ORIGINAL RESEARCH PAPER

Pulmonary Medicine

A CASE REPORT OF TUBERCULAR TRANSVERSE MYELITIS

KEY WORDS: Tuberculosis, Transverse Myelitis

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ABSTRACT

INTRODUCTION: Transverse myelitis (TM) is a focal in ammatory disorder of the spinal cord, often associated with infectious disease, which can lead to permanent paraplegia or quadriplegia.

CASE REPORT: A 56-year-female ,presentedwithb/l lower limb weakness since 2 days,b/l lower limb loss of sensations since two days,inability to walk since one day,and urinary retention requiring catherisation and fecal incontinence since one day. By history there was also , intermittent fever and night sweats. There was past history of respiratory tract infection two weeks back which partially subsided with antibiotics.Patient is known hypertensive and hypotyroid. Vitals:-normal General physical examination showed moderate general condition, and presence of crackles in both lungs. Neurological examination :- arre ecticlowerlimbs,paraplegia inboth lower limbs (strength 0/5 according to the Medical Research Council grade), and a positive Babinski sign,loss of all sensations completely below umbilicus.

CONCLUSION: Tuberculous transversal myelitis is rare but should be consid- ered in the differential diagnosis of non-compressive myelopa- thies, in high burden TB countries or in the presence of clinical symptoms suggestiveofTB

INTRODUCTION

Transverse myelitis (TM) is a focal inflammatory disorder of the spinal cord, often associated with infectious disease, which can lead to permanent paraplegia or quadriplegia. Cases of transverse myelitis associated with TB are very rare or usually not reported. Cerebrospinal fluid analysis and magnetic resonance imaging of spinal cordplusbacteriological conflrmation of tuber culous infection are necessary for the diagnosis. We report a case-patient with TB presenting with transverse myelitis who had achieved clinical improvement and partial neurologic recovery after empirical anti-tubercular treatment and high doses of system iccorticosteroids.

CASE REPORT

A 56-year-female ,presentedwithb/l lower limb weakness since 2 days,b/l lower limb loss of sensations since two days,inability to walk since one day,and urinary retention requiring catherisation and fecal incontinence since one day. By history there was also , intermittent fever and night sweats. There was past history of respiratory tract infection two weeks back which partially subsided with antibiotics.Patient is known hypertensive and hypotyroid. Vitals:-normal General physical examination showed moderate general condition, and presence of crackles in both lungs. Neurological examination :- arreflecticlowerlimbs, paraplegia in both lower limbs (strength 0/5 according to the Medical Research Council grade), and a positive Babinski sign,loss of all sensations completely below umbilicus.

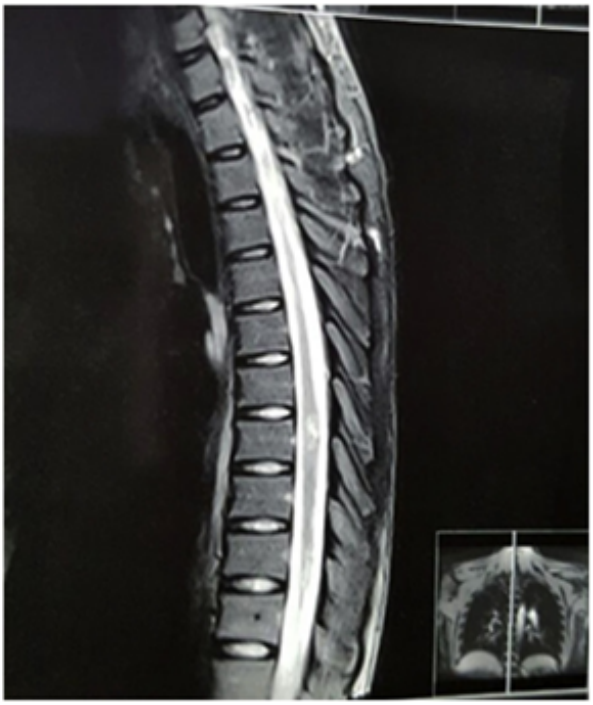
INVESTIGATIONS

Routine blood tests were normal. HIV and VDRL serologies were negative. Chest X-ray showed mild haziness in right middle lobe,. Cerebrospinal fluid (CSF) analysis revealed glucose 5.4 mg/dL, proteins 131.4 mg/dL, white cells 87 mm3 (lymphocytes 60%,neutrophils 40%) red cells 280mm 3, and negative Indiaink staining. CSF ADA->20,CSF for AFB –NEGATIVE.

Spinal cord MRI (done after treatment initiation) reveal edintramedullary T1, T2 and STIR hyper intense signals extending from T7 toT9segments.

DIAGNOSIS

A elderly female with hypertension and hypothyroid with denovo diabetes with clinical features of transverse myelitis. CSF analysis and MRI features are suggestive of tuberculous in origin.



TREATMENT

Considering the possibility of TB MYELITIS, the patient was empirically treated for TB initially with isoniazid 300 mg, rifampicin 600 mg, pyrazinamide 1100 mg, and ethambutol 1600 mg daily, dexamethasone 8 mg was administered IV every 8 h.

DISCUSSION

Central nervous system (CNS) TB is associated with a high mortality and morbidity [1]. Tuberculous myelopathy is a rare form of neurological TB [2]. Spinal cord involvement manifests like intramedullary tuberculoma, leptomeningitis,

extradural TB, and exceptionally as transverse myelitis [3]. TM may occur by direct bacillary invasion, vascular thrombosis, immunological mecha- nisms or mechanisms directly related to treatment [4]. In this particular case presented, the most probable mechanism was due toaimmune-mediated.TM is a rare neurological disorder characterized by an involvement of the spinal cord, due to acute in ammation that may evolve into cord ischemia and nally necrosis. It has an incidence between 1.34 and 4.6 per million per year, [5] with bimodal peaks between ages 10–19 and 30–39 years [5]. The symptoms of TM usually progress over hours to fewweeks. The most common symptoms include: lower limb paresthesia (80–95%),partialinabilitytomovelegs(paraparesia50%),sens ory level(80%), and bladder symptoms(almost100%)[6]. Autonomic symptoms include urinary incontinence and fecal incontinence , as happened in the present case.

CONCLUSION

Tuberculous transversal myelitis is rare but should be consid- ered in the differential diagnosis of non-compressive myelopa- thies, in high burden TB countries or in the presence of clinical symptoms suggestive of TB. Clinical manifestations should be considered the essential basis for anearly diagnose and an early treatment able to reduce permanent disability. The recommended management of this clinical entity is the treatment of tuberculosis and the use of high doses of system iccorticosteroids.

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