Tuberculosis Of The Talus: Report Of A Child Case

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Citation

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Abstract

In view of the rarity of isolated bone tuberculosis we would like to report a case. Isolated reach of the talus by Koch's bacillus (BK) is extremely rare, only a few rare cases have been reported in the literature. Clinical and laboratory findings are also described. The patient was a 20 months old boy. A delay of 6 week was necessary to make diagnosis of bone tuberculosis. Reasons for this delay, and some diagnostic and therapeutic aspects of this case are discussed in this report.

INTRODUCTION

Isolated bone tuberculosis of the talus is a juxta articular bacillary osteitis usually complicated by ankle joint abscess. Its atypical symptomatology and exceptional character explain that this pathology is often underestimated with long delays in diagnosis and treatment.

CASE REPORT

S. T is a baby of 20 months, with no notion of tubercular disease, treated for arthritis of the ankle that appeared some days before his admission to the hospital. Symptoms were fever at 38 ° and a swelling of the right ankle with functional disability of the right lower limb. An initial sheet shows a speed of sedimentation (VS) to 79 mm at the 1st hour, and white globules at 12000, the sonography shows arthritis of the ankle without abounding extrusion. The puncture of the tibio talar joint was negative, and the child had been treated as septic arthritis by antibiotherapy and immobilization of the limb.

One month later, the child was still complaining of pains of his ankle with a VS of 43 mm at the 1st hour. The X-rays of the talus showed osteolytic pictures [Figures 1 & 2]. The intra-dermic-reaction test was positive at 11 mm and VIH serology was negative. The examination was completed by a CT scan showing talus sequestrates [Figure 3]. The patient benefited from a surgical drainage by anterior approach of the ankle with evacuation of thick pus and curettage of the sequestrates. Histologic studies confirmed the diagnosis of tuberculosis.

The child evolved favorably with antibacillar chemotherapy during 9 months with an immobilization of the ankle and functional re-education since the first month of treatment.

