Frequently Asked Questions About Infant Seizures

Disclaimer: The HIE Help Center is owned by a medical malpractice law firm that focuses exclusively on cases involving HIE and other birth injuries. We try to provide useful medical information to our readers, but we cannot provide treatments or medical advice. If you think your child may be having a seizure, please call 911/your country's emergency number or your doctor.

I have seen adults have seizures before. Is this what it will look like if my child has a seizure?

Not necessarily. According to the Epilepsy Foundation, seizures in newborn babies can look very different from those that occur in older children and adults. Sometimes, parents think a healthy baby is having a seizure when they are, in fact, exhibiting something called the Moro reflex, which can occur if a baby is startled, or has jitters (1). These can look similar to shivering. On the other hand, when a baby is really having a seizure, it can be very difficult to recognize. Therefore, it is very important for parents to speak to a doctor about any concerns, even if they seem silly. It is your doctor's job to answer your questions and run diagnostic tests if you have witnessed signs of a seizure.

What do infant seizures look like? How will I know if my baby is having a seizure?

Some of the signs of infant seizures include (1, 2):

- **Tonic seizures**: Parts (or all) of the infant’s body can stiffen suddenly. For an example of how a tonic seizure might look, click here.
- **Myoclonic seizures**: A group of muscles in the infant’s body may all start to jerk in clusters several times each day and for a few days in a row. These muscle groups are usually in the shoulders, neck, or upper arms. This is called a myoclonic seizure. For an example of how a myoclonic seizure might look, click here.
- **Febrile seizures**: The infant’s limbs may either stiffen or twitch and jerk, and their eyes may roll. These seizures are the most common type of infant seizures and are usually caused by a fever above 102 degrees. For an example of how a febrile seizure might look, click here.
- **Atonic seizures**: The infant may suddenly go limp and unresponsive, as in dropping their
head suddenly or falling suddenly to the floor while crawling or walking. For an example of how an atonic seizure might look, click here.
- **Absence seizure:** The infant may appear to have short episodes of staring into space, blinking their eyes quickly, or moving their mouth as if chewing. This is called an absence seizure. For an example of how an absence seizure might look, click here.
- **Focal seizures:** Focal seizures may involve the infant having spasms or rigidity in one muscle group, becoming pale, sweating, vomiting, screaming, crying, gagging, smacking their lips, or becoming unconscious. For an example of how a focal seizure might look, click here.
- **Infantile spasm:** The infant may experience spasms characterized by stiffening of the arms and legs, bending forward, and arching of the back. This rarer form of seizures usually occurs between 4-8 months of birth. For an example of how an infantile spasm might look, click here.

How I can I be sure my child is having a seizure?

Because many signs and symptoms of seizures are similar to the normal movements and actions of infants, it may be difficult to tell if your infant is experiencing one. It is imperative that you speak to a doctor if you think your child may be having seizures. If possible, one parent may be able to take a video of the child having a seizure to show the doctors while the other parent takes the necessary precautions to ensure the baby’s safety during a seizure. If a camera (or phone with videotaping ability) is not available, or only one parent/adult is present, it is important to remain as calm as possible, prioritize the baby’s immediate safety, and observe the baby carefully so that you can report what you see to the doctor. Your observations can help doctors determine whether a baby is having a seizure, what type of seizure they are having, what caused it, and what sort of treatment the baby may require. Of course, physicians should also run diagnostic tests such as electroencephalogram (EEG), rather than relying exclusively on parents’ observations.

If you believe your child may be having their first seizure, call 911 or take them to the emergency room. If they have had seizures before, your doctor can provide you with information on how to distinguish between seizures that warrant a trip to the hospital and
those that do not.

How can I help my child during a seizure?

There are a few key steps to take if you think your infant is having a seizure. *Parents Magazine* recommends the following to keep your baby as safe as possible during a seizure (2, 3):

- Make sure your infant is protected from experiencing injuries by moving hard objects out of the way.
- Gently roll your baby onto their side to help prevent choking.
- Avoid trying to open the baby’s mouth, putting anything in their mouth, holding them, or preventing movements (including tongue biting).
- Call 911 if your baby has a seizure for more than 5 minutes, turns blue, has trouble breathing, or is unresponsive after the seizure ends.

For detailed advice on when to call 911, please see these recommendations from the CDC or the Epilepsy Foundation.

