Clinical Images

Skeletal Tuberculosis

Saate Shakil, MD^{1,2}, Elliot Dickerson, MD³, and Rabih Geha, MD¹

¹Department of Medicine, University of California, San Francisco, CA, USA; ², San Francisco, CA, USA; ³Department of Radiology, University of California, San Francisco, CA, USA.

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CASE

A 43-year-old man from the Philippines presented with lumbar pain and right lower extremity weakness. He was diagnosed with sciatica. Worsening pain, weight loss and elevated inflammatory markers prompted MRI of the spine, which showed multi-level spinal lesions. Bone biopsy showed granulomatous osteomyelitis. Sputum and bone acid-fast stains were negative. However, bone cultures subsequently grew *Mycobacterium tuberculosis* (M.Tb).

His symptoms failed to improve despite standard M.Tb treatment. MRI of the spine revealed multilevel infiltrative rim-enhancing lesions with sparing of the intervertebral discs and large areas of extra-vertebral extension (Fig. 1). Culture sensitivities revealed multidrug-resistant tuberculosis, and antibiotics were adjusted. He underwent debulking surgery, with subsequent resolution of symptoms.

Skeletal tuberculosis (Pott's disease) accounts for 10% of extrapulmonary tuberculosis.¹ The thoracic spine is most frequently affected.¹ Patients commonly present with progressive pain, focal neurologic signs, and constitutional symptoms.² On imaging, the relative sparing of the intervertebral disc, attributed to the absence of proteolytic enzymes in mycobacteria, and the presence of extensive soft tissue involvement distinguish Pott's disease from other infectious or malignant diseases of the spine.^{3,4} Inherited or acquired immunodeficiency syndromes (e.g. HIV) should be considered; however, as with our patient, Pott's disease may occur in immunocompetent patients.¹

Figure 1 Sagittal T2-weighted (a) and post-gadolinium T1-weighted (b) MRI of the lumbar spine revealed multilevel infiltrative rim-enhancing lesions (arrows) with large areas of extension outside the vertebral bodies notable for sparing of the intervertebral discs (asterisks).

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Corresponding Author: Saate Shakil, MD; , 505 Parnassus Ave, M987, San Francisco, CA 94143-0119, USA (e-mail: saate.shakil@ucsf.edu).

Compliance with Ethical Standards:

Conflict of Interest: The authors declare that they do not have a conflict of interest.

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