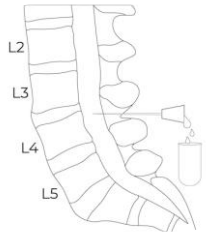
Managing in Real-World Practice

Febrile Seizure

Febrile seizure (FS): seizure that occurs in the context of hyperthermia (temp >38.0◦C) in the absence of central nervous system infection with no prior history of febrile seizures or neurological disease.[1,2] Prevalent clinical condition in childhood. Estimated incidence: 2–5%. Age: between 6 months and 5 years.

Investigation

Clinical evaluation of infants/young children after a simple febrile seizure should focus on identifying the cause of fever. A simple febrile seizure does not usually require further evaluation, specifically EEGs, blood studies, or neuroimaging.



As meningitis should be considered in the differential diagnosis for any febrile child, indication for lumbar puncture should be performed: a) if the child is ill-appearing or if there are meningeal signs and symptoms (e.g., neck stiffness, Kernig and/or Brudzinski signs); b) in children aged 6-12 months that have not received immunization against *Haemophilus influenzae type b* or *Streptococcus pneumoniae* or for whom immunization status is unknown; c) it is an option in children who have been pretreated with antibiotics.

Management*

* Management of children with FS should follow these three steps. There is no clear evidence of protection with the use of antipyretics in relation to avoiding or stopping the seizure. The recommendation for use is just to bring more comfort to the patient.

Initial

Most FS are self-limiting and resolve before arrival at the hospital.
In those children who arrive at the hospital still seizing, it is necessary to stabilize vital functions, perform venous access and use benzodiazepines.

Preventive

At present there is no evidence for continuous or intermittent use of antiseizure medication in the prevention of FS.

Rescue

In cases of long-lasting FS (>5 min), oral midazolam is the first choice. Recommended dosage is 0.5 mg/kg (bucal administration). If pre-formulated syringes are available, use 5 mg (children aged 3–4) or 7.5 mg (aged 5–9 years). Rectal diazepam can also be used (dose 0.25-0.5 mg/kg; max. 10 mg/dose); however it has more erratic distribution.

References

[1] Subcommittee on Febrile Seizures; American Academy of Pediatrics. Neurodiagnostic evaluation of the child with a simple febrile seizure. Pediatrics. 2011 Feb;127(2):389-94. doi: 10.1542/peds.2010-3318.

[2] Steering Committee on Quality Improvement and Management, Subcommittee on Febrile Seizures American Academy of Pediatrics. Febrile seizures: clinical practice guideline for the long-term management of the child with simple febrile seizures. Pediatrics. 2008 Jun;121(6):1281-6. doi: 10.1542/peds.2008-0939.

Magda Lahorgue Nunes [1]
[1]*Pontifical Catholic University of Rio Grande do Sul, School of Medicine and Brain Institute (BraIns)*
E-mail: mlnunes@pucrs.br ORCID: 0000-0002-3402-6810