

Febrile Seizures in Children

General Information:

What is a febrile seizure?

A febrile seizure or convulsion, the most common kind of seizure, is usually not harmful and will typically last between 1 - 10 minutes. During a seizure, the electrical activity in the brain is not normal – e.g. - the brain acts as if it is experiencing an electrical storm. Some seizures can be frightening to observe but this type of seizure is usually not as visually upsetting.

Children between the ages of 6 months to 6 years are more likely to have a febrile seizure and a child who has already experienced one may have another seizure brought on when a high fever develops. However, the risk of a child having another febrile seizure decreases after the age of three.

What are the causes of a febrile seizure?

It is caused by a higher than normal body temperature (fever) greater than 101.8 degrees F (38.8 degrees C). The fever is usually caused by an infection, such as cold or flu. The potential for a febrile seizure also increases if a child's temperature rises quickly.

Other potential causes for a first seizure:

With fever:

1. Meningitis (viral, bacterial)
2. Encephalitis (viral)
3. Unknown (idiopathic)

Without fever:

1. Unknown (idiopathic)
2. Chemical imbalance (dehydration, excess fluids, calcium, magnesium)
3. Trauma
4. Tumor
5. Vascular malformation, stroke

(Seizures and Epilepsy in Childhood: A Guide; www.thomsonhc.com/carenotes)

What are the signs and symptoms of a febrile seizure?

One or more of the following may be observable during your child's febrile seizure:

- Eyes rolling back.
- Jerking or twitching of the arms, legs, head or face.
- Stiff body
- Inability to talk and may not recognize who you are.
- Urinating or having a bowel movement without knowing it.
- Vomiting (throwing up).
- Fussiness, confusion, or sleepiness after the seizure.

How is a febrile seizure treated?

Before diagnosing febrile seizures in infants and children, doctors sometimes perform tests to be sure that there are not any other non fever causes. If there is severe diarrhea or vomiting, dehydration could be responsible for seizures. Also, doctors will often perform other tests such as examining the blood and urine to pinpoint the cause of a child's fever.

(www.ninds.nih.gov/disorders/febrile_seizures/detail_febrile_seizures.htm)

What should I do if my child has another seizure?

1. Keep calm and stay with your child.
2. Make sure that child is moved away from objects or places (stairs, falling on hard surfaces, the street) for protection.
3. Lay your child on his/her side with the head at the same or slightly lower level than the body. Maintaining the child in this position will prevent choking if vomiting occurs.
4. Loosen any tight fitting clothing.
5. ***Do not*** try to hold the tongue, put anything into the mouth or restrict child's movements by physical restraint.
6. Note and record the time when the seizure begins and ends and report to this information to your physician immediately.
7. If the seizure lasts more than 10 minutes, it's recommended that the child should be taken to the nearest hospital.

How are febrile seizures prevented?

The National Institute of Neurological Disorders and Stroke (NINDS) offer the following information from their website and is quoted verbatim:

If a child has a fever most parents will use fever-lowering drugs such as acetaminophen or ibuprofen to make the child more comfortable, although there are no studies that prove that this will reduce the risk of a seizure. One preventive measure would be to try to reduce the number of febrile illnesses, although this is often not a practical possibility.

Prolonged daily use of oral anticonvulsants, such as Phenobarbital or Valproate, to prevent febrile seizures is usually not recommended because of their potential for side effects and questionable effectiveness for preventing such seizures.

Children especially prone to febrile seizures may be treated with the drug diazepam (Diasat) orally or rectally, whenever they have a fever. The majority of children with febrile seizures do not need to be treated with medication, but in some cases a doctor may decide that medicine given only while the child has a fever may be the best alternative. This medication may lower the risk of having another febrile seizure. It is usually well tolerated, although it occasionally can cause drowsiness, a lack of coordination, or hyperactivity. Children vary widely in their susceptibility to such side effects.

Resources:

Epilepsy Foundation

8301 Professional Place
Landover, MD 20785
800-332-1000

Website: www.epilepsyfoundation.org

Epilepsy Foundation Connecticut Chapter

386 Main Street
Middletown, CT 06457-3360
860-346-1924
800-899-3745

Seizures and Epilepsy in Childhood: A Guide – Third Edition

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NOTE:

The information outlined in this document is primarily derived from the Epilepsy Foundation website, www.thomsonhc.com/carenotes, Seizures and Epilepsy in Childhood: A Guide”, National Institute of Neurological Disorders and Stroke (NINDS) website as well as Brenda Sullivan’s personal experience in raising a child with epilepsy.

The intent is to provide general information only and the information should not be solely relied upon in the diagnosis and/or treatment of epilepsy or seizure related activity.

If you have questions about epilepsy and/or seizures, please consult with your physician