Love Compassion Respect Believe

Mottram C.E.School
Diocese of Chester

Mottram C.E. Primary School

PROTOCOL FOR THE MANAGEMENT OF EPILEPSY IN SCHOOLS

INTRODUCTION

This is intended to raise awareness of the numbers, needs and problems those with epilepsy face with specific reference to the school situation. Also, to improve teacher understands of epilepsy and to improve their access to support and information.

WHAT IS EPILEPSY?

Epilepsy is a disorder in which people have spontaneous recurrent seizures. It is not infectious. Seizures are the result of an altered chemical state of the brain giving rise to burst of sudden excessive electrical discharges. This can happen to anyone, but people with Epilepsy have an increased susceptibility to it. There are many individual causes for this to happen. The area and amount of the brain involved will determine the pattern the fit will take. A fit, convulsion and seizure are describing the same event.

AGE OF ONSET

Epilepsy usually develops before 20 years of age, but many children who have epilepsy will grow out of it before adulthood.

CAUSES OF INDIVIDUAL SEIZURES – TRIGGERS

Some people may have seizures that show a regular pattern, e.g. only occur at night whilst others may show no pattern at all. For most people their attacks are spontaneous, but others learn to recognise certain events of triggers which may lead to a seizure which can allow them some control in avoiding their seizure.

Triggers are very individual to that person, but some events include: -

- Forgotten or incorrect medication
- Fever
- Lack of sleep

- Stress and excitement
- Boredom
- Alcohol and drugs
- Flickering lights
- Startle response
- Menstruation

TYPES OF EPILEPSY

It is preferable to talk about the epilepsies, because recurrent epileptic seizures can be part of a wide range of conditions differing in their underlying cause, response to treatment and outlook for the future. In most cases no underlying cause is found.

It is an essential part of medical care to try to identify accurately the individual's type of seizure in order to provide the most appropriate help and advice. Generalisation about epilepsy has been the source of much confusion in the past. What applies to one form may not apply at all to another.

The different types of epileptic seizures should be thought of as distinct types and not a gradation from "minor" to "major". A person may have more than one type of seizure. No two people will have the same symptoms. The type of seizure depends upon which part of the brain is affected.

If the whole brain is affected then the seizure is called "generalised" and there is a loss of consciousness, however brief and the person will fall if standing.

If only part of the brain is affected, it is known as "partial" (focal) and consciousness, though often affected, may not necessarily be lost.

MORE COMMON GENERALISED SEIZURES

(*Most of the brain is involved*)

1. **Tonic clonic (grand mal)**
   The body will stiffen, the person may call out and then fall; rhythmic jerking movements of the limbs then begin and the person may go blue due to a lack of oxygen. Incontinence may occur. The seizure lasts a few minutes.

2. **Absence (petit mal)**
   Most common in children who may look blank, stare and may have slight twitching or blinking and will not be able to communicate. Lasts a few seconds only.

3. **Myoclonic**
   Single or multiple jerks in a variable period of time. A limb, limbs or the trunk may jerk, possibly leading to a fall.

4. **Tonic**
   The muscles stiffen and the child will invariably fall to the floor. It may involve a cry out at the onset.

5. **Atonic**
   The muscles lose all tone and the person falls.

PARTIAL (FOCAL) SEIZURE
(Only part of the brain is involved).

1. **Complex**
   (Also 'temporal lobe' or 'psychomotor' seizure)
   May start with an 'aura' or warning which may take the form of hallucinations of vision, smell, hearing or taste. The child may appear conscious but may not respond. Abnormal movements like plucking at clothing and smacking of lips may occur. The person may want to wander about aimlessly. Seizure usually last half to 2 minutes or so, but full recovery will take longer.

2. **Simple**
   A "funny feeling", numbness or jerking in just one limb or down one side of the body or of the face. Consciousness is not lost. You may see twitching of eyes and mouth.

