Symmetrical Abnormal MRI Signal Change in a 1-Year-Old Boy with Infantile Spasms

Teaching NeuroImages Neurology Resident and Fellow Section



Vignette

- A 10-month-old boy with global developmental delay presents to clinic with months of infantile spasms occurring multiple times a day
- His seizures continued despite vigabatrin (dosed at 133 mg/kg/day), levetiracetam, and steroid therapy
- Routine MRI of the head showed abnormal signal change (Figure)



Imaging



Kim et. al.

Reversible neuroimaging findings during treatment of infantile spasms with vigabatrin

- These imaging findings resolved completely on 4-month follow-up after tapering vigabatrin
- 30.9% of patients¹ with infantile spasms treated with vigabatrin may present with abnormal MRI signal change (Slide 3, Figure)
- Risk is associated with a high peak-dose of vigabatrin but not a cumulative dose²
- These findings are largely asymptomatic but rarely patients can present with hyperkinetic disorders²

