Teaching Video NeuroImages: Lithium-induced reversible Pisa syndrome

Niraj Kumar, MD, DM
Dan A. Mendonça, MD,
FRCPC
Mandar Jog, MD,
FRCPC

Correspondence to
Dr. Jog:
mandar.jog@lhsc.on.ca

Figure Lithium-induced reversible Pisa syndrome

Prominent left lateral truncal flexion along with anterocollis (A) with significant improvement 3 months after stopping lithium (B).

A 49-year-old man on chronic lithium therapy (1,500 mg/d) for bipolar disorder presented with a 2-year history of progressive left-lateral truncal flexion dystonia disappearing on lying supine (video 1 at Neurology.org), known as Pisa syndrome (PS), along with anterocollis and parkinsonism. Lithium serum level was normal (1.1 mmol/L). PS improved substantially 3 months after stopping lithium (video 2), supporting the diagnosis of lithium-induced PS (figure). PS has been reported with chronic use of a single or a combination of antipsychotics, but never with lithium monotherapy.^{1,2} Parkinsonism and PS may result from lithium-induced dopamine reuptake facilitation or dopamine receptor sensitivity reduction.²

AUTHOR CONTRIBUTIONS

Dr. Kumar: conception, design, and writing the first manuscript.
Dr. Mendonça: review and critique. Dr. Jog: review and critique.

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Supplemental data
at Neurology.org

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Niraj Kumar, Dan A. Mendonça and Mandar Jog

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