



EACH BRAIN MATTERS
THE CENTER FOR NEUROSCIENCES FOUNDATION

Epilepsy

Epilepsy (also called seizure disorder) is a disorder of the brain. A person is diagnosed with epilepsy when they have had two or more unprovoked seizures. Up to 4% of the people in the U.S. will develop epilepsy in their lifetime. 10% may have a single seizure.

Seizures

A seizure occurs when electrical nerve cell activity in the brain becomes disrupted, causing periods of unusual behavior, sensation and/or loss of consciousness. Seizure symptoms can vary from blank staring and confusion for a few seconds, to falling unconscious and rhythmic muscle twitching or shaking of the arms or legs. A person with epilepsy can have more than one type of seizure.

Causes

Epilepsy can be caused by many conditions that affect the brain, e.g. stroke, brain injury, tumors, infections, genetic/inherited conditions or neurological diseases. In about 60% of cases epilepsy is idiopathic, meaning the cause is unknown.

Management and Prognosis

Even mild seizures may require treatment because they can be dangerous during activities like driving or swimming. Treatment with medications or sometimes surgery can control seizures for about 70% of people with epilepsy. Some children with epilepsy may outgrow their condition with age.

Most people with epilepsy live full, normal lives that include exercise, work and driving. Good seizure control and living safely are important. Frequent, prolonged seizures increase risk of injury and early death, as do underlying serious conditions such as stroke or tumors. Rarely (0.1%), people with epilepsy can experience SUDEP - **S**udden **U**nexpected **D**eath in **E**pilepsy. SUDEP is not well understood, but may be due to changes in heart rhythm during a seizure.

Risk reduction

Preventing brain injury, heart disease, and stroke, and reducing risk of serious infections (including by vaccination) may help reduce risk of some types of epilepsy.

(From: Centers for Disease Control and Prevention, National Institutes of Health, Epilepsy Foundation)