Clinical Images

Progressive Cervical Myelopathy as Presentation of Sarcoidosis

David Price, MD¹, Richart Harper, MD², and Mark C. Henderson, MD¹

¹Department of Internal Medicine, University of California, Davis, Sacramento, CA, USA; ²Division of Pulmonary, Critical Care and Sleep Medicine, University of California, Davis, Sacramento, CA, USA.

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Figure 1. Cervical spine magnetic resonance imaging (MRI) of a 44-year-old African-American woman. Panel a: MRI with gadolinium contrast 3 weeks prior to admission. Panel b: MRI with gadolinium contrast after 8 weeks of corticosteroid therapy.

A 44-year-old African-American woman was admitted with four months of intermittent “shock-like” sensations in her chest radiating to both arms; she developed left arm weakness just prior to admission. A cervical spine magnetic resonance imaging (MRI) demonstrated intramedullary enhancement from C1 to T1 (Fig. 1 Panel a).

Neurologic examination showed 4/5 strength of left wrist flexors and extensors, decreased bilateral light touch and pinprick sensation from C5 to T5, and hyperalgesia bilaterally from T1 to T3. Chest x-ray showed hilar adenopathy. Serum angiotensin converting enzyme level was 191 U/L (normal 9–67). Lumbar puncture was remarkable for a protein of 54 mg/dl (normal 15–45) and glucose of 30 mg/dl (normal 45–80;

serum glucose 106). Transbronchial biopsy showed non-caseating granulomas.

Sarcoidosis is an idiopathic inflammatory disease characterized by non-caseating granulomas affecting any organ. Neurologic involvement occurs in 5–17 % of sarcoidosis patients, with 0.43 % having spinal cord involvement.¹ The most common cerebrospinal fluid findings are elevated protein and hypoglycorrhachia, presumably a manifestation of chronic meningeal inflammation.² Owing to the invasive nature of spinal cord biopsy, neurosarcoidosis is often diagnosed with extra-neural tissue and the appropriate clinical syndrome.^{3,4} Treatment generally includes immunosuppressive agents. This patient’s neurological deficits and radiographic abnormalities improved with corticosteroids (Fig. 1 Panel b).

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Corresponding Author: Mark C. Henderson, MD; Department of Internal Medicine, University of California, Davis, 4150 V Street, Suite 3100, Sacramento, CA 95817, USA (e-mail: Mark.henderson@ucdmc.ucdavis.edu).

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