

Spinal Tuberculosis In Infancy

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INTRODUCTION:

The incident of Tuberculosis (TB) in children is variable. Around 10-20% of extrapulmonary TB are skeletal TB. It causes serious sequelae leading to severe kyphosis. Making the diagnosis is a challenge and most of them presented late with neurological symptoms. Despite of having serious complication, the treatment guideline is still remains controversial.

REPORT:

A.I.Q, 8-month-old, Malay girl presented with prolonged fever associated with poor appetite and lethargic for 2 months. She was noted to have bilateral lower limb weakness. Both of her parents are medical doctors. Otherwise, she has no TB contact or other risk factor. Antenatal and perinatal histories were uneventful. Examination shows no gibbus and her bilateral lower limb reveals mixed features of upper and lower motor neuron lesion signs. Her WBC was $13.3 \times 10^9/L$, ESR was 114mm/hr and sputum AFB was negative. Mantoux test was not done. Other investigations including urine, blood, CSF cultures and family screening for TB were inconclusive. Plain thoracolumbar imaging was done (Figure 1) followed by contrasted spinal cord MRI reveal features suggestive of TB spondylitis (Figure 2).



Figure 1.



Figure 2: Contrast MRI spinal cord shows lytic lesion over T4 with spinal cord compression and epidural abscess with T5 vertebral collapse.

She was started on intensive phase of anti-TB drugs for 2 months followed by maintenance phase for 10 months based on her body weight. During follow-up, she was appeared to be more active and noted improvement of her bilateral lower limb. Her latest WBC was $5.0 \times 10^9/L$ and ESR was 3 mm/hr. She was also monitored for optic neuritis and liver derangement as the side effect of anti-TB drugs.

CONCLUSION:

Diagnosis of spinal TB in children is challenging and it requires high index of suspicious. Early diagnosis of spinal TB in children is vital to prevent severe vertebral deformity. The main treatment is chemotherapy and surgical intervention is only indicated in case of spinal deformity, neurological complications, instability, large abscess or for biopsy.

REFERENCES:

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