Teaching NeuroImage: Brain Calcification in a Young Girl With Seizures—Explore the Rare Differentials

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An 18-year old girl presented with refractory seizures which started at the age of 10. 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, Cerebral calcification syndrome (CEC syndrome)\textsuperscript{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 tTG (645 U/ml) levels. Interictal EEG showed generalised discharges. Differentials were Sturge-Weber syndrome (SWS), congenital
folate malabsorption, treatment with methotrexate and antifolate, and radiotherapy. SWS was excluded due to 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.

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References:


Figure. (A) CT scan and (B) MRI (GRE) show bilateral cortical and subcortical calcification in parieto-occipital regions.
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