



**KAISER PERMANENTE®**

## Epilepsy

Epilepsy is a condition that occurs in about one out of every 200 people. It is marked by recurrent convulsions—that is, sudden, temporary, uncontrollable losses or changes of consciousness. Convulsions may also be called epileptic seizures, fits, spells, or attacks. Whatever you call it, it is the result of abnormal electrical activity in the brain, and may be caused by injury to the brain or it may be inherited. Once seizures are controlled by medication, epileptics can usually do just about everything those without epilepsy can do, including driving a car. Epilepsy is not contagious.

It's important to remember that anyone can suffer symptoms similar to an epileptic seizure from receiving an electric shock or during withdrawal from an addicting drug including alcohol. Children, especially those under six years old, may have a seizure during a high fever. Having convulsions does not necessarily mean that you have epilepsy, therefore. Epilepsy is usually diagnosed from a person's medical history, plus other tests—usually an electroencephalogram (EEG) and blood testing. Sometimes a brain scan is also necessary.

Epileptic symptoms take many forms, but there are a few major types of seizure, including grand mal seizures, petit mal seizures, and partial seizures. Let's discuss these one at a time.

The grand mal seizure, or major motor attack, is the most severe. A person with epilepsy may recognize a warning signal, such as by a certain familiar feeling in the stomach or by an involuntary jerking motion in the hand or foot. The person will usually stiffen and fall down. He or she may also briefly stop breathing and become blue from lack of oxygen. Next, the person's body will begin jerking. A seizure usually ends within 60 seconds but may last several minutes. After the attack, the person is confused and often falls asleep.

While a grand mal seizure is frightening to witnesses, the person is rarely hurt seriously. If you witness a seizure, the best thing you can do is help prevent injury to the person. Loosen tight clothing and turn the person onto his or her side, not onto the back. Despite what you may have heard or been taught, do not place anything in the person's mouth. If the jerking lasts more than five minutes, or if the person has two or more seizures without a return to consciousness in between, call 911 for emergency medical treatment and request an ambulance to transport the patient to the nearest Emergency Room.

Petit mal seizures, also called absence seizures, usually start at around grade school age. They commonly result in a brief lapse of consciousness with only slight facial twitching or fluttering of the eyes. Sometimes the child just seems to be daydreaming. However, an epileptic child can sometimes have more than 100 of these seizures during a day, which can seriously interfere with learning.

A third type of seizure is the partial seizure. A partial seizure is considered to be either simple or complex, and involves involuntary movements without a complete loss of consciousness.

The simple partial seizure, also called a focal motor seizure, can involve twitching of the face, hand, or leg on one side of the body. The person's consciousness and memory usually remain normal during simple partial seizures.

During a complex partial seizure, also called a psychomotor seizure, a person may look dazed, confused, or puzzled. They may smack their lips, make sucking, drooling, or swallowing movements, or pick at their clothing. This type of seizure may also include automatic behaviors that appear normal, yet the person cannot respond appropriately to questions. The attacks last for several minutes. After a complex partial seizure, the person is usually confused and cannot remember anything about the episode.

In most cases, epilepsy can be well controlled by medication. Determining exactly the right medication takes time because each person reacts differently to antiepileptic drugs. But in most cases, once the right medication is established, all or nearly all seizures can be prevented—as long as the medication is taken exactly as prescribed. The most common reason for treatment to fail is that the epileptic person or a family member has changed or stopped the medication. With the right medication, properly taken, most people with epilepsy can lead normal lives. Occasionally, seizures can not be completely controlled with medication and other forms of treatment are needed. If you've been diagnosed with epilepsy, you should take your medications exactly as prescribed and avoid drinking alcohol. If you experience a seizure, or have bothersome side-effects, call your health care professional. Your medications may need to be adjusted.



For additional health information you can trust:

- Log on to our members-only Web site at [www.kaiserpermanente.org/california](http://www.kaiserpermanente.org/california), then click the "Kaiser Permanente Members Only" button
- Visit your local Kaiser Permanente Health Education Center
- Check your Kaiser Permanente Healthwise Handbook
- Listen to the Kaiser Permanente Healthphone messages at 1-800-33 ASK ME (1-800-332-7563)

To get your free Handbook and Healthphone Directory, call 1-800-464-4000.

The information presented here is not intended to diagnose health problems or to take the place of professional medical care. If you have persistent health problems or if you have additional questions, please consult with your doctor or other health care professional.

© 1998, The Permanente Medical Group, Inc.

# REGIONAL HEALTH EDUCATION

6708e