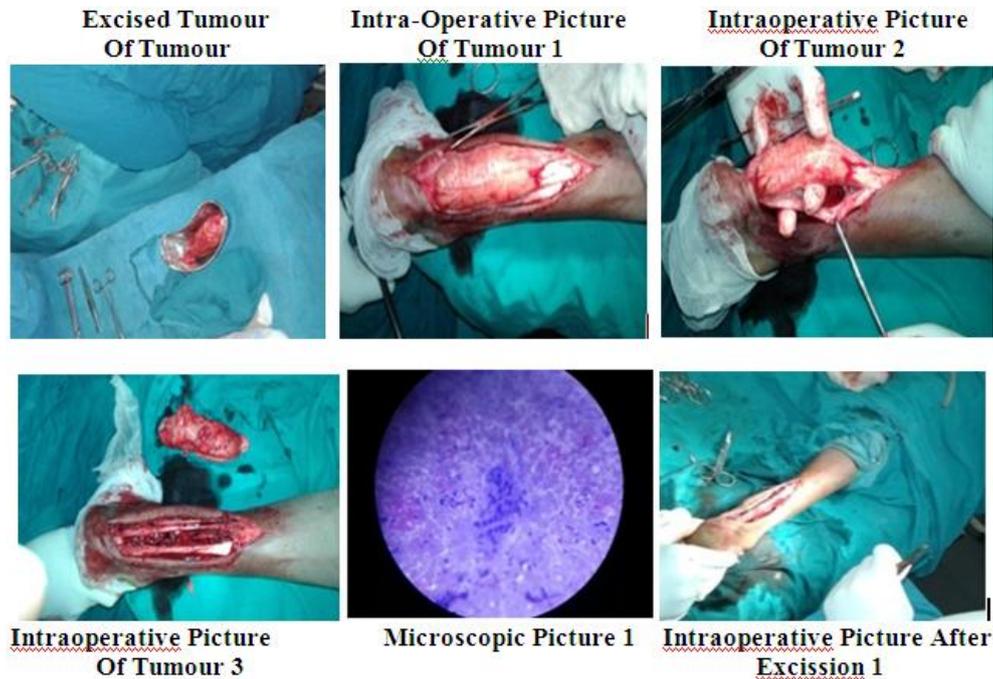
recurrence. Reported rate of recurrence is 9-44% [1]Single tumour cells or multiloculated and type ii 2nd more distant tumour. Etiology not known may be traumatic and neoplastic or inflammatory following chronic antigenic stimulation. [8]Absence of gene nn23 is associated with high recurrence rate. [1] Expression of CD 68 marker by tumour cells suggests that the tumour cells are arising from histiocytes. [5]Differential diagnosis is epithelia sarcoma, malignant fibroma, histiocytoma, neurofibroma or dermatofibroma etc. [8] MRI both T1 and T2 weighing image shows low signal intensity. [8] Drug of choice for treatment of tumour is imatinib mesylate.

IV. Conclusion

Giant cell tumor of the tendon sheath is a rare, benign tumour of hand. Nevertheless, giant cell tumour of the tendon sheath should not be eliminated from the index of suspicion in nodular swellings of the hand. The basic aim of management should be early diagnosis with operative excision. [4]

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Post Operative Scar 1



6 Months Follow Up 1

