Lower back pain caused by tophaceous gout of the spine

Figure Tophaceous gout of the spine

MRI shows abnormal signal intensity at L4–5 on T1-weighted sequences (A and B inset), with corresponding contrast enhancement (B). Analyses of biopsy were consistent with tophaceous gout. Hematoxylin-eosin stain shows brown aggregates of urate crystals surrounded by an inflammatory reaction (C), and polarizing microscopy reveals typical birefringent crystals (D).

A 75-year-old man with a history of gout presented with 5 days of fever and diffuse lower back pain. His temperature was 101.5 °F, and he had tenderness over both thoracic and lumbar vertebrae. His neurologic examination was largely normal. Erythrocyte sedimentation rate was 100 mm/h, and serum uric acid 18.6 mg/dL. Subsequent workup, including MRI and biopsy (figure), was consistent with tophaceous gout of the spine. Spinal gout is rarely reported, and can be mistaken for a spinal epidural abscess.¹ A recent study suggests the frequency of axial involvement may be as high as 14% in patients with clinical or crystal-proven gout.²

Haakon B. Nygaard, MD, Sheela Sheno, MD, and Salil Shukla, MD, New Haven, CT

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Address correspondence and reprint requests to Dr. Haakon B. Nygaard, Department of Neurology, Cellular Neuroscience, Neurodegeneration and Repair Program (CNNR), Yale University School of Medicine, 295 Congress Ave., BCMM 436, New Haven, CT 06536-0812; haakon.nygaard@yale.edu

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