



EPILEPSY AND THE CHILD

WHAT IS EPILEPSY?

The word epilepsy means a tendency to have recurrent seizures. Seizures (or convulsions) occur when there is abnormal electrical discharge in the brain. This may be triggered by chemical imbalance or a structural abnormality. The term epilepsy is used to cover a variety of seizure types. These differ in cause, nature, severity, management and long term outcome.

WHO HAS EPILEPSY?

- * Epilepsy affects at least 1 in 100 of the population.
- * An isolated seizure is not necessarily an indication of epilepsy.
- * Epilepsy can affect anyone, at any age, but most commonly develops before the age of 20.
- * Many people will have their epilepsy controlled by medication.
- * Many children with epilepsy will outgrow it.
- * Epilepsy is **not** a mental illness or psychiatric disorder.
- * Epilepsy is **not** infectious or contagious.

Too pessimistic a view is often taken of the many conditions covered by the term epilepsy, with the result that unnecessary anxiety may be created.

It is essential to try to identify accurately the individual child's type of epilepsy in order to provide the most appropriate help and advice.

Generalisations about epilepsy have been the source of much confusion in the past.

THE MORE COMMON CHILDHOOD EPILEPSIES

The epilepsies are divided into 2 major groups. Firstly, there are "generalised" seizures, which involve the whole brain, usually with some loss of consciousness, however brief. Secondly, there are "partial" seizures, which originate in a particular part of the brain and may or may not involve a loss of consciousness. Some children will have more than one type of seizure, but the majority will have only one.

GENERALISED SEIZURES

1. Tonic clonic

The body will stiffen and the child may cry (this is not pain) (tonic phase), followed by a fall; jerking

movements (clonic phase) then begins and the child may go blue due to a lack of oxygen. Incontinence may occur. Lasts a few minutes.

2. Absence

The child may look blank, stare and have slight twitching or blinking. Lasts a few seconds.

3. Myoclonic

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

PARTIAL SEIZURES

1. Complex

May start with an "aura" or warning - visual, auditory, taste, etc. The child may appear conscious but may not respond. Abnormal movements like plucking at clothing or smacking of lips may occur. The child may want to wander. The seizures last for up to 2 minutes or so.

2. Simple

A funny feeling or jerking in just one limb or down one side of the body. Consciousness is not lost.

FEBRILE SEIZURES

Febrile means "feverish". A febrile seizure relates to increased temperature usually in association with an illness, e.g.: Tonsillitis or an ear infection. These seizures are most common between 12 months and 4 years and are rarely seen after the age of 5. What is seen during the seizure is tonic clonic or clonic movements which usually last about 2 minutes. The cause of the temperature rise needs assessment by a doctor. If the seizure is longer than 5 minutes or is repeated in quick succession, emergency help should be sought from a doctor. Over the telephone the doctor will advise the parent how to lower the child's temperature, for example by sponging with tepid water. If the seizure is still continuing when the doctor arrives, the doctor will attempt to halt it with medication.

Febrile seizures are not usually classified as epilepsy and most children who have them outgrow them naturally without further problems.



ACCURATE DIAGNOSIS

Diagnosing epilepsy can be difficult, but it is essential that:-

- Non-epileptic attacks are not misdiagnosed as epilepsy;
- Seizures are not misdiagnosed as non-epileptic;
- The precise type of seizure is identified.

Mistakes can happen if the episodes and the circumstances in which they occur are not described exactly. A precise account of the exact sequence of events from the first changes in the child to complete recovery and the circumstances in which the seizure occurs should be obtained. In difficult cases EEG monitoring over longer periods can be helpful to discover if there is epileptic activity in the brain at the time of the suspected attacks, or to identify the nature of non-epileptic attacks, eg. sleep disorders.

Accurate descriptions also help classify the child's type of seizure which will determine whether special investigations such as CT scanning are needed as well as the best choice of treatment. The likelihood that the attacks will improve or stop in the future can often be assessed if the precise type of seizure is established.

The possible causes of epilepsy are many and should be carefully considered by a doctor. Often the cause cannot be determined even when a careful assessment has been carried out. This may be difficult for parents to accept but it is important that a search for the cause is not pursued indefinitely and that the parents do not feel themselves somehow responsible in such circumstances.

TREATMENT

Treatment is advisable if seizures are recurrent and troublesome. The following are the major options available:

1. Drugs:-

Control of the seizures with drugs can be good in most cases without causing harmful side-effects. Whenever possible use one drug in as few doses each day as necessary to ensure adequate blood levels by day and by night. Sometimes more than one drug has to be used.

Generally, the more modern treatments produce fewer problems than the older drugs. If drugs are given only sporadically, or different from the way

prescribed, seizure control will be poor. Drugs should never be stopped suddenly. If you are concerned about any aspect of treatment, be sure to talk to your doctor.