3. **Secondarily Generalised**
   Sometimes the electrical activity in the brain may spread so that the whole brain becomes affected giving rise to a 'secondarily generalised' seizure.

FEBRILE SEIZURE (CONVULSIONS)
Febrile means 'feverish'. A febrile seizure is related to an increase in temperature usually in association with a childhood illness. Such seizures are most common in the age group twelve months to four years and are rarely seen after the age of five.

Febrile seizures involve stiffening and rhythmic jerking movements of all limbs or just jerking movements of the body which usually last about two minutes. They are not usually diagnosed as epilepsy.

SUB CLINICAL SEIZURES
There is continuous epileptic activity in the brain, interfering with it's function, but without any obvious external manifestation. The condition may be suspected in children if their attainment level drops significantly, or the standard of oral or written work is below expectation for no accountable reasons.

PSEUDOSEIZURES (NON-EPILEPTIC SEIZURES)
Some people may exhibit seizure-like activity, which is due to episodic disturbances of behaviour of psychological origin and which is mistaken for epilepsy. These people may also have true epileptic seizures.

STATUS EPILEPTICUS

There are three definitions:
1. A prolonged seizure involving unconsciousness or altered consciousness.

   Prolonged in this context means 10 minutes or longer.

2. Repeated seizures without recovery or consciousness. This cycle of seizure and unconsciousness may be repeated many times.

3. Partial status epilepticus – a prolonged simple or complex partial seizure, often going on for hours or days.

SEE THE FIRST AID SECTION FOR ADVICE ON MANAGING STATUS EPILEPTICUS

WHAT TO LOOK FOR

The eye witness account provided by the teacher can be extremely useful to the clinician. Notes should be made as soon as possible after the seizure so important information is not lost. Specific points to make a note of for each type of seizure that may be witnessed are detailed overleaf. First try to ask someone to note the time.

GENERALISED SEIZURES

- What was the child doing before the attack started?
- Were they watching a monitor? Flickering light?
- Was there any colour change e.g. pale grey, blue?
- Was there any alteration/loss of consciousness? If so how long?
- Did the child fall to the floor? Was this rapid or slow? Was there any injury at this point?
- Were the eyes open or closed, staring or deviated to one side, if so which side?
- Was the child floppy, rigid or did both occur – if so, in which order?
- Were there any jerky movements, if so, were all limbs affected or was there selective limb involvement?
- How long did all this last?
- Was there any incontinence, tongue biting or frothing at the mouth?
- On regaining consciousness was there any confusion, nausea, vomiting, headache or drowsiness, if so, how long does it last?

ABSENCES

These may be easily missed as they can be so brief or be confused with daydreaming:

- Did the child look vacant, staring?
- Was there any twitching or blinking?
- How long did it last?
- Was the child aware something had happened?

PARTIAL SEIZURES

Simple Partial

There is no loss of consciousness.

- Is there any tingling sensation in arms or legs? If there is, does it progress to include more of the limb?

- Is there a disturbance of feeling and senses such as smell, taste and perception – with or without the above?
- How long does it last?

Complex Partial

The child appears to be conscious, but does not respond

- Is there an 'aura' (warning) e.g. visual, auditory, taste?
- Are there any abnormal movements such as plucking at clothing, lip smacking or tick like movements?
- Is there any aimless dazed walking or action?
- How long does it last?

PHOTOSENSITIVE EPILEPSY

Points to note:

All attacks are rare.

They tend to occur in the following situations:

- Whilst watching a faulty TV
- Whilst adjusting the set
- Sitting very near to the set
- When tired

Precautions:

- Sit in a well-lit room
- Have a lamp on or near to the set
- Avoid approaching the TV – use a remote control or get someone to adjust it for you.
- Sit a distance of at least 2m from the screen.
- View from an angle.
- Cover one eye.
- Tinted and photochromic lens have not been found to help.
- Watch a smaller screen as it activates fewer retinal cells if correct distance away.

