

Thoracic Spine Tuberculosis in Toddler

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INTRODUCTION:

Spinal tuberculosis is rare in the paediatric population. Early diagnosis and prompt treatment are key determinants of good clinical outcome.

REPORT:

A 2-year-9-month-old boy, who previously walked independently, presented with prominent thoracic gibbus deformity and signs of upper motor neuron lesion over bilateral lower limbs. Clinically, patient's bilateral lower limbs had no movement. Otherwise, he had no constitutional symptom, however had history of close contact with his aunt who had prolonged cough but was unsure of the diagnosis.

Patient's total white cell count was $13.0 \times 10^9/L$, Erythrocyte Sedimentation Rate was 53 mm/hour, and C-Reactive Protein of 49.2 mg/L. Tuberculosis workup such as gastric lavage for Acid Fast Bacilli staining and Mycobacterium tuberculosis Gene Xpert were all negative. Magnetic Resonance Imaging (MRI) of whole spine showed T9-T10 tuberculous spondylitis with gibbus deformity, severe spinal canal stenosis with spinal cord compression and nerve root impingement, and large paravertebral collection with extradural extension in thoracic region. Decompression, debridement and drainage over thoracic spine was done.

Case discussion:

Tuberculosis infection is common in Malaysia, with paediatric population stands about 3%, and there is increasing infection rate over the past few years.¹ Spinal tuberculosis was usually due to hematogenous spread of mycobacterium from the primary focus in lungs or genitourinary tract.² Although this patient did not have typical symptoms of spine infection, clinical findings such as thoracic gibbus and neurological deficit should raise the suspicion of spinal tuberculosis.³



Figure 1: Clinical thoracic gibbus
Figure 2: T9-T10 tuberculous spondylitis in MRI Whole Spine

CONCLUSION:

Spinal tuberculosis should be suspected in paediatric patient, especially in those with positive clinical findings.

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