

NEW ONSET SEIZURE



What is a seizure?

The brain controls how the body moves by sending out small electrical signals from the brain, through nerves, to the muscles. A seizure is caused by an abnormal burst of electrical activity within the brain that changes the way the body functions. Seizures can cause someone to become unresponsive, have unusual body movements, or behave strangely. This can last from a few seconds to minutes.

What does a seizure look like?

During a seizure (also called the ictal state), a child often loses consciousness, and is not aware of their surroundings. They will usually be unresponsive to voice or touch. They often have stiffening and/or jerking movements of their arms, legs, or face. The abnormal movements can affect the whole body, or just certain limbs. The child's eyes will often be open, and sometimes the eyes will roll up or to one side during the seizure. Most seizures last less than 3 minutes, although they can last longer. After a seizure (the post-ictal state), most children will be confused, sleepy, or irritable. This can last for a few minutes, hours, or even more than a day. Some children will vomit or complain of a headache or stomachache after a seizure.

How are seizures diagnosed?

An accurate, detailed description of the event is the most helpful tool in determining if the event was a seizure. A neurology provider will also perform a physical exam and may order additional testing. The most common test is an electroencephalogram (EEG). This is a painless test that measures the electrical activity in the brain over a brief period of time. It can detect abnormal bursts of electrical activity in the brain that can indicate if a child is prone to having seizures. Sometimes, the EEG data can provide information on the type of seizure. If the EEG does not detect abnormal activity, the data is still useful, but it does not mean that a seizure did not occur. In some cases, a picture of the brain can be helpful and a computed tomography (CT) scan or magnetic resonance imaging (MRI) will be ordered.

Could this have been something other than a seizure?

Yes. There are many events, movements, and behaviors observed in children that are caused by something other than seizure. Examples are fainting spells (syncope),

breath-holding spells, benign sleep myoclonus (muscle jerks), tics, migraines, or stress-related or anxiety-related events. Young infants often have unusual, but benign, movements or behaviors that raise concern for seizure.

Will this happen again?

The risk of seizure recurrence depends on many things. If your child has normal development, a normal evaluation (exam, EEG and MRI, if indicated) with no family history of epilepsy, then the risk of another seizure is 30-40%. The risk for seizure recurrence increases depending on the type of seizure, abnormalities detected on exam, EEG, or imaging, or if there is a family history of seizures. If a child is going to have more seizures, this is most likely to occur within 6 months of the first seizure. However, it is usually impossible to predict if or when a child will have another seizure.

Does my child have epilepsy?

Epilepsy is a diagnosis used to describe someone who has unprovoked, recurrent seizures. Unprovoked seizures have no apparent cause. Seizures can be provoked by fever in a child less than 5 years of age, or by head trauma, infection, or medications. Your provider will discuss the possibility of epilepsy with you. A diagnosis of epilepsy is not usually made after a single episode of seizure.

What should I do if my child has another seizure?

- Place your child on his or her side.
- DO NOT put anything in your child's mouth.
- DO NOT restrain your child or try to prevent jerking movements.
- Keep track of how long the seizure lasts. If it lasts longer than 5 minutes, call 911.
- Observe your child carefully, so you can tell medical providers details about the seizure. Try and remember position and movements of the eyes, head, mouth, and body. A video of the seizure can also be very helpful.
- Contact your Neurology medical provider if your child has a recurrent seizure. Your child will need to be reevaluated, and treatment options will be discussed.

References:

<https://www.epilepsy.com/article/2013/1/brief-guide-diagnosis-and-management-new-onset-unprovoked-seizures-children>