V.D.U

There is no evidence that a computer display of text on a professional VDU is a hazard to the photosensitive patient. However, where a domestic TV is used as a monitor there may be as the viewing distance is less. The picture on the VDU may be a hazard as flicker or flash may be on screen and children are more sensitive to this.

Precaution:

Complete ocular occlusion over one eye during sensitive display.
Well lit background to reduce screen brightness.

COMPUTER AND ARCADE GAMES

Hazard due to flash flicker and pattern sensitivity whatever the mode of display.

EMERGENCY CARE AND FIRST AID FOR SEIZURES IN SCHOOL

Most seizures are self-limiting, and the child will recover spontaneously.

AT ALL TIMES THE CHILD'S SAFETY MUST BE MAINTAINED.

If the child has a Tonic Clonic seizure:-

Points to remember:

- Loosen tight clothing and remove glasses.
- Protect and support the head – place something soft underneath.
- Try and avoid the person biting his/her tongue.
- Move possible hazards away.
- Prevent other children crowding round.
- Put the child in the recovery position when the seizure has stopped.
- Reassure the child – talk to him/her quietly.
- Recovery time is individual and will vary from child to child.
- The child may be confused for a time or need to sleep.

Remember

DO NOT

- Place anything in the mouth.
- Restrict convulsive movements.
- Move the child – unless in danger.

- Attempt any physical restraint unless the child is in obvious danger – he or she may be confused for some time and may forcibly resist attempts to restrain.

During a partial seizure, protect the child from moving into danger.

- Speak quietly and calmly to aid reorientation to surroundings.
- Stay with child until a normal routine can be resumed

The Recovery Position

RECOVERY POSITION IS USED TO KEEP THE AIRWAY CLEAR OF BLOCKAGE AND ENSURE BREATHING CAN TAKE PLACE

What is the Recovery position and how is it done?

The recovery Position is simply lying the person on his side with his face looking down towards the floor so that the tongue hangs down out of the mouth and so fluids can drain out on the floor.

The recovery position must be done a certain way in order that it is safe and effective.
Please follow steps below: -

STEP ONE Check that the person is breathing by: -

- If he is making sounds, then he must be breathing.
- Feeling his breath gently blowing against your cheek.
- Is his chest rising and falling as he breathes?

STEP TWO Ensure that someone contacts the emergency services as soon as possible.

STEP THREE Kneel down by the unconscious person and lie him flat on the ground on his back. Check his pockets for bulky items that may hurt to lie on and remove them. Take the arm nearest to you and put it at ninety degrees to the shoulder (like putting up your hand to stop traffic) ensuring the palm is upper most, then take the other arm and bring it across his chest with the hand palm down resting on the shoulder.

STEP FOUR Take the knee furthest away from you and bend it up with the foot flat on the floor and his toes tucked under the flat knee. With the other hand, support the head.

STEP FIVE Pull the person over to you by pulling on the bent knee and rolling him on to his side. Whilst rolling ensure head is supported.

STEP SIX Adjust the bent leg so it is over the bottom leg completely and is bent at ninety degrees so the person stays on his side and doesn't roll back. Gently tilt the head back to ensure airway stays open.

Check breathing and pulse regularly.

EMERGENCY CARE

CALLING FOR AN AMBULANCE

It is not usually necessary to call for an ambulance when managing epileptic seizures. However, it should be considered in the following circumstances:

1. If it is the first seizure, the cause of which is uncertain and needs investigation.

2. Injuries have occurred during the seizure, e.g. a cut that needs stitching.

3. The convulsion part of the seizure shows no sign of stopping after 10 minutes or 2 minutes longer than is usual for that person.

4. If a second seizure occurs without the person regaining consciousness.

A prolonged seizure or series of seizures without regaining consciousness is called STATUS EPILEPTICUS and is a medical emergency.

Lack of normal respiratory movements combined with extreme muscular contractions during a seizure throws stress on the cardiovascular system. The continuing lack of oxygen may lead eventually to brain damage.

