

Clinical Image

Title : Magnetic Resonance Imaging of the Spine in HIV-associated Tuberculous Meningitis Immune Reconstitution Syndrome Presenting as Myeloradiculopathy

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A 25 year old HIV infected man (CD4 count 74 /mm³) presented with pulmonary and meningeal tuberculosis (TB) complicated by hydrocephalus. After ten days of TB treatment, he developed leg weakness and sensory loss, consistent with a lumbosacral polyradiculopathy. Spinal MRI was normal. He was assessed as having a paradoxical deterioration on TB treatment. Oral prednisone (1.5 mg/kg) was started and he steadily improved with complete neurological recovery within six weeks. The steroids were tapered rapidly thereafter, concurrent with initiation of combined antiretroviral therapy (cART). Two months after starting cART he developed marked leg weakness, urinary incontinence, erectile dysfunction, interscapular pain and fever. Clinically he had a thoracic myeloradiculopathy with a T6 sensory level, due to suspected TB-IRIS. Post-gadolinium T1 sequences on MRI spine demonstrated extensive thickening of the pachymeninges with diffuse enhancement (figures 1&2, sagittal; figure 3, axial). Biopsy revealed chronic granulomatous inflammation and Ziehl-Neelsen staining was negative for acid fast bacilli. He was pulsed with intravenous methylprednisolone for two weeks, followed by oral prednisone (1.5 mg/kg) thereafter and showed a substantial improvement over the following month.