Thoracolumbar Tubercular Spondylodiscitis: Evaluation Of Single Stage Posterior Surgical Approach

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INTRODUCTION:

Spinal involvement occurs in less than 1% of patients with tuberculosis but the increasing frequency of TB in both developed and developing countries have continued to make spinal TB a health problem. Adequate early pharmacological treatment can prevent severe complications [1]. Surgical management is needed along with ATT if there is no significant recovery.

MATERIALS & METHODS:

This is a prospective random experimental type of study. A total of 16 patients aged 18-46 years irrespective of sex were included in the study. The average age was 28.12 years. 56.3% patients were female and 43.8% male. Maximum 62.5% were dorsal followed by lumbar 25% and dorsolumbar 12.5%.We performed posterior decompression, stabilization & fusion in a single stage procedure.

RESULTS:

Preoperative mean kyphotic deformity was 23.12^0(range85^0–5^0), which declined to 5^0 (20^0-0^0) postoperatively. Preoperatively there was only 1 patient with ASIA score E, Postoperatively 9 patients achieved score E. Most clinical presentations were pain 81.3%, gibbus 75%, paraplegia 75%, weakness 25% and kyphoscoliosis 12.5% had significant clinico-radiological improvement. Maximum 62.5% patients achieved posterior bony fusion grade I, 31.3% grade II and 6.3% had fusion grade III. 75% patients had excellent outcome, 12.5% good, 6.3% fair and 6.3% poor outcome on Modified Macnab criteria.

DISCUSSION:

Approach for surgical treatment of thoracolumbar tuberculosis is always controversial. Traditionally, the anterior approach has been preferred throughout the spine[2]. Posterior approach has gained popularity in the last decade as it provides excellent exposure for circumferential spinal cord decompression and also allows posterior instrumentation to be extended for multiple levels, above and below the level of pathology [3].

CONCLUSIONS: Single stage posterior surgery can be a dimension to achieve satisfactory clinical outcomes in patients with thoracolumbar TB spondylodicitis.

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