Teaching NeuroImage: Brain Calcification in a Young Woman With Seizures

Explore the Rare Differentials

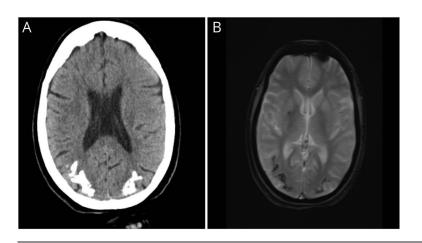
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Neurology® 2023;100:397-398. doi:10.1212/WNL.0000000000201573

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Figure (A) CT Scan and (B) MRI (GRE) Show Bilateral Cortical and Subcortical Calcification in Parieto-occipital Regions



An 18-year-old woman presented with refractory seizures that started at the age of 10 years. There was no history of medication use for other illnesses, radiation exposure, or neurocutaneous stigma. Her CT scan and MRI (GRE) (Figure, A and B) showed bilateral cortical and subcortical calcification in parieto-occipital regions. Based on her imaging findings, celiac disease, epilepsy, and cerebral calcification (CEC) syndrome^{1,2} was considered. This was confirmed by the presence of high antigliadin IgA (7.16U/mL), IgG (36.12 U/mL), and IgG tissue transglutaminase (645 U/mL) levels. Interictal EEG showed generalized discharges. Differentials were Sturge-Weber syndrome (SWS), congenital folate malabsorption, treatment with methotrexate and antifolate, and radiotherapy. SWS was excluded because of the absence of facial nevus, lobar atrophy, and subcortical calcification on MRI. Our patient had CEC syndrome with silent celiac disease. A gluten-free diet and antiseizure medications were recommended. She was seizure free on follow-up.

Author Contributions

B. Menon: drafting/revision of the manuscript for content, including medical writing for content; major role in the acquisition of data; study concept or design; analysis or interpretation of data. G. Manam: analysis or interpretation of data. P. Reddy: major role in the acquisition of data; analysis or

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interpretation of data. H. Mandalapu: analysis or interpretation of data. A Sudarsana: 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* May 24, 2022. Accepted in final form October 3, 2022. Submitted and externally peer reviewed. The handling editor was Associate Editor Roy Strowd III, MD, Med, MS.

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Neurology 2023;100;397-398 Published Online before print December 16, 2022

DOI 10.1212/WNL.000000000201573

This information is current as of December 16, 2022

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