

CORRESPONDENCE**TO THE EDITOR**

Re: Reid AY, Galic MA, Teskey GC, Pittman QJ. Febrile Seizures: Current Views and Investigations. Can J Neurol Sci. 2009; 36: 679-86.

The review by Reid et al¹ expands upon several issues discussed in a recent commentary.² They have focused on information gleaned from animal models. A multicentre collaborative effort, the FEBSTAT study, has addressed issues related to prolonged febrile seizures;³ the study offers evidence to suggest that non-continuous seizures are underdiagnosed in the emergency room, and their recognition and treatment are important to prevent long-term sequelae.

The commentary and review reinforce the need to re-explore febrile seizures incorporating current knowledge.^{2,3} We must move beyond the classification of 'not complex' (simple) and 'complex' febrile seizures, though the concept remains seminal.⁴ Central to further progress would be the early precise recognition of seizure semiology and the consideration of syndromes in which febrile seizures constitute only one facet. A prospective Canadian population-based study through the Canadian Pediatric Surveillance Program (CPSP), the Canadian Pediatric Epilepsy Network (CPEN) and the Canadian League against Epilepsy (CLAE) would achieve this purpose and provide for current evidence-based management. Furthermore, children enrolled in the study could be followed up into adult life to clearly establish more current links between febrile seizures in childhood and epilepsy in later life.

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RESPONSE TO SESHIA/REID LETTER TO THE EDITOR

Re: Reid AY, Galic MA, Teskey GC, Pittman QJ. Febrile Seizures: Current Views and Investigations. Can J Neurol Sci. 2009; 36: 679-86.

Thank you for the interest in our review article on febrile seizures¹. We agree that further investigations into febrile seizures are certainly warranted, both clinically and experimentally. As mentioned, the Consequences of Prolonged Febrile Seizures in Childhood or FEBSTAT study is a prospective, multicentre study currently underway in the United States which will address the relationship between prolonged febrile seizures and subsequent mesial temporal sclerosis and mesial temporal lobe epilepsy². While previous prospective studies have been undertaken in this area³⁻⁵, they have not confirmed the association between febrile seizures and temporal lobe epilepsy found in retrospective studies⁶⁻⁸. Results to date of the FEBSTAT study have shown that prolonged febrile seizures are often of the intermittent form and may be unrecognized in the emergency department². Future data to come from this study, such as evidence on imaging of injury to mesial temporal structures, and development of subsequent epilepsy, will be key in providing guidelines for evidence-based management.

One limitation of the FEBSTAT study is that the five recruiting sites are all in the north-east and not representative of the American population as a whole. A population-based study could be more easily done in Canada than the United States, in large part because of the establishment of the Canadian Pediatric Epilepsy Network (CPEN)⁹. This network of scientists and healthcare professionals would allow for easier patient recruitment and a more representative cohort of patients. As well, the multi-disciplinary approach of CPEN would allow for the investigation of many important factors not included in the FEBSTAT study, such as comorbidities, psychosocial issues, and quality of life.

Determining the links between febrile seizures and the later development of epilepsy may one day allow for the utilization of preventative measures to alter this relationship. However, we would like to note that further studies of experimental febrile seizures will also be crucial as they can determine the cellular and molecular mechanisms responsible for high seizure susceptibility.

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