

Supporting Pupils with Epilepsy

Lucy Brewer
Epilepsy Nurse Specialist
Paediatric Community Services
01209 888230

Aims

- Facts and Figures about epilepsy
- First Aid management of seizures
- Education and Epilepsy
- Discuss the use of Home Rescue Treatments
- Protocols

Facts & Figures from Epilepsy Action

- There are around 40 types of seizures and a person may have more than one type of seizure.
- Epilepsy can affect anyone, at any age and from any walk of life.
- 456,000 or one in every 131 people in the UK has epilepsy
- Epilepsy is a neurological condition.
- Only 52% of people with epilepsy in the UK are seizure free. It is estimated that 70%-80% could be seizure free with the right treatment.
- One in 20 people will have a single seizure at some time in their life.
- Epilepsy is covered by the Disability Discrimination Act.

What is epilepsy?

Epilepsy is a physical condition that starts in the brain (a neurological condition). It is a symptom that the way a person's brain works is sometimes disrupted. When this happens, a person may suddenly have a seizure. Many people will have a single seizure at some time in their lives, but this does not mean that they have epilepsy.

If a person has epilepsy it means they have had more than one seizure that began in the brain.

- National Society for Epilepsy

Why seizures happen

Electrical activity is happening in our brain all the time. A seizure happens when there is a sudden burst of intense electrical activity. This intense activity causes a temporary disruption to the way our brains normally work, meaning that the brain's messages become mixed up. The result is an epileptic seizure.

Epilepsy Action

Epilepsy in Children

- Figures from the National Centre for Young People with Epilepsy reveal about 1 in 200 children have epilepsy.
- 70% of people with a diagnosis of epilepsy develop the condition within the first 20 years of life. (Sign 2005)
- Epilepsy is the most common chronic neurological condition in childhood. (RCN competencies for PENS 2005)



Types of seizures

There are 2 groups of seizures:

- Generalised seizures affect the whole brain
- Focal/ Localization related seizures (previously partial) affect [any] part of the brain

Generalised Seizures

- Absences
- Myoclonic
- Tonic
- Atonic
- Tonic Clonic



Focal seizures

- Simple Focal seizures – consciousness is not impaired.
- Complex Focal seizures – consciousness is impaired. Sometimes people have ‘automatisms’
- Secondary generalised seizures are where a focal seizure [simple or complex] spreads throughout the whole brain and becomes a generalised [usually tonic clonic] seizure

First Aid of Tonic clonic seizure

Do's –

- Note time & stay calm
- Remove any sharp or hard objects from the area
- Support/protect head
- Place in the recovery position if necessary
- Check airway
- Allow time to recover
- Talk quietly/reassure

Don'ts -

- Restrain convulsive movements
- Put anything in their mouth (with the exception of emergency medication)
- Move person, unless in danger
- Give anything orally while the person is still confused

Support during a non-convulsive seizure

Do's –

- Talk quietly/gently
- Guide/maintain safety
- Ask simple questions
- Reassure
- Note the time/length of the seizure

Don'ts –

- Restrain
- Raise your voice

Observing a seizure

- **It is important to keep accurate eye-witness accounts of seizure activity. Things to note include:**
 - Date and time of seizure
 - Did you notice anything unusual preceding the seizure?
 - Could there have been a triggering factor?
 - How did the seizure start?
 - Did you notice any abnormalities in the child's breathing or colour?
 - Description of the event itself
 - How long did the event last, and how did you know the seizure had finished?
 - What was the child like after the event?
 - How long was it until the child was back to their usual self?

