

## An Elbow-Knee Joint: Tuberculosis Osteomyelitis in a 16-Month-Old Infant

<sup>1</sup>Abdul Rahman, MAF; <sup>1</sup>Muhammed Fuad, MA

<sup>1</sup>Department of Orthopedic and Traumatology, Hospital Sungai Buloh, Jalan Hospital, Selangor, Malaysia.

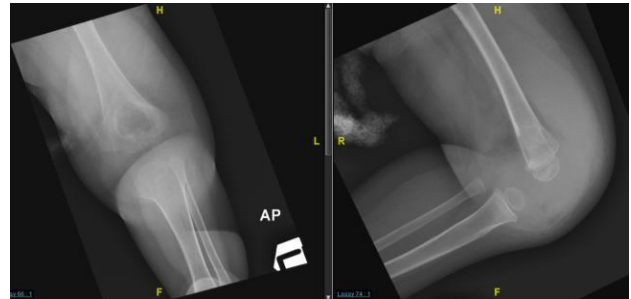
### INTRODUCTION:

Tuberculosis (TB) osteomyelitis is a great mimicker of lesions, usually manifesting in a non-specific presentation especially in the pediatric population. Late diagnosis of the disease causes significant bone destruction; hence, early and correct diagnosis is crucial due to the distinct required treatment.

### REPORT:

We present a case of left supracondylar femur TB osteomyelitis in a 16-month-old previously healthy Malay male infant with no pulmonary symptoms. He presented with left knee swelling for 3 months and refused to weight bear over left lower limb. Further history revealed the child's father has been previously treated for pulmonary TB since May 2023 and had completed treatment for 8 months. Physical examination showed the left knee in fixed flexion position with diffuse, tender and warm swelling of distal femur extending to the knee. Initial blood investigations showed leukocytosis with elevated C-reactive protein (CRP) and erythrocyte sedimentation rate (ESR).

Plain radiograph and MRI showed lytic lesion of metaphyseal region left femur and left distal femur intramedullary and left quadriceps intramuscular collections with adjacent inflammation (**Figure 1**). The case was further managed in the pediatric orthopedic tertiary center and underwent surgical debridement. Around 20cc pus evacuated and cloaca seen over the metaphysis of distal femur with breached anterior periosteum (**Figure 2**). Samples taken yielded acid-fast bacilli (AFB) on Ziehl-Neelsen stain and histopathological examination confirms chronic granulomatous inflammation. Treatment with rifampicin, isoniazid, pyrazinamide, and ethambutol were commenced. Post-surgery, child was active and responded well to the anti-TB medications.



**Figure 1:** Plain radiograph of left knee



**Figure 2:** Intraoperative findings

### CONCLUSION:

Infantile TB osteomyelitis is a rare manifestation of TB infection, which may present insidiously without systemic or pulmonary symptoms. A high index of suspicion is needed in children with musculoskeletal complaints of swelling and stiffness as timely treatment is vital.

### REFERENCES:

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