

Carpe Diem – Seize the Day Blog

Editor's Note: Content presented in the Carpe Diem – Seize the Day Blog is for awareness and informational purposes only, and it is not meant to be a diagnostic tool.

Witnessing your child have a seizure can be a frightening moment. You will wonder what is causing it and what to look for in the future. There are different types of seizures. Each affects your child's brain in various ways and sets off different symptoms. This week we will focus on focal seizures, aware and impaired. This can be helpful information as you and your child's doctor work to pinpoint their specific form of seizure.

What Is a Focal Seizure?

Inside your brain, nerve cells called neurons send out signals to various parts of the brain at distinct times. When your brain suddenly sets off many neurons at the same time, this triggers a seizure. Focal seizures happen only on one side of the brain. Generalized seizures are another type that impacts both sides of the brain.

What Causes Seizures?

There are often no clear answers into the exact reasons for your child's seizures. Injury, infection, and medicine are just some of the possible causes. Here are some of the things that can trigger a seizure:

Brain issues. Changes to the brain from an injury or illness may be causing your child's seizures. They include:

- Head or brain injuries resulting from things like a concussion
- Infections such as encephalitis or meningitis
- Stroke (more common in adults)
- Brain tumors
- Brain disorders that get worse over time
- Fever. A body temperature that is too high can sometimes trigger seizures in children. Your doctor will ask about any recent fevers as part of their health history in diagnosing seizures.

Other causes of seizure include:

- Serious injury at birth
- Health conditions present at or before birth (congenital conditions)
- Poisoning
- An illness that affects the birth mother
- An illness passed from a parent to their child (genetic)
- Problems with metabolism or chemical balance such as high or low blood sugar
- Alcohol or drug withdrawal

What Are the Types of Focal Seizures?

There are three kinds of focal seizures:

- Focal aware seizures. When a child has this type of seizure, they know where they are and what is happening to them. They will not lose consciousness but will have emotional, physical, and sensory changes. Some doctors may call this form of seizure simple focal seizures.
- Focal impaired seizures. This is also called a complex focal seizure. With this type, a child may not know what is happening to them during or after the seizure. In other words, they are not aware of their surroundings. Your child could also lose consciousness. Some people describe this type of seizure as the feeling of being in a dream-like state.
- Secondary generalized seizures. This type of seizure starts as a focal seizure that only affects one side of the brain. Then it expands to both sides of the brain and becomes a generalized seizure.

These seizures typically last for a couple of minutes or less. Symptoms of focal seizures may mimic other conditions that affect the brain like migraine, narcolepsy, or mental illness. Always consult and talk with your doctor for a proper medical diagnosis.

What Happens During and After a Focal Seizure?

Each type of seizure -- focal aware or focal impaired -- comes with different symptoms. The biggest difference in symptoms is your child's awareness of what is happening to them.

Focal aware seizure

During a focal aware seizure, a child may:

- Quickly pull or thrust their arms and legs on one side of their body
- Turn their head or eyes in one direction
- Have tingling, twitching, or other abnormal sensations on one side of their body
- Have a fearful or pained expression
- Sweat
- Have sensory changes (smell, taste, or touch)
- See flashing lights
- Become dizzy

Focal impaired seizure

A child having a focal impaired seizure may:

- Stare into space
- Move aimlessly around the room
- Grasp at imaginary objects
- Have trouble replying to others
- Make repeated movements like chewing, hand rubbing, or swallowing
- Grab at their clothes
- Say things that do not make sense
- Scream, cry, or laugh
- Move their legs as if they are riding a bicycle
- Thrash their arms

Experts call the period after a seizure the postictal phase. You will notice that your child is confused and tired. They may also have a headache and other symptoms. This phase typically continues for a few minutes but can last longer.

What Is an Aura?

Before a focal seizure even starts, your child may have symptoms that together are called an aura. This signals that a seizure is coming. These symptoms may include:

- A sense of déjà vu (the feeling you have experienced your present situation before)
- A smell or taste that is out of the ordinary
- Visual symptoms like flashing lights
- Abrupt, extreme emotions, like fear
- Feeling sick to their stomach or like they are going to throw up
- An aura is more likely to happen before a focal impaired seizure.

As always, if you have questions or concerns about focal seizures, please be sure to consult your neurologist/epileptologist.

Editor's Note: The Carpe Diem – Seize the Day Blog will be distributed and posted weekly.
Always remember – CARPE DIEM – SEIZE THE DAY!

Steve.Hutton@epilepsy-ohio.org