

*This article is part of an ongoing series of health and wellness articles for Ft. Carson Tricare beneficiaries. Dr. Patrin invites you to submit medical topics and health care questions to be addressed in future issues.*



## *Let's Talk About ...*

# **Epilepsy**

*November is National Epilepsy Month. It is appropriate, then, that we review exactly what epilepsy is and what you can or should do about seizures when they occur. This article was written by MAJ Patrin and SSG Pinelo of Evan's US Army Hospital Pediatric Clinic.*

### **What is epilepsy?**

Epilepsy is an underlying condition disturbing the normal electrical functions of the brain making it susceptible to recurring seizures. When someone has epilepsy, the normal brainwave pattern may be interrupted by bursts of electrical energy that are much more intense than usual. They may affect a person's consciousness, bodily movements or sensations for a short time. These physical changes are called epileptic seizures. That is why epilepsy is sometimes called a seizure disorder. Epilepsy affects approximately 2.3 million persons in the United States. Of these, approximately 300,000 are school-aged children. About 30 percent of the 125,000 new cases every year begin in childhood or adolescence. While epilepsy is often thought of as a condition of childhood, it can develop at any time of life. Another period of relatively high incidence is in people over the age of 65. When seizures continue to occur for unknown reasons or because of an underlying problem that cannot be corrected the condition is known as epilepsy.

### **What causes epilepsy?**

Epilepsy is not contagious. You cannot catch epilepsy from someone else and no one can catch it from you. Conditions in the brain that produce seizure episodes may have been present since birth or they may develop later in life. Some causes include head injury, congenital (birth) abnormalities in the brain, exposure to toxic agents (like lead poisoning), brain tumors, genetic conditions (such as tuberous sclerosis), and infections like meningitis. In about seven out of ten people with epilepsy, no cause can be found. Many illnesses or injuries can affect the brain enough to produce a single seizure. Having a single seizure does not necessarily mean a person has or will develop epilepsy. It is quite common for children to have a single seizure simply due to fever. This is called a febrile seizure and does not mean the child will go on to have epilepsy.

### **What should I do if I see a person having a seizure?**

Many persons do not know how to appropriately assist a person having a seizure; some incorrectly believe they should place something in the person's mouth or restrain movements. However, both actions can be harmful. Instead, to assist a person having a seizure, loosen clothing around the neck, remove objects the person may bump against or hit, and consider rolling them on their side to let fluids drain from the mouth. Remain nearby to assist the person once the seizure ends. If the episode lasts for more than five minutes call 911 for emergency assistance.

**How is epilepsy treated?**

Epilepsy may be treated with drugs, surgery, or a special diet. Of these treatments, seizure-preventing drugs are by far the most common and first to be tried. The goal is to keep the medicine's blood level high enough to prevent seizures but not so high that it causes excessive sleepiness or other unpleasant side effects.

**What does a doctor look for when someone has a seizure?**

After a first seizure, a patient should be seen for a careful medical evaluation to help the doctor decide whether to recommend treatment or to wait and see whether it occurs again. The most important factor in deciding whether to begin drug treatment for a single seizure is the probability of further seizures determined by taking a careful medical history. If you think you or a loved one might be having seizures, keep a record of how often the unusual episode occurs, the time of day, how long it happens, and what it looks like. A diagnostic test called an electroencephalograph (EEG) to record brain waves might be ordered to look for special patterns that help decide whether or not someone has epilepsy. X-rays such as CT (computerized tomography) or MRI (magnetic resonance imaging) scans may also be used to search for growths, scars, or other physical conditions in the brain that may be causing seizures.

**Which doctors treat epilepsy?**

Patients will usually be seen first by their Primary Care Manager (PCM) - a family physician, pediatrician, or internist. The PCM may refer them to a neurological specialist if seizures recur. Once plans for testing and therapy have been made, their PCM is most often the one who sees them again and prescribes medications. However, visits back to a sub-specialist once a year are common. When referred out to a sub-specialist, always make sure you remind the specialist to forward a summary of the visit back to your referring doctor.

The Epilepsy Foundation has launched the "Be Seizure Smart" campaign as the focus of this month's activities. The campaign is a nationwide initiative directed at schools to dispel myths and to educate school staff about responding effectively to students having a seizure. Additional information about epilepsy is available from the Epilepsy Foundation, telephone (800) 332-1000, or on the World Wide Web, <http://www.seizuresmart.org>\* and <http://www.epilepsyfoundation.org>. Much of the information for this article was found in these web sites.

**Dr. Patrin and SSG Pinelo**