

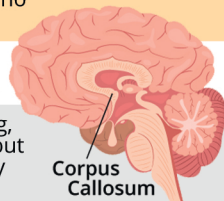
TYPES OF SEIZURES

A seizure, formally known as an epileptic seizure, is a period of symptoms due to abnormally excessive or synchronous neuronal activity in the brain. Outward effects vary from uncontrolled shaking movements involving much of the body with loss of consciousness (tonic-clonic seizure), to shaking movements involving only part of the body with variable levels of consciousness (focal seizure), to a subtle momentary loss of awareness (absence seizure).

Absence Seizure ("Petit Mal") - Mild seizure which accounts for 2-4% of epilepsy. They are characterized by brief episodes of staring, usually lasting only 2-10 seconds & may happen repeatedly during the day. There's no warning before a seizure & the person is completely alert afterwards with no memory of it. It's also easily unnoticed by those around them.

Aicardi Syndrome - Rare inherited (genetic) disorder in which the structure that connects the two sides of the brain (corpus callosum) is partly or completely missing.

Alice in Wonderland Syndrome (Micropsia) - Children feel that their body is changing, because of migraines & headaches. They don't just see themselves changing in size, but they also see other people, animals & objects look larger or smaller than they actually are. They can also feel that their hearing & sense of touch have changed.



Atonic Seizures (Drop Attacks) - Without warning, a person will abruptly loses consciousness, collapse & fall to the floor. Their head may drop suddenly, eyelids may droop, head may nod, & they may drop things. Recovery occurs after a few seconds. They regain consciousness, & can again stand & walk.

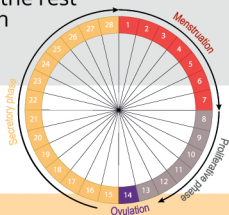
Atypical Absence Seizures - More common in children than in adults. Entail a period of staring with some minor responses or additional movements such as eye blinking or slight jerking movements of the lips.



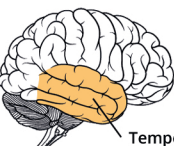
Autonomic Seizures - Occurs with autonomic symptoms or signs, such as nausea or abdominal discomfort which may rise into the throat, stomach pain, rumbling sounds of gas moving in the intestines, belching, flatulence & vomiting. Sometimes been referred to as abdominal epilepsy. Other symptoms may include pallor, flushing, sweating, hair standing on end, dilation of the pupils, alterations in respiration & heart rate, & urination. A few people may experience sexual arousal, penile erection, & orgasm.

Benign Rolandic Epilepsy (Sylvan Seizures) - Accounts for more than 1/3 of epilepsy beginning in middle childhood between ages 3 & 13. Typically occurs at night & these children are otherwise normal & healthy. The prognosis is favorable with 95% outgrowing their seizures by age 15. A typical attack involves twitching, numbness, or tingling of the child's face or tongue (a partial seizure), which often interferes with speech & may cause drooling. There's a jerking of the corner of the mouth that may spread to the rest of that side of the face, causing a twisting motion. No loss of consciousness, except in cases of secondarily generalized seizures. In rare cases, the seizure may progress to the entire side of the body, becoming a generalized tonic-clonic condition.

Catamenial Epilepsy (CE) / Menstrual Seizures - Linked to a woman's menstrual cycle & related hormone levels in the body. Women with CE will generally have seizures throughout their cycle however, the number of seizures will often increase in certain times; just before or during menstruation, or period & during ovulation.



Clonic Seizures - Begins in early childhood & may eventually progress to generalized tonic-clonic seizures. During a seizure, they may lose control of bodily functions & begin jerking rhythmically in various parts of the body. Consciousness may be temporarily lost & followed by confusion.



Complex Partial Seizures (Psychomotor / Temporal Lobe) - Begins with a blank look or an empty stare. Person may be unaware of their surroundings & seem dazed & confused. The seizure may progress to include chewing movements, mumbling, uncoordinated activity, or sometimes performing meaningless bits of behaviour, which appear random & clumsy. It usually lasts about 2 to 4 minutes. Seizures may be followed by a longer lasting confusion. Following the seizure, there will be no memory of it.

Dravet Syndrome / Severe Myoclonic Epilepsy of Infancy (SMEI) - Severe epilepsy which appears during the first year of life with frequent febrile seizures. Children with SMEI typically experience poor development of language & motor skills, hyperactivity, & difficulty relating to others.



