



**Brainwave The Irish Epilepsy Association**  
249 Crumlin Road  
Dublin 12

Tel: 01-4557500 Email: [info@epilepsy.ie](mailto:info@epilepsy.ie) Web: [www.epilepsy.ie](http://www.epilepsy.ie)

## SEIZURES

### How can seizures be described?

Not all seizures involve convulsions and many different terms are used. It is important to use terms, which describe what is happening during the seizure.

A person with epilepsy can experience more than one type of seizure, but the pattern of seizures tends to remain fairly constant. It is individual.

Although epilepsy is usually classified by seizure type, it can also be classified by syndromes. The International League Against Epilepsy (ILAE) has published a list of epileptic syndromes, the use of which should be encouraged

### Generalised Seizures

In this type, a large part of the brain is involved immediately at the outset. Consciousness is lost. What happens next is rather variable depending on the individual.

The most dramatic form is the generalised tonic-clonic convulsive seizure (still sometimes called a "major" or "grand mal" seizure) in which the person becomes rigid, then falls to the ground and there is jerking of all four limbs. Breathing is laboured and there may be incontinence of urine. Not all of these features are always seen.

Other types of generalised seizures include-

**TONIC** - in which there is a general stiffening of muscles without rhythmical jerking. The person may fall to the ground, if standing, with consequent risk of injury.

**ATONIC** - in which there is a sudden loss of muscle tone and a collapse to the ground (also known as "drop attacks")

**MYOCLONIC** - in which abrupt jerking of the limbs occurs. These often happen within a short time of waking up, either on their own or in company with other forms of generalised seizure.

**ABSENCES** - in which there is a brief interruption of consciousness without any signs, except perhaps for a fluttering of the eyelids. These occur characteristically in children, when they are commonly called "petit mal".

## Partial Seizures

In these the disturbances in brain activity begins in or involves a distinct area of the brain. The nature of these seizures is usually determined by the function of the part of the brain that is involved.

Partial seizures are sometimes known as "focal". It is incorrect to call these seizures "petit mal". There are basically three types of partial seizure- simple partial, complex partial and secondarily generalised.

In simple partial seizure consciousness is not impaired and the seizure is confined to either rhythmical twitching of one limb or part of a limb or unusual sensations, such as pins and needles in a distinct part of the body. If a partial seizure spreads to involve areas of the brain concerned with consciousness it becomes a complex partial seizure. Partial seizures arising in the temporal lobe are especially likely to behave in this way.

The initial part of these seizures may consist of a strange feeling welling up from the stomach, an unusual taste or smell or some other sensory disturbance. This is called an "Aura". The Seizures may then be characterised by a change in awareness as well as "semi-purposeful" movements (such as fiddling with clothes or nearby objects and wandering about) and general confusion.

In some people either of the above may progress to a full blown tonic clonic seizure. This is called secondarily generalized seizure.

The following questions should help you gather information the doctor needs to make an accurate diagnosis:

1. What was the date of the seizure?
2. What was the exact time of the day?
3. What was the person doing at the time?
4. Had the person just fallen asleep?
5. What called your attention to the seizure – a cry, fall, stare, head turn?
6. Did the seizure progress slowly or quickly?
7. What parts of the body were affected?
8. Was one side of the body more affected than the other?
9. Did the body become stiff? Did it jerk, twitch or convulse?
10. Did the person lose consciousness? If not, was there any alteration in awareness?
11. Did the skin show changes – pale flush, signs of blueness?
12. Did the person's breathing change?
13. Did the person talk or perform actions during the seizure?
14. Was the person incontinent of the bladder or bowel?
15. Did the person vomit during the seizure?
16. Were there any injuries as a result of the seizure?
17. How did the person behave after the seizure? Were they alert, drowsy, confused?
18. Did the person remember any unusual sensations before the seizure?
19. How long did it take for the person to recover completely?
20. If the person takes medication, when was the last dose given?

If you can answer these questions, you will be able to provide a very full account of a person's seizure. A complete account, such as this can be very useful at the onset of epilepsy or at times of change, for example, a change in medication or a change in the pattern of seizures. At other times, it may only be necessary to keep a summarised record. Patient diaries, which can be used for this purpose, are available from Brainwave. Sometimes videotaping may be helpful too but ensure to obtain the person's consent.

#### **DURING THE TONIC-CLONIC SEIZURE DO NOTHING - EXCEPT**

1. Put something soft under their head to cushion and prevent it from being damaged or cut.
2. Remove anything that they might injure themselves on.
3. Help their breathing by turning them on their side and ensure they remain in this position until they come around.

DO NOT – PUT ANYTHING IN THEIR MOUTH

DO NOT – TRY TO ROUSE THE PERSON

#### **OTHER TYPES OF SEIZURE (NON CONVULSIVE SEIZURE)**

During the attack, the person may seem just blank, will not be able to speak or answer questions normally. They may act in an odd way, like chewing or smacking their lips, say odd unexpected things or, for example, fiddle with their clothes or buttons.

A person having a minor seizure may seem as if affected by alcohol or drugs or as having disturbed behaviour. Minor seizures may come on suddenly and only last a short time (a few minutes).