



## A comparative study of vigabatrin *vs.* carbamazepine in monotherapy of newly diagnosed partial seizures in children

Wojciech Sobaniec, Wojciech Kułak, Jolanta Strzelecka,  
Joanna Śmigielka-Kuzia, Leszek Boćkowski

Department of Pediatric Neurology and Rehabilitation, Medical University of Białystok, Waszyngtona 17,  
PL 15-274 Białystok, Poland

**Correspondence:** Wojciech Sobaniec, e-mail: kneur2@wp.pl, tel fax +48 85 7450812

---

### Abstract:

Carbamazepine (CBZ) is a drug of choice for the treatment of simple or complex partial seizures and secondary generalized seizures in adults and children. Vigabatrin (VGB) is a relatively new second line antiepileptic drug and was first registered for use in Poland more than ten years ago. Few reports have been published on the comparison of efficacy of VGB in children with epilepsy. The objective of this study is to evaluate the safety, efficacy and EEG effects of initial VGB monotherapy compared with initial CBZ monotherapy in children with newly diagnosed epilepsy. We present results of a prospective, outpatient and open study carried out in the University Hospital Center in Białystok. Twenty-six children with partial epilepsy treated with VGB and 28 patients treated with CBZ were studied. The evaluation of the efficacy of the two drugs did not reveal any significant differences. Very good (reduction > 75%) seizure control was achieved in 22 out of 26 patients (84.6%) in the VGB group. One patient had a 50–75% decrease of seizures (good effect), similarly one child had a 25–50% reduction of seizures (mild effect). In two patients, we observed increased seizures (myoclonic jerks). Very good seizure control was achieved in 17 out of 28 patients (60.7%) in the CBZ group. Good seizure control was achieved in 5 out of 28 patients (17.8%) and mild control was seen in two children. No improvement was observed in 4 (14%) of the patients. The EEG background activity was improved in VGB-treated patients. No effect on the EEG background activity was observed in CBZ-treated children. VGB seems to be a safe and effective antiepileptic drug as primary monotherapy for epilepsy in children with similar proportion of side effects as CBZ.

### Key words:

carbamazepine, vigabatrin, partial seizures, epilepsy, children

---