

Metastatic Spine Mimicking Spinal Tuberculosis: A Case Report

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INTRODUCTION:

Clinically it is difficult to distinguish an infection of the spine from a metastasis.

Radiologically, the hallmark of spinal infection is an erosion of adjacent vertebral endplates and narrowing of the disc space with or without a paravertebral shadow. Metastasis typically presents as a lytic lesion in the vertebral. We reported a case of 45 year old male with so-called radiological features of spinal tuberculosis infection which turns out to be a metastatic spine.

MATERIALS & METHODS:

45-year-old male technician with history of treated pulmonary tuberculosis presented with backache and lower limb weakness since 2 months. The pain progressively worsening with numbness and weakness of both lower limbs. Six weeks prior to lower backache he was diagnosed with reactivation of pulmonary tuberculosis and started on anti-tuberculous therapy. Clinically there is tenderness over upper lumbar spine with firm swelling over left paraspinal region and complete paralysis of both lower limbs.

RESULTS:

Patient proceeded with X-ray and MRI spine and features are consistent with tuberculous spine involving T12, L1 and L2 body level causing spinal stenosis and conus medullaris compression at L1 level complicated with large lobulated multiloculated left psoas abscess with left paraspinal and left prevertebral abscess. Patient underwent spinal fusion T10 to L4 and laminectomy of L1, corpectomy of L1 and mesh cage insertion and cortical bone graft. HPE tissue from posterior L1 reported as metastatic carcinoma likely primary from lung.



Figure 1: X-ray lumbosacral –AP and lateral



Figure 2: MRI image of lumbosacral

DISCUSSIONS:

Spine is the most common site for metastatic lung carcinoma. Magnetic resonance imaging (MRI) is very sensitive for both infection and metastasis spine. However metastatic spine disease should be considered in this case as patient is not responding to treatment despite on anti-tuberculous maintenance therapy. Surgical stabilization with instrumentations is required when the spinal canal is compromised by vertebral collapse or infiltration of tumor or spinal instability due to the pathological vertebral collapse or extensive destruction of the posterior elements.

CONCLUSION:

We believe that metastatic lesion in spine can mimic tuberculosis in clinical and radiological presentation. A biopsy is mandatory whenever in doubt or patient is not responded with provisional treatment.

REFERENCES:

Eismont FJ, Green BA, Brown MD. Coexistent infection and tumor of the spine. A report of three cases. *J Bone Joint Surg Am.* 1987; 69:452-458.