

Teaching Video NeuroImage: Dramatic Response to Topiramate in Acquired Pendular Nystagmus From Multiple Sclerosis

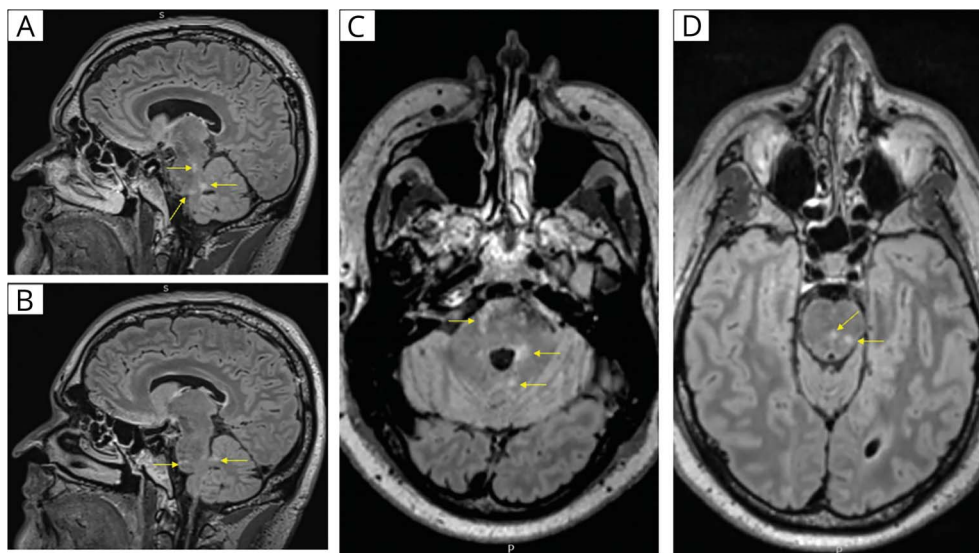
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Figure MRI Brain Findings



Sagittal (A and B) and axial (C and D) FLAIR images from the patient's head MRI are shown here, with MS lesions marked with yellow arrows. Multiple lesions were evident throughout the brainstem and cerebellum, including in the paramedian area of the pons (a region potentially implicated in patients with acquired pendular nystagmus).

A 41-year-old man with MS (Figure) experienced debilitating oscillopsia secondary to acquired pendular nystagmus (APN). Treatment with gabapentin and memantine (used individually and then in combination) were mildly effective, but he reported that the oscillopsia reduced dramatically after alcohol consumption. Given responsiveness to alcohol is a feature of essential tremor, we tried a similar therapeutic approach. Propranolol was ineffective, but topiramate 50 mg twice daily resulted in a dramatic improvement in oscillopsia and APN (Video 1). Gabapentin and memantine are commonly used treatments for APN,¹ but understanding specific alleviating factors may shed light on pathophysiology and lead to novel therapeutic strategies.

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Disclosure

The authors report no disclosures relevant to the manuscript. Go to Neurology.org/N for full disclosures.

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 **Video**

Teaching slides

<http://links.lww.com/WNL/C418>

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Name	Location	Contribution
Olwen C. Murphy, MBBCh, MD, MRCPI	Department of Neurology, Johns Hopkins University School of Medicine, Baltimore, MD	Drafting/revision of the manuscript for content, including medical writing for content; study concept or design; analysis or interpretation of data

Appendix (continued)

Name	Location	Contribution
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Reference

1. Nerrant E, Abouaf L, Pollet-Villard F, et al. Gabapentin and memantine for treatment of acquired pendular nystagmus: effects on visual outcomes. *J Neuroophthalmol*. 2020; 40:198-206. doi: 10.1097/WNO.0000000000000807.

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