

Classification of seizures

Generally, seizures fall into two categories: focal and generalised seizures. The difference between these is how and where they begin.

Focal seizures

(Previously called 'partial seizures')

Focal seizures start in one part of the brain and affect the part of the body controlled by that part of brain. The symptoms the person experiences will depend on what function that part of the brain controls (or is associated with). The seizure may involve the involuntary movement or stiffening of a limb, loss or changes in speech, feelings of déjà vu, an unpleasant smell or taste, or sensations in the stomach such as 'butterflies' or nausea. The seizure usually last less than two minutes however this may be different for each person.

Focal aware seizures

(Previously called 'simple partial seizures')

People can have different levels of consciousness during a focal seizure. A 'focal aware seizure' is when a person remains alert throughout the seizure and can remember what happens.

Focal seizures where the person retains full awareness of the event were previously called simple partial seizures or auras. We now know that an 'aura' is actually a focal seizure.

Focal seizure with impaired awareness

(Previously called 'complex partial seizures')

In some focal seizures, the person has altered awareness. This means their level of consciousness is altered rather than lost. The person may often appear confused and dazed and may do strange and repetitive actions like fiddling with their clothes, making chewing movements or uttering unusual sounds.

These behaviours may also be described as trance-like or robot-like and are called automatisms. The seizure usually lasts for one to two minutes but the person may be confused and drowsy for some minutes to several hours afterwards and have no memory of the seizure or the events just before or after it.

This type of seizure can be mistaken for drug/alcohol-affected behaviour or mental health disturbance. At times, focal seizures can become generalised.

Generalised seizures

Primary generalised seizures involve the whole brain and therefore involve the whole body. There are many types of generalised seizures, some convulsive, others non-convulsive. Below are descriptions of some of the more common presentations:

Absence seizures

(previously called 'petit mal seizures')

These brief, non-convulsive events involve the whole brain and usually occur in children. With this type of seizure, the person's awareness and responsiveness are impaired, they simply stare and their eyes might roll back or their eyelids flutter.

It can be difficult to tell the difference between absence seizures and daydreaming. However, absence seizures start suddenly, cannot be interrupted, last a few seconds, and then stop suddenly. And the person resumes what they are doing. Although these seizures last less than 10 seconds and sometimes longer, they can occur many times daily, disrupting learning.

Myoclonic seizures

Myoclonic seizures are brief, shock like jerks of a muscle or a group of muscles, usually lasting no more than a second or two, which at times can result in a fall. There can be just one, but sometimes many will occur within a short time. (Clusters)

Atonic seizures

Atonic seizures cause a sudden loss or decrease of normal muscle tone and the person often falls to the ground. Seizures usually last less than 15 seconds. Often called drop attacks, these seizures can cause head or facial injury. Wearing protective headwear may reduce injury.

Tonic seizures

Tonic seizures greatly increase normal muscle tone, and the body, arms or legs suddenly become stiff. These seizures most often occur in clusters during sleep, although they can occur when the person is awake. If the person is standing, they will fall quite heavily, often injuring their head, face or neck. Protective headwear may minimise injury. Tonic seizures usually last less than 20 seconds.

Tonic-clonic seizures

(previously called 'grand mal seizures')

During a tonic-clonic seizure a person's body stiffens, air being forced past the vocal cords causes a cry or groan and they fall to the ground (the tonic phase). Their limbs then begin to jerk in strong, symmetrical, rhythmic movements (the clonic phase). The person may experience excess saliva from the mouth, go blue or red in the face or lose control of their bladder and/or bowel as the body relaxes.

As consciousness returns, the person may be confused, drowsy, agitated or depressed. They may have a headache and want to sleep. This drowsiness can last for a numbers of hours, for some people it can be days.

Although this type of seizure can be frightening to watch, the seizure itself is unlikely to seriously harm the person experiencing it. They may, however, vomit or bite their tongue and can sometimes injure themselves if they hit nearby objects as they fall or convulse.

Tonic-clonic seizures generally last 1 to 3 minutes. If the active movements of the seizure last more than 5 minutes, call an ambulance.

Prolonged seizures, or a series of seizures with or without out a break in between, indicate a dangerous condition called *convulsive status epilepticus* and demands emergency treatment, mostly in the form of rescue medication administered in the community.

Information taken from Epilepsy Australia's brochure 'Diagnosing Epilepsy, answering your questions'
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