

Teaching NeuroImage: Hypothalamic Involvement in Neuromyelitis Optica Spectrum Disorder in a Child

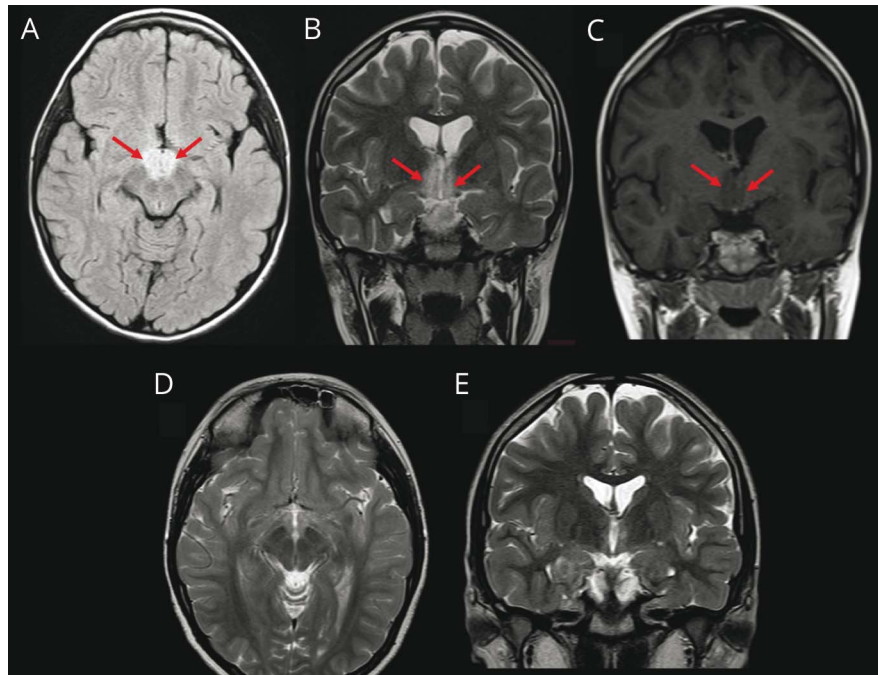
Juan Esteban Cote-Orozco, MD,* and Natalia Vélez-Tirado, MD*

Neurology® 2022;99:535-536. doi:10.1212/WNL.0000000000201011

Correspondence

Dr. Cote-Orozco
je.coteorozco@gmail.com

Figure Brain MRI



Brain MRI after 2 weeks of symptoms, (A) Axial fluid-attenuated inversion recovery imaging and (B) coronal T2-weighted image demonstrated a bilateral hypothalamic hyperintense nonenhancing (C) lesion (arrows). (D) and (E) T2-weighted images show resolution of the lesion 3 months after diagnosis and treatment.

A 10-year-old girl presented with a 15-day history of excessive daytime sleepiness and sudden sleep onset, hypnagogic hallucinations, hyporexia, and behavioral changes. An MRI examination of the brain revealed a bilateral hypothalamic lesion (Figure). We found positive AQP4-IgG antibodies in serum and low hypocretin levels (93 pg/mL) in the CSF. A diagnosis of narcolepsy secondary to neuromyelitis optica spectrum disorder was made. She improved after glucocorticoid administration. After 10 months of immunosuppressive maintenance therapy with azathioprine, she remains asymptomatic without new lesions in the follow-up neuroimages. Any diencephalic clinical syndrome, such as narcolepsy, with hypothalamic involvement, should prompt a serum test for AQP4-IgG.^{1,2}

Study Funding

No targeted funding reported.

Disclosure

The authors report no relevant disclosures. Go to [Neurology.org/N](https://www.neurology.org/N) for full disclosures.

*These authors contributed equally to this work.

From the Paediatric Neurology Department, Bogota (J.E.C.-O.), Hospital Militar Central—Universidad Militar Nueva Granada; Clínica del Country (J.E.C.-O., N.V.-T.), Bogotá; and Paediatric Immunology and Allergy Department (N.V.-T.), Fundación Hospital Pediátrico La Misericordia, Bogota, Colombia.

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Publication History

Received by *Neurology* January 14, 2022. Accepted in final form June 9, 2022. Submitted and externally peer reviewed. The handling editor was Roy Strowd III, MD, Med, MS.

Appendix Authors

Name	Location	Contribution
Juan Esteban Cote-Orozco, MD	Paediatric Neurology Department, Hospital Militar Central—Universidad Militar Nueva Granada, Bogotá; Clínica del Country, Bogotá, Colombia	Drafting/revision of the article for content, including medical writing for content; major role in the acquisition of data; study concept or design

Appendix (continued)

Name	Location	Contribution
Natalia Vélez-Tirado, MD	Clínica del Country, Bogotá; Paediatric Immunology and Allergy Department, Fundación Hospital Pediátrico La Misericordia, Bogotá, Colombia	Drafting/revision of the article for content, including medical writing for content; major role in the acquisition of data; and study concept or design

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Neurology 2022;99:535-536 Published Online before print July 8, 2022
DOI 10.1212/WNL.0000000000201011

This information is current as of July 8, 2022

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