

Seizures

What is a seizure?

A seizure (also called a 'fit' or convulsion) occurs when there is a temporary disturbance in the electrical activity of the brain. There are many different types of seizures. They vary from absence seizures that look as if a person is staring into space to more obvious convulsions that involve the entire body. Seizures usually result in loss or reduced consciousness. Some people only have one seizure in their lifetime, while others may have many. Most seizures last less than five minutes.

Seizures are not always a sign of epilepsy (a medical condition that causes seizures). They may be caused by a brain injury or infection, fever, drugs or excessive alcohol use. The cause of a seizure may not always be obvious.

Seizures are often very frightening for the observer, especially if they have never seen one before. However, brain damage resulting from a seizure is rare.

Types of seizure

There are many different types of seizures. Some of the most common generalised (affecting both sides of the brain) seizures are:

- **Tonic clonic** (the most common type) – The person may cry out before losing awareness (consciousness). They may fall to the ground and may injure themselves as a result. Their entire body stiffens and starts shaking or jerking violently. Their eyes may roll back (so you can only see the white part) and they may turn blue around the lips or in the face. Saliva or fluid may come out of their mouth (this could be red if they have bitten their tongue). They may be incontinent of urine (wet their pants). They are confused and drowsy (groggy) once the fitting stops. They may feel dazed or act strangely. They may be unaware of their actions.
- **Absence** – The person may have a fixed gaze as if a person is staring into space or their eyelids may 'flicker'. There is no other obvious jerking. They do not respond when you talk to them.
- **Myoclonic** – Twitching, jerking or 'tremor' is seen in one or more limbs. The person may be awake.
- **Febrile convulsion/seizure** – happens in children aged between six months and six years due to a sudden change in temperature (when they have a fever). This seizure may appear like a tonic clonic seizure (as explained above).

How can I help?

First aid

DO:

- Protect the person from injury – remove harmful objects from nearby
- Cushion their head
- Aid breathing by placing them in the recovery position (on their side) once the seizure has finished
- Stay with the person until recovery is complete
- Call an ambulance (dial triple zero (000)) if any of the features listed below are present or you are otherwise worried about the person

DO NOT:

- Restrain the person's movements
- Put anything in the person's mouth (including your fingers)
- Try to move them unless they are in danger
- Give them anything to eat or drink until they are fully recovered

Call triple zero (000) for an ambulance if:

- The person is unconscious for more than 10 minutes
- The seizure continues for more than five minutes
- The person is having repeated seizures or having their first seizure
- The person is injured during the seizure
- You believe the person needs urgent medical attention

Emergency care

In the emergency department the patient will be closely monitored and any injuries they may have sustained will be treated. Doctors will rule out important causes of seizures requiring urgent treatment such as brain trauma and brain infections.

If the seizure has not stopped or recurs, a group of medications called benzodiazepines may be used to stop it (such as midazolam or clonazepam). This may cause drowsiness. Additional drugs or breathing support are rarely needed.

PATIENT INFORMATION

Anti-seizure (antiepileptic) medication is usually not required after a single seizure.

If antiepileptic medication is necessary, it may be given in tablet form or intravenously (into a vein) via a drip.

The person may have some tests including:

- An ECG (heart tracing)
- Blood tests, including to test their blood sugar level
- An EEG (electroencephalogram) – which looks at the brain waves and electrical activity
- A CT (computerised tomography) – a specialised scan of the brain (sometimes called a CAT scan)
- An MRI (magnetic resonance imaging) scan – another specialised scan of the brain

It is usual for a person to be confused, sore, tired or groggy for some time after the seizure has stopped. They may sleep for several hours after the seizure.

They may not remember what happened while they were in hospital or that they had a seizure.

After emergency care your Cabrini doctor will arrange ongoing follow up and care as required. Sometimes admission to hospital under a Neurology (brain) specialist is recommended, and sometimes care can be provided that includes discharge home and a booked medical review over the next 24-48 hours.

Advice on discharge

Depending on the circumstances of the initial seizure, there may be a risk of future seizures.

The person must not drive until cleared to do so by their doctor. This is to protect both the person who had the seizure and other road users. The period for which the person must not drive is variable and depends on further medical assessment.

Once home, the person should consider common sense precautions in case of a further seizure. They should avoid working at or climbing to heights, using some power tools or other dangerous equipment and bathing or swimming (especially if alone). These can be discussed further with the doctor at the follow-up appointment.

Follow-up

Follow-up after a seizure is important so that the best treatment to prevent it happening again can be given. This may be with a specialist doctor (neurologist).

Lifestyle and driving advice or restrictions can be discussed further at this appointment.

Seeking help

Cabrini Emergency Department (ED) is staffed by experienced emergency doctors and nurses 24 hours a day, 7 days per week. If you have any questions about your ED treatment our qualified ED staff can be contacted on **(03) 9508 1500** at any time. If you need to return to Cabrini ED for ongoing care we would be glad to take care of you again and if this occurs within a week of your initial consultation the doctor's fee will be bulk-billed.

You can also expect to receive a phone call or SMS message from one of our emergency nurses the day after you have been discharged. The nurse will be able to clarify any aspect of your diagnosis, treatment, or follow-up.

In a medical emergency return to Cabrini ED if it is safe to do so or go to the nearest hospital emergency department or call an ambulance – dial triple zero (000).

Want to know more?

- Contact Cabrini ED on **(03) 9508 1500**
- Ask your local doctor or healthcare professional
- Visit the Better Health Channel at www.betterhealth.vic.gov.au