Epilepsy and Cerebral Palsy

What is epilepsy?

Epilepsy is the most serious neurological condition in the world. It affects around 55,000 people in Scotland, that is 1 in 97 of the Scottish population. It is defined as a tendency to have repeated seizures starting in the brain.

The cause of epilepsy is not always clear. There can be an obvious identifiable cause such as a malformation of the brain, a tumour, birth injury, head injury, stroke or dementia, ie anything that causes damage to the brain. This is called symptomatic epilepsy. If we can identify or at least suspect there is an underlying genetic cause, this is called idiopathic epilepsy. If no obvious cause is found, but there is the suspicion of an underlying cause, we talk about cryptogenic epilepsy.

What is a seizure?

During a seizure the brain’s electrical activity gets temporarily disrupted. This causes a temporary disturbance in the level of consciousness, which then affects how we behave, think, move or feel.

There are many different types of seizures. Some will have a complete loss of consciousness. Others will come with an impaired level of consciousness, or with full consciousness where the person is fully aware of a seizure but cannot stop what is happening.

Seizures are divided into focal and generalised seizures. Focal seizures affect only one part of the brain, generalised seizures affect both halves of the brain. Not all seizures are convulsive. There is more information about the different types of seizures in our ‘Seizures explained’ factsheet which you can request from our helpline 0808 800 2200.
What is cerebral palsy?

Cerebral palsy is a neurological condition which causes physical disabilities as a result of an injury to the parts of the developing brain which control movements. This injury to the brain can occur before, during or shortly after birth. It is the most common physical disability in children, and around 150 children per year are diagnosed with cerebral palsy in Scotland. Cerebral Palsy affects people in different ways depending on what type they have, which part of the body is affected, and how severe the condition is.

Cerebral palsy and seizures

Many children and adults with cerebral palsy will have associated conditions, such as epilepsy. A child/adult with cerebral palsy is likely to have at least one seizure or more during their lifetime and will often experience their first seizure during their first year of life, or even earlier during their first few months after birth. These can be both generalised (affecting both halves of the brain) or focal seizures (affecting only one part of the brain). In fact, it is estimated that between 30-50% of children with cerebral palsy will have epilepsy.

Epilepsy is more likely with children with cerebral palsy who have limited mobility.

Treatment of epilepsy for someone with cerebral palsy

Treatment for seizures in someone with cerebral palsy is the same as with someone who does not have cerebral palsy.

The most common treatment is with anti-epileptic drugs which prevent seizures from occurring. Other treatment options include surgery, the ketogenic diet, or vagal nerve stimulation, but these may not always be suitable for everyone. If you want to find out more about epilepsy and the different treatment options, check out our website www.epilepsyscotland.org.uk or phone our helpline 0808 800 2200 for an information pack.
First Aid for seizures

Generally, if the seizure is non-convulsive, simply stay with the person, keep them safe, and once they have come round from a seizure, reassure them and explain what has happened.

For a convulsive seizure, ie a tonic-clonic seizure, do the following:

- Check the airway is clear
- Time the convulsive part of the seizure
- Move any objects that could cause injury
- Put something soft under their head
- Loosen tight clothing/remove glasses
- Stop other people crowding around/reassure/explain
- Turn person onto their side after the convulsions have stopped
- Make sure breathing has returned to normal

**Do not** put anything in their mouth, do not restrain or restrict movement, do not give anything to eat or drink until fully recovered, and do not move the person unless they are in danger.

To find out more about seizure first aid and when to call an ambulance, contact our helpline 0808 800 2200 for our ‘First aid for seizures’ factsheet.

First aid for seizures with restricted mobility

As cerebral palsy causes physical disabilities, some people may use a wheel chair. Seizure first aid can be more tricky and needs to be properly risk assessed.

Generally, if a person using a wheel chair has a convulsive seizure, any restraints around their arms, legs, chest or head should be unfastened during a seizure to allow for free movement. To prevent the person falling out of the chair, keep any waist restraint fastened.
If the wheel chair has a recline function, lower the back of the chair to offer support to the back of the head. This may help prevent injury and keep the airway open, however, if there is excess saliva or vomit, reclining can present a choking hazard.

Always secure the wheelchair by putting the brakes on, and only move the chair during a seizure if there is an immediate danger. If the person prefers it, once convulsions have stopped, help the person out of the chair into the recovery position.

We have a specific factsheet on first aid for seizures and restricted mobility. Simply phone our helpline 0808 800 2200 for a copy.

More information

If you want to find out more about epilepsy, contact us on our helpline 0808 800 2200, or visit our website www.epilepsycotland.org.uk

For further information on cerebral palsy, check out Cerebral Palsy Scotland www.cerebralpalsycotland.org.uk or Bobath Scotland www.bobathscotland.org.uk