CASE REPORT

Isolated Tuberculosis of Talus without Ankle and Subtalar Joint Involvement

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Summary

This case has been reported because of its rarity and atypical clinical presentation. An 8-year-old boy presented with a gradually increasing swelling localised on the antero-medial aspect of the foot. haemogram, erythrocyte sedimentation rate (ESR), Mantoux and X-ray chest were normal. An irregular lytic lesion of the talus was seen on the x-ray of the affected part. Ziehl Nelson staining of the aspirated fluid revealed acid-fast bacilli. Material obtained after curettage and bone grafting was sent for histopathological examination which confirmed the diagnosis of tuberculosis. Post operatively a below knee cast was given for 12 weeks and anti tubercular treatment was given for 20 months. At the end of the treatment patient had full and painless motion at the ankle and subtalar joint. The lytic lesion had healed on X-ray.

Key Words: Tuberculosis, Talus

Introduction

Tuberculosis of the bone and joints, a ubiquitous disease in many regions of the world, presents more commonly as an osteo-articular lesion and less commonly as an osseous lesion. A case of an isolated tuberculosis of the talus without ankle and subtalar joint involvement is reported here for its rarity and atypical presentation.

Case Report

History: An 8-year old boy presented in the out-patient department (OPD) with a gradually increasing swelling localised on the antero-medial aspect of the foot. There was no history of preceding trauma, pus discharge or any constitutional symptoms. On examination, the swelling was fluctuant, tender to touch and the temperature of the overlying skin was not raised. Ankle and subtalar joint movements were painless and free.

Investigations: Haemogram and ESR were within normal limits. Mantoux test and X-ray chest were normal. The child had been immunised with BCG (Bacille Calmette Guerin) vaccine at birth and a scar was noted. X-ray of the affected part revealed

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Fig.1: X-ray AP and Lateral view of ankle joint: lytic lesion with a sequestrum in the talus (arrow).

Fig. 2: X-ray AP and lateral view of ankle joint: healed lesion (sclerosis) five months after the treatment (arrow).

soft tissue swelling overlying the talus and an irregular lytic lesion in the head and neck of the talus, with a small sequestrum inside the lytic lesion (Fig.1). Aspiration of the swelling yielded straw coloured fluid, which showed acid fast bacilli on Ziehl Nelson staining. Subsequently curettage and bone grafting was performed. Histo-pathological examination of the material confirmed the diagnosis of tuberculosis.

Treatment and Follow-up: Postoperatively a below knee cast was given for 12 weeks. Four-drug antitubercular treatment (Iso nicotinic hydrazide, Rifampicin, Pyrazinamide, Ethambutol) for two months, followed by 3 drugs (Iso nicotinic hydrazide, Rifampicin, Pyrazinamide) for 6 months, and 2 drugs (Iso nicotinic hydrazide, Rifampicin) for 12 months was given. The patient was allowed partial weight bearing 3 months after the operation. The lytic lesion had sclerosed on X-ray of the affected part taken five months after the operation (Fig.2). At the end of 20 months patient had full and painless motion at the ankle and subtalar joint. There was no evidence of recurrence.

Discussion

Tuberculosis of the skeletal system is one of the chief causes of morbidity and mortality in many developing countries. The picture has worsened because of the increased incidence of tuberculosis in HIV-positive patients. This disease must be considered in the differential diagnosis of single or multiple destructive lesions of the bone and joint. In the uncommon osseous type, tuberculosis of the talus without ankle and subtalar joint involvement is extremely rare[1,2]. It is often difficult to make this diagnosis on clinical grounds because of atypical presentation and normal chemistries as evident in this case and previously described by Khan et al[3]. Moreover, it could be associated with a normal haemogram and negative Mantoux test. The only confirmatory test is isolation of the acid-fast bacillus (AFB). This further underlines the need for a clinical suspicion of tuberculosis, so that early diagnosis and proper management can be carried out. Adequate debridement and anti tubercular therapy for 18-24 months is the appropriate treatment with good results[4].

Conclusion

Rarity of the lesion and atypical presentation makes tuberculosis of talus a difficult diagnosis on clinical ground. A normal ESR and negative Mantoux do not help either. This case has been reported to highlight the unusual musculo-skeletal manifestations of tuberculosis so as to prevent its misdiagnosis and delayed treatment.

References

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