

What is Post-Traumatic Seizure/Epilepsy?

Post-traumatic seizure is a well-recognised complication of a significant brain injury. Epilepsy is a sudden disruption of brain function that results in seizures or fits. Post-traumatic seizures can be classified into two groups based on the time of occurrence in relation to your brain injury. EARLY seizures are those which occur within one week of injury. LATE seizures are seizures which occur after the first week. The term epilepsy implies recurrence; hence post-traumatic epilepsy refers to recurrent seizures.

Does Everyone With a Brain Injury Get Post-Traumatic Seizure?

No - however, there are factors associated with brain injuries that increase the likelihood of a person having seizures.

What Are These Risk Factors?

The incidence of Post-Traumatic Epilepsy is in most cases, related to the severity of the injury. Risk factors include:

- Early seizures
- Intracranial haematoma
- Cortical contusions
- Penetrating head injury (for example gunshot wound)
- Depressed skull fracture
- Intracerebral bleed
- Prolonged duration of coma and post traumatic amnesia

What Causes Post-Traumatic Epilepsy?

Scarring of the brain tissue can become a focus for a seizure which is an abnormal electrical activity in the brain.

How Do I Know a Seizure When I See One?

There are two main types of seizures that can occur after brain injury:

Focal Seizures: These may involve jerking/twitching of a body part

Generalised (tonic-clonic) Seizures: These can be recognised by sudden loss of consciousness or awareness, body stiffening, breath holding followed by general body jerking.

The person may appear confused after either focal or generalised seizures. Most post-traumatic seizures are focal seizures and a large percentage of these can progress on to generalised seizures. Often during a generalised seizure the person may bite the tongue or lip and be incontinent. Rarely, a brief 'absence' is also a seizure type that can occur after brain injury.

What Should I do if Someone is Having a Seizure?

- Stay calm
- Time the seizure
- Do not try to restrain the person
- Do not put anything in the mouth
- Do not apply mouth to mouth
- Protect the person from injury
- Clear the area of harmful objects
- Loosen their tie or collar
- Place something soft under the head and shoulders
- As soon as possible, roll the person onto their side to keep their airway clear
- Stay with and reassure the person until they have fully recovered

Call an ambulance if:

- Active or jerking movements of the seizure last for more than 5 minutes
- Another seizure quickly follows
- The person has been injured or not breathing properly after initial seizure
- You are in doubt as to whether the person is okay

Do They Have to Take Medication for the Rest of their Life?

The risk of developing post-traumatic epilepsy in the first two years is high, however the risk of developing post-traumatic epilepsy also decreases with length of time following injury, hence a decision to start or continue anti-epileptic medication will be made by your doctor based on your potential risk factors or seizures already occurred. People are occasionally maintained on anti-epileptic drugs for a few months even though they may not have had a seizure if the risk is high. If a person has had recurrent seizures your doctor may advise to continue the medications for up to two years since the last seizure or even longer. Stopping of medication should be supervised by your doctor and then tapered off over at least six weeks.

What Kinds of Activities should be Avoided?

If you have had a seizure, or your risk is high, there will probably be a restriction on your driving or operating machinery. You should discuss these restrictions with your doctor.

What Can I do to Help?

Lifestyle management has a definite role in helping people maintain good seizure prevention and control. Tiredness, lack of sleep, emotional stress, alcohol and illicit drugs can all trigger seizures. It is also important to keep taking tablets prescribed for post-traumatic epilepsy and if there are any concerns regarding the medication, side-effects or seizures, then you should talk to your doctor. It is advised that you carry some form of ID with diagnosis and contact details with you when you go out, especially on your own.

Aim to:

- Get plenty of sleep
- Drink no alcohol while on medication for epilepsy
- Do not use marijuana, speed or other illicit drugs