



# Longitudinally extensive transverse myelitis with unknown etiology presenting with sensory ataxia

Athena Sharifi Razavi<sup>1\*</sup>; Narges Karimi<sup>2</sup>

<sup>1</sup>Department of Neurology, Bou -Ali Sina Hospital, Mazandaran University of Medical Science Pasdaran boulevard, Sari, Iran

<sup>2</sup>Department of Neurology, Clinical Research Development Unit of Bou Ali Sina Hospital, Mazandaran University of Medical Science, Sari, Iran

**\*Corresponding Author(s): Athena Sharifi Razavi**

Department of Neurology, Bou - Ali Sina Hospital,  
Mazandaran University of Medical Science Pasdaran  
boulevard, Sari, Iran  
Email: Athena.sharifi@yahoo.com

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## Clinical image description

Longitudinally Extensive Transverse Myelitis (LETM) is an inflammatory lesion of spinal cord that extending over three or more spinal segments. A number of conditions may be associated with LETM such as autoimmune central nervous system disease, infective, neoplastic, and connective tissue disorders. Neuro Myelitis Optica (NMO) is commonest underlying etiology but is not pathognomonic of NMO, therefore it is important to investigate for other causes of myelopathy in these patients [1]. Most useful spinal MRI findings are bright spotty lesions (either

punctuate or as larger cavities), centrally-located or both centrally- and peripherally-located lesions, and a lesion involving  $\geq 50\%$  of the cord area [2].

Our patient was an 18-year-old boy that admitted with a 4-week history of progressive gait disorder, and right lower limb weakness from 2 days ago. Examination of his cranial nerves and upper limbs was normal. Lower limb examination revealed mild weakness on the right side with extensor plantar responses and



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are flexia .There was no sensory level but severe proprioception loss and sensory ataxia.

Cervicothoracic MRI showed extensive bright spotty lesion from C3 to T1 predominantly in posterior segment of spinal cord (Figure 1) that enhanced with gadolinium (Figure 2). Brain MRI was normal.

All laboratory tests including NMO ab, MOG ab, ANA profile, ACE, serum vitamin E and B12, was normal. There was no positive IgG index or OCB in CSF, but 8 lymphocyte and mild protein elevation. CSF culture was negative.

He was received methylprednisolone pulse therapy for 5 days but no improvement were occurred, so 5 time plasma exchange was performed, and finally he discharged with significant improvement.



Figure 1



Figure 2

## References

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