

# Fractured Osteochondroma: 2 Sides of The Same Coin

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## INTRODUCTION:

Osteochondroma is the most common benign bone tumour, affecting around 3% of the population. Despite it being common, literature only contains a small handful of published cases regarding osteochondroma fractures. Treatment of this fracture is controversial where some authors recommend nonoperative treatment, whereas others argue that the osteochondroma should be surgically excised. We would like to present 2 cases of adolescent patients with a fractured osteochondroma, one treated conservatively the other surgically.

## REPORT:

### Case 1:

A 14-year-old boy presented with complaints of right thigh pain for 2 years in duration associated with a swelling which was gradually increasing in size.

A plain radiograph showed a pedunculated mass at the metaphyseal region projecting away from the epiphysis. There was discontinuity of the cortical bone at the base of the stalk indicating a fracture.

After discussion with the patient and parents, a consensus was reached to treat this conservatively with regular radiographic evaluation

Subsequent clinic visits were uneventful. The pain reduced gradually over time. Follow-up radiographs at 1 year showed that the fracture had united. Patient was followed up till skeletal maturity. There were no radiographic features to suggest malignant transformation.

### Case 2:

A 14-year-old boy under our follow-up for a left distal femur osteochondroma since the age of 5 had presented to our emergency department with sudden onset of thigh pain after being kicked in the thigh.

Radiographs showed that he had a fracture over the base of his osteochondroma.

Surgical excision was performed for this patient and he subsequently recovered well.



**Figure 1: Right femur X-ray showing fracture of osteochondroma (case 1)**

**Figure 2: Right femur X-ray showing fracture of osteochondroma (case 2)**

## CONCLUSION:

Fracture of an osteochondroma is a rare occurrence. Due to the rarity of its occurrence the management options between conservative and surgical excision are controversial. We report 2 cases of a fracture of a pedunculated osteochondroma through its base in adolescent patients which were treated differently. Both patients had successful outcomes.

## REFERENCES:

1. Errani, C., Vanel, D., Donati, D., Picci, P., & Faldini, C. (2015). Spontaneous healing of an osteochondroma fracture. *Diagnostic And Interventional Imaging*, 96(3), 283-285. doi: 10.1016/j.diii.2014.11.013