

Images in clinical medicine



A rare case of giant cell tumor of medial epicondyle of right elbow managed with sandwich technique

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A rare case of giant cell tumor of medial epicondyle of right elbow managed with sandwich technique

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Image in medicine

Giant cell tumor is a benign, locally aggressive tumor usually found in the epiphyseal region of the long bones. The most commonly involved areas are distal femur and proximal tibia. Tumors are quite rare surrounding the elbow joint, and especially the giant cell tumors are very uncommon in the elbow joint. A single case report of a giant cell tumor of the isolated medial humeral condyle was found in the literature. A rare case of a 40-year-old lady with pain and progressively increasing swelling in her right elbow over a period of 8 months presented to Orthopaedics Outpatient Department. The patient also had significant restriction of elbow range of movement (70 to 90 degree). A plain radiograph

revealed an expansile radiolucent lesion in the epiphyseo-metaphyseal region in the medial aspect of the distal humerus, with the surrounding rim being thin but still intact. The CT of the elbow revealed a solid lesion of size 4.6 x 3.5 x 4.5 cm in the medial aspect of the elbow with no breach of cortex. Biopsy of the lesion revealed small clustered population of multi-nucleated

osteoclastic giant cell consistent with the diagnosis of giant cell tumor. Extended tumor curettage with bone cementing was performed by sandwich technique through a medial approach. On 1 year follow-up, there has been no evidence of recurrence. The elbow range of movements is around 30 to 100 degrees.

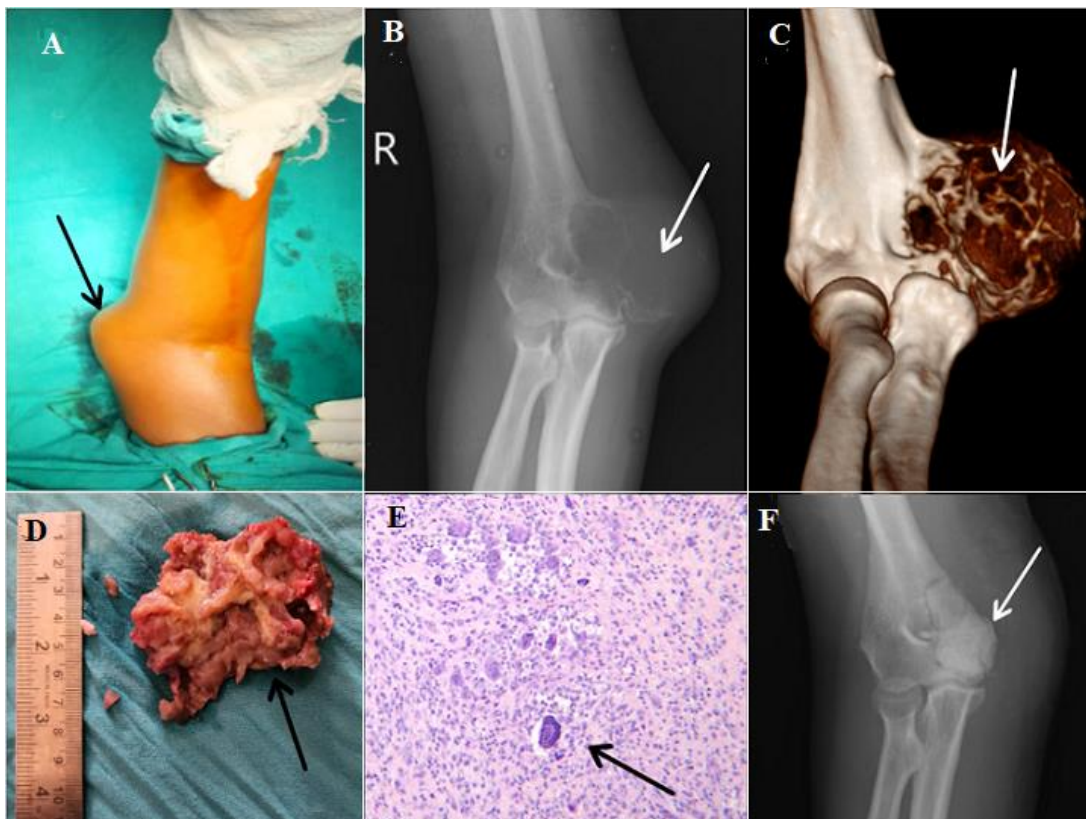


Figure 1: A) deformity over medial aspect of right elbow; B) plain radiograph of right elbow joint shows an expansile radiolucent lesion in the epiphyseo-metaphyseal region in the medial aspect of the distal humerus, with the surrounding rim being thin but still intact; C) computed tomography scan of right elbow joint shows solid lesion of size 4.6 x 3.5 x 4.5 cm in the medial aspect of the elbow with no breach of cortex; D) excised tumor tissue from medial aspect of distal humerus; E) histopathological evidence of multi-nucleated osteoclastic giant cells; F) post-operative radiograph of right elbow joint managed with bone cement and bone graft by sandwich technique