

SEIZURES

What you need to know

Background

Seizures are occurrences of abnormal electrical activity in the brain. This activity can produce sensory, motor, or behavioral changes in the person experiencing seizures.

Epilepsy is diagnosed when a person has had 2 or more seizures.

Persons with Intellectual/Developmental Disabilities and/or Autism (IDA) experience *significantly higher* rates of epilepsy than does the general population.

Seizures occurring in a specific area of the brain are called *focal*. Those that occur throughout the brain are called *generalized*. A focal seizure can spread and become generalized.

Some of the more commonly observed features of seizure activity include “zoning out” for a few seconds with a glassy-eyed stare (absence or petit-mal seizures); uncontrolled movements of limbs with or without a change in consciousness (partial complex seizures); sudden, total body relaxation (atonic or falling seizures); and convulsive, tonic-clonic limb movements in which the eyes roll back, possibly accompanied by drooling/foaming at the mouth, bowel/bladder incontinence, and even temporary cessation of breathing (grand mal).

An aura is a strange sensation (seeing bright lights, smelling smoke, hearing a buzzing sound) that occurs just before a seizure is about to happen. Not all persons who have seizures have auras, but those who do may indicate to you that they are about to have a seizure. Trust them.

Seizures usually last a few seconds to less than five minutes. After a seizure, the person will often need to rest or sleep for a few hours to recover.

Causes and Triggers

Possible *causes* of seizures: genetics, heredity, brain tumors, infections, hypoxia, impaired circulation, stroke (CVA), dehydration, heat stroke, electrolyte imbalances, head trauma, toxins, drugs and alcohol.

The majority of seizures are *idiopathic*, meaning that the specific cause is unknown.

Some of the more common *triggers* for seizures include: stress, hormonal changes, lack of sleep, certain meds, sensory overload, fluorescent light, strobe lights, excitement, dehydration, heat stroke, fever, extreme cold, abrupt discontinuation of certain meds.

The number one trigger for seizures is missing a scheduled dose of a prescribed seizure medication.

Some medications can lower the seizure threshold and therefore trigger seizure activity, including: Flagyl, Cipro, Levaquin, Ritalin, Wellbutrin, Ultram, Tofranil, Thorazine, Haldol, Theophylline, Cocaine.

These meds, when suddenly stopped, can trigger seizures: Benadryl, Xanax, Ativan, Valium, Klonopin.

Medical Treatment

The most common way to manage epilepsy is with anticonvulsant (also called anti-seizure) medications. Some of the more commonly prescribed meds are: Tegretol, Klonopin, Keppra, Lamictal, Topamax, Trileptal, Diastat (given rectally when a seizure begins), and Depakote (blood ammonia levels should be drawn regularly when taking this).

A Vagus Nerve Stimulator is a surgically placed (beneath the collarbone, like a pacemaker) with a wire connecting it to the vagus nerve in the neck. Passing a magnet over the generator stimulates it to send signals to the brain through the vagus nerve and reduce the intensity of, or stop, the seizure.

Different types of brain surgery can be done, but there are risks, and this should be a last resort.

Other treatments for epilepsy may include:

Ketogenic diet, medical marijuana, vitamin B-6 and magnesium, breathing exercises, meditation, and cranio-sacral therapy.

First Aid for Seizures

Do:

- Time the seizure
- Gently lower them to the floor
- Gently turn them on their side (place a pillow or rolled-up towel or jacket under the head)
- Clear the area of sharp or dangerous objects
- Cover them with a blanket (dignity protection in case of incontinence)
- Stay with them until they have recovered

Do Not:

- Place anything in their mouth
- Attempt to give food/liquids/meds by mouth
- Restrain them
- Attempt to administer oxygen or CPR during the seizure

Call 911 if:

- The seizure lasts more than 5 minutes
- A new seizure starts as they are recovering
- It's their first seizure (check med alert bracelet)
- They are in a bathtub or pool of water
- They aspirated vomitus
- They suffered a blow to the head or other apparent injury
- Normal breathing does not return
- They are diabetic
- They are pregnant
- They state that something doesn't feel right or request to go to the ER
- You aren't sure what to do

<https://epilepsymichigan.org>, 1/26/2021.

<https://www.epilepsyidaho.org/about-epilepsy/faq/>, 1/22/2021.

<http://www.intellectualdisability.info/physical-health/articles/epilepsy>, 1/22/2021.

Ruth Myers, MD, presentations on 5/2/14 and 10/18/19.

Myers, Ruth M. and Steven P., *Individuals with Intellectual Developmental Disabilities and Aggression, Self-Injury, and Failure to Thrive: One Comprehensive Approach*, 2017.