Ecstatic Seizures / Dostoyevsky's Epilepsy - Characterized by feelings of transcendent joy or ecstasy. These seizures can involve more than one seizure symptom, such as tonic, tonic-clonic, & more. Mystical, spiritual, & hallucinatory experiences often occur as well. Temporal lobe is effected by the seizure activity & provides a neural basis for these experiences.

Eclampsia - A rare but serious condition where high blood pressure results in seizures during pregnancy.



Febrile Seizures - Occurs in only 2% to 5% of all children aged 3 months to 5 years. Some children may have febrile seizures when they have a high fever which are usually mild & brief. It often results in slight slumping, rolling of the eyes back in the head & loss of consciousness, convulsive stiffening & jerking. Seizures are classed as incidents rather than a condition. Incidence doesn't indicate a possibility of developing long term epilepsy. They pose no threat of mental retardation, cerebral palsy, learning disabilities, or death.

Complex Febrile Seizures - May be more threatening & they can last longer than 15 minutes. Although only one side of the body is affected during the seizure, neurological reports may indicate abnormalities. Child with complex febrile seizure has another seizure within 24 hours of the first seizure, or during the same period of illness the child doesn't fully recover from the seizure within one hour

Focal Cortical Dysplasia (FCD) - Most common cause of intractable epilepsy in children. It's a frequent cause of epilepsy in adults. FCD are localized regions of malformed cerebral cortex. They are a common cause of focal seizures. Onset of seizures can be at any age, with two thirds having seizure onset by 5 years of age & most having seizure onset by 16 years. Older age of onset is rarely seen.

Frontal Lobe Epilepsy (FLE) - A neurological disorder that is characterized by brief, recurring seizures that arise in the frontal lobes of the brain, often while the person is sleeping. Involves thrashing movements during sleep, also stiffening with the head turned to one side & the arm rising into a brief frozen state. May produce weakness or inability to use certain muscles, including those that govern speech. Some seizures may be dramatic & upsetting; with screaming, bicycling movements of the legs, running.



Gelastic Seizures - Both unpredictable & unprovoked by the person's surroundings. They're abrupt in onset & quickly over. They may occur nocturnally, waking person from sleep & leaving them exhausted. Basically, they are characterized by brief outbursts of emotion, usually in the form of a laugh or a cry. May be accompanied by forced eye movements, chewing or grinding the teeth, tonic posturing, & clonic jerking. May appear confused &/or dazed during & after an episode. Usually lasts 5 to 60 seconds.



Infantile Spasms / West Syndrome / Jackknife seizures - Very rare, consist of a cluster of sudden jerks followed by stiffening. They occur only during the first year of life, usually starting around 3-7 months of age. Often the arms are flung out as the knees are pulled up & the body bends forward. Infantile spasms consist of clusters of sudden, quick movements. Individual spasms last only 1 or 2 seconds & often repeat in a series of 5 to 50 or more. A child may have many series per day. Spasms are most likely to occur when the child is drowsy, just waking from a nap or falling asleep.

Jacksonian March / Seizure - A kind of simple partial seizure; "Simple" in this context means person do not lose awareness. Partial means that abnormal neuron firing only occurs in part of the brain, & accordingly, abnormal movement or sensation is limited to only part of the body. They don't lose awareness & there's no confusion afterwards. Characteristic features are that it only occurs on one side of the body & it progresses in a predictable pattern from twitching or a tingling sensation or weakness in a finger, a big toe or the corner of the mouth, then marches over a few seconds to the entire hand, foot or facial muscles. Generally brief & relatively mild, no confusion afterwards. They are episodic, come & go.

Juvenile Myoclonic Epilepsy - Typically begins at puberty in otherwise healthy children. The first symptom is usually a generalized convulsion. These children may also have myoclonic seizures (jerking of muscles) on awakening. A hand may suddenly fling out, a shoulder may shrug, a foot may kick, or the entire body may jerk. A child may spill or drop whatever he or she is holding or fall from their chair. Absence seizures may also occur. Seizures can occur as a single event or in a series.



Lafora Disease - Severe form characterized by seizures & progressive neurological degeneration. Occurs during late childhood or early adolescence. Death usually occurs within 10 years of the first symptoms.

Landau-Kleffner Syndrome (LKS) - A rare disorder beginning between ages of 3 & 9 years, occurs in about one child in a million. Characterised by loss of language skills & silent electrical seizures during sleep.

