

Surgical treatment of Spinal tuberculosis in young patient, a case report

Wee Cheong Lim, Asrul Fahmi, Dzulkarnain Amir, Fazir Mohamad
Department of Orthopedic, Hospital Kuala Lumpur

INTRODUCTION:

Spinal tuberculosis (TB) is one of the rare forms of TB in young patient. We reported a case of young lady, presented with Tuberculosis of thoracic spine. Dramatic improvement in the patient's condition was obtained following surgery.

REPORT:

36 years old, Indonesian, lady, no known medical illness. She presented with back pain 6 months, bilateral lower limb weakness 2 weeks, unstable gait, constipation 1 week. She denies symptoms of pulmonary tuberculosis, constitutional symptoms, family history of malignancy, PTB contact. Neurological assessment noted she had normal neurology up to Thoracic 9, evidenced by bilateral lower limb motor power MRC grade 0, hyporeflexia at knee reflex.

Blood investigations shows high CRP and ESR. Sputum AFB direct smear and urine culture were negative.

Xray thoracolumbar (figure 1&2) shows thoracic 10 vertebral plana. Magnetic resonance images (figure 3-6) show cortical destruction, large paraspinous abscess, anterior and posterior subligamentous spread with spinal cord compression.

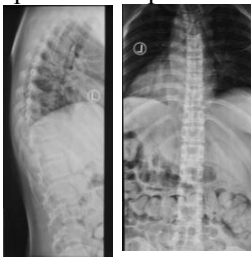


Figure 1&2: Xray thoracolumbar shows vertebra plana.

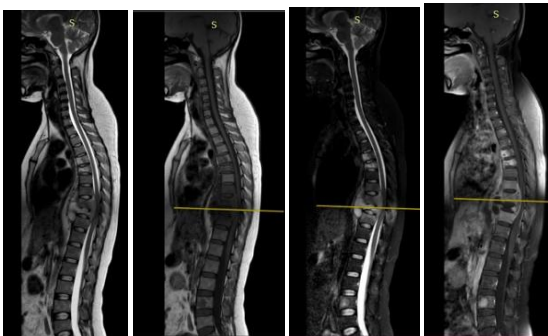


Figure 3-6 : MRI spine at thoracic 10

She was diagnosed with tuberculosis spondylitis T10. Tuberculosis chemotherapy started. Posterior instrumentation and spinal Fusion T7- T12, costotransversectomy, T10 anterior corpectomy and cage insertion was commenced after 2 weeks chemotherapy.

Intra operative finding noted pus at T10, body at T10 was soft and caseous formation. Operative culture shows necrotising granulomatous inflammation features, evidenced by multiple granulomas, langhan's type multinucleated giant cell with few areas of caseous necrosis. AFB stain was negative. Chemotherapy was continued. At follow-up, the patient improved significantly in his motor and sensory deficits, and the pain was relieved significantly.



Figure 7: PSIF T7-T12, costotransversectomy, T10 corpectomy and cage insertion.



Figure 8&9: At 5 months post instrumentation and fusion, patient is able to stand up with assistance.

CONCLUSION:

Surgical treatment of spinal TB is safe and effective, with good clinical outcome. The advantages of surgery include thoroughness of debridement, decompression of the spinal cord, and adequate spinal stabilization.