

## CASE REPORT

# Management of Intracalcaneal Lipoma: A Case Report

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### ABSTRACT

Intraosseous lipomas are rare lesions often missed and confused with other tumors. They constitute 0.1% of benign tumors of bone.<sup>1</sup> Intraosseous lipomas can occur in the calcaneum, proximal femur, tibia, and other long bones. The most common location in calcaneum is the neutral triangle. We report a case presented to our hospital with complaints of heel pain for one and a half years. The patient was evaluated and was diagnosed with intracalcaneal lipoma for which curettage and grafting were done with hydroxyapatite and iliac bone. The patient was followed up for 1 year, no recurrence was found. We discuss the case of intracalcaneal lipoma, its presentation, diagnosis, and treatment.

**Keywords:** Bone grafting, Calcaneum, Curettage, Lipoma.

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### INTRODUCTION

The intraosseous lipoma is the most common lipogenic lesion of bone. Intraosseous lipoma is found most frequently in the intertrochanteric region of the proximal femur (34%), with the calcaneal intraosseous lipoma benign the next most prevalent, found in 8–15% of cases.<sup>2,3</sup> Patients with intracalcaneal are usually asymptomatic, but some may present with heel pain.

### CASE DESCRIPTION

A 51-year-old man came to our OPD department with complaints of right heel pain for one and a half years. He does not give any history of trauma to the right foot/ankle. It started gradually and progressed to present stage. It is affecting his daily activities. He did not have any comorbid conditions and he did not have history of constitutional symptoms like loss of weight, fever, loss of appetite, etc. Patient was taking some random analgesics for his pain relief.

On examination, the patient was having an antalgic gait and he was not able to stand on his heel. There was no swelling around the ankle joint and heel or discoloration. Mild tenderness was noted over the lateral aspect of the right calcaneum. Ankle and subtalar joint movement were full and painless.

Blood investigations did not show any abnormality. Plain radiograph of calcaneum revealed a lytic lesion in calcaneum with central sclerosis. MRI and CT scan confirmed the diagnosis of intracalcaneal lipoma. He was taken for surgery and through lateral approach to calcaneum, the lesion was identified under the c arm. The lesion was curettaged completely taking precautions not to fracture the cortex. It was a cystic lesion with fat foci in the lesion. Dead space was covered with autologous bone graft and hydroxyapatite granules. The patient is allowed to weight bear on the immediate postoperative day. Patient had significant improvement in pain and gait. There was no recurrence (Figs 1 to 3).

### DISCUSSION

Intraosseous lipoma is a rare benign lesion, which mostly occurs in the proximal femur followed by the calcaneum. Pain is the most common presenting symptom but many are asymptomatic. More than 30% of lipoma is found as an incidental finding. Some authors

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have reported up to 70% of patients with intraosseous lipomas presented with pain,<sup>4,5</sup> while other authors described most patients as asymptomatic.<sup>6,7</sup>

The patient may present with heel pain which should be differentiated from other causes of heel pain like plantar fasciitis, retro calcaneus bursitis, or arthritis. Its diagnosis may be difficult on plain radiograph and may require MRI/CT scan.<sup>8</sup> Definitive



Fig. 1: Intraoperative picture



**Fig. 2:** Preoperative X-ray



**Fig. 3:** Postoperative X-ray

diagnosis requires histopathological examination. Milgram classified intraosseous lipoma into three stages depending on the severity of calcification and necrosis in lipoma on histopathological staging.<sup>6</sup>

Surgical intervention may be needed in patient who has a risk of pathological fracture, painful lipoma, inconclusive diagnosis which requires histopathological confirmation, patients with increased risk of malignant transformation.

## CONCLUSION

Symptomatic intracalcaneal lipoma treated with curettage and bone grafting gives excellent pain relief.

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