CLINICAL VIDEO

Reversible hand tremors, downbeat nystagmus, and an unsteady gait with nontoxic lithium level

Yen-Yi Peng

Renown Institute for Neuroscience, Renown Health, Department of Neurology, University of Nevada, Reno, Nevada

Correspondence

Yen-Yi Peng, Renown Institute for Neuroscience, Renown Health; Department of Neurology, University of Nevada, Reno, NV.

Email: ypeng@renown.org

Key Clinical Message

Patients with nontoxic lithium levels can still develop hand tremors, downbeat nystagmus, and an unsteady gait.

KEYWORDS

downbeat nystagmus, lithium, tremor, unsteady gait

Four years of hand tremors, 2 years of jumpy eyes, and 6 months of unsteady gait with frequent falls caused the 60-year-old woman to be on forced medical leave. In the past 3 years, primidone, propranolol, sinemet, and amantadine have been tried without significant improvement. The patient has been taking lithium for more than 20 years. The lithium level was normal: 0.9 mmol/L (normal range:

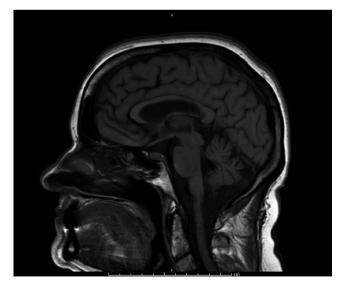


FIGURE 1 The MRI of the brain is unremarkable

0.6-1.2 mmol/L). The MRI of brain was not remarkable (Figure 1). On examination, the patient had downbeat nystagmus, tremors, and an unsteady gait. Lithium medication was stopped, and symptoms improved within one month^{1,2} (Video S1).

CONFLICTS OF INTEREST

The author declares no conflicts of interest.

AUTHOR CONTRIBUTION

YYP: was the neurologist for this patient.

ORCID

Yen-Yi Peng https://orcid.org/0000-0002-5829-6217

REFERENCES

 Jorgensen JS, Landschoff Lassen L, Wegener M. Lithium-induced downbeat nystagmus and horizontal gaze palsy. *Open Ophthalmol J*. 2016;10:126-128.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2019 The Authors. Clinical Case Reports published by John Wiley & Sons Ltd.

Clin Case Rep. 2019;7:599–600. wileyonlinelibrary.com/journal/ccr3

2. Halmagyi GM, Lessell I, Curthoys IS, Lessell S, Hoyt WF. Lithium-induced downbeat nystagmus. *Am J Ophthalmol*. 1989;107(6):664-670.

SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article. **How to cite this article:** Peng Y-Y. Reversible hand tremors, downbeat nystagmus, and an unsteady gait with nontoxic lithium level. *Clin Case Rep.* 2019;7:599–600. https://doi.org/10.1002/ccr3.1981