The Language Lab: Epilepsy

Epilepsy

Recurrent seizures (2 or more) not provoked by specific events such as fever, infection, injury, etc.

Seizure

Temporary disruption of brain function due to sudden changes in the electrical activity of the brain, which results in alteration of consciousness, motor function, sensation, autonomic function, or all of these.

Absence Seizures

A generalized seizure characterized by brief lapses of consciousness, usually not more than ten seconds, and may occur many times per day (formerly known as Petit Mal seizures).

Anticonvulsant

A drug used to prevent the onset of seizures. Also referred to as antiepileptic.

Atonic Seizures

A generalized seizure form in which the body tone is suddenly lost and the individual slumps to the ground.

Atypical Seizures

These seizures may last longer than the typical absence seizure and may have other features, such as falling.

Aura

Sensation experienced at the beginning of a seizure, often described as a warning signal, but which may be difficult to describe.

Automatisms

Automatic, uncontrolled movements which may accompany a complex partial seizure, such as lip-smacking, chewing, picking at clothing, or wandering in a confused state.

Autonomic

The autonomic functions of the nervous system controlled by the brain, including heart rate, blood pressure, skin temperature, and color. Temporal lobe seizures can produce disturbances of these functions.

Benign

Mild, having good outcome, or not likely to get worse.

Benign Rolandic Epilepsy

Seizures which occur most commonly during certain stages of sleep, with a sensation in the corner of the mouth followed by jerking of muscles, spreading to one side of the face or body, and may become generalized. These seizures frequently begin after the age of three and may be outgrown.

Clonic Seizure

Rhythmic jerking of an arm, leg or the whole body.

Cognitive

The ability to receive information, process and analyze it.

Complex Partial Seizure

Seizure activity which involves only part of the brain and which alters consciousness or awareness, usually involving the temporal or frontal lobes of the brain.

Consciousness

Awareness (a person's contact with, and recall of events during the period in question) and responsiveness (the ability of a person to carry out simple commands or willed movements).

CAT or CT Scan

A type of scan using small doses of X-rays and computers to produce a picture of the brain or other areas of the body.

EEG

Electroencephalogram- a recording of electric activity of the brain used to determine levels of electrical discharge.

Febrile Seizure

Seizures that occur between the ages of 6 months to six years, with 90% occurring within the first three years of life, associated with fever and are not associated with intracranial infection. Febrile seizures are not associated with an increased risk for mental retardation or cerebral palsy, and probably not for learning disability.

Generalized Seizures

A term used when a seizure involves the whole brain. In generalized seizures, consciousness is affected.

Idiopathic

No identifiable cause.

Infantile Spasms

A form of epilepsy occurring in the first two years of life with multiple causes. An observer usually sees repeated episodes of bending (flexion) of the head toward the chest, knees coming up, and arms straightening (extending). Each seizure lasts seconds and can occur in a series of 5 to 50. Infantile spasms are usually associated with mental retardation and require a specific medication for treatment.

Intractable

Seizures which have not become controlled in response to treatment.

Juvenile Myoclonic Epilepsy

Begins in late childhood with mild myoclonic jerks on awakening or going to sleep. May be associated with absence or generalized tonic-clonic seizures. Can be produced by sleep deprivation. Family history of this type of seizure is common.

Lennox-Gastaut Syndrome

Two or more types of seizures, one being the falling down (akinetic or atonic) type. Absence and generalized tonic-clonic seizures are common, particularly at night. These seizures are often associated with mental retardation, and are often difficult to control.

Lesion

An injury resulting in a change in the tissue.

Lobes

The functional parts of the brain: Frontal- personality and memory; Temporal-speech, memory, and emotion; Parietal- integration of sensory function; Occipital- site of vision.

Monotherapy

The use of a single anticonvulsant drug.

MRI Scan

Magnetic resonance imaging scan used to identify structure and abnormalities within the brain.

Myoclonic Jerks

Sudden contractions of muscle groups resembling sudden jolts. Occasional myoclonic jerks may be normal, but when they are repeated they can be a difficult to control form of epilepsy.

Neurofibromatosis

A genetic condition presenting as brown spots on the skin, or freckling of the

armpits and groin, that is frequently associated with learning or intellectual disabilities, and seizures. Individuals often develop tumors of various organs such as the brain or spine.

Neurons

The nerve ends of the brain.

Neurotransmitter

The chemical substance in the brain that transmits electrical signals between nerve cells.

Nonconvulsive

Seizures that are not characterized by convulsive movements, such as absence seizures.

Partial Seizures

Seizures which occur in a localized area of the brain.

Photic Sensitive Seizures

Caused by flashing lights, strobe lights or light shining through trees or fences, etc.

Polytherapy

Using two or more anticonvulsants at the same time.

Post-ictal

Latin for *after the seizure*. It refers to confusion, sleepiness, or weakness following a seizure.

Prolonged Seizure

A seizure lasting more than five minutes.

Pseudo-Seizure

An occurrence which appears to be an epileptic seizure, but can be distinguished by

factors which are not characteristic of true seizures such as: variation of behavior during

episodes, responsiveness to environment, roving eye movements, directed violence, etc. Such episodes typically appear within the presence of witnesses and, unlike epileptic seizures, are believed to be behavioral.

Rasmussen's Syndrome

A rare, progressive condition producing seizures and progressive paralysis on one side due to encephalitis on one side of the brain. This condition is now treated with a hemispherectomy (removal of one half of the brain).

Refractory

Resistant to ordinary treatment.

Simple Partial Seizures

Seizures involving a single area of the brain, where consciousness is not affected. A person may experience movement in the face, an arm, finger, leg or other areas of the body, smells, or sensations, depending upon which area of the brain is affected.

Sleep Myoclonus

Normally occurring, sudden muscle jerks of the body, usually experienced when falling asleep.

Spike

A sharp jump appearing on an EEG, indicating an electrical discharge of a small group of brain nerve cells. Recurrent spikes are electrical seizures that may spread to involve enough cells to be termed a clinical seizure, resulting in a change of function or behavior.

Status Epilepticus

Prolonged, continuous seizures, or recurrent seizures without full recovery of consciousness in between them, for 30 minutes or more. Convulsive status epilepticus is considered a medical emergency and requires immediate medical intervention.

Symptomatic Seizures

Seizures resulting from an identified cause such as fever, meningitis, head injury, etc.

Syndrome A collection of symptoms which have a known outcome or which require special treatment.

Threshold

The susceptibility of a single neuron to fire, or of the brain to have a seizure. Anticonvulsant drugs raise the threshold for seizures to occur.

Todd's Paralysis

Weakness in a limb or on one side of the body after a partial seizure, resulting from inhibition of the seizures and of normal function of the brain on that side, usually lasting 1-2 hours. Occasionally it can last for days, but always has full recovery.

Tonic-Clonic Seizures

Seizures involving the entire brain (generalized) characterized by stiffening and then rhythmic jerking of the body, formerly called Grand Mal. (This is the type of

seizure most commonly thought of when hearing the term epilepsy).

Tuberous Sclerosis

A disease characterized by skin lesions, seizures, and mental retardation, and caused by abnormal development of cells. Tumors or other changes are experienced in various organs of the body.

Unilateral Seizures

Involving one side of the body.