

Pathological Fracture in Ankylosing Spondylitis- A Difficult Situation. Case Report

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INTRODUCTION:

Pathological fracture in ankylosing spondylitis (AS) with spinal tuberculosis (TB) is a rare entity¹. The management of this type of patient is very challenging.

REPORT:

Madam L was a 58-year-old lady, diagnosed with diabetes mellitus, hypertension and history of cerebral vascular accident complicated with residual hemiparesis. She presented to us with severe back pain and lower limb weakness.

From the further history she complained of having progressive lower thoracic back pain for three months, worsened for one month duration associated with lower limb weakness. Due to the severe pain this patient was bed ridden in left decubitus position and reduced oral intake. She denied cough or TB contact.

She appeared malnourished, in pain whenever tried to move. Auscultation showed reduced air entry of the lower zone of left lung field. No palpable mass elicited. Multiple pressure sores seen over left lower thoracic and sacral areas. Neurological examination revealed sensory level of L2, lower limb power zero with hyporeflexia, and lax anal tone.

Laboratory investigation showed elevated erythrocyte sedimentation rate (ESR) 81mm/h and C-reactive protein (CRP) 113mg/L. Total white cell count was $12 \times 10^9/L$. Pathological fracture of L2 seen on plain radiograph with features of ankylosing spondylitis (Figure 1). Magnetic resonance imaging (MRI) reported features suggestive of spondylitis with paravertebral collection (Figure 2). Computerized tomography (CT) guided biopsy yielded positive results for TB PCR and culture.



Figure 1: Plain radiograph of the spine

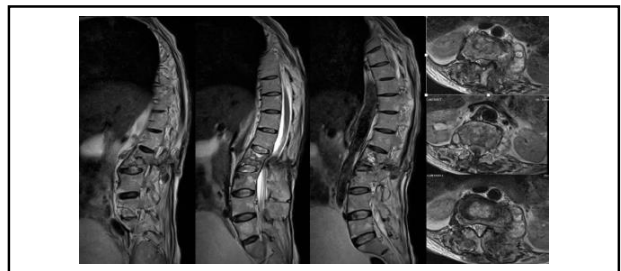


Figure 2: MRI of the spine

Anti-TB treatment was commenced and the patient underwent posterior instrumentation, decompression and biopsy. Post-operatively she was able to ambulate via wheelchair and her appetite was improved.

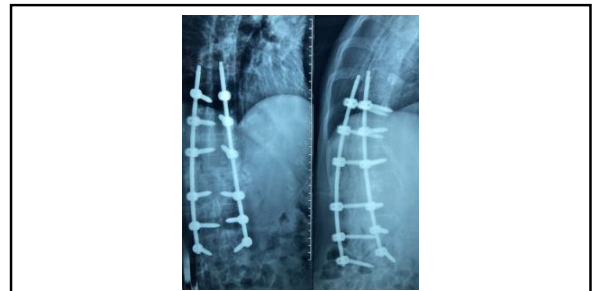


Figure 3: Post-operative X-ray of the spine

CONCLUSION:

Surgery is a good option to address fractures in ankylosing spondylitis for patient rehabilitation.

REFERENCES:

1. Yin et al., Posterior surgical treatment of ankylosing spondylitis with spinal tuberculosis. *Medicine (Baltimore)* 2018 Aug; 97(34): e11925.