

SECONDARY NEUROIMAGING CHANGES FOLLOWING TREATMENT WITH VIGABATRIN (CLINICAL CASE)

Introduction

Some studies show an association between the occurrence of neuroimaging changes (MRI) and Vigabatrin treatment in West syndrome in children, all changes being reversible and dose-dependent.

Purpose

Evaluation of neuroimaging peculiarities secondary to Vigabatrin treatment based on a clinical case.

Material and methods

We evaluated the case of a 1-year-old 7-month-old boy diagnosed with West syndrome who was hospitalized in 2019 in the Hospital of Mother and Child Health Care where he received treatment with Vigabatrin. At the age of 6 months the child presented the clinical picture of infantile spasms and delay in neuropsychic development, being diagnosed with West syndrome. The first neuroimaging investigation-MRI was performed at the age of 8 months, and the repeated one after 6 months of treatment with Vigabatrin

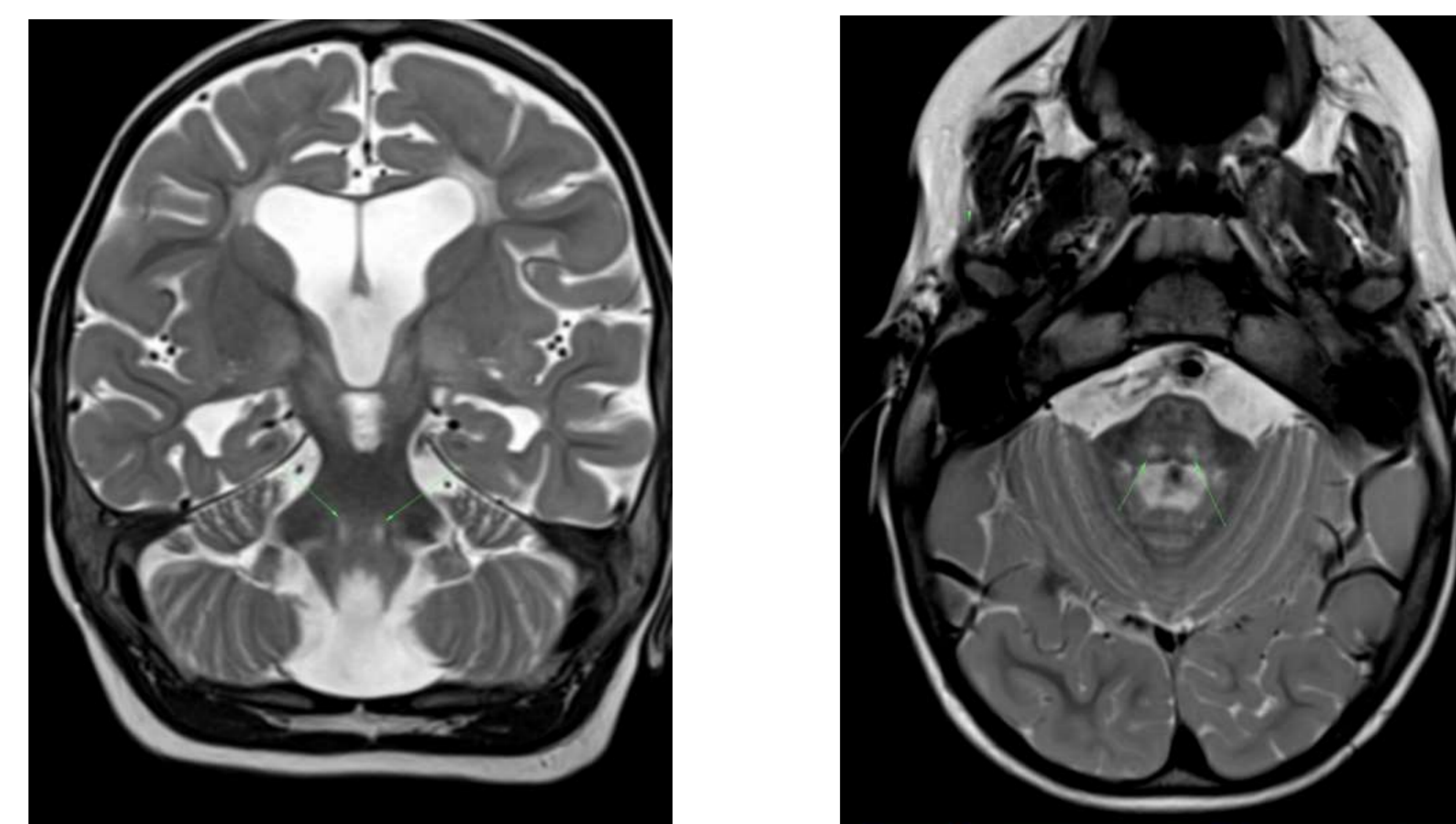
Conclusions

Brain MRI changes may be seen in children with epilepsy treated with Vigabatrin. These may include increased signal in T2 and transient changes in the brainstem, usually being dose dependent and disappearing after discontinuation of treatment.

Keywords

West sindrom, epilepsy, Vigabatrin

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After 6 months of treatment

Results

The child performed the first brain MRI, where periventricular cysts, a minimized volume of cerebral white matter with periventricular gliosis, with reduction of hippocampal volume and enlargement of the ventricular and cisternal system were described. After the initiation of Vigabatrin treatment, the seizures stopped. The same changes were described on the repeated MRI examination (after 6 months), but small gliotic lesions appeared in the brainstem and tegmentum, which were not previously described.