



## Rare presentation of osteoarticular tuberculosis

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The varied clinical presentation of osteoarticular tuberculosis makes the diagnosis an enigma. This report underlines the fact that osteoarticular tuberculosis can present in the most atypical pattern. It also emphasises the need for a high index of clinical suspicion and the low threshold for tissue biopsy for establishing the diagnosis.

**Key words** : tuberculosis ; osteoarticular.

### CASE REPORT

A 44-year-old Asian pharmacist was referred to the clinic with ankle pain of 18 months duration. The pain was insidious in onset, intermittent and worsened following an episode of physical activity. He could weight bear on this foot, had no loss of weight, had normal appetite and had no constitutional symptoms related to any of his other systems.

Clinical examination revealed very little abnormal findings. There was minimal localised tenderness over the medial malleolus and a 2 × 2 cm area of skin overlying this malleolus was hyper pigmented (fig 1). There was no effusion into the joint, there was no tenderness across the ankle joint, and movements at this joint were marginally restricted in comparison to the normal side. Routine haematological and radiological investigations did not reveal any abnormalities.

The inability to correlate the minimal findings with the intensity of symptoms at the ankle aroused



**Fig. 1.** — Photograph showing patch of hyper-pigmented skin over the medial malleolus.

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**Fig. 2.** — Coronal fat saturated T2 weighted MRI scan of the ankle showing a well-defined signal lesion in the medial malleolus consistent with osteomyelitis.

suspicion. On further exploration into his medical history, he admitted having had full treatment for intestinal tuberculosis. He did not have any evidence of pulmonary tuberculosis infection in the past nor in the present.

With the level of suspicion being raised, we investigated him further with an MRI scan. MRI showed chronic osteomyelitis of the distal tibia in the region of the medial malleolus (fig 2). The patient underwent debridement and saucerisation of the lesion. Operative findings showed that the lesion was well contained in the malleolus and that the ankle joint was not damaged. Histopathological studies showed evidence of granulomatous inflammation with central caseous necrosis. The patient responded well to antituberculous treatment. At final follow-up at 18 months, he was pain free, had a full range of movement and radiological features have resolved.

## DISCUSSION

Osteoarticular tuberculosis continues to be a significant worldwide problem even in the 21<sup>st</sup> century (2). Previous studies have noted that a considerable delay in diagnosis, often as long as 12 to 18 months is common and likely occurs due to the insidious presentation of the disease and to a low index of suspicion for the diagnosis. Untreated osteoarticular tuberculosis can result in substantial loss of bone and cartilage, joint destruction and soft tissue destruction (3).

Owing to its low incidence in developed countries, the diagnosis is often delayed for months to years (1). It is well established that the diagnosis in endemic areas generally can be made on clinical and radiological examination.

This case report highlights the fact that osteoarticular tuberculosis can present in the most unusual way with many symptoms but without any major clinical findings. When tackling a case of tuberculosis with atypical clinical features, we strongly emphasise a high index of suspicion, and detailed history taking. We also would like to underline the fact that, whenever there is doubt because of an atypical clinical presentation or lack of clinical exposure, tissue diagnosis is mandatory. A patient with osteoarticular tuberculosis need not have a history of pulmonary tuberculosis.

The purpose of reporting this case is more to highlight the fact that osteoarticular tuberculosis has an unpredictable mode of clinical presentation than to describe its management. The mere presence or absence of symptoms/clinical signs should not be the way to rule out this condition. It should be emphasised that a high index of suspicion is mandatory to successfully diagnose this curable entity.

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