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CASE REPORT

Pedunculated Osteochondroma arising from the Medial Aspect of Proximal Femur: A Rare Presentation

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ABSTRACT

Osteochondroma is a benign bony tumor arising as a bony outgrowth covered by a cartilage cap and occurs most commonly in the metaphysis of long bones (proximal tibia, distal femur, proximal humerus) and pelvis. Osteochondroma grows eccentrically instead of centrifugally. This article reports a case of a 24-year-old female, who presented with a painless bony hard irregular swelling over medial aspect of right groin. There was no distal neurovascular deficit. Site, nature, and extent of the lesion were assessed by radiographs and magnetic resonance imaging. Tumor was completely excised and on histopathology, osteochondroma confirmed. No weight bearing was allowed for 1 week. Patient returned to her normal routine activities in 1 month. On regular follow-up, no evidence of recurrence of the lesion was seen.

Keywords: Benign, Metaphysis, Osteochondroma.

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INTRODUCTION

Osteochondroma is a benign bony tumor arising as a bony outgrowth covered by a cartilage cap and occurs most commonly in the metaphysis of long bones (proximal tibia, distal femur, proximal humerus) and pelvis.[1] Mostly, they are asymptomatic, but because of the bony palpable mass, it can cause pain due to bursitis, compression on an overlying structure, or fracture through the stalk. The effects of solitary exostoses of the proximal femur have been described in cases involving sciatic nerve compression[2] and trochanteric bursitis,[3] leading to surgical excision or local treatment.

CASE REPORT

A 24-year-old female presented to us with complaints of swelling in medial aspect of right groin for a period of around 3 years. Patient noted swelling, which was of insidious onset and gradually increased in size over a period of 3 years. She had a history of on-and-off pain while doing her daily activities due to the mass effect of the tumor. There was no history of trauma or fever. Skeletal survey showed no other evidence of similar lesion in the patient. On examination, patient had no evidence of any systemic illness. Local examination revealed a diffuse, ill-defined, bony hard, globular swelling of about 5 × 3 cm found projecting into the right medial aspect of upper thigh near lesser trochanter beneath a thick cover of muscles. Surface was irregular, hard in consistency with ill-defined borders. Skin over the swelling was normal. There was no localized lymphadenopathy and distal neurovascular deficit. There was no evidence of any laboratory abnormalities. Plain radiographs were performed to confirm the site and origin of tumor as shown in Figures 1 and 2. Thereafter, magnetic resonance imaging was done to exactly assess the extent and nature of tumor and soft tissue extension, if any. Once the tumor was confirmed to be of benign nature, complete excision of tumor via medial approach was performed (Figs 3 and 4). Postoperative radiographs were done and showed complete excision (Fig. 5). The patient was kept partial weight bearing for a period of 1 week. At the end of 4 weeks, the patient had returned to her daily routine activities. The patient was followed up at monthly interval. At the end of follow-up of 6 months,

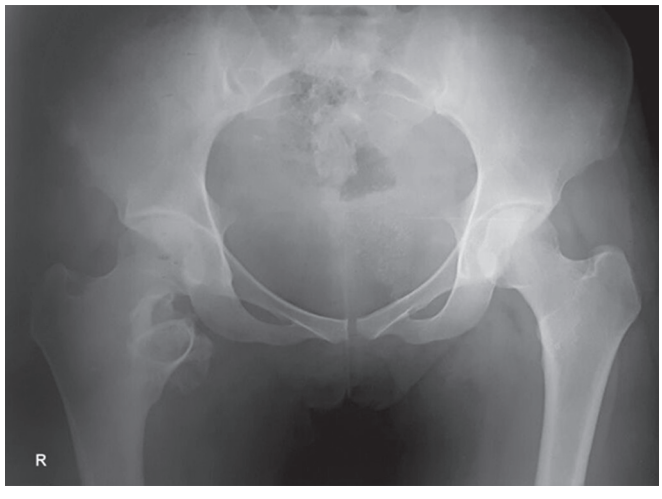

Fig. 1: Preoperative X-ray of pelvis with bilateral hip–anteroposterior view with large cauliflower-like growth arising from right medial aspect of proximal femur

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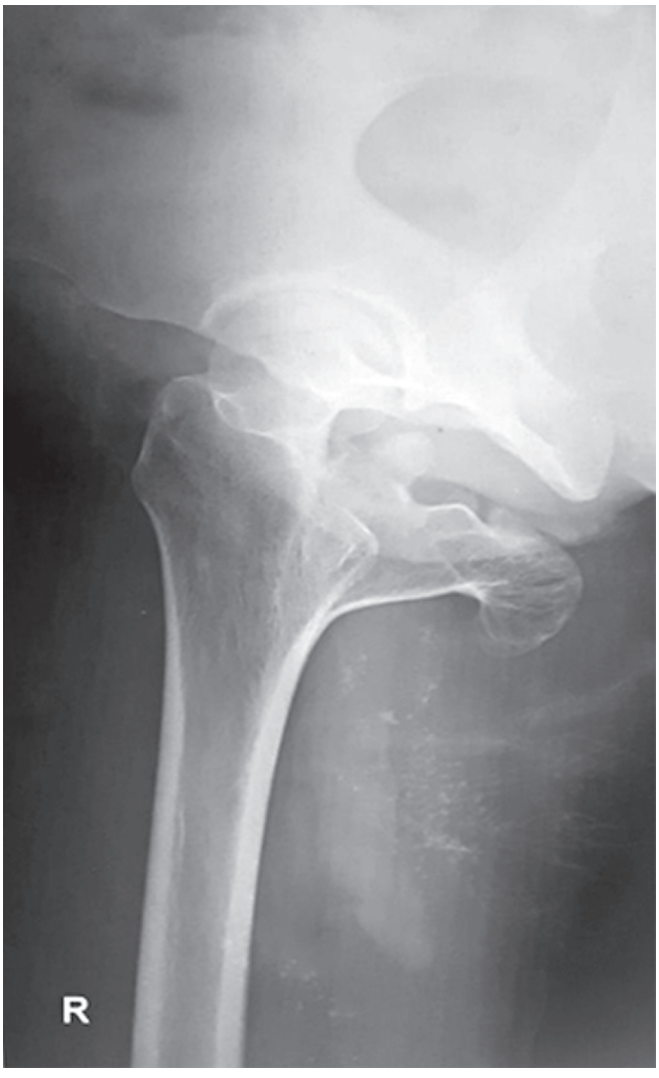

