

Late Presentation of Giant Osteochondroma of Talar Neck in Elderly: A Case Report and Review of Literature

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Learning Point of the Article:

Osteochondroma of talar neck can very rarely present late with a large size and a grave clinically picture, however this can be managed successfully by surgical excision of the mass.

Abstract

Introduction: Osteochondroma is a benign bone tumor of the bone primarily seen in younger age groups. However, late presentation of the same is a rare incidence, as the symptoms develop rapidly due to compression of nearby structures.

Case Report: We present a case of a 55-year-old male patient with a giant osteochondroma originating from the neck of the talus. The patient presented with a huge 100 × 70 × 50 mm swelling over the ankle. The patient underwent an excision of the swelling. Histopathological examination of the swelling confirmed the findings of an osteochondroma. The patient had an uneventful recovery after the excision and resumed his functional activity completely.

Conclusion: Giant osteochondroma around the ankle is an extremely rare entity. Even rarer is a late presentation in the 6th decade onward. However, the management like others involves the excision of the lesion.

Keywords: Giant osteochondroma, neck of talus, excision.

Introduction

Case Report

Osteochondromas are a benign tumor of the bone with a cartilaginous cap, which are primarily seen in the adolescent and young people. These form 10–15% of all the benign bone tumors. The most common location for osteochondroma is in the metaphyseal region of long bones [1]. Involvement of foot and ankle is rare and is either a solitary presentation or is an occurrence in multiple hereditary exostosis [2]. However, late presentation of osteochondroma is an infrequent finding.

We report an unusual case of a giant osteochondroma originating from the neck of talus in a 55-year-old man. We came across only one case with similar presentation in the literature.

A 55-year-old male patient had presented to us in the outpatient department with a gradually progressive swelling over ankle anteriorly, noticeable for the past 15 years. The swelling was globular, bony hard to feel and non-fluctuant in nature. It measured 100 × 70 × 50 mm clinically (Fig. 1). The overlying skin was non-adherent to the underlying swelling, with no local signs of inflammation. Examination revealed dorsiflexion of the ankle beyond neutral to be restricted; however, plantar flexion was preserved. The subtalar movements were unaffected. There was no evidence of compression symptoms of the neurovascular structures in the vicinity.

Author's Photo Gallery



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Figure 1: Clinical pictures of the ankle.



Figure 2: Radiographic images of the ankle (lateral, mortise, and anteroposterior views).



Figure 3: CT scan images of the osteochondroma.

On radiographic evaluation, there was a huge anteromedial bony swelling originating from the neck of the talus and abutting the distal tibia (Fig. 2). Computed tomography scan suggested a benign bony mass originating from the talar neck, likely to be osteochondroma (Fig. 3). In view of the long-standing nature and benign radiographic appearance, the patient was planned for excisional biopsy of the swelling.

The patient was operated in supine position, and a single anteromedial incision was given (Fig. 4). The lesion was well-encapsulated and well-margined from the surrounding soft tissues. It was excised en-mass, following osteotomy from the base and sent for histopathological examination (HPE) (Fig. 5). The HPE showed the lesion to be an osteochondroma (Fig. 6). The skin was closed primarily, and the redundant skin was left intact. A well-padded compressive dressing was done for a period of 02 weeks. Post-operative radiographs revealed complete removal of the lesion with a congruent mortise.

The patient was full weight-bearing ambulant from post-operative day 1. The dorsiflexion of the ankle improved to 30°. The patient essentially had an uneventful recovery.

Discussion

Osteochondroma is the most common benign bone tumor and is generally seen in the metaphyseal region of the long bones forming from enchondral ossification. Ozdemir et al., in their study, reported 196 cases out of the 1786 cases of osteochondroma to be found in foot and ankle region, and most originating from the metatarsals and phalanges [2]. Talus, out of all is an extremely rare site to have this pathology, as only a few are reported as case reports in the literature [3,4]. Earliest description available of talar neck osteochondroma is by Fuselier et al. in 1984 [5].

