

NOT YOUR TYPICAL SPONDYLOLISTHESIS

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Introduction

Spondylolisthesis is defined as a vertebral pathology in the pars interarticularis where one vertebra slips anteriorly over the vertebra underlying it. Progression in the disease may cause localized pain and may result in lower extremity deficits if not corrected.

Case report

- 56 YO with relevant PMH for DM, gout, ETOH and tobacco abuse presenting with acute debilitating low back pain. MRI (shown) confirms diagnosis.
- Pt. develops progressive AMS and weakness.
- Admitted to OSH for septic shock and multisystem failure preventing biopsy.
- Etiologic agent unknown, blood cultures grow MSSA, tuberculosis work up negative.
- After 2 months of antibiotic treatment, pt. scheduled for spinal fusion, and final diagnosis obtained during the procedure.

References

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3. Hohenberger, Christoph, Nils-Ole Schmidt, Christian Doenitz, Odo Winfried Ullrich, and Karl-Michael Schebesch. "Infectious spondylodiscitis of the lumbar spine: conservative antibiotic therapy vs. antibiotic therapy with surgery, and the time of surgery." Neurology India 70, no. 1 (2022): 155-159.

Discussion

The most common cause of diskitis and osteomyelitis are attributed to staphylococcus species.

Studies have shown various etiologies of spondylolisthesis, including congenital, degenerative, and traumatic in the posterior region of the spinal cord. Spinal tuberculosis is often found in the thoracic spine and the usual progression of the disease is not currently known to cause spondylolisthesis (1).

TB predominantly affects the anterior aspects of the vertebral column with research estimating 95 - 98% of infections localizing to this region (2). Involvement within the posterior segments of the vertebral column is rare but may lead to pathological fractures within the pars interarticularis. These fractures may lead to a secondary morbidity of spondylolisthesis. In addition, existing defects in the pars interarticularis may become symptomatic or exacerbate when associated with a tubercular infection.

Clinical evidence has shown aggressive treatment of patients diagnosed with TB with spondylolisthesis has led to significant symptomatic and radiologic improvement (3). Whether early oral anti TB Rx is preferable to surgery remains controversial.

