

A Case Series: Treating Spondylodiscitis with Primary Fusion Surgery.

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INTRODUCTION:

The hallmark of treatment of spondylodiscitis remains broad-spectrum antibiotics, for 6 weeks. Prolonged pain and suffering and risks of prolonged bed rest to immobilize affected spinal segment, argues if conservative treatment should remain as standard treatment. The concern remains that spinal instrumentation during on-going infection carries the risk of colonization and persistence of infection. This case series, offers an alternative by single stage debridement and interbody fusion.

REPORT:

This case series retrospectively reviewed 6 patients diagnosed to have spontaneous or iatrogenic spondylodiscitis using records for January 2021 - March 2023.

The review included 6 patients (4 male, 2 female, mean age 60). All 6 patients underwent lateral debridement with extreme lateral interbody fusion. 3 patients showed to have positive intraoperative tissue cultures, remaining 3 patients had negative cultures, which had positive blood cultures, allowing for titred pharmacological treatment. Infection was eliminated by normalization of the infective markers. Clinical outcomes showed pain control across all 6 patients, and neurological recovery in 1. Fusion was depicted in 2 patients which had completed 1 year follow up.

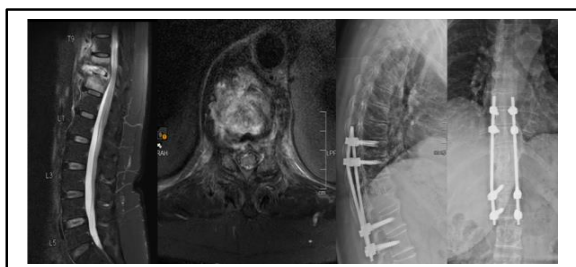


Figure 1: Lumbar spondylodiscitis positive for MRSA, treated with primary fusion surgery.

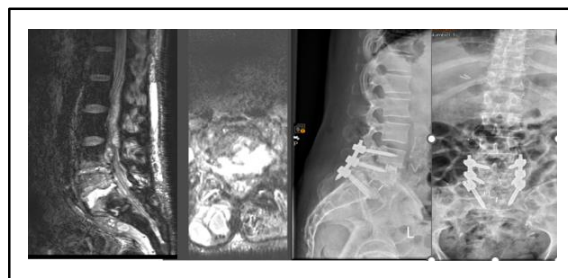


Figure 2: Established fusion in TB spine having undergone single stage debridement and interbody fusion.

CONCLUSION:

Primary fusion surgery addresses neurological deficits, sepsis, instability, deformities, and failure of conservative management. Extreme lateral interbody fusion can be done safely by ensuring adequate lateral debridement of the infected disc material, whilst obtaining tissue culture for titration of antibiotics.

This case series suggests single stage debridement and interbody fusion, is a viable option in treating spondylodiscitis when compared to conventional treatment as it is safe, improves pain control and has good clinical outcomes due to early surgical intervention and rapid post operative mobilization.

REFERENCES:

1. Mohd et al., *Egyptian Journal of Neurosurgery* 2020; Pg 35:23.
2. Chia et al., *World Neurosurgery* 2019, Pg 755-760.
3. Tao et al., *Acta Ortho Traumatol Turc* 2018, Pg 277-282.