Will my doctor be able to know for sure if my child is having seizures?

If you suspect that your baby is having seizures, the pediatrician will typically refer you to a pediatric neurologist. Your baby’s pediatric neurologist may order and perform a number of tests to narrow down the type of seizures and their causes. The following tests can help diagnose infant seizures (4):

- An EEG to look for abnormal activity in the brain.
- An MRI of the head to look for structural abnormalities in the brain.
- Chromosomal studies to look for genetic disorders.
- A spinal tap to look for infection, chemical disorders, or metabolic disorders.
- Blood or urine tests to look for metabolic issues or chemical disorders.
What’s causing my baby’s seizures?

Many different conditions and injuries can cause a baby’s seizures. The most common cause of seizures in newborn infants is brain damage from illness or injury, such as hypoxic-ischemic encephalopathy (HIE) (5). For more details on HIE and other causes of seizures, including infections, traumatic brain injury, or prolonged second stage of labor, click here. HIE also has its own set of possible causes, which are listed here.

Other causes include (5):

- Brain bleed or hemorrhage
- Stroke
- Brain tumor
- Infection such as meningitis, encephalitis.

Diagnosis and prompt treatment is typically made in the NICU.

If seizures occur after discharge from the hospital, it is absolutely imperative that parents inform their child’s doctors of possible seizures immediately so that their child can receive proper diagnosis and treatment as soon as possible.

What possible treatments are there for infant seizures?

According to Core Curriculum for Neonatal Intensive Care Nursing: Fifth Edition, patient care management for infant seizures involves the following, in sequential order (6):

- Determining the cause of the seizures
- Obtaining diagnostic studies as ordered
- Providing pharmaceutical therapy

If the cause of seizures is HIE, cooling therapy is initiated.
The most common treatment for seizures is anti-seizure medications. These may also be referred to as antiepileptic drugs or AEDs. There are many types of AED that may be prescribed, depending on age, type of seizure, frequency of seizure, and other variables. Narrow spectrum AEDs are designed for specific types of seizures occurring in a certain part of the brain. Broad spectrum AEDs can prevent seizures that occur in multiple parts of the brain. Healthline provides more detailed information about AED types.

Some children with seizures may benefit from cannabidiol (CBD) oil, which is derived from the cannabis plant, but does not have the psychogenic effects associated with strains used as a recreational drug. Many patients report fewer overall side effects from CBD than other seizure medications. To learn more about this treatment, click here.

It is important to know that CBD may react negatively with certain AEDs. It is also very important for parents to be aware that in some states, it is illegal to give children CBD or other cannabis products, and child protective services may become involved if they are reported. However, state laws are rapidly changing, and many have recently legalized cannabis products for seizures and/or other medicinal purposes.

In some cases, doctors may also recommend the ketogenic diet, which is high in protein and fat, and low in carbohydrates. The ketogenic diet causes the child’s body to produce ketones, which help to control seizures.

Some children may also benefit from vagus nerve stimulation (VNS), which involves surgical implantation of a magnet-controlled device that can prevent seizures.

Finally, if a child’s seizures are unmanageable by other means, they may need surgery to remove the part of the brain causing seizures. Of course, it is very important to carefully consider other functions that may be affected by brain surgery, and weigh the pros and cons. See the Stanford Children’s Health website for more information on the treatment of seizures in children.
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Related Reading: HIE and Seizures

- Epilepsy, Seizures and Seizure Disorders
- Seizure Dogs
- Diagnosing HIE

About the HIE Help Center

The HIE Help Center is sponsored by ABC Law Centers, a medical malpractice firm exclusively handling cases involving HIE and other birth injuries. Our lawyers have over 100 years of combined experience with this type of law, and have been advocating for children with HIE and related disabilities since the firm’s inception in 1997.

We are passionate about helping families obtain the compensation necessary to cover their extensive medical bills, loss of wages (if one or both parents have to miss work in order to care for their child), assistive technology, and other necessities.

If you suspect your child’s injury may have been caused by medical negligence, please contact us today to learn more about pursuing a case. We provide free legal consultations, during which we will inform you of your legal options and answer any questions you have. Moreover, you would pay nothing throughout the entire legal process unless we win or settle
your case.

Sources:


FAQS

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Learn about the signs and causes of neonatal seizures, as well as what to do if your baby has one.

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