



Epilepsy and Isolated Hemimegalencephaly

Epilepsi ve İzole Hemimegalensefali

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Twenty-one year old male patient receiving epilepsy treatment presented at our center for follow-up and check-up. He had been receiving treatment for complex partial seizures since he was eight years old. He had been using valproic acid 1500 mg/day and carbamazepine 1200 mg/day for the last four years and his seizures had been under control for the past two years. His neurological examination was normal except for slight mental retardation. Among the EEG examinations performed under treatment, four were normal, while two were abnormal and showed mild slowing of basic activity on the left hemisphere. Cranial MRI was performed with suspected symptomatic epilepsy four times in 2 separate centers, and 3 of these were assessed as normal. The third MRI timewise, was reported to show left hemimegalencephaly (HME) (Figure 1). When other examinations were retrospectively evaluated the pathology was found in all.

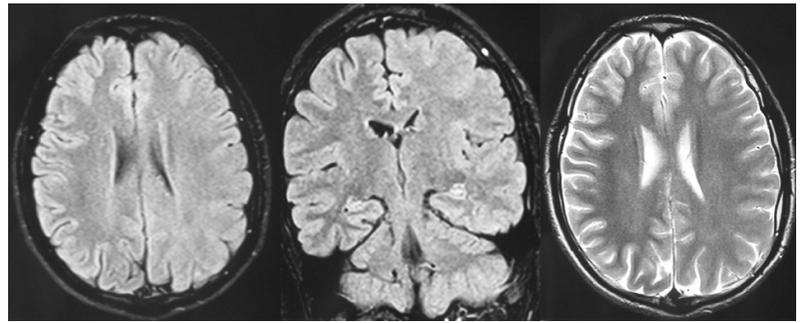


Figure 1. The volume of the left cerebral hemisphere is increased asymmetrically compared to the right hemisphere. T2 and FLAIR images show increase in left hemisphere white matter intensity.

HME is a rare anomaly characterized with the overall or partial hamartomatous proliferation of a hemisphere. It is seen at a rate of 1-3 in 1000 in children with epilepsy. There are 3 distinct clinical forms and the most common is the isolated form. The second form includes systemic manifestations such as hemigigantism and neurocutaneous syndromes. Brain stem as well as cerebrum and cerebellum involvement may be seen in the third form (1). Although it is fairly simple to recognize HME with MRI, isolated forms occasionally present a problem and be missed. The clinician and the radiologist may help diagnosis by sharing information.

Key Words: Epilepsy, hemimegalencephaly

Anahtar Kelimeler: Epilepsi, hemimegalensefali

Reference

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