

An Unusual Presentation of Tubercular Spondylodiscitis with Severe Lumbar Kyphosis Corrected with Pedicle Subtraction Osteotomy - A Case Report

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Abstract: Background: Pott's disease, a severe manifestation of musculoskeletal tuberculosis, poses significant challenges due to spinal deformity and instability. This report documents a rare case of severe lumbar kyphosis corrected using pedicle subtraction osteotomy. Case: A 22 - year - old female presented with chronic low back pain and progressive kyphotic deformity. Imaging confirmed tubercular spondylodiscitis, and surgical intervention successfully restored spinal stability. Conclusion: This case highlights the efficacy of pedicle subtraction osteotomy in managing advanced Pott's disease.

Keywords: Pott's disease, spinal deformity, lumbar kyphosis, pedicle subtraction osteotomy, tubercular spondylodiscitis

1. Introduction

Tuberculosis (TB) remains a significant public health concern, ranking among the top 10 causes of death globally. Spinal tuberculosis, also known as Pott's disease, constitutes nearly half of all musculoskeletal TB cases. Severe kyphosis resulting from Pott's disease often necessitates surgical intervention, particularly in cases unresponsive to medical therapy.

2. Aim

To determine the functional outcome of pedicle subtraction osteotomy in the management of post - tubercular severe lumbar kyphosis.

3. Case Report

A 22 - year - old female presented with a 4 - year history of low back pain exacerbated post - delivery. She exhibited

significant weight loss, fever, and radiculopathy. Examination revealed a tender bony swelling in the lumbar region, muscle spasm, and antalgic gait. Imaging confirmed vertebral collapse and tubercular spondylodiscitis from L1 to L4, with associated psoas collections and kyphotic deformity. Gene X - pert test verified the diagnosis.

Patient underwent Posterior decompression (L2 - L5) with L3 pedicle subtraction osteotomy with Posterior spinal stabilization (L1 - S1) under general anaesthesia.

Post - operative Outcome:

The patient experienced symptomatic improvement, was mobilized on post - op day one, and was referred for 9–12 months of anti - tubercular therapy. Regular follow - ups document her recovery.



4. Discussion

Spinal TB frequently leads to kyphotic deformities that progress despite medical therapy. Indications for surgical intervention include severe deformity, neurological impairment, and spinal instability. Pedicle subtraction osteotomy provides significant deformity correction in complex cases, albeit with associated surgical risks. This case emphasizes the role of surgical treatment in restoring function and quality of life.

5. Conclusion

This case report underscores the successful surgical management of severe lumbar kyphosis secondary to tubercular spondylodiscitis. Pedicle subtraction osteotomy proved effective in correcting deformity and ensuring spinal stability.

References

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