

Rare Radius Bone Tuberculous Osteomyelitis With Healed Fracture: A Case Report

¹Pong YH; ²Yusoff MF; ³Chemok Ali HA

¹Department of Orthopaedic and Traumatology, Hospital Sultan Idris Shah Serdang, Jalan Puchong, Kajang, Malaysia

INTRODUCTION:

Paediatric tuberculous osteomyelitis has been posed with diagnostic challenges due to variable clinical presentations causing delay in diagnosis and treatments. 4% of children with active tuberculosis will have osteo-articular involvements. It is however rare to present with immediate history of fracture prior to diagnosis.

[1][2]

REPORT:

A well-vaccinated 2-year-old girl was brought in complaining of persistent pain and swelling at left wrist after an alleged fall 3 months ago. With multiple visits to clinics and hospitals, she was initially diagnosed as distal left radius fracture. However persistent swelling had led parents to opt for traditional medicine but to no avail. Examination revealed erythematous, non-tender and fluctuant swelling at volar aspect left wrist while not affecting wrist motion. Chest radiography revealed no consolidation.

Plain radiography of left wrist revealed well defined lucency with surrounding sclerotic changes and cortical thickening over distal left radius in Figure 1.



Figure 1: lateral, AP view left wrist

Normal leucocyte count, c-reactive protein but raised erythrocyte sedimentation rate were

found in blood investigation. Magnetic resonance imaging (MRI) of the left forearm revealed meta-diaphyseal intraosseous collection with subperiosteal and transphyseal extension in Figure 2.

She underwent incision, drainage and biopsy of distal left wrist. Intraoperative findings revealed caseous material with cortical invasion.

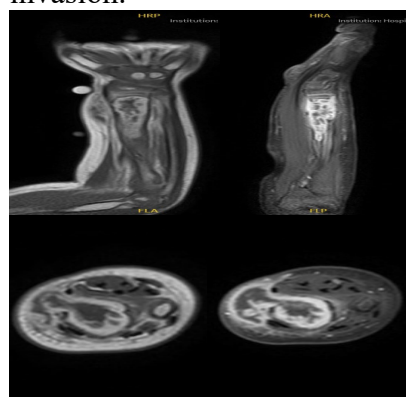


Figure 2: MRI left wrist

Histopathological examination confirmed *Mycobacterium tuberculosis*. Anti-tuberculous medication was initiated.

CONCLUSION:

Suspicion of tuberculous osteomyelitis is imperative in paediatric population when clinical presentations though variable, follow a protracted course.

MRI and biopsy will help to diagnose the condition to avoid delay in treatment.

REFERENCES:

1. Herdea, A.; Marie, H.; Negrila, I.-A.; Abdel Hamid Ahmed, A.D.; Ulici, A. Reevaluating Pediatric Osteomyelitis with Osteoarticular Tuberculosis: Addressing Diagnostic Delays and Improving Treatment Outcomes. *Children* **2024**, *11*, 1279.
2. Vallejo, Jesus G.MD; Ong, Lydia T.PAC; Starke, Jeffrey R.MD. Tuberculous osteomyelitis of the long bones in children. *The Pediatric Infectious Disease Journal* **14**(6):p 542-546, June 1995.