

## **ABSTRACT**

### **INTRODUCTION**

Longitudinally Extensive Transverse Myelitis (LETM) presents a diagnostic challenge with a wide spectrum of potential etiologies, including infectious, degenerative, inflammatory, and autoimmune factors. Performing early serological testing for NMO-IgG antibodies in suspected LETM is crucial for swift diagnosis, prognosis evaluation, and the initiation of appropriate therapy to mitigate the risk of future relapses or disease progression.

### **CASE PRESENTATION**

This case involves a previously healthy 17-year-old male who presented with acute urinary retention. He was admitted to a local hospital, where urinary retention was managed via catheterization. During his hospitalization, he developed progressive bilateral lower limb numbness, weakness, and paraparesis. He also reported reduced vision in his right eye, mild bilateral upper limb numbness, and weakness. The patient denied various constitutional symptoms, including weight loss, cough, malaise, and joint issues. His neurological examination revealed motor and sensory deficits in the limbs, without cranial nerve abnormalities. MRI showed long segment central cord involvement suggestive of extensive myelitis. He responded well to PLEX and Rituximab therapy.

### **CONCLUSION**

Recognizing and promptly managing Longitudinal Extensive Transverse Myelitis (LETM) is crucial in young patients to improve patient outcomes and prevent complications, emphasizing the need for increased research and clinical awareness.