Fig. 2: Preoperative X-ray of right hip with upper thigh – lateral view

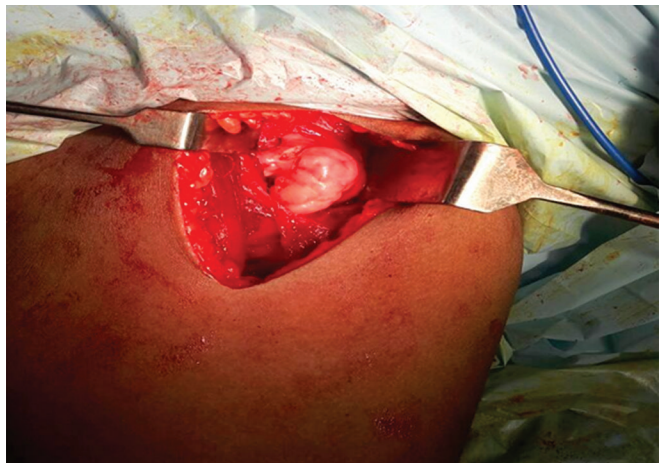

Fig. 3: Intraoperative photograph with large cauliflower-like growth arising from right medial aspect of proximal femur

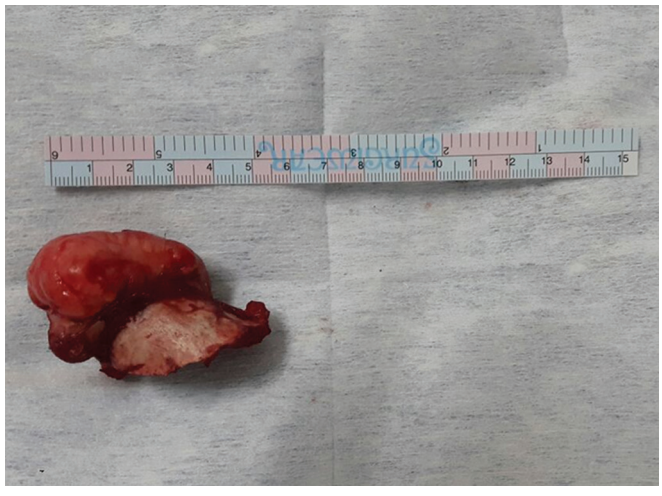

Fig. 4: Excised mass

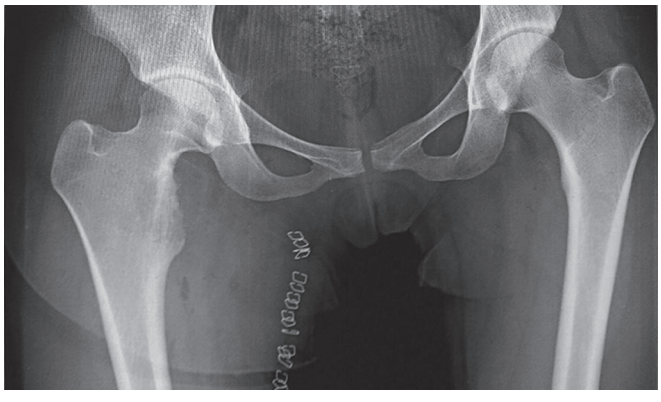

Fig. 5: Postoperative X-ray of bilateral hip with upper thigh – anteroposterior view

patient is completely asymptomatic and the radiographs showed no evidence of local recurrence.

DISCUSSION

Patients with osteochondroma usually present due to cosmetic reason or due to bursitis, vascular involvement, nerve compression, or fracture of the stalk; the symptomatic nature is usually due to the location and size of the tumor.[4] Resection of the tumor is indicated in symptomatic lesion causing damage to the joints, surrounding soft tissue irritation and inflammation, neurovascular compression, lesion having characteristics of malignant change, and the lesions which are prone to minor trauma.[5-9] If radiograph and imaging technique show a slight evidence of malignant transformation, then early surgery is indicated, as it has got high risk of malignant transformation.[10,11] Medial approach, posterior approach, and extensive approach of Tschokanow (osteochondroma of femoral neck) have already been described to assess the lesion.[12,13] Humber et al[14] reported recurrence of solitary osteochondroma in two patients out of 114 patients, and suggested that cartilage cap incomplete removal is responsible for recurrence, while early surgery at an young age is an additional prognostic factor. Mostly all studies concluded that mainstay of treatment of symptomatic osteochondroma is surgery, and complete resection is needed for the lesion.

CONCLUSION

Solitary osteochondroma can be effectively treated with complete excision. Local recurrence is rare, if excised very carefully and precisely. High-risk patients should be followed up on regular basis with routine X-rays, imaging technique, and investigation to detect an early malignant change and appropriate management needed, resulting in reduction in the mortality and morbidity.

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