

Berg AT, Shinnar S, Levy SR, Testa FM. **Newly diagnosed epilepsy in children: Presentation at diagnosis.** *Epilepsia* 1999;40:445-452.

Summary: *Purpose:* The current understanding of epilepsy has changed significantly in the past 2 decades. This report presents a description of newly diagnosed childhood-onset epilepsy, with a special emphasis on epilepsy syndromes, in a large, prospectively ascertained community-based cohort evaluated and diagnosed in the mid-1990s.

Methods: Children, aged 0 through 15 years at the time of the first seizure, were prospectively identified at the time of diagnosis of epilepsy through the practices of 16 of the 17 child neurologists in Connecticut as well as five adult neurologists and seven pediatricians from January 1993 through December 1997. Parents were interviewed, and all relevant medical records were reviewed. Classification of seizures and of epilepsy syndromes was done for each child by each of three pediatric neurologists. Discrepancies were resolved in conference.

Results: A total of 613 children was recruited into the study. The median age at time of the first seizure was 5.3 years. Half the cohort was boys. Eighteen percent had a remote symptomatic etiology. Epilepsy syndromes were classifiable in all but four children, although some syndromes are, by definition, relatively nonspecific. In this childhood-onset cohort, 58.6% of the syndromes were localization related, 29.0% generalized, and 12.4% undetermined as to whether focal or generalized. Benign rolandic epilepsy occurred in 10% of the cohort. Primarily generalized syndromes accounted for 20.6%, with childhood absence being the single most common syndrome in this subgroup (12.1% of the cohort). Secondarily generalized syndromes accounted for 8.5% of the total, with infantile spasms being the most common in this grouping (3.9% of the cohort).

Conclusions: This study presents a description of childhood-and adolescent-onset epilepsy as it is diagnosed and evaluated in the 1990s in one state in the United State and based on current classification guidelines. The results should be generalizable to the rest of the country. The prognostic value of early identification of epilepsy syndromes will be determined through subsequent follow-up of this cohort.