International Journal of Medical and Pharmaceutical Research

Online ISSN-2958-3683 | Print ISSN-2958-3675
Frequency: Bi-Monthly
Available online on: https://ijmpr.in/

Case Report

A Rare Case of Symptomatic Osteochondroma of the Proximal Femur Managed by Surgical Excision

Dr Kavaljitsinh Parmar[1], Dr Jaydeep Maniya[2], Dr. Pratik dhondge[3], Dr Nirav Solanki[4]

[1]MS Orthopaedics, Assistant professor, NAMO medical education and research institute, silvassa, DNH
[2]MS Orthopaedics,Senior resident, NAMO medical education and research institute, silvassa, DNH
[3]Junior Resident, Department of Orthopaedics, NAMO medical education and research institute, silvassa, DNH,
[4] Junior Resident, Department of orthopaedic, NAMO medical education and research institute, silvassa, DNH

OPEN ACCESS

Corresponding Author:

Dr Jaydeep maniya
Senio Resident, Department of orthopaedic, NAMO medical education and research institute, silvassa, DNH

Received: 19-02-2026
Accepted: 13-03-2026
Available online: 31-03-2026

ABSTRACT

Introduction: Osteochondroma is a common benign bone tumor, often asymptomatic. However, when located near the hip joint, it can present with pain and restriction of movement.
Case Report: We report a 24-year-old male presenting with chronic left hip pain and recent onset swelling over the gluteal region. Clinical examination revealed a firm, tender mass with restriction of hip movements. Imaging suggested a bony lesion arising from the proximal femur. The patient underwent surgical excision through a posterior approach. Histopathology confirmed osteochondroma.
Conclusion: Proximal femoral osteochondroma, though uncommon, can cause significant functional impairment. Surgical excision in symptomatic cases provides good clinical outcomes.

Keywords*: Osteochondroma, Proximal femur, Hip pain, Benign tumor, Surgical excision.*

INTRODUCTION

Osteochondroma is the most common benign bone tumor encountered in orthopaedic practice. It usually arises from the metaphyseal region of long bones and is often detected incidentally. Most lesions remain asymptomatic throughout life.

However, depending on the size and location, osteochondromas can become symptomatic. Lesions around the proximal femur are relatively rare but clinically important, as they may interfere with hip mechanics and surrounding soft tissues.

We present a case of symptomatic osteochondroma of the proximal femur in a young adult, managed successfully with surgical excision.

CASE REPORT

A 24-year-old male presented with complaints of pain in the left hip for the past 2 years. The pain was insidious in onset and gradually progressive. Over the last 4 months, the patient noticed worsening of symptoms along with a swelling over the left gluteal region.

The pain was associated with difficulty in walking, sitting, and standing for prolonged periods.

On clinical examination, the skin over the swelling appeared stretched and slightly shiny . On palpation, a firm, tender mass of approximately 5 cm was felt in the gluteal region . Range of motion of the left hip was restricted, particularly external rotation and abduction.

Investigations

Plain radiographs showed a bony projection arising from the proximal femur. CT scan with 3D reconstruction provided better visualization of the lesion and its origin. MRI was performed to assess the cartilage cap and surrounding soft tissues.

