

Berg AT, Langfitt J, Shinnar S, Vickrey BG, Sperling MR, Walczak T, Bazil C, Pacia SV, Spencer SS. **How long does it take for partial epilepsy to become intractable?** Neurology 2003; 60:186-190.

**Background:** Much remains unknown about the natural history of intractable localization-related epilepsy, including how long it typically takes before intractability becomes evident. This information could guide the design of future studies, resolve certain discrepancies in the literature, and provide more accurate information about long-term prognosis.

**Methods:** Individuals evaluated for resective surgery for refractory localization-related epilepsy were prospectively identified at the time of initial surgical evaluation at seven surgical centers (between 1996 and 2001). The latency time between onset of epilepsy and failure of second medication and history of remission ( $\geq 1$  year seizure-free) before surgical evaluation were examined with respect to age at onset, hippocampal atrophy, febrile seizures, and surgical site.

**Results:** In the 333 patients included in the analysis, latency time was 9.1 years (range 0 to 48) and 26% reported a prior remission before surgery. A prior remission of  $\geq 5$  years was reported by 8.5% of study participants. Younger age at onset was strongly associated with longer latency time ( $p < 0.0001$ ) and higher probability of past remission ( $p < 0.0001$ ). In multivariable analyses, age at onset remained as the most important explanatory variable of both latency time and prior remission.

**Conclusions:** A substantial proportion of localization-related epilepsy may not become clearly intractable for many years after onset. This is especially true of epilepsy of childhood and early adolescent onset. If prospective studies confirm these findings and the underlying mechanisms behind these associations become understood, this raises the possibility of considering interventions that might interrupt such a process and some day prevent some forms of epilepsy from becoming intractable.