

What are the principles of medical management?

- The aim of medical treatment is to control your child's tendency to have seizures, so that can get on with life with as little disruption from epilepsy as possible.
- Most doctors wait until a child has experienced at least two or even three seizures before prescribing medication.
- The doctor's choice of medication will depend on the **type of seizure** the child has, **the age** of the child, **how effective the drug is**, and the **side-effects** of the drug.
- Most doctors try to prescribe just one drug (monotherapy) to the child.
- The aim of drug therapy is to control seizures with the fewest side-effects possible. Doctors usually commence with a low dose, this will help limit side-effects. The dose is gradually increased until acceptable seizure control is gained. Achieving the right medication and dosage may take time. Dosages will also be adjusted as the child grows. Common side-effects include:
 - alteration of behaviour
 - drowsiness
 - lethargy
 - dizziness
 - unsteadiness
 - or skin rash
- All side-effects should be reported to the child's doctor immediately. Some side-effects may lessen over time as the child becomes accustomed to the drug, but others may be serious.
- It is important for children to learn that they have to have their medication and it should become part of their daily routine.
- Some children do not like taking medication. Using tricks to hide medication in foods or drinks may help. Parents will need to be patient and firm to get their child to take their medication.
- Herbs, alternative medications and other medications may contain chemicals that can interfere with antiepileptic medication. You must consult your child's doctor regarding possible drug interactions.
- Your child will usually need to stay on anti-epileptic drugs until she/he has been free from seizures for at least two years, and in some cases may need to continue taking anti-epileptic drugs indefinitely. Drugs must be stopped only under the supervision of your doctor who will advise you how to gradually reduce the medication. If medication is suddenly stopped, status epilepticus – a medical emergency – could result.
- Successful withdrawal of drugs is more often achieved in children than in people whose epilepsy began during adulthood.

See medication chart included in this kit.

Surgery

- Not everyone is a suitable candidate for surgery but it is less dangerous than people expect.
- Surgery is considered only when seizures are frequent and when drugs or other treatments have failed.
- Surgery might be considered by parents whose children have uncontrolled partial seizures, especially if the child is experiencing serious drug side effects. Recovery after surgery is usually quick.
- Vagal Nerve Stimulation (VNS) A small device is implanted under the skin on the chest under the collar bone, it is similar to a pacemaker. It sends electrical signals to the brain via the vagus nerve, which helps to control seizures in some people. Side-effects may include: shortness of breath, feeling of choking, throat pain, coughing, voice alteration, ear or tooth pain, and skin irritation or infection at the implant site. VNS can be an option for some children.

How can I keep my child safe?

Bathing

No child, whether they have epilepsy or not, should be left in the bath or around water unsupervised. The most frequent cause of accidental death from a seizure is drowning.

- Water is especially dangerous for children with epilepsy, so children should bath in low levels of water. Even when as little water as possible is used, drowning is a possibility if the child falls unconscious without making a sound.
- The bathroom door should not be locked when the child is in the bath.
- Children with frequent seizures should take showers while sitting on a stool. Taking showers is safer than taking baths, but be aware, that injuries may still occur. Consider using a shower curtain instead of glass panels in the shower. Use temperature control devices for hot water.
- Even older children struggling to gain independence should ensure that someone else is home when they bath or shower. They should not be permitted to take a bath when there is no one else in the house.
- Children should be taught about the risks that they face, should they experience a seizure in the bath or shower when no one is else is home.

Swimming

- Children with epilepsy should swim under the watchful eye of lifeguards and responsible adults who are trained in lifesaving and ready to act in case of an emergency.
- Inform supervisors that the child has epilepsy so that they are ready to deal with a seizure, should one occur.
- While swimming, children with epilepsy should have a “buddy” who swims with them.
- Diving should be avoided because of the pressure it places in the head.

Bicycle Riding

Wear a helmet and children who have frequent seizures should ride in a protected environment.

Horse Riding

Wear a helmet, ride with others.

Head Protection

- When a child has tonic or atonic(drop) seizures, they may fall violently to the ground and hurt themselves. These seizures are often difficult to control. A helmet will help protect your child.
- Your occupational therapy department of your local hospital will be able to fit your child for a helmet and will know where to purchase an appropriate one.
- A helmet should be worn when children with epilepsy are involved in sports where head injury may be a risk.

Medical Identification

Medical identification can improve chances of accurate and prompt medical treatment in the event of a seizure occurring outside the home. Your child should be encouraged to wear some form of medical identification. Bracelet, necklaces and key rings are available, stating name, address and medical condition. Your local epilepsy association may be able to assist you.

Mobile Phones

There has been some recent controversy about the safety of mobile phone use by children. Research has been inconclusive, although there is some indication they may cause problems for children whose brains are more easily damaged.

British Epilepsy Association Medical Advisor, Dr Tim Betts has made the following recommendations:

- Children with epilepsy, 14 and under, should be actively discouraged from using mobile phones.
- Anyone with epilepsy should consider, until the picture is clearer, restricting their use of them to short conversations and monitor their seizure frequency if they are using them a lot - the advice one would give any child or adult.
- People using VSN (vagal nerve stimulation) devices should keep their mobile phone away from the device and not have it in direct contact with the implanted device (e.g. in a pocket over the device). This is the advice given to people with cardiac pacemakers. (VSN is a device which is surgically implanted under the skin.)

Further information about any of these issues can be obtained from your doctor or epilepsy association.

REFERENCES:

Pollard,R.,Chapman,D,(2002) *Epifile – An Epilepsy Management Manual*. Melbourne: Epilepsy Australia
British Epilepsy Association – from article in Epilepsy Today March 2001