

Globus pallidus restricted diffusion associated with vigabatrin therapy

Restrição à difusão no globo pálido associado à terapia com vigabatrina

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A magnetic resonance imaging (MRI) exam was performed in an 11-month-old female patient with West syndrome who had been treated with vigabatrin for five months (131.5 mg/kg/day). The MRI showed asymptomatic changes (Figures 1, 2 and 3). Vigabatrin-associated MRI abnormalities occur in 10–20% of treated infants^{1,2}. Animal studies have associated the use

of vigabatrin with histopathologic abnormalities showing microvacuolization of glial cells and intramyelinic edema^{3,4}. Neurologists and neuroradiologists should be aware of, and recognize these changes, as they are mostly transient and may be symptomatic or not. Asymptomatic abnormalities revealed on MRI appear to be dose dependent, according to recent studies⁵.

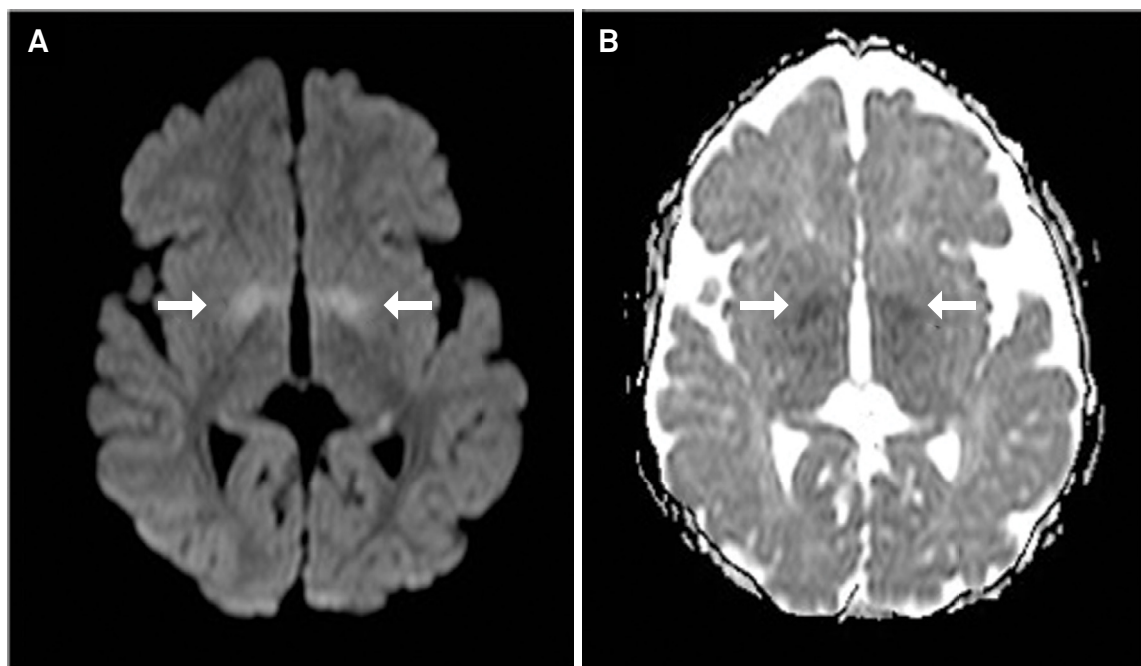


Figure 1. A) Diffusion weighted imaging showing restricted diffusion in the globus pallidus bilaterally (arrows). B) Apparent diffusion coefficient map showing hypointensity in the globus pallidus bilaterally, compatible with restricted diffusion (arrows).

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Figure 2. Axial FLAIR-weighted MR image showing high intensity signal in the globus pallidus bilaterally (arrows).



Figure 3. Axial T2-weighted MR image showing symmetric hyperintense foci in the globus pallidus bilaterally (arrows).

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