Seizure Smart

EPILEPSY ACTION AUSTRALIA

SEIZURE CLASSIFICATION

There are many different types of seizures. Gaining an awareness of these can help people to manage epilepsy better as well as educating the general public.

Partial seizures

Around 60% of people with epilepsy have partial seizures. Partial seizures can often be very subtle or unusual, and may be unnoticed or confused with other events. These start in one small area of the brain and either remain confined to that area, or spread to other regions of the brain. They can become a generalised seizure, most commonly a tonic clonic seizure.

Simple partial seizures

These seizures are not characterised by a loss of awareness or consciousness. Examples of symptoms are:

- Sensory – numbness, tingling or burning sensation in a region of the body
- Motor – jerking of a limb, twitching of the face
- Autonomic – blushing, pallor, racing heart-rate, nausea
- Psychic – déjà vu, hallucinations (visual, sound, taste or smell), different emotions

These short-lived seizures are often termed an 'aura' or warning by the person experiencing them as they can precede a complex partial or tonic clonic seizure. They usually last less than a minute.

Complex partial seizures

Consciousness or awareness is altered, producing a vague, confused or dreamlike appearance. The person may respond, often inappropriately, and display unusual, random and repetitive behaviour. This behaviour commonly presents as chewing, fidgeting, taking off clothes, walking around, or mumbling. There is often a period of confusion after the seizure and little, if any, memory of the event. These seizures can last approximately 30 seconds to three minutes.

Generalised seizures

There are many kinds of generalised seizures, which result from abnormal activity in the whole brain. For this reason, consciousness is lost at the onset of the seizure. They can also occur immediately after a simple or complex partial seizure, but not always. In this case, they are termed a secondarily generalised tonic clonic seizure.

Generalised seizures occur in the whole brain simultaneously and consciousness is lost.

Generalised tonic clonic seizures ('grand mal')

These are the most universally recognised seizures. They often begin with a sudden cry. If standing, the person will fall to the ground, losing consciousness. The body becomes quite stiff (tonic phase) shortly followed by jerking of the muscles (clonic phase). Breathing is shallow or temporarily suspended causing the lips and complexion to look grey/bluish. Saliva may come out of the mouth, sometimes also blood if the person has bitten their tongue, and there may be loss of bladder control. The seizure usually lasts approximately two minutes and is followed by a period of confusion or agitation. Headaches and soreness are common afterwards and the person may need to sleep.

Absence seizures ('petit mal')

These seizures almost always begin in childhood, sometimes with a family history, and are commonly mistaken for daydreaming and inattentiveness. They are characterised by staring, loss of facial expression, unresponsiveness, cessation of activity and sometimes eye blinking or upward eye movements. They start and end abruptly, lasting approximately 2-20 seconds. Mental function is usually recovered immediately and the person resumes previous activity with no memory of the event.

Children who have absence seizures often have normal cognitive function and intelligence, although learning gaps can result if seizures are untreated and occur many times a day.

Myoclonic seizures

These brief muscle jerks usually involve the upper body but can also affect the lower or whole body. The person may spill or drop what they are holding or fall off a chair. Although consciousness is not impaired, the person may feel confused or drowsy if several seizures occur over a short period.

Tonic seizures ('drop attacks')

These cause a sudden, brief stiffening of the muscles of the whole body, causing it to go rigid. If a person is standing, they will fall rapidly to the ground. Recovery is swift, but injuries can be sustained. Tonic seizures also occur in sleep.

Atonic seizures ('drop attacks')

The opposite of tonic seizures, atonic seizures are a sudden, brief loss of muscle tone of the body. Once again, the person will abruptly collapse to the ground, usually head first, so facial and head injuries are common. There is no noticeable loss of consciousness and recovery is swift unless the person is injured.

Importantly:

- Most seizures last 1-3 minutes, although there may be a period of confusion afterwards.
- Sometimes confusion after a seizure can be prolonged, lasting up to several hours.
- Exhaustion often follows, especially after a tonic clonic seizure, and rest or sleep is needed.
- Seizures cannot be stopped or slowed by restraint. The brain almost always stops the seizures naturally. Let the person have the seizure and then apply first-aid if necessary.
- It is physically impossible to swallow your tongue so there is no need to insert anything into a person's mouth. Doing this is dangerous and fingers may be bitten or teeth broken.
- In emergencies, drugs can be used to stop prolonged seizures.
- Afterwards, most people remember little, if anything about what has happened.