Intramedullary granuloma suggestive of tuberculoma

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Tuberculosis is still a major health problem in many parts of the world, especially Asia, Africa, and South America. The most common form of spinal intradural tuberculosis is meningitis and intramedullary tuberculomas are rare¹. According to Citow and Ammirati intramedullary tuberculomas are seen in two of 100,000 cases of tuberculosis and in two of 1000 cases of central nervous system tuberculosis². The ratio of intramedullary spinal to intracranial tuberculoma was found to be 1:42 in one major series³.

CASE

A 26-year-old woman presented with two-month back pain followed by paraparesis. At admission unit, the patient presented with urinary retention and paraparesis grade II. Magnetic resonance images demonstrated intramedullary lesion, at C7-T1 level, with ring contrast enhancement (Fig 1A, 1B, 1C), and lytic lesion on T8 vertebral body (Fig 1D). The patient tested negative for HIV. In view of the evidence of tuberculosis by the radiological appearance in T8 level, a presumptive diagnosis of intramedullary tuberculoma was made, and the patient received chemotherapy. However the neurological deficits worsened and the surgery was planned. A laminotomy at C7-T1 level was done followed by debulking of the lesion microsurgically.

Histopathologic examination revealed lymphocytes, epithelioid cells, and Langerhans giant cells indicative of tuberculoma (Fig 1E, 1F). Cultures were negative and PCR has not been done. Postoperatively, patient showed gradual improvement in power over a period of six months.

DISCUSSION

The common location of intramedullary tuberculoma is the thoracic cord and less commonly in the cervical and lumbar regions. The best imaging modality for diagnosis is magnetic resonance image⁴. The ideal treatment remains controversial, and many authors have recommended medical treatment. Surgery is generally indicated when there is no response to chemotherapy, the diagnosis is in doubt or rapid deterioration in neurologi...
We recommend that patients who present with advanced neurological deficits should undergo early decompression even with adequate chemotherapy, since the intramedullary location and expansion of the cord with demyelinating destruction of tracts could worsen the clinical status.

REFERENCES