Figure 1. Xray

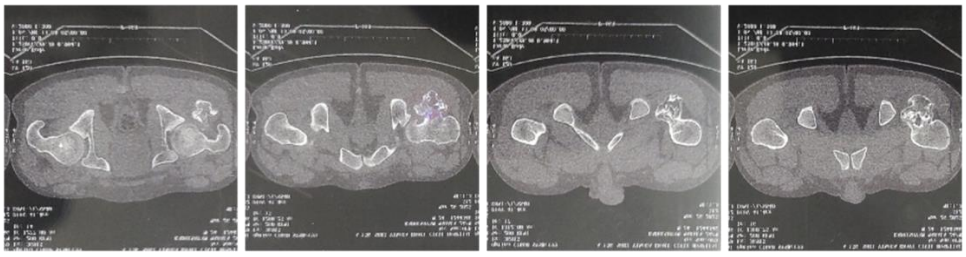


Figure 2. CT

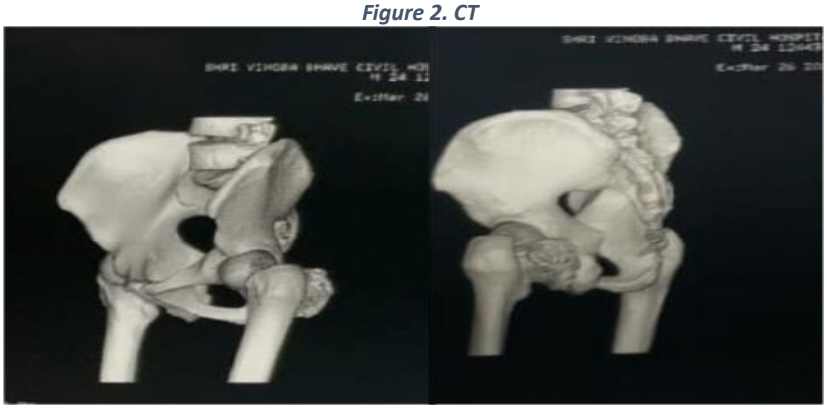


Figure 3. 3D CT

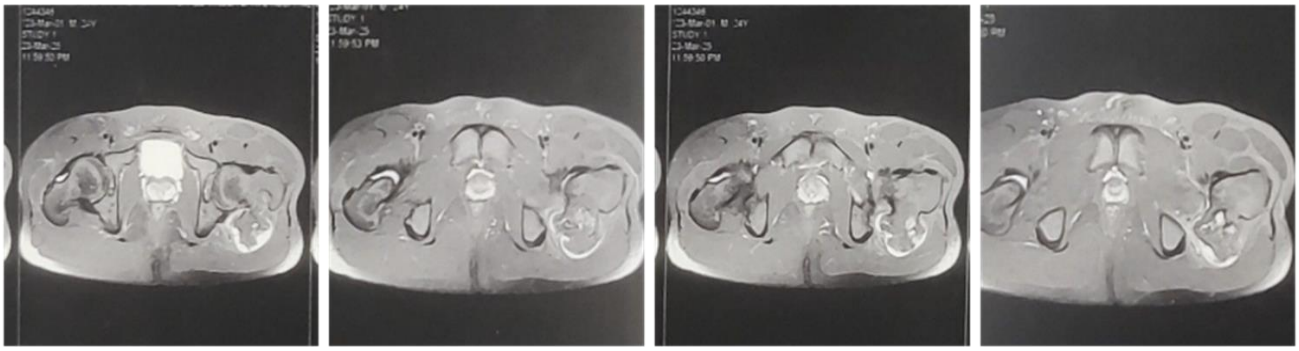


Figure 3. MRI BASE

Based on clinical and radiological findings, a provisional diagnosis of osteochondroma was made.

Surgical Procedure

The patient was planned for excision of the lesion under anesthesia. A posterior approach to the hip was used.

Short external rotators were identified and retracted cranially, and the quadratus femoris was retracted caudally. Capsulotomy was performed to expose the lesion.

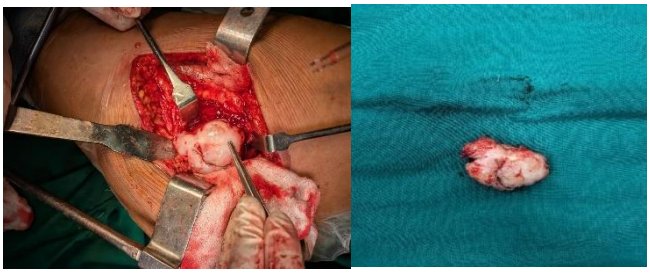


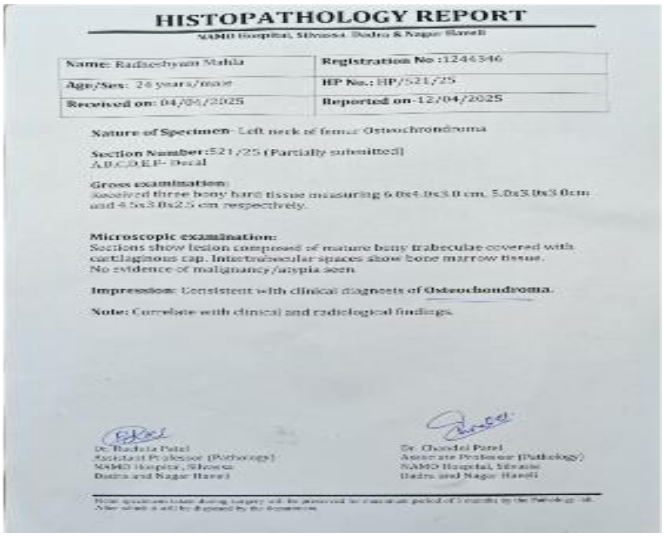
Figure 4. intraop images

A well-defined bony mass arising from the proximal femur was identified and excised completely. The specimen was sent for histopathological examination. The capsule was repaired, and closure was done in layers.

There were no intraoperative complications, and no neurovascular deficit was noted postoperatively.

Histopathology

Histopathological examination confirmed the diagnosis of osteochondroma.



HISTOPATHOLOGY REPORT

Name: Radheshyam Mahla	Registration No :1244346
Age/Sex: 28 years/male	IEP No.: HP/521/25
Received on: 04/04/2025	Reported on-12/04/2025

Nature of Specimen- Left neck of femur Osteochrondroma

Section Number:521/25 (Partially submitted)
A,B,C,D,E,F- Decal

Gross examination:
Received three bony hard tissue measuring 6.0x4.0x3.0 cm, 5.0x3.0x3.0cm and 4.5x3.0x2.5 cm respectively.

