

Successful Conservative Management Of Spondylodiscitis With Minor Neurological Deficit Followed By Minimal Invasive Stabilisation Using Percutaneous S2 Alar Iliac Screw

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INTRODUCTION:

About one third of patient with spondylodiscitis presented with neurological deficit. Few studies had shown complete neurology recovery with conservative management by prolonged antibiotic. Surgery is only indicated when there is large abscess collection, instability, failure of conservative management and need of spinal cord decompression.

MATERIALS & METHODS:

A 50 year-old man with underlying obesity with BMI 41.4 kg/m², hepatitis B and hypertension presented with 2 weeks history of gradual worsening back pain. The pain was worse on changing position and subsequently patient was bedridden for 1 week. No prolonged fever and no contact with tuberculosis. He denied loss of weight or appetite. On palpation, the lumbar spine was tender axially. Power was grade 3 at right ankle dorsiflexion and big toe extension. Otherwise power left lower limb was grade 5. Sensation was intact bilaterally. Reflexes were normal. Perianal sensation is present. MRI lumbosacral spine showed paravertebral inflammation with spinal canal stenosis and nerve root impingement. Intravenous cloxacillin was started empirically for 12 weeks.

RESULT:

Neurology improves with right ankle dorsiflexion and big toe extension power grade 4. However, lower back pain was persistent on sitting and worse on changing position. Repeated MRI showed containment of infection but severe bone loss in L4 and L4. Minimal invasive spinal stabilization from L2 – S2 ilium was performed with indication of instability pain.

Figure 1: MRI lumbarsacral spine

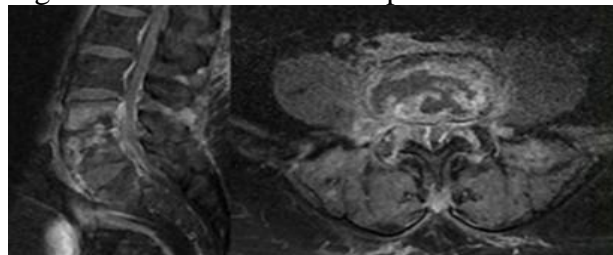


Figure 2: Percutaneous lumbar-pelvic fixation



DISCUSSIONS:

Conservative management is an option for patient with minor neurological deficit especially in patient with high surgical risk. Neurology improvement was reported in literature. Targeted antibiotic therapy with serial monitoring of inflammatory markers is important. Minimal invasive approach offers advantages of reduced blood loss, stable fixation, reduced postoperative pain, infection and is beneficial in immunocompromised patient. Percutaneous S2 Alar Iliac screw requires proper surgical skill with advantages of less extensive dissection with less infection, technical ease of placement, less prominence, no interference with bone graft harvesting and in line placement with proximal screws.