

What is it?

Epilepsy is a problem in the brain with its electrical signals that create seizures. This interruption causes recurring seizures. Seizures are episodes of disturbed brain activity and cause uncontrolled changes in behaviour.

Types of seizures

Seizures are classified as either focal and generalized based on how the abnormal activity begins.

FOCAL SEIZURES

- Abnormal activity in just one part of the brain
- No loss of consciousness.
- May alter emotions or the way things look, feel, taste or smell.
- May result in involuntary jerking of a body part e.g. the arm or the leg with spontaneous sensory symptoms like tingling, vertigo, flashing lights.

COMPLEX FOCAL SEIZURES

- Will cause you to lose awareness for a period.
- Results in staring and continuous movements like hand rubbing, swallowing, chewing or walking in circles.

GENERALIZED SEIZURES

This seizure involves all parts of the brain and there are 6 types:



1) Absence Seizures (Petit Mal)

- Staring
- Subtle movements

2) Clonic Seizures

- Rhythmic jerking
- Muscle contractions of the face, neck and arms

3) Atonic Seizures

- Loss of normal muscle tone
- Collapse or fall

4) Tonic Seizure

- Stiffening of the muscles

5) Myoclonic Seizures

- Sudden brief jerks or twitches of the arms and legs

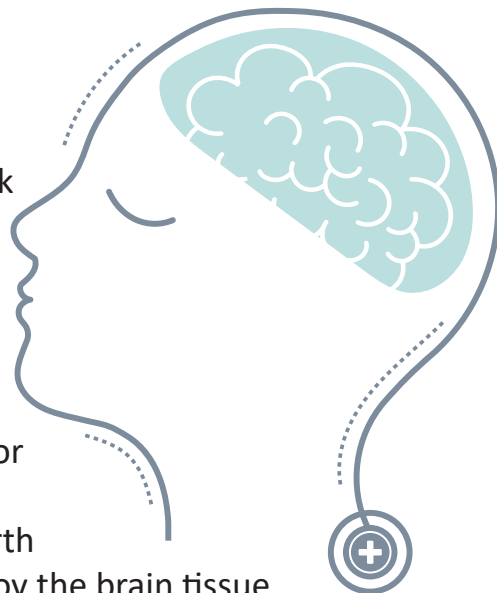
6) Tonic-Clonic Seizure (Grand Mal)

- Loss of consciousness
- Body stiffening
- Shaking
- Tongue biting



Causes

- Stroke or transient ischaemic attack
- Dementia / Alzheimer's disease
- Brain tumour
- Abnormal blood vessel in the brain
- Congenital brain defect
- Traumatic brain injury
- Infections-meningitis encephalitis or brain abscess and aids
- Metabolism disorder present at birth
- Other illness that damage or destroy the brain tissue
- Use of certain medications including antidepressants tramadol cocaine and amphetamines



Treatment



- **Medication** - anticonvulsants. Regular blood tests are needed to adjust the dosage accordingly. Never stop medication or skip a dose as this can result in having a seizure. Strictly take medication as prescribed.

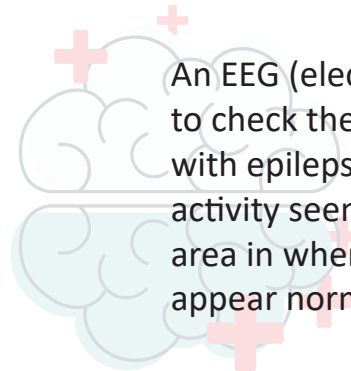


- **Surgery** might be necessary in case of tumours to stop bleeding in the brain or abnormal blood vessels.



- **Insertion of a vagus nerve stimulator (VNS)** to reduce the number of seizures.

Diagnosing of epilepsy



An EEG (electroencephalogram) will be done to check the electrical activity in the brain. People with epilepsy will often have abnormal electrical activity seen on the test. The test may show the area in where the seizures start. The brain may appear normal after a seizure or between seizures.

LIFESTYLE CHANGES

- Consult your doctor regularly for your follow up appointments.
- Record and report any seizures.
- Discuss with your doctor whether it is safe for you to drive and to operate machinery.
- Ensure a good night's sleep.
- Avoid stressful environments as far as possible.
- Parents should educate carers and teachers of epileptic children what to do in case of a seizure, and provide emergency contact numbers.