Helping Patients and Their Families Live with Epilepsy

Basim M. Uthman, MD
Professor of Neurology
Weill Cornell Medical College in Qatar

The normal human brain is a beehive of electrical activity, as billions of neurons constantly send out signals to run the mind and body. Erratic or disturbed signaling may trigger a seizure, an involuntary sensation or behavior such as a staring, muscle stiffness, repetitive movements, even brief loss of consciousness or convulsions.

Some seizures may be the result of factors such as high fever, extreme sleep deprivation, low blood sugar or calcium, infection or other medical conditions and may never recur if the underlying condition is treated. New onset seizures should be taken seriously and immediately evaluated by a medical doctor.

People who suffer two or more seizures are said to have epilepsy, a disorder that affects about 1 percent of the world’s population or about 50 million people. While epilepsy can affect men and women of all ages, it more commonly affects the elderly and the very young.

Despite advances made in the understanding and treatment of epilepsy, many people with the disorder face difficulties at work, in school or in social settings. Some may not be allowed to obtain a driver’s licenses, if their seizures are not under good control.

Children with epilepsy may be subject to teasing or bullying that may, in turn lead to behavioral and emotional problems.

While epilepsy is a serious disorder, it is not, as myth would have it, evil or contagious. Some people – from Neil Young and Agatha Christie to Thomas Edison, Alfred Nobel and Vincent Van Gogh – achieved extraordinary success despite the disorder. Most people with epilepsy manage to live normal lives, hold challenging jobs, get married and have normal healthy children.

Treatments are Available

Today, many effective, well-tolerated anticonvulsant medications are available. More than 70 percent of patients with epilepsy who use them regularly become seizure free. Other treatments, such as surgery or special diets, can be helpful in some cases.

Tests for epilepsy include electroencephalography (EEG) or brain wave tests, CT or magnetic resonance imaging (MRI) scans and certain blood tests.

There are different types of seizures. Some involve convulsions, that is, uncontrollable shaking; while others involve an impairment of consciousness and awareness of surroundings, confusion, or staring. Normally, the seizures last only a few minutes.

It is important to note that not every incidence of shaking is an indication of epilepsy. Other neurological or medical conditions, such as Parkinson’s disease, essential tremor, excessive thyroid hormone, and drug withdrawal, may result in what looks like a seizure but is not.
Ways to Aid Someone Having a Seizure

- If you see someone having a seizure on the floor, turn the person onto his or her side to prevent choking on saliva.
- Try to keep calm the person.
- Do not put anything in the person’s mouth; it is not possible for the person to swallow his or her tongue.
- If the seizure does not stop in a couple of minutes, call a doctor or an ambulance.
- Try to remember details of the person’s behavior before and during the seizure. They may provide medical personnel with clues about where in the brain the seizure originated.

Generally, the seizure will end in a few minutes. If not, call a doctor or ambulance.

Resources

Additional information is available at the web sites listed below.

- Epilepsy.com: www.epilepsy.com
- Epilepsy Foundation: www.epilepsyfoundation.org

The medical information in this article is provided as an information resource only, and is not to be used or relied on for any diagnostic or treatment purposes. This information is not intended to be patient education, does not create any patient-physician relationship, and should not be used as a substitute for professional diagnosis and treatment. If you have or suspect that you have a medical problem or condition, please contact your physician.