

A Case Of Infant Lumbar Spine Tuberculosis

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INTRODUCTION:

Spine tuberculosis (TB) in infants is rare with limited case reports available in literature. Delayed diagnosis and treatment may result in serious complications to a growing child later in life. Diagnosing TB spine could be clinically challenging, as there is less marked paraplegia or quadriplegia in infants compared to older children. We present a case of lumbar TB spine of an infant.

CASE PRESENTATION:

Patient was a 1yr 2months old boy who presented with main concern of refusal to walk. Child previously was able to stand and walk independently. Parents denied history of trauma or fall. Otherwise, child also has on and off fever. Child's mother noticed spinal deformity. Otherwise, there was no obvious weight loss or reduced feeding. Clinically, there were 'gibbus' on inspection over the upper lumbar region. Child was able to move all four limbs with no obvious reduction in muscle power. Observation during admission shows that child's reluctance to sit up and stand. Possible TB contact was from mother, who was a nurse in a hospital.

INVESTIGATIONS:

Child's white cell count (WCC) on presentation was 7.7, with Erythrocyte Sedimentation rate (ESR) of 70 and c-reactive protein (CRP) of 5.69. Sputum AFB on three occasions was negative. Positive Tuberculin skin test at 10mm. Bone biopsy was not performed. There was no microbiology confirmation. Whole spine x-ray showed erosion and sclerosis of the L1 inferior end plate and L2 superior endplate suggestive of spondylodiscitis. A whole spine MRI showed severe spondylodiscitis at L1-L2 with paravertebral soft tissue inflammation suggestive of Tuberculous spondylitis.

RESULTS:

Anti-TB treatment was initiated with regular outpatient follow up. At 2-months post intensive

phase anti-TB treatment, child had gained weight and able to walk independently.

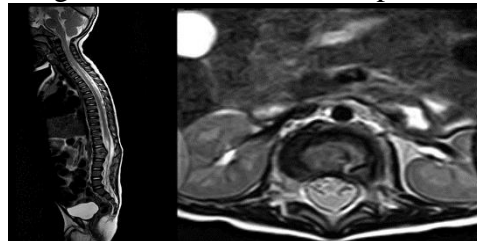


Figure 1: MRI: L1-L2 spondylodiscitis

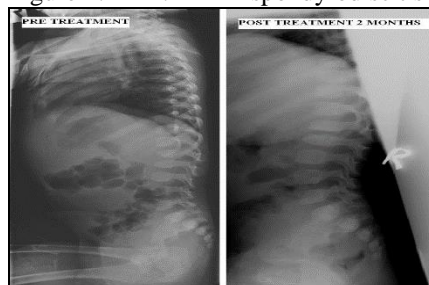


Figure 2: Radiographic comparison 2 months post treatment.

DISCUSSION:

Spine TB is rare, especially in infants.^{1,2} Postulated hypothesis is *Mycobacterium tuberculosis* spread from a primary infection involving the pulmonary or genitourinary system, followed by haematogenous spread to the vasculature of cancellous bone in vertebral bodies.^{1,2,3} In our case, workup showed no pulmonary or genitourinary involvement. MRI imaging is helpful in determining diagnosis and extent of disease.^{1,3,4} Clinical outcomes are measured with neurological assessment, radiographic and laboratory investigations.^{1,2,3}

CONCLUSION:

High index of suspicion is needed in determining the diagnosis of TB spine. Prompt anti-TB treatment is essential for good clinical outcomes.

REFERENCES:

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