

SYMMETRIC RESTRICTED DIFFUSION OF BASAL GANGLIA AND BRAINSTEM BY USE OF VIGABATRIN

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Keywords: Vigabatrin; Symmetric restricted diffusion; Epilepsy; Mitochondrial disease.

8 month-old female patient under treatment with Vigabatrin for epilepsy of difficult response.

The Vigabatrina is an anti-epileptic drug used for the treatment of infantile spasms, having potential risk to developing brain abnormalities, showing a symmetrical involvement of the basal ganglia, thalamus and brain stem, mostly affecting users under 1 year-old. Patients frequently are asymptomatic or may present involuntary movements, impaired vigilance, hypotonia and bradycardia. The MRI image abnormalities are reversible after the drug withdrawal or by reducing its dose, which makes the prompt recognition of this pattern crucial to avoid unfavorable evolution of parenchymal alterations.

Among the main differential diagnoses stand out viral encephalitis, hypoxic-ischemic encephalopathy, mitochondrial encephalomyopathy and other toxic-metabolic diseases.

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Figure 1 - Diffusion (A,B,C, D) the image shows a symmetric restricted diffusion of basal ganglia, thalamus and brainstem

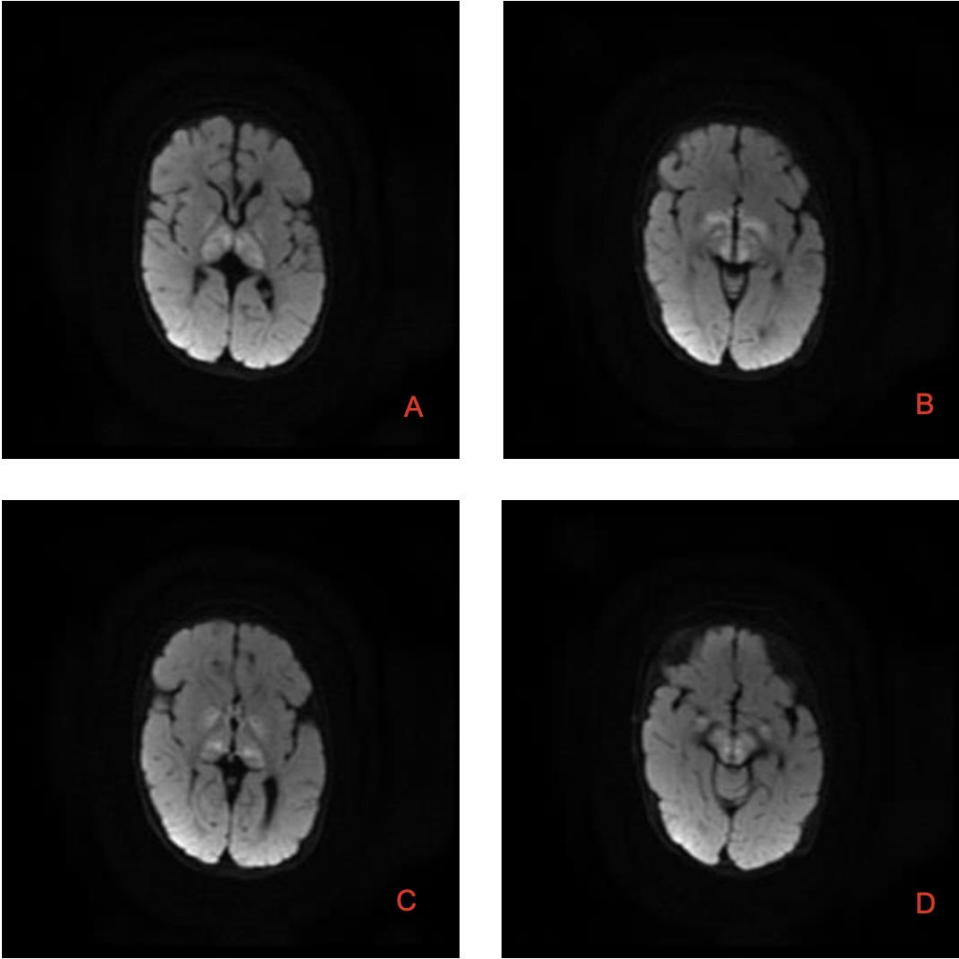
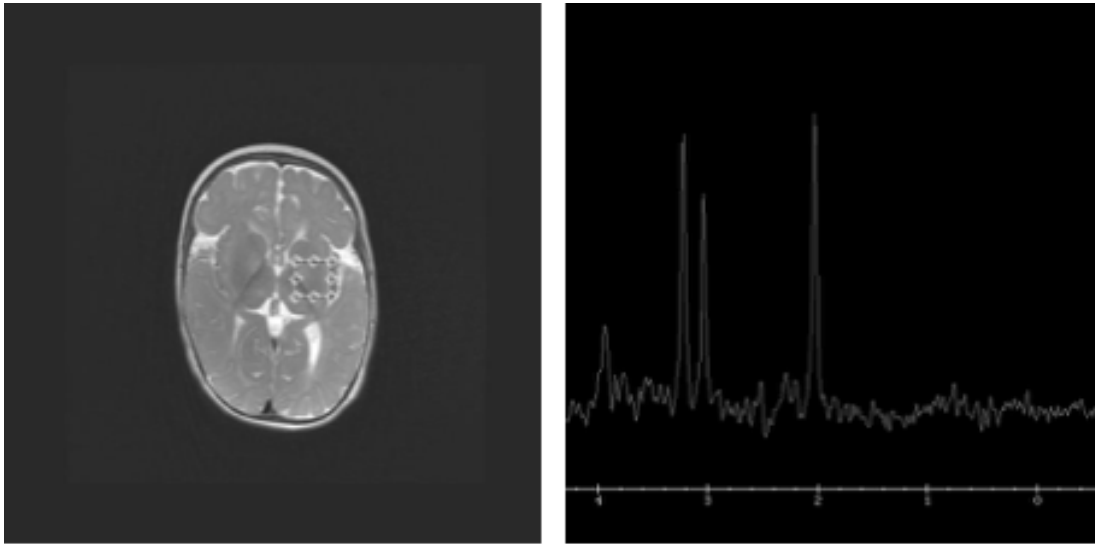


Figure 2 - Spectrum showing absence of lactate, which at first rules out the possibility of mitochondrial disease, one of the main differential diagnoses



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