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Thought it was just fatigue? Think twice – it could be myelitis

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OBJECTIVES

Longitudinal extensive transverse myelitis (LETM) is defined as a spinal cord lesion that extends over three or more vertebrae, which is associated to a broad variability of motor and sensory signs and symptoms [1]. For a more favorable prognosis, it is essential not to underestimate the initial disturbances.

MATHERIALS AND METHODS

We describe the case of a 36-year-old male with no significant past medical history, with a subacute and asymmetric onset of motor and sensory disturbances in the lower limbs, initially mismanaged in a primary care setting. Upon admission to the Emergency Department, he presented with flaccid paraplegia, areflexia in both lower limbs, anaesthesia below T11, urinary retention, and rectal sphincter atony.

RESULTS

Urgent spinal MRI showed longitudinal extensive T2-hyperintense lesions with oedema and gadolinium enhancement from T5 to L1. Brain MRI was unremarkable. CSF analysis demonstrated mild lymphocytic pleocytosis (23/mm3) and elevated protein content (81 mg/dL), with negative microbiological screening. Serum testing for anti-MOG antibodies was positive via cell-based assay. Electrophysiological studies were consistent with inflammatory myelo-radiculitis.

DISCUSSION

The clinical presentation was suggestive of transverse myelitis of infectious or autoimmune origin. CSF Studios ruled out an infectious process, supporting an autoimmune etiology, further confirmed by the presence of serum anti-MOG antibodies. The patient was initially treated with intravenous corticosteroids without clinical improvement. Subsequent therapeutic plasma exchange led to mild neurological recovery. Rituximab was than initiated as a disease-modifying treatment.

CONCLUSIONS

This case highlights the potential for misdiagnosis when early neurological symptoms, such as radicular pain and focal weakness, mimic more common conditions like lumbar radiculopathy. In MOG-antibody-associated disease, early recognition and prompt initiation of targeted immunotherapy are critical to preventing permanent neurological impairment and optimizing long-term outcomes.

References: [1] Gina Perez-Giraldo, Natalia Gonzalez Caldito, Elena Grebenciucova - Transverse myelitis in myelin oligodendrocyte glycoprotein antibody-associated disease - Frontiers in Neurology - 2023 - 14 - 6