

Clinical Course and EEG Findings of 25 Patients Initially Diagnosed with Childhood Absence Epilepsy

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Abstract

Rationale: The prognosis of childhood absence epilepsy (CAE) is good, and remission usually occurs before the age of 12 years. However, some patients progress to juvenile myoclonic epilepsy (JME), requiring continuous treatment after adolescence.

Purpose: To determine the risk factors for being unable to discontinue treatment for CAE during childhood.

Methods: We divided the 25 patients with CAE into two groups according to their clinical course: Group A included nine patients who could not discontinue treatment during childhood and group B included 16 patients who discontinued treatment because of remission. We evaluated both the EEG findings and the clinical aspects of patients initially diagnosed with CAE.

Results: 1) All 25 patients started with typical absence seizures (TAS), and 44% of the patients in group A developed generalized tonic-clonic seizures (GTCS) concomitant with the stage of active TAS 2) The EEG findings of group A showed that six patients had a photoparoxysmal response (PPR) on inter-ictal EEG, seven patients had focal spike and wave complexes (SWC) in the frontal lobe. The EEG findings of group B showed that two patients had PPR and one patient had focal SWC in the frontal lobe. Three patients (12%) progressed to juvenile absence epilepsy and two patients (8%) progressed to JME.

Conclusions: The risk factors for a worse prognosis of CAE are GTCS observed during the active stage of TAS, PPR or focal SWC in the frontal lobe.

Key words : Generalized tonic-clonic seizures, Juvenile myoclonic epilepsy, Photoparoxysmal responses, Focal spike and wave complexes, Juvenile absence epilepsy