

A CASE OF CHRONIC ANKLE AND FOOT PAIN WITH SWELLING: A RARE DIAGNOSIS AS OSTEOARTICULAR TUBERCULOSIS INVOLVING TALUS AND CALCANEUM***Dr. Swapnil Patil, Dr. Tapish Shukla, Simranjit Singh, Subeena Randhawa, Srijna Rana**

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ABSTRACT

Tuberculosis is a major health problem in India and in developing countries. Despite the availability of drugs it can cause a wide variety of complications. In relation to this we present a case report of 63 year old male patient with history of pain and swelling of left foot and ankle since 4 months which after investigations was diagnosed as osteoarticular Tuberculosis of talus and calcaneum. Patient was started on anti-tubercular treatment and debridement and curettage of talus with subtalar arthrodesis was done. Patient was kept on anti-tubercular treatment for 9 months after which patient stopped experiencing pain upon walking. The objective is to present a case of isolated TB of talus and calcaneum which is a rare presentation of osteoarticular TB and its consideration as a diagnosis in chronic ankle and foot pain.

KEYWORDS: Osteoarticular Tuberculosis of talus and calcaneum.**INTRODUCTION**

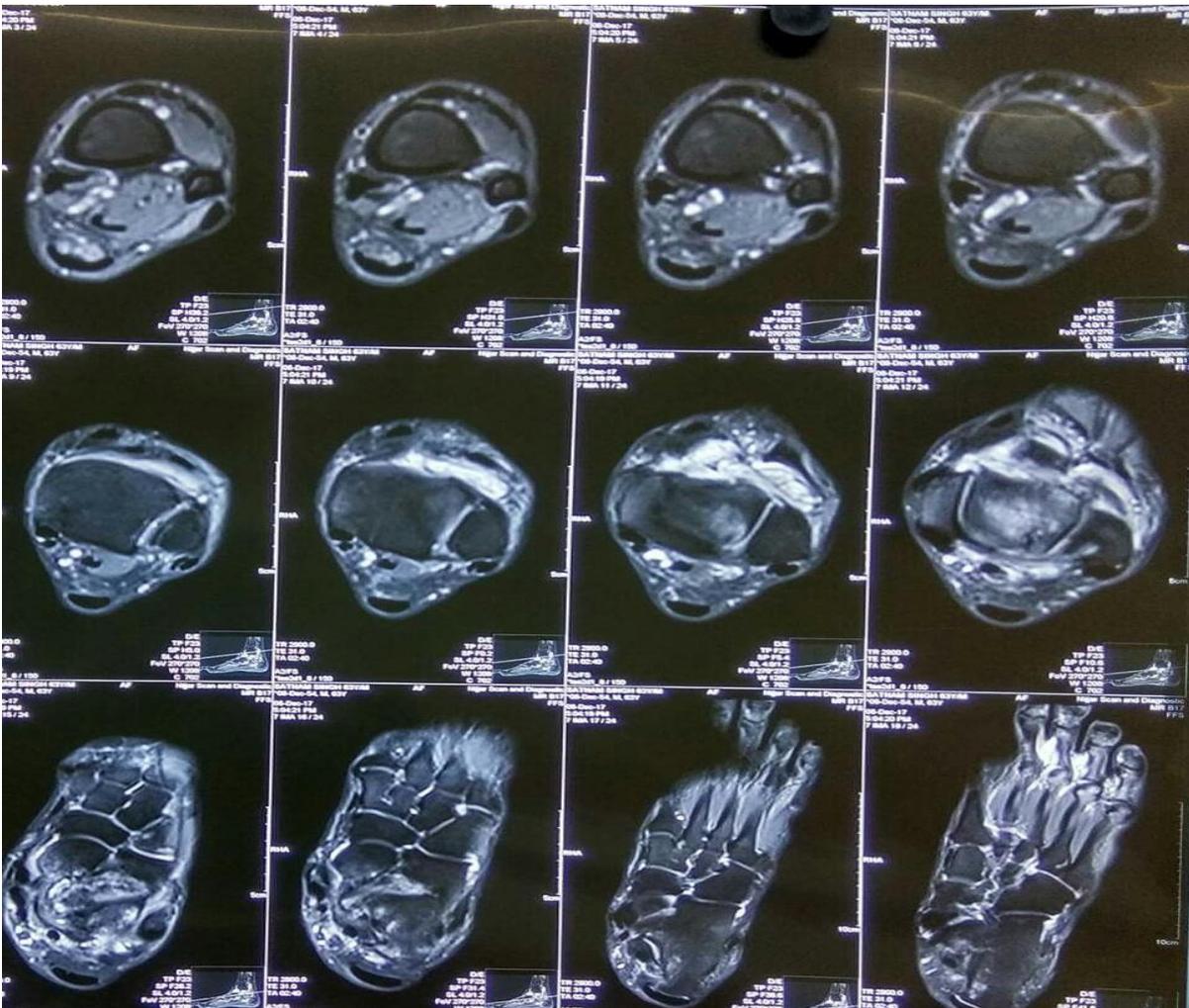
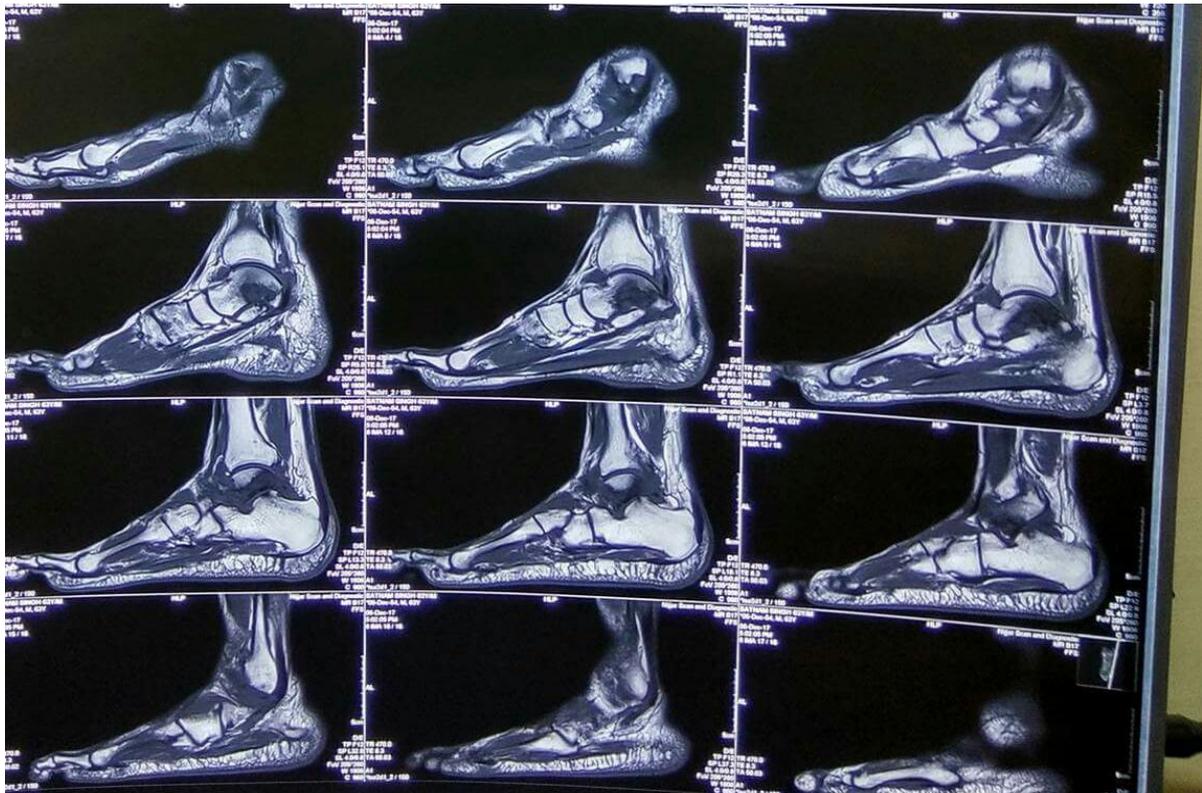
Tuberculosis is the leading cause of death in adults with infectious diseases. Extrapulmonary tuberculosis accounts for 10-25% of tuberculosis cases. Incidence of osteoarticular involvement is 1-3% of all cases. Most commonly it affects spine followed by hip and knee joints. Less than 10% of osteotubercular cases affects the foot.^[1,2] The diagnosis of foot TB is challenging due to vague symptomatology and a presentation which closely resembles that of other more common disorders affecting this region.^[3] The delay in diagnosis of such cases results in widespread destruction of adjacent joints. Isolated TB of talus and calcaneum is very rare and very few cases have been reported in literature till date.^[3]

