## FEBRILE SEIZURES

A 23 month old female is rushed to the ED with a history of being unresponsive with jerking of limbs and eyes rolling upwards. On examination she is drowsy but arousable with the following vital signs: HR 124, RR 28, T 38.6, BP 112/60. Which of the following factors excludes a simple febrile seizure?

- A. Temperature > 39
- B. Seizure lasting > 10 minutes
- c. Right sided weakness on examination
- D. Two consecutive episodes, each lasting about 10 minutes

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- Febrile seizures are a common cause of convulsions in young children occurring in 2 to 4 percent of children younger than five years of age.
- Criteria for febrile seizures include:
- A convulsion associated with an elevated temperature greater than 38°C
- A child 5 months to six years of age
- No central nervous system infection or inflammation
- No acute systemic metabolic abnormality that may produce convulsions
- No history of previous afebrile seizures

- Febrile convulsions are divided into two categories, simple (benign), or complex, based upon clinical features.
- Simple febrile seizures are the most common and are characterized by seizures that last less than 15 minutes, have no focal features, and, if they occur in a series, the total duration is less than 30 minutes. Complex febrile seizures are characterized by episodes that last more than 15 minutes, have focal features or postictal paresis or occur in a series with a total duration greater than 30 minutes.

- 2. The patient is diagnosed with a febrile seizure and her mother wants to know how likely this is to occur again. Factors that increase the risk of recurrent febrile seizures include all of the following except:
- A. Age  $\leq 12$  months
- B. Complex febrile seizure
- c. Low grade fever on presentation
- D. First degree relative with a history of febrile seizures
- E. Brief duration between fever and seizure onset

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- A prospective cohort study (Berg, AT et al. 1997) of 428 children with a first febrile seizure defined factors influencing recurrences as:
- Young age at onset
- History of febrile seizures in a first-degree relative
- Low degree of fever while in the emergency department
- Brief duration between the onset of fever and initial seizure

Other factors identified in different studies include abnormal development before the first febrile seizure, a history of afebrile seizures in parents and siblings, recurrence of seizures within the same illness, and the number of subsequent febrile illnesses. Among children who have had one recurrence, younger age at the time of the first recurrence and a family history of epilepsy predispose to further recurrences.

Source: UpToDate article on febrile seizures by Marvin Fishman, MD