# **Focal Onset Aware Seizures (simple partial seizures)**

#### **CONTENT HIGHLIGHTS**

- A seizure that starts in one area of the brain and the person remains alert and able to interact is called a focal onset aware seizure.
- This term replaces simple partial seizure.
- These seizures are brief, lasting seconds to less than 2 minutes.
- Many treatment options are available, including medications, dietary therapy, surgery, and devices.

#### WHAT IT LOOKS LIKE...

Focal aware (simple partial) seizures are remarkably different from person to person, depending on the part of the brain where they begin. The one thing they all have in common is that the person remains alert and usually can remember what happens. Here are a couple of experiences.

"I have a feeling of déja vu, as if I've lived through this moment and I even know what's going to be said next. Everything seems more alive."

"It is a pressure that starts in my stomach, then rises to my chest and throat. When it reaches my chest, I smell an unpleasant odor of something burnt. At the same time I feel anxious."

Sometimes the seizure activity spreads to other parts of the brain, so another type of seizure follows. This can be a focal onset impaired awareness (complex partial) seizure or a focal to bilateral tonic-clonic (secondarily generalized) seizure.

### What is a focal onset aware seizure?

A focal onset seizure begins in one side of the brain. They were previously called partial seizures. Focal onset seizures are the most common type of seizure experienced by people with epilepsy. For short, the term focal seizure can be used.

When the seizure begins in one side of the brain and the person has no loss of awareness of their surroundings during it, it is called a focal onset aware seizure. This type of seizure was previously called a simple partial seizure.

## Who is at risk for focal aware seizures (simple partial seizures)?

Anybody can get them. They may be more likely in people who have had a head injury, brain infection, stroke, or brain tumor. Yet many times the cause is unknown.

### What is it like to have a focal aware seizure?

When people have focal aware seizures, they are fully awake, alert, and able to recall events during the seizure. Some are "frozen" during the seizure, so they may or may not be able to respond to others during the seizures. Overall, these seizures are brief, usually lasting less than 2 minutes.

### Can other health conditions look like focal aware seizures?

Yes, some symptoms of focal onset aware (simple partial) seizures are similar to other health conditions.

Health symptoms or problems, such as nausea or pain from stomach disorders or tingling and numbness from a pinched nerve, can be mistaken for focal seizures.

- Hallucinations (smells, tastes, sounds, visions) can accompany psychiatric illness or the use of certain drugs.
- Some symptoms (such as déja vu) are experienced by almost everyone at some time.
- Temporary numbness or weakness in a limb or the face sometimes occures from a transient ischemic attack (TIA), which can be a serious warning sign for a future stroke.
- Migraines, with or without a significant headache, can produce visual, tingling, or other symptoms that can be confused with a seizure.

Your health care provider can help determine whether your symptoms may be focal aware (simple partial) seizures or some other condition. Your provider will consider

- How often the symptoms occur?
- Are they stereotyped (similiar event-to-event)?
- What other symptoms happen?
- Do you have other seizure types?
- Learn more about diagnosing focal aware seizures.

## What happens after a focal onset aware seizure (simple partial seizure)?

When a focal onset aware seizure ends, the person usually continues doing whatever they were doing before it started. This type of seizure can be a warning or aura before a stronger seizure with loss of consciousness. Care and comfort first aid is all that is needed when a person has a focal onset aware seizure.

## How often will they occur?

It depends. Some people may have just one seizure and others may have several.

# How can I tell if someone is having a focal onset aware seizure (simple partial seizure)?

You may not be able to tell because the person is fully alert and able to interact. The person may need to tell you what is happening.

## How are they diagnosed?

- A complete medical history and physical examination can help rule out other possible causes of the symptoms and assess the likelihood of epilepsy.
- Although electroencephalograms (EEGs) are also helpful, they may not always show seizure discharges during a focal aware seizure. EEG shows abnomral electrical discharges if present at the time of the EEG. However, absence of EEG changes does not rule out seizures.
- A brain MRI (magnetic resonance imaging) or CT (computed tomography) scan may show an underlying cause for seizures. MRI and CT show structural problems in the brain, which would be present even between seizures.

## How are focal aware seizures (simple partial seizures) treated?

Several treatment options are available that can help prevent further focal onset aware seizures from occurring, including:

- Anti-seizure medicines
- Devices
- Surgery
- Dietary therapy

If your seizures are not controlled, consider asking for a consult from neurologist that specializes in epilepsy (called an epileptologist). An evaluation at a comprehensive epilepsy center can help you evaluate all treatment options.

# What should I do if I think my loved one or myself may have focal aware seizures?

If you think that you or loved one may have focal aware seizures, it is important to let your doctor know right away. Seek help to get an accurate diagnosis and treatment plan.