2. Psychological intervention:-

Some children's seizures are made worse by such things as stress, emotional upset and boredom. In these cases it is important to identify the problem and deal with it, which may require help from a counsellor in addition to the medication being continued.

3. Surgery:-

Only a small number of children with epilepsy will be suitable for surgery but improved investigations and new surgical techniques mean that surgery can now be very successful for some children. Unfortunately not all epilepsies have a good prognosis and some children will have seizures for many years, even for all their lives. In general the prognosis for good seizure control is poor where epilepsy is associated with intellectual disability. Rarely seizures cannot be controlled because of progressive underlying brain disease.

LEARNING AND EDUCATION

It is still a popular misconception that epilepsy is usually accompanied by low intelligence. In fact, it is only in a minority of children, where seizures are the result of brain damage or malformation, that this is true. Such children may need special placement where both their medical and educational needs can be met.

The majority of children with epilepsy attend mainstream schools where many of them do well. In fact, epilepsy is compatible with the full range of intelligence and achievements. However, there is evidence that some children with epilepsy may underachieve at school. If underachievement is suspected, careful psychometric assessment is required. If a genuine degree of underachievement has been demonstrated convincingly in a child, various factors need to be considered:

1. Physical possibilities:-

These include frequent seizures, underlying structural damage, sleep disorders causing inadequate or poor quality sleep.

2. Side-effects of anti-epileptic medication.

3. Various psychological and social factors:-



These include poor motivation, under-stimulation, overprotection, family /friends/ teachers attitudes. It is difficult to say which factors are the most important, but the third group is often to the forefront. The attitude of the teacher towards the child with epilepsy plays an important part in the child's progress. Close communication with the parents will ensure that the teacher will be aware of the child's epilepsy and will be able to deal with a seizure occurring in the classroom. Teachers must not be afraid to push children with epilepsy to their limits just like any other child.

BEHAVIOUR

In the same way that limited intelligence is by no means an inevitable accompaniment of epilepsy, serious psychological disturbance is uncommon. Children with epilepsy rarely have seizures that take the form of aggressive outbursts or other kinds of unpredictable behaviour.

If a child with epilepsy lacks confidence or is difficult, there is likely to be a simple explanation such as over-permissiveness or restricted opportunities at home or at school, or perhaps fearful or hostile behaviour by other people, including other children. Teasing and social isolation are often sources of much distress. The same is true of unnecessary restrictions on childhood activities.

Some anti-epileptic drugs can cause difficult or disturbed behaviour. Should any marked behaviour change occur, the parents should discuss this with the doctor.

THE CHILD AND THE FAMILY

Each child's epilepsy and any problems experienced will be unique so the following generalisations may or may not apply. Realistically, as a family you will probably have some difficult times. A usual reaction to a diagnosis of epilepsy is to feel frightened, possibly even panic stricken. You will be worried about the future, education, social life, effects of medication and many other things. You are no different from other parents; your concerns are natural. However, it is important that your family develops a positive attitude to epilepsy and to your child's future and that each member supports the others.

Communication between parents and all the children is important: discuss your worries, share your knowledge of epilepsy and try to find out

more. Time spent sharing this information will probably bring the family even closer together.

Correct information about your child's epilepsy and a positive attitude can help you avoid some of the classic problems some families develop.

These simple guidelines should help:

DO emphasise what your child can do, not what he or she cannot do (while at the same time taking sensible precautions).
DO treat the child like all other children in the family.
Do help your child to integrate into as many social activities as possible, helping to develop the required social skills like all other children
DON'T overprotect the child.
DON'T make the child the centre of attention.
DON'T blame the child's epilepsy if the family experiences difficulties.

OUTLOOK FOR THE FUTURE

The prospect of control by means of anti-epileptic drugs is good in most children with epilepsy. In some forms of epilepsy the long term prospects (prognosis) for seizure control are very favourable and it is likely that the seizures will eventually improve with age or stop completely of their own accord.

Absences and tonic clonic seizures without a partial onset may well stop by early adulthood. The chance of this happening is even higher in some other types of epilepsy, including some occurring mainly during the night and mostly involving the face and mouth ("benign centrotemporal epilepsy). It is important that these epilepsies with a good prognosis are recognized early and appropriate reassurance is given by the doctor.

If a child has been seizure free for 2 years it is often appropriate for treatment to be gradually withdrawn by the doctor to see if it is still needed. In most cases there will be no recurrence.

Remember that epilepsy is not anyone's fault. It can happen to anybody at anytime. Try to accept the situation in a positive way and keep in mind that most children will have all their seizures controlled by medication and will grow out of them. As our understanding of epilepsy improves and the treatment progresses the future for all children with epilepsy will look brighter