Lennox-Gastaut Syndrome (LGS) - Rare & severe epilepsy that starts in childhood between ages 2 & 6. Child with LGS have several different kinds of seizures often, learning difficulties, developmental delays that can be moderate to severe, & they can also have behavioural problems. Each child develops differently, & it is impossible to predict how a child with LGS will do. Most have ongoing seizures & some form of learning disability, some may respond well to treatment & have fewer seizures. Others may continue to have seizures often, as well as problems with thinking, development, behaviour, & will need help with daily living activities.

Limbic Epilepsy - Limbic areas are regions in the temporal & frontal lobes, which are involved with speech, memory, emotion & more. The seizure happening in this area.

Motor Seizures - Form of simple partial seizures. Include clonic, jerking, convulsive movements. Begins in one area of the body & may spread to other parts of the body. Affects the muscles of the body; can cause muscles to go stiff or to weaken temporarily.

Multifocal Seizures - While most seizures can be neatly split into partial & generalized, there exists some that don't fit (seizure may be generalized only within one hemisphere). Alternatively there may be many focal points (multifocal seizures) that are distributed in a symmetrical or asymmetrical pattern.



Musicogenic Seizures - Certain types of music or even specific frequencies of pitch for which your brain has a low threshold or tolerance trigger this reflex epilepsy. They usually involve a degree of cognitive or emotional appreciation of the stimulus. This usually results in a complex partial seizure, but may also induce others, such as tonic-clonic seizures. Sensitivity to music varies from person to person. Some people are sensitive to a particular tone from a voice or instrument. Others are sensitive to a particular musical style or rhythm. Still others are sensitive to a range of noises.

Neonatal Seizures - Occur in babies soon after birth; as many as 1.5 to 2.5% have seizures in the first month of life. A further 20% of all seizures in children under 3 years of age have neonatal seizures. They're generally classified as subtle, clonic, tonic, & myoclonic. Subtle attacks are characterised by apnoeas with episodes of pallor, fixed staring, deviation of one or both eyes, eye blinks, motor changes, episodic chewing movements, or stereotypic limb movements such as swimming or bicycling motions. Drooling & unusual alertness may accompany neonatal seizures. Most occur over only a few days. Fewer than half develop seizures later in life.

Nocturnal Seizures - These are usually tonic-clonic. They might occur just after a person has fallen asleep, just before waking, during daytime sleep, or while in a state of drowsiness. People who experience nocturnal seizures may find it difficult to wake up or to stay awake. Although unaware of having had a seizure while asleep, they may arise with a headache; have temper tantrums, or other destructive behaviour throughout the day.



Partial (Focal) Seizure - Occur when this electrical activity remains in a limited area of the brain. Can be divided into: Simple - not affecting awareness or memory & complex - affecting awareness or memory of events before, during, and immediately after the seizure, & affecting behaviour.

Pattern - Sensitive Epilepsies - In this reflex condition, seizures are produced by particular visual patterns. These triggers may consist of circles, stripes, or other patterns, usually of high contrast. Moving patterns are most likely to incite a seizure.



Photosensitive Epilepsy - Certain types of flickering or flashing light may incite a seizure. The trigger could be exposure to television screens due to the flicker or rolling images, computer monitors, certain video games or TV broadcasts containing rapid flashes, even alternating patterns of different colours, in addition to intense strobe lights. Can also be triggered by natural light, such as sunlight, especially when shimmering off water, even sun flickering through trees or through the slats of Venetian blinds.

Post Traumatic Seizures - Seizures may develop immediately after an injury to the brain or may develop in delayed fashion, showing up months or years after the initial trauma. The risk of post traumatic seizures is related to the severity of the injury. The greater the injury, the higher the risk of developing seizures. Even mild to moderate injuries can result in seizures.

Primary Reading Epilepsy - This is a reflex epilepsy where seizures are triggered by reading. Usually begin in adolescence, & onset is unusual in younger children or adults over 30 years old. Person may have jaw jerking or clicking while reading, often with jerks of the arms, & if reading continues, a generalized convulsion may occur. Transient cognitive impairment has also been noted with the jerks.



Progressive Myoclonic Epilepsy - A rare, form of epilepsy with myoclonic & tonicclonic seizures. Children affected may have trouble with maintaining balance and experience rigid muscles & loss of mental ability.

