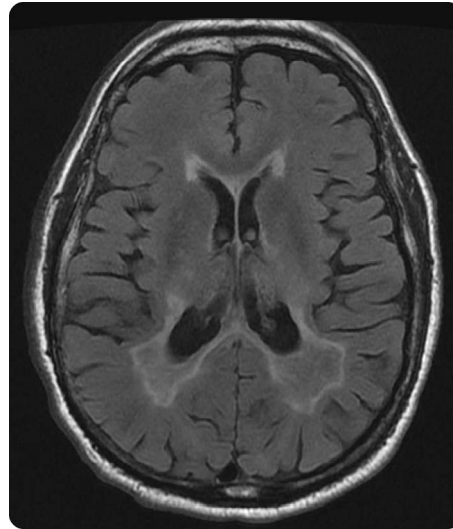


# Teaching Video NeuroImages: P/Q-type voltage-gated calcium channel–associated paraneoplastic elliptical nystagmus



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**Figure** Extensive T2 fluid-attenuated inversion recovery signal changes in the periventricular area, splenium, and genu of corpus callosum are nonenhancing



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A 71-year-old chronic smoker had an 11-month history of monocular followed by binocular elliptical nystagmus and oscillopsia (video at [Neurology.org](#)). MRI brain showed extensive periventricular T2 signal changes (figure) and CSF showed elevated protein to 102 mg/dL. CSF and serum paraneoplastic panel revealed elevated serum titers of anti-P/Q-type voltage-gated calcium channel (VGCC) and anti-neuronal-type voltage-gated potassium channel antibodies. An underlying malignancy was not found after an extensive investigation. The patient was treated with carbamazepine for symptomatic control, followed by high-dose IV methylprednisolone, resulting in moderate improvement. Anti-VGCC antibodies have been implicated in paraneoplastic nystagmus and small cell lung cancer is the most common associated malignancy.<sup>1,2</sup>

## AUTHOR CONTRIBUTIONS

E.A. Mistry authored the manuscript and participated in patient care and diagnosis. Dr. Lai critically reviewed the manuscript and participated in patient care and diagnosis. Dr. Lee critically reviewed the manuscript and participated in patient care and diagnosis.

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## DISCLOSURE

The authors report no disclosures relevant to the manuscript. Go to [Neurology.org](#) for full disclosures.

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Supplemental data  
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## Teaching Video *NeuroImages*: P/Q-type voltage-gated calcium channel–associated paraneoplastic elliptical nystagmus

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