



NATIONWIDE CHILDREN'S
When your child needs a hospital, everything matters.™

Helping Hand™

Health Education for Patients and Families

Psychogenic Non-Epileptic Events (PNEE)

Psychogenic non-epileptic events (PNEE), sometimes called psychogenic non-epileptic seizures (PNES), are behavioral episodes (“events”) that look like epileptic seizures. For a brief time, the person is not able to control the way his or her body moves, senses things, or thinks. Emotional stress or trauma may cause PNEE, while electrical problems in the brain cause epileptic seizures.

PNEE events look and feel real. They are serious but not life-threatening. They cannot hurt your child’s brain. It is important to remember that your child is not faking the event.

Some children who have epileptic seizures can also have non-epileptic events. Talk to your child’s neurologist about the differences between the two. You will need to deal with each one differently.

Causes

Some examples of things that may cause PNEE are:

- divorce
- bullying (Picture 1)
- death in the family
- problems with school or sports
- problems with friends or family



Credit: National Institute of Diabetes and Digestive and Kidney Diseases, National Institutes of Health

Early warning signs

Just before a PNEE event, your child may have:

- shaking arms, legs, or body tremors)
- light-headedness
- headache
- changes in breathing
- a tight feeling in the chest

Picture 1 Bullying can cause stress that may lead to psychogenic non-epileptic events (PNEE).

How to diagnose PNEE

The doctor needs to find out if your child's events are due to PNEE or to epilepsy. The way to do this is:

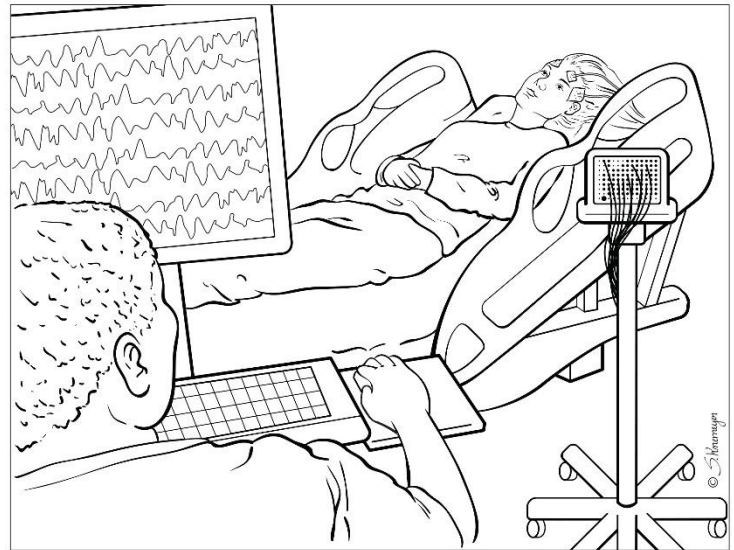
- Clinical history: The doctor will ask you to describe what happened before, during, and after an event and where it took place. It is important to tell the doctor as much as you can about what you saw and what your child felt.
- If possible, bring a video of your child having an episode for the doctor to see.
- EEG or electroencephalogram (e LEK tro en SEF ah lo gram) (Picture 2).

The best way to diagnose PNEE is to see an event on the EEG while it happens. An EEG is a painless test that records the brain's electrical activity or brain waves. To do this test, many small round discs (called electrodes) are put on your child's head. Wires attach the discs to a computer. The computer records the brain's electrical activity.

If your child has an event during the test and we see abnormal brain activity, then we know it is an epileptic seizure. If the doctor does not see any abnormal brain activity, then we know the event is probably PNEE.

If your child does not have an event during the test, the diagnosis of PNEE can still be made based on the clinical history.

- Psychological exam. Your child may see a mental health provider to assess possible emotional causes for his or her symptoms.



Picture 2 An EEG is a safe test that records what happens inside your child's brain during an event.

Treatment

- The goals of treatment for your child are to:
 - Stop the events from happening again.
 - Learn the early-warning signs.
 - Find the things that trigger the non-epileptic events.
 - Learn ways to calm down, such as deep breathing, during an event.
 - Learn ways to manage stress better.

- Mental health counseling is the main treatment for PNEE. The doctor will refer your child to a mental health provider.
- Your child may also be referred to a psychiatrist or back to his primary care provider for treatment. This doctor may recommend medicines for depression or anxiety.
- If your child's symptoms are due to PNEE, the doctor will stop all seizure medicines for epilepsy. They are not used and do not work for PNEE.
- Sometimes it is hard to know if an event is an epileptic seizure or a non-epileptic event. If it is not clear, the doctor may prescribe anti-seizure medicines.

How to respond to a non-epileptic event

When PNEE occurs, do the following and instruct others who are with your child often to:

- Move your child to a quiet area, like a bedroom or the school nurse's office.
- Do not talk to your child during an event. The event will pass more quickly in a quiet place, free from extra stimulation.
- Take away anything that is distracting to your child. Turn off the TV. Have other people leave the room.
- Have your child breathe deeply to calm down. She or he should breathe in slowly through the nose to the count of 5, then slowly breathe out through the mouth to a count of 7.
- Only call the emergency squad or go to the hospital if the event is very different from the others and it does not stop.

Going to school

- If your child has not been going to school because of PNEE events, it is important that she or he go back as soon as possible.
- The doctor's office will give the school information about PNEE. That way, the staff can help your child the right and safest way.
- School staff needs to respond to the events the same way you do. Tell your child's teachers and the school nurse about the early warning signs and best ways to treat an event.

If you have more questions or need to make an appointment, call the Nationwide Children's Hospital Psychogenic Non-Epileptic Event Clinic at 614-722-4625.