Status epilepticus is usually convulsive, but sometimes it can be non-convulsive. i.e. absence or complex partial status. This will need intervention, although the urgency is not as great. In most cases status epilepticus is an extremely rare occurrence, except in a very few patients with difficult to control epilepsy.

CALLING A PARENT

Whether to call a parent or not will depend on the seizure type. It is usually unnecessary to call a parent for absence seizures for instance. Parents should usually be called when a tonic/clonic seizure has occurred and definitely if it is a first fit, a fit that is of a different pattern

from normal or the child is in status epilepticus (i.e. has a series of seizures without recovering consciousness between each one). However, the parent should be informed at some point.

ANTI-EPILEPTIC DRUGS

These act to control the seizures and are not a cure. Seizures can be completely abolished in 80% of people using currently available drugs. Children usually take only one type.

If a single dose is missed the dose should be taken as soon as it is realised, but *DOUBLE DOSES SHOULD NOT BE TAKEN*. If in doubt contact the clinician.

TREATMENT

Aims of Anti-Epileptic Drugs

The aim of drug treatment is to control the seizures. Drugs are not a 'cure' for epilepsy; they work by abolishing or reducing the amount of excessive electrical activity within the brain. If the drugs are stopped or too little is taken then this excessive activity may recur. However, seizures can be completely abolished in up to 80% of people with epilepsy using the currently available drugs. Some of these people will eventually stop taking the drugs, without the seizures returning.
In general, treatment should be started as soon as the diagnosis is certain, as there is evidence to suggest that if the seizures continue unchecked it is more difficult to gain control.
Successful treatment will depend on accurate diagnosis, correct drug selection, subsequent monitoring of its effectiveness, and on following the prescribed drug regime fully.

Several drugs are currently used, these are the common ones.

Drug

Carbamazepine
Carbamazepine Retard
Sodium Valproate
Phenytoin
Ethosuximide
Vigabatrin
Lamotrigine
Clobazam
Clonazepam
Phenobarbitone
Primdone
Diazepam

If you are concerned about side effects, consult the school doctor or school nurse.

MONOTHERAPY

Monotherapy is now the preferred practice. This means a single drug is used and the dose increased until control is achieved. If control of seizures cannot be achieved despite adequate

dosage or if unwanted side effects occur, then a second drug is tried and the first is gradually withdrawn. Only when seizures are resistant to single drug therapy should a combination of drugs be necessary.

THE TEACHER'S PERSPECTIVE

Seizures are unlikely to occur at school, but the teacher needs to know what to expect and what to do. Opportunities may arise for the teacher to discuss epilepsy in the class in an informed and positive way. Hopefully this will help reduce the stigma that can be attached to the conditi9on. Children with epilepsy may be sometimes anxious and less self-reliant than their peers. Teachers can help build a child's self-esteem and confidence. Children with epilepsy have the right to be treated in exactly the same way as their peers. They should also be expected to conform to accepted standards of behaviour as their peers are.

School Activities

The teacher must act as a reasonable parent when allowing a child with epilepsy to participate in certain events. To be able to make an informed judgement to teachers needs clear written information about that individual child's epilepsy.

Basic facts:

- Type of seizure
- What it looks like
- Frequency
- Pattern e.g. nocturnal only
- Duration of seizure
- Speed of recovery
- Trigger
- Warning
- Management e.g. first aid/drugs required if any.

Try to establish a good relationship with parents to facilitate an exchange of information.

In general, restrictions on activities should be minimised and adequate supervision maintained. Swimming should not be barred but there must be a qualified and informed lifeguard able to effect immediate rescue if needed. Many schools adopt the 'buddy' system meaning that special attention need not be drawn to the child with epilepsy.

If the child appears to be drowsy or unsteady this should be brought to the attention of the parents and the doctor for the cause to be determined. It may be due to seizure activity or medication effects.

Training

All staff are trained to recognise signs of epilepsy and how to deal with this initially.