Microscopic examination:
Sections show lesion composed of mature bony trabeculae covered with cartilaginous cap. Intertrabecular spaces show bone marrow tissue.
No evidence of malignancy/atypia seen.

Impression: Consistent with clinical diagnosis of **Osteochondroma.**

Note: Correlate with clinical and radiological findings.

Dr. Radeela Patel
Assistant Professor (Pathology)
NAMO Hospital, Silvassa
Dadra and Nagar Haveli

Dr. Gaurav Patel
Associate Professor (Pathology)
NAMO Hospital, Silvassa
Dadra and Nagar Haveli

Figure 5. biopsy report

Figure 6. immidiate post op X ray

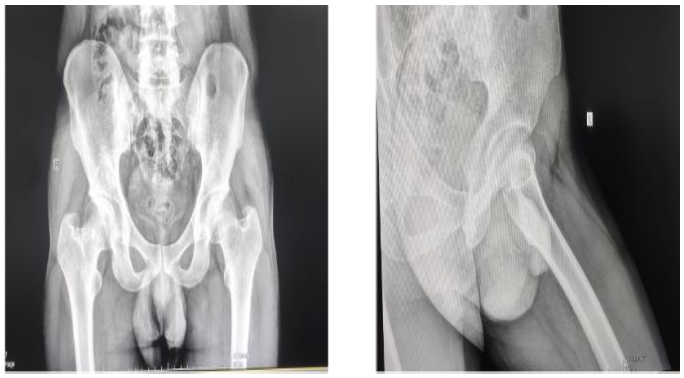


Figure 7. 3 months followup X ray

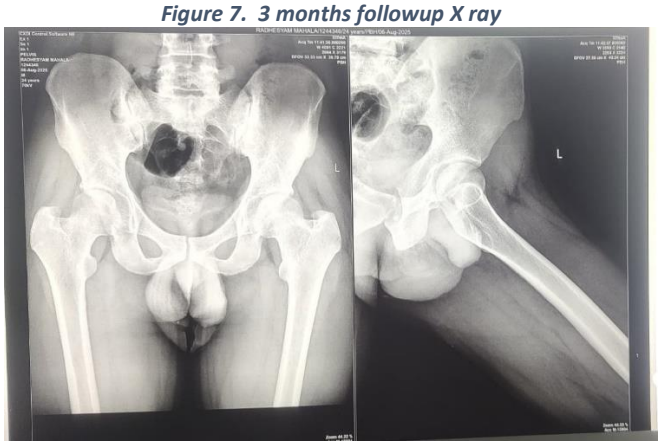


Figure 8. 5 month follow up X ray

Follow-up

Postoperative radiographs confirmed complete excision of the lesion. At 3 months follow-up, the patient reported significant reduction in pain and improvement in mobility. At 5 months, range of motion had improved considerably, and the patient had returned to routine daily activities without difficulty.

Figure 10. improved ROM

DISCUSSION

Osteochondromas account for a significant proportion of benign bone tumors. They are most commonly seen around the knee joint, while involvement of the proximal femur is less frequent.

When located near the hip, these lesions may lead to pain, restricted movements, and mechanical symptoms due to impingement. In some cases, they may also cause irritation of surrounding muscles or bursae.

MRI plays an important role in evaluating the cartilage cap and ruling out malignant transformation, especially in symptomatic or enlarging lesions.

Surgical excision is indicated in symptomatic patients. Complete removal of the lesion, including the cartilage cap, is essential to prevent recurrence.

In our case, the posterior approach provided adequate exposure for safe excision, and the patient showed good functional recovery postoperatively.

CONCLUSION

Osteochondroma of the proximal femur, although uncommon, should be considered in patients presenting with hip pain and a palpable mass. Early diagnosis and timely surgical intervention can lead to excellent functional outcomes.

Clinical Message

Not all hip pain in young adults is intra-articular. A careful clinical examination combined with appropriate imaging can identify uncommon causes like osteochondroma, where simple excision can significantly improve patient function.

Declarations

Ethical Approval:
Not required for case report (as per institutional policy).

Consent
Informed written consent was obtained from the patient for publication.

Conflict of Interest:
None declared.

Funding
No funding received.

REFERENCES

1. Kitsoulis P, Galani V, Stefanaki K, et al. Osteochondromas: review of the clinical, radiological and pathological features. *In Vivo*. 2008;22(5):633–646.
2. Murphey MD, Choi JJ, Kransdorf MJ, et al. Imaging of osteochondroma: variants and complications. *Radiographics*. 2000;20(5):1407–1434.
3. Unni KK. *Dahlin's Bone Tumors: General Aspects and Data on 11,087 Cases*. 5th ed. Philadelphia: Lippincott-Raven; 1996.
4. Garrison RC, Unni KK, McLeod RA, et al. Chondrosarcoma arising in osteochondroma. *Cancer*. 1982;49(9):1890–1897.