Figure 1

Figure 1: Profile X-rays of ankle showing talus sequester

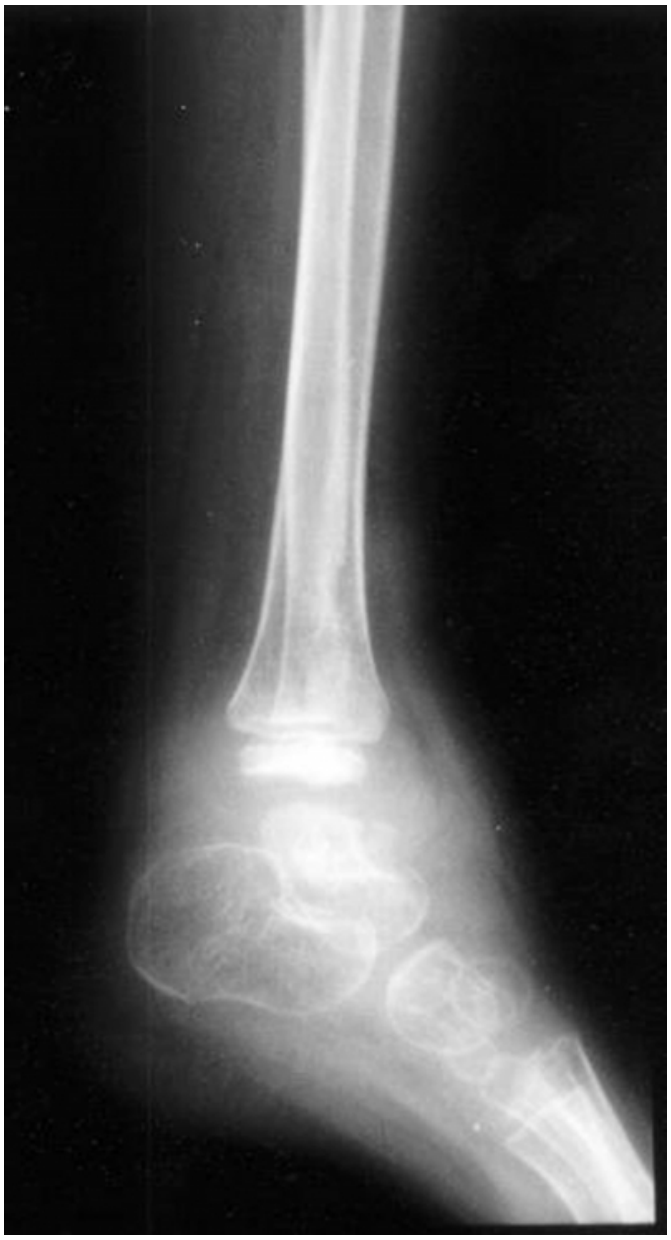


Figure 2

Figure 2: Frontal X-rays of ankle showing talus osteolytic lesion

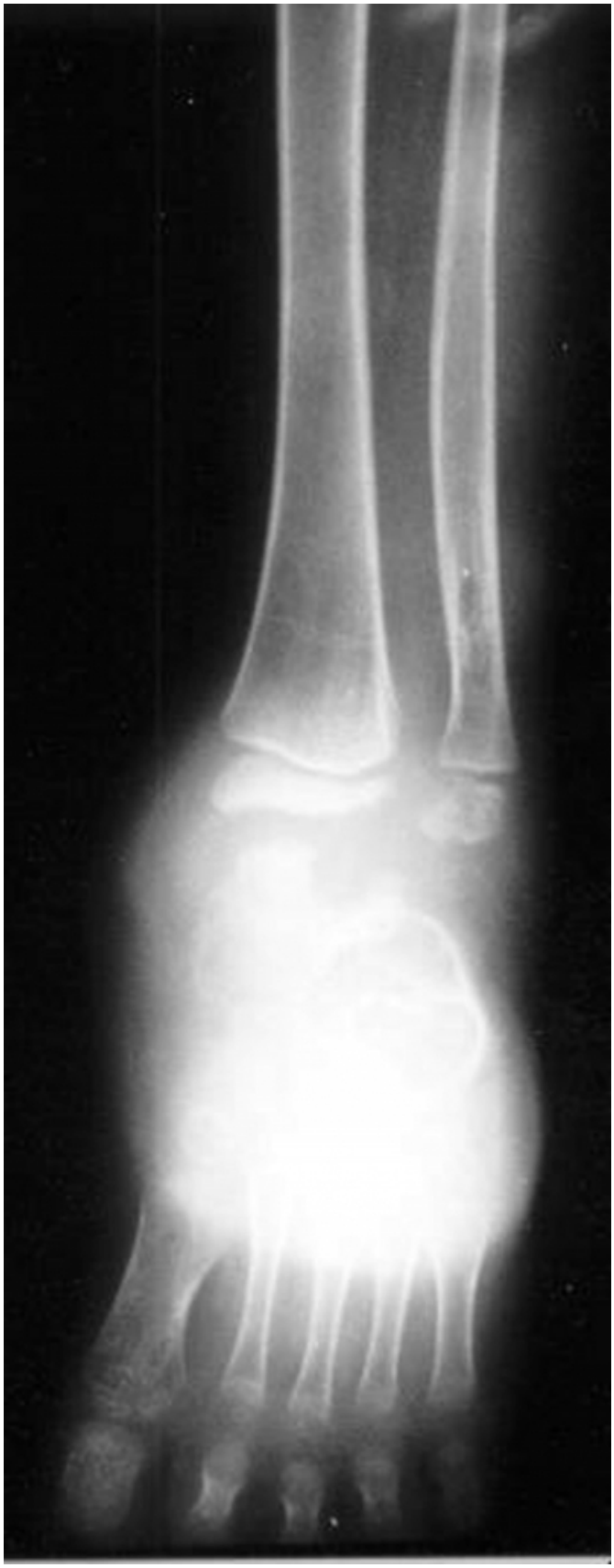
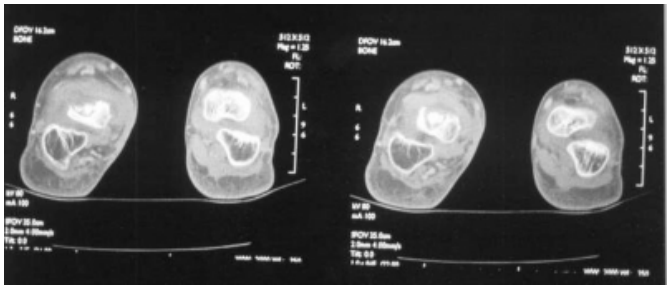


Figure 3

Figure 3: CTscan pictures showing the sequester of talus in comparison with the safe side.



DISCUSSION

Isolated bone tuberculosis of the foot is a rare entity that can occur at any age [1]. Isolated anklebones lesions often seat on the calcaneum and the talus. Since 1979 [2], less than 100 pediatric cases have been reported.

Talus localization often represents one of many other concomitant expressive localization's [2,3]. This bacillary localization is usually secondary and late [5], in some cases it can be inaugural as in our observation.

Symptomatology is frequently led by an insidious pain of the ankle with a functional disability [1,3,4]. The poor character of this symptomatology and our patient's age explain the difficulty and the delay of diagnosis, an observation made also in Anderson's study [2].

Biologic inflammatory syndrome is non-specific and can mime septic arthritis's due to banal germs [2,5]. X-rays can show some indirect signs (soft part thickening and greasy line repression). It can be normal at a precocious stage, as in our case; secondarily, some signs of bone destruction will appear (osteolysis, sequesters) [6].

The CT scan and magnetic resonance imaging (IRM) find their indication in making the precocious diagnosis in such localization's. CT scan reveals the extension of lesions and bony destruction. IRM can shows bone destruction sites at a precocious stage [6,7].

Diagnosis can be made through these means but confirmation is brought by identification of the Bacillus from the local prelevments or by histologic study of the sequester [1,5], as in our case.

The treatment is based on antibacillar chemotherapy for 9 to 12 months. Surgical treatment had double aim: diagnosis by providing a material for bacteriological and histologic study and therapeutic through curettage and evacuation of pus or of the necrotic bone (sequestrectomy). This treatment should be always completed by orthopedic treatment such as a plastered immobilization [1,3,5].

The prognosisn of this disease and its evolution depends of the forwardness of diagnosis and treatment as well as of the possible association with other localizations.

In our patient, the recuperation was complete after good treatment despite the delay of diagnosis.

CONCLUSION

Talus tuberculosis in children is an extremely rare disease. It should be considered when confronted with any inflammatory ankle symptomatology without specific lesions. Symptomatology is often discreet and slowness of evolution explains the late diagnosis.

With prompt chemotherapy and early surgery, the long term results of this once crippling disease are now excellent.

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