

# Mycobacterium Tuberculosis In My Forearm

Lee ZC<sup>1</sup>; Fairuz S<sup>2</sup>; Saravaneswaran<sup>1</sup>; Satriya S<sup>1</sup>

<sup>1</sup>Department Of Orthopaedic, Hospital Selayang, Selangor

<sup>2</sup>Faculty of Medicine, University Teknologi Mara Sungai Buloh, Selangor

## INTRODUCTION:

Musculoskeletal tuberculosis(TB) is reportedly rare, accountable for 1-2% of all tuberculosis cases.<sup>1</sup> The rarity and its subtle symptoms frequently lead to diagnostic challenge causes delay treatment resulting in severe deformities and functional deficits.

## CASE REPORT:

32-year-old female underlying SLE presented with 1 week history of painful forearm swelling. However, no history of chronic cough or constitutional symptoms. Local examination showed diffuse tender swelling over ulnar border of proximal forearm with impaired function. No detectable lymphadenopathy. Laboratory revealed raised leucocytes with predominant neutrophils. Forearm radiograph showed normal bone architecture. She was treated as cellulitis with antibiotics. 1-week later, she again presented with worsening symptoms. Repeated radiograph revealed osteolytic area with osteopenia over distal ulna. Subsequently wound debridement and bone curettage was done. Intraoperatively 15cc purulent discharge with osteomyelitis changes over distal ulnar noted. Tissue culture isolated *mycobacterium tuberculosis*. She was started on antituberculosis treatment.

## RESULTS



(a)

a) Initial radiograph with normal bone architecture



(b)

b) Arrow shows area of osteolysis with osteopenia



(c)

c) 1 day postoperative wound.

## DISCUSSIONS:

The most frequent sites of skeletal TB involvement are hip and knee joints, while the isolated forearm is reportedly rare.<sup>1</sup> TB osteomyelitis has chronic and insidious onset without any penumbra signs. Index patient who presented initially with non-specific signs mimicking soft tissue infection, however bony involvement noted within two weeks which resulted in impaired function over forearm. Tuberculous osteomyelitis, like other extrapulmonary tuberculosis, is secondary to lymphohematogenous spread to bones from the primary focus in lungs. The peculiarity of index patient is acute onset with no detectable lesion in the lungs which likely due to her immunocompromised state masking the typical presentation. Antituberculosis treatment should be initiated at early stage with liberal wound debridement is recommended to remove all devitalised for proper drug penetration and wound healing.

## CONCLUSION:

Diagnosis of tuberculous osteomyelitis requires high index of suspicion. Liberal wound debridement and anti-tuberculous medication remains mainstay of treatment.

## REFERENCES:

1. Shah-BA. Multifocal osteoarticular tuberculosis. Orthopedics 2005;28:329