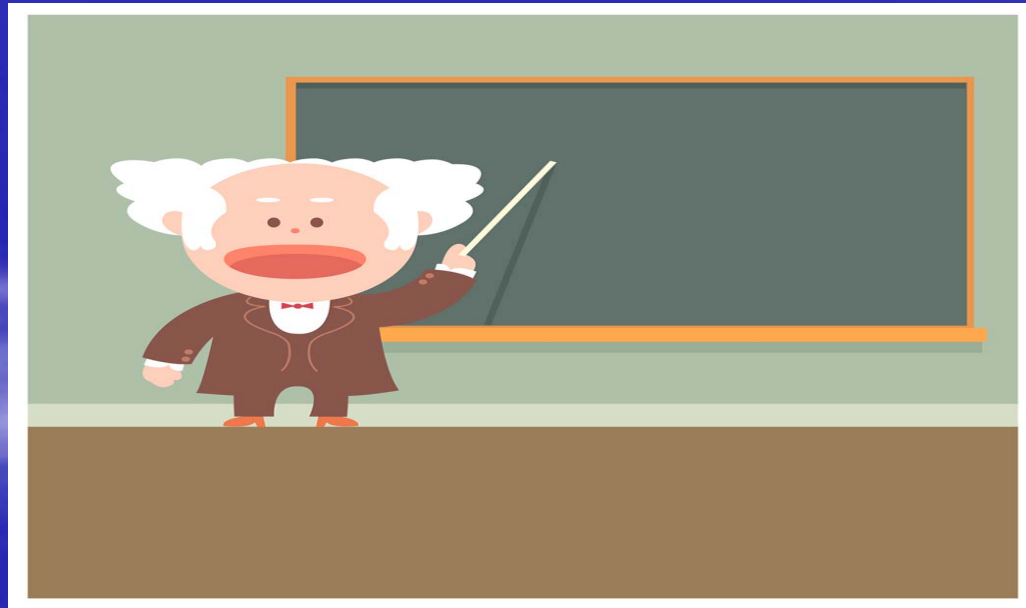
Emergency Services

- It is not always necessary to call an ambulance. However, the emergency services should be called if:
 - It is the pupil's first seizure
 - A convulsive seizure lasts more than 5 minutes
 - The pupil is having repeated seizures without regaining consciousness in between
 - An injury has occurred
 - You are concerned about breathing difficulties

Situations that can trigger seizures

- Tiredness
- Stress
- Excitement
- Flashing lights
- Illness –particularly raised temperatures
- Menstruation
- Alcohol/drug abuse
- Not taking regular medication

Education and Epilepsy



Language and Communication

A pupil's ability to communicate is likely to be affected if the associated areas of the brain are being disrupted by epileptic activity

Problems may occur with:

- delayed development of language skills

- word-finding difficulties

- slow or slurred speech

Epilepsy Action

Behaviour

- Behaviour can be affected in many ways when a pupil has epilepsy. Considerations should be made for:
 - the impact of the diagnosis on self-esteem and autonomy
 - the possibility of medication affecting mood
 - symptoms of focal/partial seizures
 - seizures which may have occurred the previous day or overnight

Memory

- Memory problems are not uncommon amongst individuals with epilepsy. The difficulties with memory may be a result of:
 - Epileptic activity in the temporal lobes
 - Damage to the part of the brain responsible for registering and recalling information
 - Anti-epileptic drugs
- Short and Long term memory problems can occur

Safety considerations

- Science
 - Use of protective equipment
- Cookery
 - Avoidance of carrying hot plates
 - Advise pupil to use the back rings on a hob
 - Cooker guards may be required
- PE
 - Contact sports may not be suitable in some cases
 - Precautions should be in place for swimming
- Technology
 - Assessment should be made on an individual basis

Epilepsy Home Rescue Treatment

What is Status Epilepticus?

- A single seizure lasting 30 minutes or longer.
- A series of seizures last for 30 minutes without regaining consciousness in between.
- [Status can be Tonic-Clonic or Non-convulsive]

Stages of Status Epilepticus

- Premonitory: an increase seizure frequency &/or intensity
- Early Status (30-60 minutes): major body systems start to fail + neuronal failure
- Establishes (60-90 minutes)
- Refractory Status (90+ minutes) poor prognosis, high level of mortality/morbidity
- Mortality rates approximately 20%

Why is it a Medical Emergency?

- Causes brain damage
- Puts a strain on the heart
- Danger of choking
- Stops Oxygen
- Can cause death [if not treated]

What is rescue medication?

- Rescue treatments are given to prevent status.
- They are absorbed quickly and usually work within 5 -15 minutes.
- Certain treatments can be given in the community by carers and may prevent admission to hospital.

Rectal Diazepam.

- Is licensed for the treatment of epilepsy.
- It usually works within 15 minutes [if given orally it would take about an hour]
- Diazepam is the generic name for Valium
- There are 2 trade names:
 - Stesolid & Rectube
- The usual dose for adults is 10-20 mg.
- My have a prolonged “hangover” effect

Midazolam

- Is not currently licensed for epilepsy
- The brand which is designed for use in epilepsy is called **Epistatus**
- Can be administered in either the buccal or nasal cavities.
- It should be effective within 5 minutes.
- The usual dose for adults is 10mg/1ml
- The 'hangover' effect is much shorter than Diazepam.

After administering Rescue Medication

- Stay with the person while they recover
- Keep reassuring the person [even though they may not appear to hear]
- Record the time and administration of the drug
- The person may sleep after, or they may be drowsy.

Protocols

- Everyone written up for rescue medication must have their own individual protocol.
- This should be signed by a doctor [GP or Consultant]
- If in doubt call an ambulance.



Useful Contacts.

- Epilepsy Action
- Helpline:0808 8005050
- www.epilepsy.org.uk
- National Society for Epilepsy
- Helpline: 01494 601400
- www.epilepsynse.org.uk
- Epilepsy Bereaved
- phone:01235 772850
- www.sudep.org
- (P.S. There are also specific epilepsy organisations for Wales, Ireland & Scotland)