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Chondroblastoma of the Talus: A Rare Case Report

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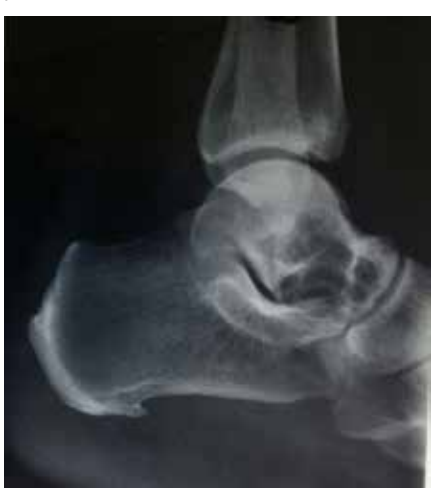
ABSTRACT

Chondroblastoma is a rare benign cartilaginous neoplasm that accounts for approximately 01% of all bone tumors. It characteristically arises in the epiphysis of long bone, particularly humerus, tibia and femur. Chondroblastoma in tarsal (talus) bone is a rare entity. Chondroblastoma usually occur in 2nd decade of life before obliteration of epiphyseal line with slight male predominance. Diagnosis is obtained from histopathological examination. We report an unusal case of benign chondroblastoma of talus in a female patient managed successfully with curettage and bone cementing.

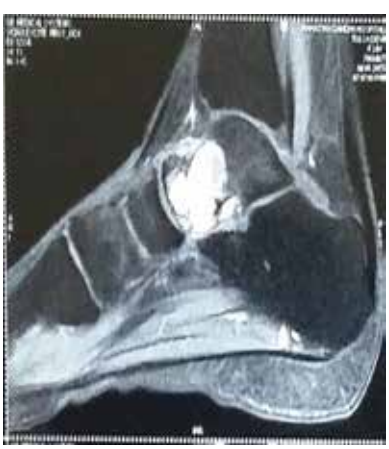
KEYWORDS : Chondroblastoma, Talus, Curettage and Bone cementing

Introduction:
Chondroblastoma is a rare, benign tumour of immature cartilage cells. The talus is an uncommon location for chondroblastoma. We present a case of chondroblastoma of talus was managed successfully by curettage and bone cementing.

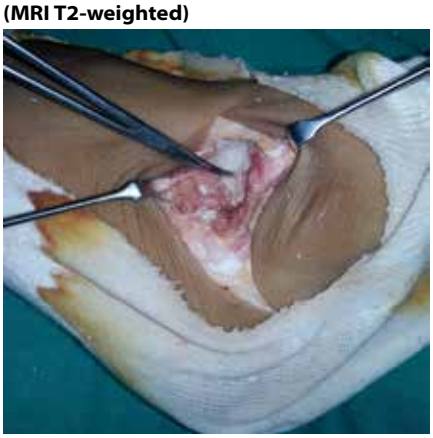
Case Report:
A 24 year female patient presented with left ankle pain for 1 year.On examination there was no swelling but deep tenderness was present on anterior aspect of ankle. Range of movements of ankle were normal. On imaging(radiography and MRI scan) an osteolytic lesion in the body of talus was revealed. FNAC was suggestive of chondroblastoma. An open biopsy, curettage and bone cementing performed and specimen was sent for histopathology examination. Histopathology report confirmed the diagnosis of chondroblastoma of talus bone. At one year follow up the patient is ambulating normally without any pain or evidence of recurrence.



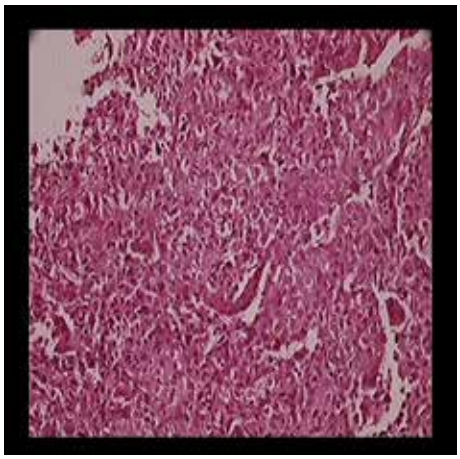
(Pre-operative radiograph)



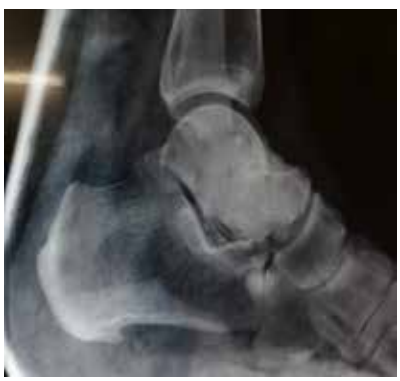
(MRI T2-weighted)



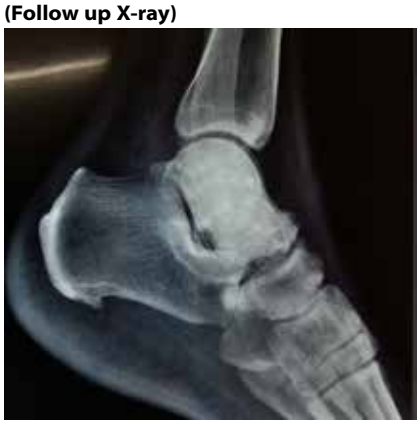
(Intra-op picture)



(Histology picture)



(Follow up X-ray)



(Final Follow up-Xray)

Discussion:

Chondroblastoma of talus is a rare, benign tumour of of immature cartilage cells (1). It accounts for 1% of all benign bone tumours (2). Also known as Jaffe and Lichtenstein lesions(3).Commonly occurs in 2nd decade of life with slight male preponderance. It usually arises in the epiphysis of long bones particularly humerus, tibia and femur before obliteration of epiphyseal line.

Chondroblastoma of foot commonly found in the posterior subchondroal areas of talus and calcaneum as well as in calcaneum epiphysis (4).X-ray shows well demarcated radiolucent lesion.MRI shows very high signal intensity on T2-weighted scans (5).

Histopathology picture shows collection of chondroblasts surrounded by a matrix of immature fibrous tissue and giant cells(6).Treatment of the primary lesion consist of complete curettage and bone grafting(7).Recurrence rate is around 10-40%.Managing chondroblastoma of talus with curettage and bone cementing has shown good results.

Conclusion:

Chondroblastoma of the talus is a rare condition and it should be considered in differential diagnosis in lytic lesions of the talus. A thorough history ,physical examination and proper radiographic studies are mandatory. Diagnosis is confirmed by imaging study supplemented with open biopsy. Properly performed extensive curettage and bone grafting is a good option for complete removal of tumor.

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