

CASE REPORT: A RARE CASE OF HUGE GIANT CELL TUMOUR

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INTRODUCTION:

Giant Cell tumour is a locally aggressive tumour with a low metastatic potential. It occurs slightly more in female than male. The primary area of involvement includes femoral condyles, tibia plateau, proximal humerus, and distal radius. 3% of giant cell tumours are primarily malignant. The classical appearance of Giant cell tumour in radiology are eccentric lytic lesions without matrix formation (1).

REPORT :

We are reporting a case of a huge giant cell tumour on the distal of the right femur. Madam S is a 40 years old lady who presented with a painless huge swelling in her right knee for the past 3 years. She describes the swelling as progressively increasing in size over the years and she was unable to ambulate for the past 2 years. The patient had a symptomatic loss of weight for the past 2 years. Further examination, reveal a 30cm x 30cm swelling, hard in consistency with superficial dilated veins. The range of motion of the right knee is limited.

Xray shows huge lytic lesion distal right femur with cortical breakage. MRI right knee shows a heterogenous solid cystic mass measuring 14x17x17cm distal right femur with extension to the right tibia plateau.

The tumour was thought to be malignant until the HPE result revealed giant cell tumour with no malignant transformation. CT TAP revealed no distant metastasis.

Patient preferred long femoral stem knee replacement surgery rather than above knee amputation. Hence, she was started on bisphosphonate, calcium lactate and calcitriol to consolidate the lesion while waiting for her final surgical decision.



Figure 1

Figure 2

Figure 3

Figure 1: Huge mass at right knee region with superficial dilated veins

Figure 2&3: X-ray showing large osteolytic lesion at distal of right femur

CONCLUSION:

Management of giant cell tumour is based on the Campanacci classification. Adequate resection and endoprosthesis procedures are the main treatment modalities together with adjuvant bisphosphonate or denosumab. However, her lesion was classified as Campanacci class 3 because of evidence cortical breakage. Limb salvage procedure become challenging as it is difficult to resect the tumour with clear margin. The use of bisphosphonates may be recommended as an adjuvant therapy to reduce the incidence of postoperative recurrence (2).

REFERENCE:

1. Heijden V et al 2020 Current Opinion in Oncology 32(4): p 332-338. Current concepts in the treatment of giant cell tumour of bone DOI: 10.1097/CCO.0000000000000645
2. Moshen M et al. Beni-Suef Univ J Basic Appl Sci (2022) 11:110. Effect of bisphosphonates on bone giant cell tumor recurrence: a meta-analysis. <https://doi.org/10.1186/s43088-022-00292-2>