



Dr. Steven C. Schachter, is Professor of Neurology at Harvard Medical School in Boston, Massachusetts

The practical clinical definition of epilepsy proposed by Fisher et al.¹ is an important step forward. It reflects current science and clinical practice, particularly among many epileptologists who start therapy after a first seizure in patients at substantial risk for recurrence to spare them the potentially life-limiting medical and psychosocial consequences of additional seizures. This definition also emphasizes the need to identify the underlying cause of a first seizure and, just as significantly, provides a basis for determining when epilepsy has resolved.

Broadly implementing this revised definition will enhance the care of patients, facilitate communication among clinicians and scientists, and set the stage for further progress. By working with the International League Against Epilepsy (ILAE), epilepsy-related organizations can expedite the new definition's utilization and amplify its impact through education of the clinical and patient communities; and by supporting additional research to expand knowledge in risks of seizure recurrence for specific brain pathologies, to develop new methods for diagnosing the underlying causes of first seizures when not apparent with available techniques, and to establish best practices for treatments after first seizures when recurrence is likely.

Educating clinicians, patients and their families, the public, agents of licensing authorities (such as registries of motor vehicles), public officials, and others about the revised definition will increase awareness of epilepsy and counter any increase in stigma as an unintended conse-

quence. The full spectrum of clinicians who encounter patients after a first seizure need to be familiar with the varied clinical presentations of seizures, especially those that are nonconvulsive, as well as the appropriate investigations to determine the underlying cause. Otherwise, unnecessary delays in diagnosing epilepsy and initiating therapy as well as inappropriate diagnosis and treatment will continue to occur. Early referral to a neurologist or epileptologist, prior to a patient's second seizure, should be encouraged to confirm the diagnosis when the underlying cause is not obvious or to assist in the selection of therapy, if needed.

The risks of recurrence following a first seizure in association with many underlying pathologies will need to be studied further to establish whether these risks over time reach the threshold specified by the revised definition. Similarly, the evidence base for selecting particular therapies after a first seizure due to specific underlying etiologies, which at present is relatively thin and in many cases nonexistent, must be expanded. Concerted efforts in partnership with other subspecialties that represent specific etiologies of epilepsy are needed to design and conduct appropriate treatment trials for first seizures in addition to longitudinal observational studies to establish risk of seizure recurrence and the likelihood that epilepsy will resolve. Epidemiologic studies will need to be updated so that the demographics of epilepsy and incidence and prevalence values reflect the revised definition.

Undoubtedly the revised definition will raise scientific and pragmatic concerns and issues that will be discussed, debated, and ultimately answered through research. Indeed, epileptology has been and will continue to be a vibrant and dynamically evolving field. Our definitions will therefore continue to change in order to represent the best current science, facilitate communication, enhance patient care, and stimulate further progress. The revised definition proposed by Fisher et al.¹ is an important step forward in this long journey.

DISCLOSURE

I have no conflicts of interest to disclose. I confirm that I have read the Journal's position on issues involved in ethical publication and affirm that this report is consistent with those guidelines.

REFERENCES

1. Fisher RS, Acevedo C, Arzimanoglou A, et al. A practical clinical definition of epilepsy. *Epilepsia* 2014;55:475–482.