What can I do to maintain my health?

There are things that may triggers seizures so it may be helpful to reduce your stress, get enough sleep, avoid drinking a lot of alcohol, and avoid nicotine by not smoking.

If you are on medication for epilepsy, make sure you take your medication as directed by the doctor. If you are having problems with the medicine you are taking, talk with your doctor. Do not stop taking your medicine unless your doctor tells you to stop.

Making changes to your diet may also be helpful.

People with epilepsy should consider wearing a medical alert bracelet to help emergency personnel know how to treat you correctly.

Where can I find more information?

Centers for Disease Control and Prevention

800-CDC-INFO or 800-232-4636

www.cdc.gov

Epilepsy Foundation

800-332-1000

www.epilepsy.com

American Epilepsy Society

312-883-3800

www.aesnet.org

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PATIENT INFORMATION

Epilepsy

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What Is Epilepsy?

Epilepsy is a neurological disorder where abnormal electrical activity in the brain causes seizures. If you have at least two seizures that happen more than 24 hours apart, then you may have epilepsy.[1]

What is a seizure?[1]

A seizure is an event in the brain that happens when cells in the brain do not function correctly and cause a chemical imbalance, leading to a surge of electrical activity. There are many different types of seizures. The type of seizure you have depends on the area of the brain involved and other factors. Some people with seizures just stare; others may shake or fall down, sometimes losing consciousness (awareness). Usually a seizure does not last very long, only a few seconds to a few minutes. Seizures can affect both sides of your brain (generalized) or just one area of your brain (focal). Often, you may not remember having a seizure and may be confused afterwards. Seizures are not a disease, but are a symptom of a wide variety of disorders that can affect the brain.

Seizures can be caused by other problems besides electrical surges, including a high fever, low blood sugar, or alcohol or drug withdrawal. About 30% of children with autism spectrum disorder may have seizures. The reason for this is still not clear.[2]

Epilepsy causes and symptoms[1]

There can be a variety of causes for epilepsy, including brain damage from a head injury or an infection. In adults, epilepsy can be caused by a stroke or tumor. In newborns and children, epilepsy may be caused by maternal drug use, brain deformity, or lack of oxygen during birth. However, many causes of epilepsy are still not known.

Recently, some epilepsy conditions have been shown to be due to a person's genetics. You can get epilepsy from your parents, as some epilepsy causing genes can be passed on from parent to child, or there can be changes that occur to genes during pregnancy when the baby is still in the womb. Some genes make a person more sensitive to seizure triggers, such as environmental factors.

Who gets epilepsy?

Epilepsy affects people of all ages and races. There are about 3.4 million people in the United States that have active epilepsy.[1] It is more common in children and people over the age of 60.[3]

How is epilepsy diagnosed?[4]

Your doctor will talk with you in detail about your symptoms and will want you to describe your seizures. You may need to bring along someone who has seen your seizures. The doctor will also want to look into the medical history of you and your relatives to help determine whether your epilepsy may be genetic in nature. Your doctor will perform a neurological exam and a sample of your blood may be taken to check for genetic disorders, infections, nutrient deficiencies, or other conditions that may be associated with seizures.

The most common test used to detect brain abnormalities is an electroencephalogram (EEG). In this test, doctors attach electrodes to your scalp with paste and monitor the electrical activity of your brain. For people with epilepsy, there are often changes in the normal pattern of brain waves, even when you're not having a seizure. There are other x-ray scans, imaging, and mapping tests used to help pinpoint where in the brain seizures start. Accurate diagnosis of your seizure type and where seizures begin gives you the best chance for finding an effective treatment.

Genetic testing

Your doctor may want to order genetic testing to help determine the cause of your seizures. About 40% of epilepsies are thought to have a genetic cause.[4] Genetic testing can identify a gene or set of genes that may be responsible for your epilepsy. This testing may be helpful for newborns with epilepsy, people with epilepsy plus developmental delays, and for epilepsy patients in which treatment is not working. Identification of epilepsy-related genes may determine your treatment. Genetic tests may identify metabolic disorders that can be treated. Genetic testing may also let you know the risks to relatives or help with future pregnancies.[5]

How is epilepsy treated?[1]

The type of doctor that specializes in epilepsy is called a neurologist. Your primary care physician may also provide treatment. Treatment depends on the type of epilepsy you have. Doctors generally start treating epilepsy with a medication. If the medications are not working, surgery may be helpful for some patients. Another type of treatment includes nerve or brain stimulation. A special (ketogenic) diet may also help, depending on the cause of your seizures.