When do children diagnosed with epilepsy continue to have seizures over the long-term?



Summary

The main aim of this study was to determine seizure status of children 2 to 17 years of age diagnosed with epilepsy. Children included in this study had at least 2 years follow-up from initial diagnosis. Slightly more than half of these children no longer had seizures at follow-up and were off medication. Almost a third was still on medication but had no seizures, and about 20% still had frequent seizures despite use of multiple medications. The likelihood of ongoing epilepsy was largely predicted by the presence of more than one seizure type, and presence of global developmental delay or intellectual deficits at initial diagnosis of epilepsy. Furthermore, a recurrence of a seizure in the 1st year after diagnosis and initial treatment was also associated with greater likelihood of ongoing seizures. The results were that, out of a group of 200 children, almost a third, while still on medication, were seizure-free and approximately one fifth (20%) of the group still had frequent seizures despite adequate amounts of multiple medications. The children in this last 20% showed signs of eventual ongoing epilepsy. These children tended to suffer from global developmental delay or intellectual deficits at the first examination and also suffered from more than one type of seizure. Also, if a child had a seizure in the first year of treatment (medication, therapy), the likelihood of ongoing seizures was increased.

What families should know

The majority of children with childhood onset epilepsy will be free of seizures long-term, however, a subset of children with childhood epilepsy are more likely to have ongoing seizures. Factors predicting persisting seizures include the type of epilepsy (i.e. multiple seizure type), poor initial response to medication and the presence of a developmental delay.

What practitioners should know

This study highlights a subset of children with epilepsy who are perhaps more deserving of more intense follow-up and scrutiny.

Reference

Oskoui, M., Webster, R., Zhang, X., & Shevell, M.I. (2005). Factors predictive of outcome in childhood epilepsy. *Journal of Child Neurology*, 20, 898-904.