

Selection Of Surgical Approach In Spinal Tuberculosis - A Multicenter Experience Of 621 Case

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INTRODUCTION:

Tuberculosis of the spine is a common form of TB infection for 50% to 60% of osseous tuberculosis. Although uncommon, spinal TB still occurs in both developed and developing countries. The diagnosis of spinal tuberculosis is difficult and it commonly presents at an advanced stage. Delays in establishing diagnosis and management result in complications such as spinal cord compression and spinal deformity.

METHODS:

A total of 621 patients with tuberculosis of the cervical, thoracic and lumbar spine with moderate to severe cord compression were studied. Variable degrees of neurological deficit with deformity were treated from January, 2003 to July, 2016. Thoracotomy along with anterolateral decompression and autogenous strut bone grafting with simultaneous fixation by screws and rods were done in 113 cases. Posterior decompression, posterior interbody and posterolateral fusion by bone graft with stabilization by transpedicular screws and rods were done in the remaining 508 cases. Appropriate anti TB drugs were given to all patients for 12-18 months. The follow-up period was 3 months to 10 years.

RESULTS:

The average age was 47 (9-85) years. All patients survived surgery. There were 8 cases of superficial infections (1.2%) whilst there were 5 cases (0.7%) of deep infections. Revision surgery was performed in 6 patients (1.0%). Implant failure occurred in 5 cases (0.8%) whilst

malposition of screws occurred in 13 cases (2.1%). Perioperative bleeding complications were reported for 4 patients (0.7%). Neurological improvement occurred in all patients except for 2 cases (0.3%). Preoperatively, the majority of patients (n=229, 37%) were classified with Class A on the American Spinal Injury Association (ASIS) neurological impairment scale. This was significantly reduced postoperatively to 0.3%.

CONCLUSION:

For patients with spinal tuberculosis anterior debridement, auto graft bone fusion, anterior or posterior fixation appears to be effective in arresting disease, correcting kyphotic deformity and maintaining correction until solid spinal fusion.

Keywords: Thoracolumbar spinal tuberculosis debridement; bone graft; stabilization

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