

A Rare Case of Giant Cell Lesion Arising From Ring Finger

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Abstract: Primary giant cell tumour of soft tissue arising in a finger is rare. We present a 21 year old male presented with a swelling over the left ring finger since 2 years later diagnosed as case of a Giant cell lesion.

Keywords: Giant cell tumour, Finger.

INTRODUCTION

Primary giant cell tumour of tendon sheath is a rare soft tissue tumour. In 1972 it was described by Salm and Sissons [1] and Guccion and Enzinger [2] in two different case series. It is rare with only very few cases reported in the literature so far. It commonly involves the thigh, trunk, and upper extremities. We present one such case of giant cell tumour of soft tissue arising from left ring finger.

CASE REPORT

A 21 year old male presented with swelling over the left ring finger since 2 years. It was gradually increasing in size with no other complaints. On examination, there was 3×2 cm swelling over the dorsal aspect of the left ring finger. It was not tender, soft to firm in consistency, not freely mobile and skin over the swelling was free. Fine needle aspiration cytology revealed cluster of spindle cells and round oval cells with eccentric nucleus & moderate amount of cytoplasm with many multinucleated giant cells suggestive of giant cell lesion of soft tissue. Patient underwent excision. Histopathology report shows mass composed of interlacing & intersecting fascicles of smooth muscle cells arranged in whorled pattern. Cells exhibit mild to moderate nuclear pleomorphism, few bizarre cells & occasional mitotic figures. Many dilated & congested vessels, areas of hemorrhages, skeletal muscle fibres and large area of necrotic debris are seen. Histological features suggestive of Giant cell tumour arising from soft tissue. (Figure 1 & 2)



Fig 1: Location of the swelling

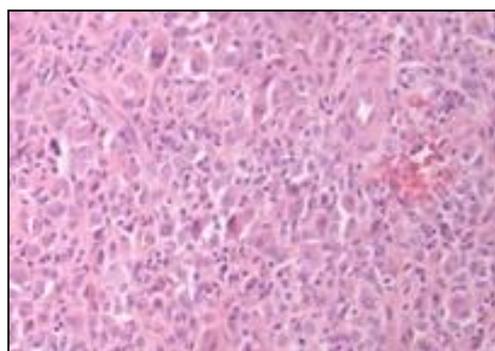


Fig 2: HPE

DISCUSSION

The Giant cell tumour of soft tissue affects patients aged between 5-84 years, with no predilection for sex [3]. The histological feature of these lesions is similar to giant cell tumour of bone. Histologically these are well circumscribed, non-encapsulated and multi nodular lesion, composed of round to spindle-shaped cells intimately admixed with scattered osteoclast-like multinucleated giant cells. It has been postulated that the osteoclast-like cells arise by fusion of the mononuclear cells [4].

Immuno histo chemically they are positive for CD68, vimentin and tartarate resistant acid phosphatase. Literature also reports positivity for Cytokeratin, smooth muscle actin and S-100. Literature has established other histologic criteria for the diagnosis of these lesions, more similar to conventional giant cell tumour of bone. According to these criteria, the tumours have a better clinical course and the depth of the lesion does not appear to be a significant prognostic factor [5]. The differential diagnosis of giant cell tumour of soft tissue includes nodular tenosynovitis, pigmented villonodular synovitis, dermatofibroma, plexiform fibrohistiocytic tumour and malignant giant cell lesion. Histopathological and immuno histochemistry of other lesions are different than giant cell tumour of the soft tissue. Wide excision with tumour free margin and close follow up is the treatment of choice for giant cell tumour of soft tissue.

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