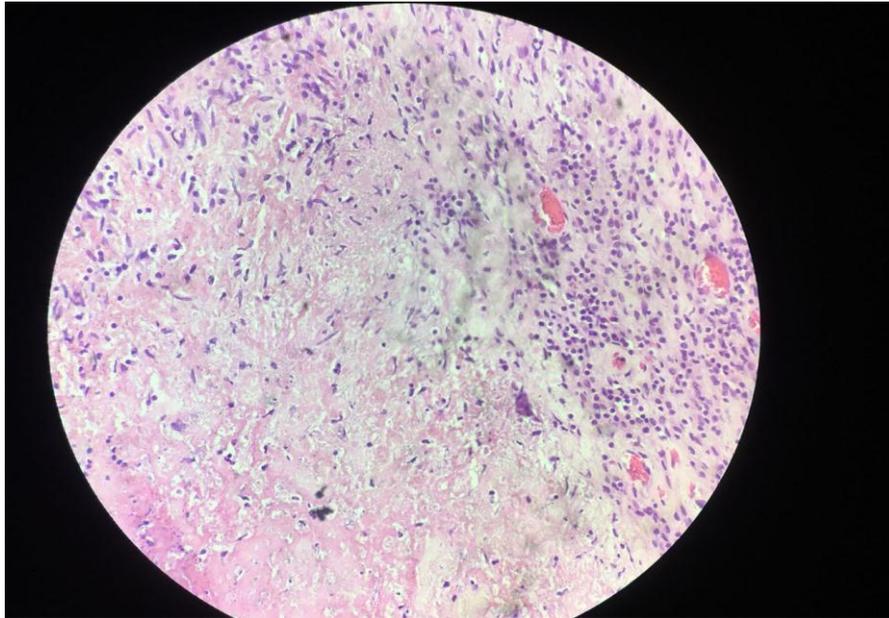
CASE REPORT

63 year old male presented in our OPD with chief complaints of pain and swelling in the left foot for 4 months with inability to bear weight on affected side because of pain. There was no h/o trauma, fever, cough, or weight loss. X ray of the patient was done along with other preliminary investigations. X ray showed lytic lesions in talus with eroded subtalar articular surface. ESR was raised while other blood investigations were normal. MRI of the affected foot was done which showed erosions along the articular surface of talus along

with moderate joint effusion with areas of synovial hypertrophy suggesting a tubercular pathology. There was also evidence of marrow edema in the talus and calcaneum. Based on this, patient was started on a four drug Anti-tubercular regime according to his weight on OPD basis, along with symptomatic treatment. After 6 weeks when pain and swelling subsided surgical debridement and curettage of subtalar joint was done and the specimen was sent for histopathological examination. Arthrodesis of subtalar joint was achieved with the help of staples and a below the knee POP cast was applied with no weight bearing for 4 months. Anti-tubercular therapy was given for a total of 9 months, consisting of isoniazid, ethambutol, rifampicin, and pyrazinamide for 2 months and 2 drugs, isoniazid and rifampicin for 7 months.

After 4 months of immobilization a repeat x-ray was done which showed satisfactory union of subtalar joint. But patient was having mild tenderness and stiffness at ankle. So patient was advised non weight bearing physiotherapy for the next 3 months. Finally after 7 months post-operatively when patient had no tenderness and pain partial weight bearing was advised for 3 months, followed by full weight bearing.





DISCUSSION

Tuberculosis (TB) infection is a grave problem for the medical society, especially in the third-world healthcare systems. Although it majorly manifests in the pulmonary system extrapulmonary tuberculosis is reportedly on the rise, and may manifest itself at a number of sites in the body including the peripheral skeleton. The spine and hip are the most common sites of skeletal tuberculosis. Involvement of the foot and ankle region is relatively less common with incidence being less than 5% with calcaneum being the most frequent bone affected^[4] followed by talus, first metatarsal and navicular. Any of the foot joints can be affected either alone or in combination, but the midtarsal joints are the most common sites^[5] for these pathologies. Most common symptoms includes pain, swelling and stiffness of foot. The important signs of ankle foot tuberculosis are swelling with fullness around malleoli and tendoachillis insertion, plantar flexion of ankle joint. There may be discharging sinus or non-healing ulcer with secondary infection. Pulmonary involvement is uncommon and usually present in less than 50% of cases.^[6,7]

Routine blood investigations are usually normal, except for decreased hemoglobin and raised ESR. X-rays are rarely diagnostic until late stages, hence MRIs should be done on suspicion of ankle foot tuberculosis which will show periarticular osteoporosis, marginal joint erosion, joint space narrowing. However, diagnosis is confirmed only by histopathological examination of bone and soft tissue taken from respective site. Since ankle-foot tuberculosis is a paucibacillary disease cultures are rarely positive.

Anti-tubercular drugs are the mainstay of treatment modality. ATT can be given for 9-18 months. In some cases longer duration of ATT is used as recurrence is common after a short course.^[8,9] Results of conservative treatment are usually very good. However, in cases of

failure of conservative management, surgical intervention in the form of debridement, curettage, sequestrectomy, and arthrodesis can be employed. In our case, since most of the talus and subtalar joint was involved, surgical intervention was done.

Patient was followed up after 2 weeks of surgery for the removal of stitches, and there after, every 3 weeks for the first 4 months to see clinical signs of healing, such as decrease in pain and swelling and on x-ray to see the position of the staple. Radiological signs of healing are usually evident after 5-6 months of treatment.

CONCLUSION

Owing to the unusual clinical presentation and inconclusive routine investigations in most of the cases of talus and calcaneum TB, such patients suffer from a delay in diagnosis leading to increased morbidity. They should be considered as a differential diagnosis in chronic inflammatory pathologies of the foot and ankle.

Our case highlights the importance of the fact that in endemic areas clinical features, radiological features, raised ESR are sufficient to diagnose AFTB and start ATT course.

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