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NEUROLOGICAL PICTURE.....

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Dorsal intramedullary tuberculoma

A 35-year-old male presented with lower back pain, progressive weakness of the ankles, loss of pain, temperature and touch sensation on the medial aspect of the legs, dorsum of the foot and soles, and urinary urgency, frequency and urge incontinence. Ankle dorsiflexors and plantar flexors showed grade 4/5 power with only minimal weakness of knee extension. Bilateral ankle jerks were diminished. Bilateral L3–S1 dermatomes showed 50–70% sensory loss to pain, temperature and touch. The Mantoux test was positive. No chest symptoms or signs were present. CSF examination revealed mild lymphocytosis (20 cells/mm³), elevated proteins (110 mg/dl) and low glucose (40 mg/dl with a blood glucose of 140 mg/dl). CSF Gram stain and bacterial culture were negative.

MRI of the spine showed an intramedullary conglomerate of cystic lesions at the T11–12 vertebral level (fig 1). Acid fast stain of CSF was negative but CSF culture for *Mycobacterium tuberculosis* was positive. CSF-PCR for tuberculosis was positive (fig 2). Chest radiographs were normal. Following a diagnosis of spinal tuberculosis (intramedullary tuberculoma), the patient was started on antituberculosis chemotherapy along with oral corticosteroids. Isoniazid, rifampicin, ethambutol and pyrazinamide were given for the first 3 months followed by isoniazid and rifampicin for 5 months. Corticosteroids were given for 6 weeks and gradually stopped. The patient started showing improvement following 2 weeks of initiation of therapy with continued improvement during the course of treatment and was completely asymptomatic after the full course of treatment. Follow-up MRI could not be done because of unwillingness of the patient who is being followed-up clinically

Figure 1 MRI of the spine showing a well defined intramedullary conglomerate of cystic lesions at the T11–12 vertebral level. Perilesional and cord oedema extending up to the T7 vertebral level upwards and till conus downwards, and hypointense cyst wall (arrow) are seen on the T2 weighted image (A, sagittal section). On gadolinium enhanced images (B, post gadolinium T1 weighted sagittal; C, post gadolinium T1 weighted coronal; D, post gadolinium T1 weighted axial), conglomerate ring enhancement of the lesion was seen.

and there is no recurrence of symptoms after 6 months of completion of therapy.

Intramedullary tuberculomas, although well known, are an uncommon occurrence.^{1,2} They have a typical appearance of “ring enhancing lesions” on MRI and the differential diagnosis includes neoplastic, demyelinating, vascular, inflammatory and other granulomatous lesions.³ In our case, CSF culture for *Mycobacterium tuberculosis* and PCR confirmed the diagnosis along with the typical MRI appearance of the lesion.

Figure 2 CSF PCR showing a characteristic 240 bp band, indicative of the MPT gene of *Mycobacterium tuberculosis*.

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