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How long for epilepsy remission in the ILAE definition?

by

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Revision of the operational definition of epilepsy[1] has served in part as motivation to gather welcome new data on the time required for epilepsy to be considered in remission. In a recent study, Sillanpää [2] and colleagues followed 148 patients with childhood onset epilepsy. For certain subgroups, the 5-year remission was as predictive of a long-term remission as was a 10-year remission. However, for other subgroups, the 10-year remission was more predictive of long-term remission. For example, as estimated from their figure 3, both for all patients and for patients with generalized epilepsy, 5-year remissions with the last two years off anti-seizure medicines were associated with subsequent relapses in about 15%, with the 95% confidence

intervals extending above 20%. In comparison, all patients and patients with generalized seizures who were 10-years seizure-free with the terminal 5 years off anti-seizure medicines had a relapse rate less than 5% and an upper limit of confidence intervals around 15%.

The traditional epilepsy definition of two unprovoked seizures more than 24 hours apart was modified to make it possible to "outgrow" epilepsy. What seizure-free period of time would designate a likely condition of no future seizures? The Task Force recognized that relapse rates for people with epilepsy probably always remains above baseline general population levels. For that reason, the Task Force avoided the word "cure." We employed "resolved" as a descriptor, rather than "remission," which some people associate with cancer. In the absence of solid data, the Task Force chose the conservative time period of 10 years seizure-free and 5 years off anti-seizure medicines.

The study by Sillanpää [2] is one investigation with a relatively small sample size and subjects having limited etiologies of epilepsy, in that all had childhood-onset epilepsy. Relapse rates might vary considerably among different populations with varied epilepsy etiologies. Self-limited age-dependent syndromes and other special etiologic categories might merit separate consideration. For these reasons, the Task Force and the ILAE consider it premature to alter the published definition of epilepsy [1] but we can envision doing so in the future after further accumulation of broadly applicable data and larger cohort sizes from which to extrapolate findings.

None of the co-authors have a conflict of interest related to the basic definition of epilepsy.

'We confirm that we have read the Journal's position on issues involved in ethical publication and affirm that this report is consistent with those guidelines.

1. Fisher RS, Acevedo C, Arzimanoglou A, et al. ILAE official report: a practical clinical definition of epilepsy. Epilepsia 2014;55:475-482.
2. Sillanpaa M, Schmidt D, Saarinen MM, et al. Remission in epilepsy: How long is enough? Epilepsia 2017;58:901-906.