

Teaching Video NeuroImage: Alternating Skew Deviation as a Manifestation of Anti-GAD65–Associated Cerebellitis

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Neurology® 2023;100:640. doi:10.1212/WNL.0000000000206752

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 **Video**

Teaching slides

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A 53-year-old woman presented with ataxia, dysarthria, and vertical binocular diplopia on left and right gaze but absent in primary gaze. Her symptoms were progressive over several months without clear inciting event. Initial neuro-ophthalmology evaluation showed subtle downbeat nystagmus in primary gaze that increased in horizontal gaze, consistent with “side-pocket” phenomenon.¹ On cross-cover testing, she was found to have an alternating skew deviation (ASD), raising question of cerebellar localization (Video 1). Multiple etiologies can lead to ASD including autoimmune, ischemic, and paraneoplastic entities. Prior structural imaging was unrevealing. Serum studies revealed elevated glutamic acid decarboxylase antibody (anti-GAD65) levels (>250.0 IU/mL, normal range 0–5.0 IU/mL). She was subsequently diagnosed with anti-GAD65 cerebellitis. The patient was not screened for a neoplasm because anti-GAD65 is rarely paraneoplastic in nature. Anti-GAD65 interferes with the production of GABA, thereby disrupting supranuclear pathways and has been associated with autoimmune epilepsy and stiff-person syndrome. Intravenous immunoglobulin may improve outcome.²

Author Contributions

C. Bell: drafting/revision of the manuscript for content, including medical writing for content. P. Drummond: major role in the acquisition of data. S. Grossman: drafting/revision of the manuscript for content, including medical writing for content; study concept or design; analysis or interpretation of data.

Study Funding

The authors report no targeted funding.

Disclosure

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

Publication History

Received by *Neurology* August 19, 2022. Accepted in final form November 15, 2022. Submitted and externally peer reviewed. The handling editor was Resident and Fellow Section Editor Whitley Aamodt, MD, MPH.

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Neurology 2023;100;640 Published Online before print December 20, 2022

DOI 10.1212/WNL.0000000000206752

This information is current as of December 20, 2022

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