

# Epilepsy

## Definition:

Epilepsy is a common and diverse set of chronic neurological disorders characterized by seizures.

## Description:

- Epilepsy is characterized by a long term risk of recurrent seizures. These seizures may present in a number of different ways.
- Epileptic seizures result from abnormal, excessive or hypersynchronous neuronal activity in the brain.

## Characteristics:

- There are two types of seizures: **Focal seizures**, when seizures appear to result from abnormal activity in just one part of the brain, and **Generalized seizures**, seizures that seem to involve all of the brain.
- A seizure can produce: Temporary confusion, a staring spell, uncontrollable jerking movements of the arms and legs, loss of consciousness or awareness
- Seizures may be fragmented or broken into small bursts
- In infants, most seizures will continue for less than five minutes
- Some infants experience involuntary jerks simultaneously with staring spells

## Causes:

- Genetic influence. Some types of epilepsy, which are categorized by your type of seizure, run in families, making it likely that there is a genetic influence. For most people, genes are only part of the cause, perhaps by making a person more susceptible to environmental conditions that trigger seizures.
- Head trauma may cause epilepsy.
- Medical disorders. Events like strokes or heart attacks that result in damage to the brain also can cause epilepsy. Stroke is responsible for up to one-half of epilepsy cases in those over age 35.
- Dementia is a leading cause of epilepsy among older adults.
- Diseases such as meningitis, AIDS and viral encephalitis can cause epilepsy.
- Prenatal injury. Before birth, babies are susceptible to brain damage caused by an infection in the mother, poor nutrition or oxygen deficiencies. This can lead to cerebral palsy in the child. About 20 percent of seizures in children are associated with cerebral palsy or other neurological abnormalities.
- Developmental disorders. Epilepsy can sometimes be associated with other developmental disorders, such as autism and Down syndrome.

## Implications for speech and language:

Epilepsy may co-occur with speech and language disorders, and it may be the cause of differences in language development. The presence of epilepsy during childhood may impact brain development, affecting areas such as executive function, attention, and language. This may result in difficulties with language learning, as well as with reading and writing.

## Diagnosing this disorder:

Speech-language pathologists do not diagnose epilepsy. At least two unprovoked seizures are generally required for an epilepsy diagnosis.

**Treatment:**

Epilepsy may be managed in a variety of ways, through medications, diet, and surgery. Consult with a medical professional for information about appropriate treatment options.

**Resources:****Books for Parents:**

- Jan, J, Ziegler, J. & Erba, R. (1991). *Does Your Child Have Epilepsy?* 2nd Edition. Austin, TX: Pro-ed, Inc.
- Freeman, J.M. (2002). *Seizures and epilepsy in childhood: A Guide*. Baltimore, MD: Johns Hopkins University Press.
- Devinsky, O. (1994). *A Guide to Understanding and Living with Epilepsy*. Pp149-229. Philadelphia: F.A. Davis Co., 1994

**Books for Kids:**

- Moss D. (1989). *Lee, The Rabbit with Epilepsy*. Kensington, MD: Woodbine House. Gladstone, NJ. (1996).
- *Dotty the Dalmatian has Epilepsy*. Gladstone, NJ: T. Peters and Co.

**Support Groups:**

- Epilepsy Foundation Central & South Texas, North Austin Medical Center, 12221 Mopac 3rd Floor Atrium Conference Room, Austin, TX 78758
- Epilepsy Foundation Central & South Texas, 10615 Perrin Beitel Rd Ste 602, San Antonio, TX 78217-3142, (210) 653-5353, (888) 606-5353

**Websites:**

- Epilepsy Advocate <http://www.epilepsyadvocate.com/default.aspx>
- Growing Up With Epilepsy- Learning from Massachusetts General Hospital. <http://www2.massgeneral.org/childhoodepilepsy/child/index.htm>. Nationwide website for those with epilepsy and their caregivers with links to local seminars and events
- Epilepsy Foundation of Central and South Texas <http://old.epilepsyfoundation.org/local/efcst/groups.cfm>

**References:**

Epilepsy Guide. (2009, September 16). In *WebMD*. Retrieved from <http://www.webmd.com/epilepsy/guide/default.htm>.

Epilepsy. (2011, April 28). In *Mayo Clinic Health Information*. Retrieved from <http://www.mayoclinic.com/health/epilepsy/DS00342>.

Barr, William. (2003). Types of Language Problems in Epilepsy. Retrieved from: [http://www.epilepsy.com/articles/ar\\_1063657589](http://www.epilepsy.com/articles/ar_1063657589).