



Letter to the Editor

In Response to “The 2017 Sachs Lecture: Kindling Knowledge in Epilepsy”



To the Editor:

We read with much interest the *Perspectives in Pediatric Neurology* piece in the August 2018 issue that was based on Professor Solomon Moshé's 2017 Sachs Lecture.¹ Dr. Moshé has exhorted our community to develop protocols and standardize treatment approaches based on the available literature. In reference to that, we would like to present here the results of a survey that we completed recently to evaluate variability in management of benign rolandic epilepsy. The results, with an expected lack of consensus, epitomize what we already know that protocols and guidelines are either unavailable or difficult to formulate for most neurological disorders in children.

We devised our survey based on guidance provided in an expert commentary published by W. Donald Shields and Orlando Carter Snead III in 2009, which conveyed that the characteristics of seizures should guide the decision to treat patients with antiepileptic drugs and that medications are not justifiable when used with a goal of either allaying parental anxiety or improving spike burden or cognition.² We prepared the survey by using Survey Monkey (<https://www.surveymonkey.com>) and disseminated it by using the Child-Neuro listserv (<http://www-personal.umich.edu/~leber/c-n/e-mailUM.html>).

We received a total of 124 responses, of which 111 were complete and usable replies from either a board-certified child neurologist or an epileptologist.

For patients with seizures lasting less than five minutes and occurring during sleep, 51 responders stated that they would start daily prophylaxis if there is a history of one to five seizures with the most recent one in preceding six to 12 months. Twenty-nine responders said that they would start daily antiepileptic drugs in case of one to five seizures shorter than five minutes and out of sleeping state with the most recent one in preceding six to 12 months, but would include only those with secondary generalization had occurred. Another 29 responders chose to wait for at least the sixth seizure before considering a daily medication if they were all shorter than five minutes and always during sleep; a subset of these 29 responders preferred to wait even longer—at least the eleventh seizure—before prescribing prophylaxis. Two responders said that they would never prescribe daily antiepileptic drugs if seizures were less than five minutes and always out of the sleep state.

For those with seizures longer than five minutes and only out of sleeping state, 63 responders stated that they would start daily prophylaxis in individuals with any seizure lasting five to 15 minutes during the preceding six to 12 months. Twenty-eight responders said that they would start daily medications for any seizure five to 15 minutes long during the preceding six to 12 months, but only if there was secondary generalization. Eighteen responders chose to treat with daily antiepileptic drugs only if the seizure was longer than 15 minutes, whereas two responders said that they would never use daily antiseizure medications in this scenario.

For individuals with seizures less than five minutes but with some during wakefulness, 48 responders stated that they would start daily prophylaxis if there had been any seizure less than five minutes during wakefulness during the preceding six to 12 months. Sixteen responders said that they would start daily antiepileptic drugs for any seizure during wakefulness lasting less than five minutes during the preceding six to 12 months, but only if there had been secondary generalization. Forty-one responders said that they would wait until at least a second seizure during wakefulness and lasting less than five minutes before considering daily antiepileptic drugs, whereas two responders preferred to never use daily prophylaxis in this scenario.

For those with seizures lasting longer than five minutes during wakefulness, 81 responders stated that they would start prophylaxis if there had been any five to 10 minutes long seizures during the preceding six to 12 months. Another 19 responders said that they would start daily antiepileptic drugs for any seizure lasting five to 10 minutes during the preceding six to 12 months, but only if there had been secondary generalization. Ten responders stated that they would start prophylaxis only if the seizure during wakefulness had been longer than 10 minutes, whereas one responder chose to never use daily antiseizure medications in this scenario.

Forty responders stated that their first choice for prophylaxis was levetiracetam. Oxcarbazepine was the first choice for 39 responders, and carbamazepine was named by another 16 responders. Lamotrigine, valproic acid, gabapentin, sulthiame, and clobazam were preferred as first-line by a minority of the responders.

The protocol for tapering prophylaxis also varied widely, with 67 responders stating that they would wait for two-year seizure freedom, irrespective of age or Tanner stage, obtain an electroencephalograph (EEG), wean medications only if the EEG was normal, and consider repeat EEG after one to two years if abnormal. Thirty-four responders chose to wait for two-year seizure freedom, irrespective of age or Tanner stage, and taper without getting an EEG.

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Ethical Approval: Institutional review board approval was obtained before the survey.

The rest preferred to take Tanner stage into account to decide when their patients can come off medications.

Although there are obvious limitations of our survey and no definitive conclusions can be made based on the results, it appears that a child with benign rolandic epilepsy may receive differing treatment recommendations from different practitioners. This differing treatment is not very reassuring given that we are well into the twenty-first century and that benign rolandic epilepsy happens to be the single most common epilepsy syndrome in childhood. There may be a silver lining to this, in that child neurology remains an art in addition to being a science. However, we ought to realize the inadequacies of the science and heed Professor Moshé's advice.

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the survey and wrote the manuscript. M.M. helped with the survey and drafting of the manuscript.

References

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