

Berg AT, Levy SR, Testa FT, Shinnar S. **Treatment of newly diagnosed pediatric epilepsy: a community-based study.** Arch Pediatr Adol Med 1999;153:1267-1271.

Objective To determine the patterns and frequency of treatment and use of specific drugs for newly diagnosed pediatric epilepsy.

Design and Setting Prospective, community-based study. Children were recruited from physicians in Connecticut from 1993 to 1997.

Patients Children aged 1 month through 15 years at the time of their first seizure, who had 2 or more unprovoked seizures, and who were newly diagnosed during the recruitment period were eligible.

Main Outcome Measure Initiation of treatment at diagnosis and within 1 year after diagnosis of epilepsy.

Results Of 613 children, 482 (78.6%) were treated at the time of initial diagnosis. By 6 months another 10.3% were treated, and by 12 months 90% of the cohort had been treated. The most commonly prescribed antiepileptic drug (AED) was carbamazepine (38.8%) followed by sodium valproate (18.4%). Only 1 child received an investigational drug and none received any of the most recently approved drugs as a first AED. Children with idiopathic and secondarily generalized forms of epilepsy were most likely to be treated (90%-100%), whereas children with idiopathic localization-related epilepsy were least likely to be treated (50.8%). Approximately 80% of those with other forms of epilepsy were treated at the time of diagnosis. Use of specific medications reflected current guidelines and recommendations for treatment of specific seizure types and syndromes.

Conclusions In Connecticut, approximately 20% of children with epilepsy are not treated at the time of initial diagnosis, and around 10% continue to be untreated after 1 year. This most likely reflects the increased understanding of the nature of pediatric epilepsy and concerns regarding the adverse effects of AEDs. The most commonly used first drugs are carbamazepine and valproate. Follow-up of this cohort may help provide information to guide the use of recently approved AEDs.