A rare case of osteochondroma of Patella- Case Report

S. Vijayakumar

Professor, Dept. of Orthopaedic Surgery, Gokulam Ortho Hospital, Tamil Nadu

***Corresponding Author:**
Email: svijayakumar71@yahoo.com

Abstract

Tumors involving the patella are very rare. Only a few studies have been reported. The commonest benign tumor involving the patella is giant cell tumor. We in our study report a case of osteochondroma involving the patella. A 23 year old male patient presented with swelling of left knee of ten year duration. Radiology showed an ill-defined bony mass attached to the patella. We had done an excision of the lesion. The histopathological report was osteochondroma. Two cases reports from Medline have reported about osteochondroma involving patella [9,10]. The case is reported for the rarity of presentation.

Key words: Bone tumors, Patella, Osteochondroma Patella

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Introduction

Tumors involving the patella are very rare. In a study by Ferguson et al[5] it has been reported that only eight cases of primary tumour involving patella were identified in a series of 587 patients treated for benign or malignant bone tumors. In these eight cases giant cell tumor was found to be very common. Osteochondroma involving patella has been very rarely described. Two case reports have been reported in pubmed about osteochondroma involving patella.[9,10] Osteochondroma patella has been described as part of dysplasia epiphysealis hemimelica of patella[3,4] We in our study describe a case of osteochondroma involving the patella.

Case Report

A 23 year old male patient presented with swelling of left knee of ten year duration. There was no history of any other joint involvement. The swelling was associated with pain. Swelling was noticed first by the patient. Pain developed later. On examination a hard swelling adherent to patella was noted. Terminal movements of knee were restricted. Routine blood investigations were normal. Radiology showed an ill-defined bony mass attached to the patella. We had a differential diagnosis of calcified bursitis calcified hematoma, myositis ossificans and osteochondroma. We had done an excision of the lesion. The histopathological report was osteochondroma. After two year follow up. There was no recurrence of tumor and there was no functional disability.

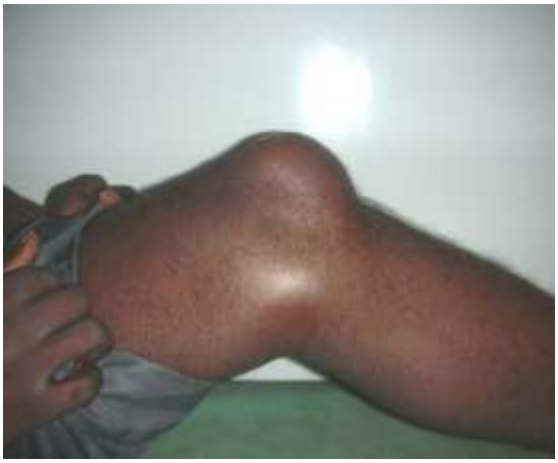

Fig. 1:

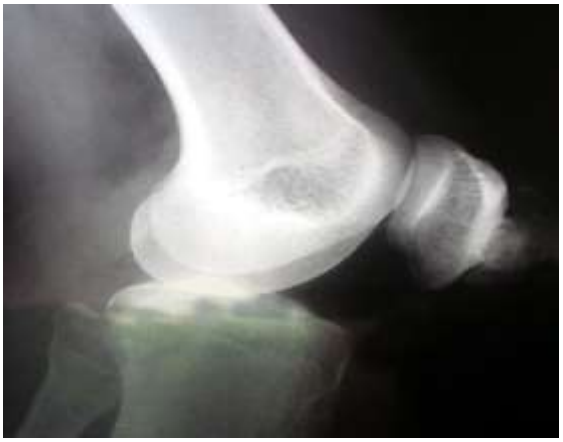

Fig. 2:

Discussion

Tumors involving patella are very rare. Ferguson et al[5] in his study had reported eight cases of primary tumors of patella in a series of 587 patients treated surgically for benign and malignant bone tumour. Mark. J. Kransdorf[6] has reported 42 cases of

histologically proven and radio graphically correlated primary patella tumors. In both the studies benign tumors were found to be common. Of the benign tumors giant cell tumor of patella has been commonly reported.

We in our study have described a case of osteochondroma patella. This tumor has not been described very commonly. Only two studies have been reported[9,10]. These have been found in Medline details of the study are not to be found. The only other study where osteochondroma of patella is described is the study of Dysplasia epiphysealis hemimelica (DEH) of patella. DEH is a rare developmental bone dysplasia characterizes by an osteo cartilagenous tumor arising from epiphyses. This entity is mostly described in epiphysis and also occurs in sesamoid bones such as patella. This disorder is usually seen in children. The lesion is characteristically hemimelic involving either the medial or lateral aspect of ossification centre. As for involvement of patella in Dysplasia epiphysealis hemimelica (DEH) the only reported case in English literature is described by Enriquez et al[4] in 1981. The differential diagnosis for osteochondroma patella includes myositis ossificans, calcification of bursa or calcification of the hematoma. There was no history of significant fall so the chances of calcified hematoma or myositis ossificans have been ruled out. The swelling has been present for ten years; the only diagnosis to be considered in our case was osteochondroma.

The treatment options are simple observation or surgical excision. Surgical option is used if the lesion is causing pain or deformity or interferes with function. We did an excision of tumor leaving as much as patella intact. The histopathological finding showed a fibro osseous lesion with cartilage cap on one surface. Deeper aspect of the cartilage plate showed crowded columns of chondrocytes and endochondral ossification. Underlying trabaculae of bone is separated by fatty marrow with fibrosis and congested vessels.

In conclusion tumors of patella especially osteochondroma is very uncommon. Swelling arising from patella should be investigated properly and treatment option has to be decided based on radiological and biopsy findings. We have described a case of osteochondroma patella in a 23 year old man, which is a rare presentation.

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