Psychogenic Seizures / "Pseudo Seizures" (PNES) - Not due to epilepsy & can occur at any age, but are more common in people under the age of 55. They occur three times more frequently in women than men. They may arise from various psychological factors, may be prompted by stress, & may occur in response to suggestion. Some individuals with PNES may have previously experienced trauma, such as sexual abuse.

Reflex Epilepsy - A small number of people have seizures that are set off by specific stimuli. Can include a flickering computer monitor, flashing lights, sudden noises, a particular piece of music, or the phone ringing. Some even have seizures when they think about a particular subject or see their own hand!

Sensory Seizures - Some simple partial seizures consist of a sensory experience. They may smell or taste things that aren't there, hear clicking, ringing, or a person's voice when there is no actual sound. You may also see lights, hear a buzzing sound, or feel tingling or numbness in a part of the body. Simple partial seizures usually last just a few seconds, although they may be longer. If there are no convulsions, they may not be obvious to others.



Rasmussen's Encephalitis / Chronic Focal Encephalitis (CFE) - Rare, progressive neurological disorder which affects one half of the brain, producing severe seizures, loss of motor control & speech along with paralysis on one side of the body, inflammation of the brain & dementia.

Startle Epilepsy - A type of reflex epilepsy in which seizures are provoked by sudden surprises or loud noises. It is often associated with disorders such as cortical dysplastic lesions & Down syndrome. Seizures usually last less than 30 seconds. It begins with a startle response, followed by a brief tonic phase. Person sometimes fall to the ground & experience clonic jerks. Responsiveness to the stimulus decreases as a result of repeated exposure to the stimulus. Spontaneous seizures also occur, but are infrequent in most cases. Person have static cerebral lesions & developmental delay usually. For many people, half of the body is partially paralysed & it is the weak side of the body that is primarily involved.



Status Epilepticus - Continuous seizure activity for 5 minutes or more without return of consciousness, or recurrent seizures (two or more) without an intervening period of neurological recovery

Temporal Lobe Epilepsy (TLE) - A type of epilepsy causing focal seizures beginning in the temporal lobe area of the brain. One or both lobes may be affected. There may be an aura warning sign before a seizure, but not everyone will experience this. Temporal lobe epilepsy may cause either simple partial seizures without loss of awareness or complex partial seizures with a loss of awareness.

Tonic Seizures - Characterised by facial & muscle spasms of the trunk, flexing or reaching of the upper & lower extremities, & impaired consciousness. Several types of tonic seizures exist; those grouped with absence, myoclonic, & atonic seizures are non-convulsive & tend to be brief. The more prolonged seizures usually are convulsive & may manifest dilation of the pupils, tachycardia, apnoea, a bluish tinge to the skin, salivation, & the loss of bladder or bowel control. Tonic seizures are often followed by postictal confusion.



Tonic-Clonic Seizures ("Grand Mal") - Person probably gives out a short cry & fall to the floor. The muscles will stiffen during the tonic phase & then, during the clonic phase the extremities will jerk & twitch. Often person will lose consciousness, stop breathing or have difficulty breathing, turn blue & lose bladder control which is not uncommon, but extremely embarrassing. Afterwards, person may feel tired, confused & disorientated. This may last from 5 minutes to several hours or even days. Rarely, this disorientation may last up to 2 weeks. Person may sleep, or gradually become less confused until full consciousness is regained.

Vertigo Epilepsy - While epilepsy is commonly accompanied by dizziness or vertigo, vertigo is only rarely caused by epilepsy. This arises primarily because vertigo is much more commonly caused by ear conditions. Epileptic vertigo is due to brain injury, typically the part of the temporal lobe that processes vestibular signals. Loss of consciousness usually occurs at the time of injury. The typical symptom is "quick spins."

Withdrawal Seizures - Seen when certain medications, such as barbiturates & benzodiazepines, are stopped abruptly. In this case, continued treatment with antiepileptic medications is usually not advisable. Withdrawal seizures are common when a person with alcoholism is trying to quit drinking. If a person with epilepsy drinks alcohol heavily & experiences withdrawal seizures, it is difficult for the physician or specialist to determine the exact cause of the seizure & to determine the next appropriate step. Therefore, it is important to avoid alcoholic beverages once you begin taking antiepileptic medications.



The Voice for Epilepsy

Registered Charity
Number 1181756

 facebook.com/voice4epilepsy

 twitter.com/voice4epilepsy

 instagram.com/voice4epilepsy