As the tumor affects the growing bone, the age of presentation is in adolescent age group. Only a few have reported the presentation in older age group [6,7]. Similar to us, Al Mutani et al. reported a case in a 65-year-old patient, who had a giant osteochondroma originating from the neck of talus [7]. Other reported cases of talar neck osteochondroma have generally been of younger age group [4,8].

The case reported by Al Mutani et al. had a presentation like ours in all the ways [7]. Their lesion measured 100 × 90 × 30 mm, whereas ours measured 100 × 70 × 50 mm. The authors

had approached the lesion through dual incision, but we could access and excise the osteochondroma using a single anteromedial approach. Overall, both the patients had an uneventful recovery.

Late presentation for a talar osteochondroma is a rare phenomenon, as the ankle and surrounding structures are in a closed tight compartment. We did a



Figure 4: Pre- and post-excision intraoperative images.

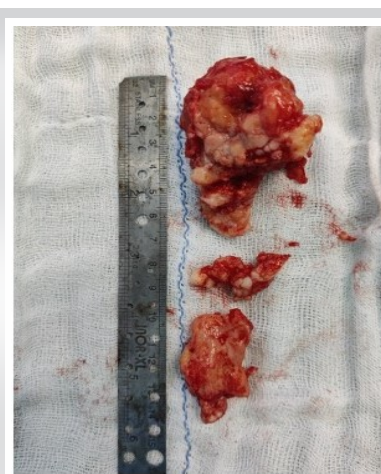


Figure 5: Excised osteochondral mass.

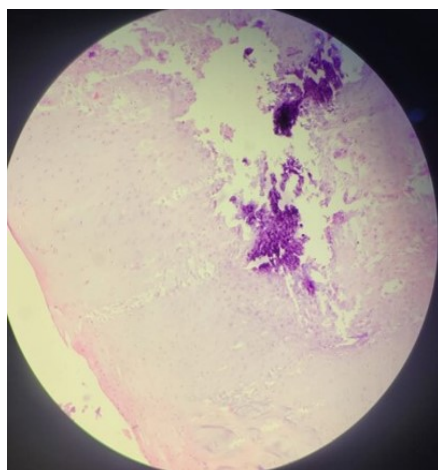


Figure 6: Histopathological image showing overlying fibrous perichondrium, cartilaginous cap, and underlying bone suggestive of osteochondroma.

S. No.	Authors	Cases	Age	Location and origin	Symptoms	Management
1	Al Mutani et al.	1	65	Anterior, neck of talus	Swelling, restricted movements, neurological compression	Excision
2	Shah et al.	1	52	Lateral, body of talus	Pain, swelling, difficult pronation	Excision
3	Suranigi et al.	1	60	Posterolateral, body of talus	Pain, swelling, stiffness, tarsal tunnel syndrome	Excision
4	Keser and Bayar	1	45	Anteromedial, neck of talus	Pain, swelling, callosity	Excision

Table 1: The cases of talar osteochondroma presenting in older age groups.

thorough search of the literature for cases presenting in 5th decade and beyond and came across few cases (Table 1) [6, 7, 9, 10]. The location of osteochondroma in the talus varied for them, and the maximum incidence was of anterior location. Late presentation is also fraught with the increased size and compression symptoms; however, it was realized that pain, swelling, and stiffness were common to all, but compressive neurovascular symptoms were rarely encountered and were mostly accompanied to swelling else anterior. This could be attributed to possible soft-tissue adaptation to the swelling more anteriorly and anatomical morphology of other regions.

Conclusion

Osteochondromas in foot and ankle region are a rare entity and

even rarer is involvement of talus. Very few cases of giant osteochondromas of talar neck are seen; however, such cases if encountered can be managed after careful and deliberate planning. Awareness of such an occurrence is essential to the orthopedic surgeons, as these can be tackled at an early stage.

Clinical Message

A careful and deliberate planning and a meticulous execution of it can lead to a successful outcome in patients presenting with a large osteochondroma of the talar neck.

Declaration of patient consent: The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given the consent for his/ her images and other clinical information to be reported in the journal. The patient understands that his/ her names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Conflict of interest: Nil **Source of support:** None

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