

Epilepsy in children

Epilepsy can begin at any time of life, but it is most common in children under five years. Although epilepsy varies from person to person, children with epilepsy generally have seizures that respond well to medication and they enjoy a normal and active childhood. More than half will outgrow their seizures as they mature, while others may have seizures that continue into adulthood.

Recognising seizures

Seizures are not always recognised in children when they first occur. Seizures can be subtle and short, such as an 'absence seizure' in which the child has brief episodes of decreased awareness and responsiveness. Some childhood events that may be confused with seizures are:

- Fainting spells
- Breath-holding spells
- Normal sleep jerks
- Daydreaming
- Night terrors in young children
- Migraine
- Heart and gastrointestinal problems
- Psychological problems.

Febrile convulsions

Febrile convulsions are brought on by very high fever, usually during times of illness. One in 25 children has a febrile convulsion at some time, usually between the ages of six months and four years. One-third of children who experience febrile convulsions will have repeated convulsions. Febrile convulsions are not considered a type of epilepsy and 97 per cent of all children with febrile convulsions do not develop epilepsy later.

Epilepsy syndromes

Once seizures are confirmed, the next step in the diagnosis is to clarify the type of seizures and the possible cause. Electroencephalography (EEG) can help determine the type of epilepsy and a brain CT (computed tomography) may be required if a brain lesion is suspected. If the epilepsy fits a particular pattern or syndrome, this can help the doctor to select the best treatment. It can also help to predict whether the seizures are likely to be easily controlled and limited to childhood, or whether the condition may be more persistent.

Some epilepsy syndromes include:

- **Childhood and juvenile absence epilepsies** – also called 'petit mal' epilepsy. Onset age is usually three to 10 years. It involves brief staring spells and is often outgrown.
- **Benign rolandic epilepsy** – onset age is usually five to ten years. Seizures may be minor and cause drooling and speech arrest (when the child cannot speak for a while). They usually happen in sleep or first thing in the morning as the child wakes. Convulsions may also occur. It is always outgrown.
- **Juvenile myoclonic epilepsy** – onset age is usually in the teenage years. May include generalised seizures on waking, brief myoclonic jerks and absence seizures. Usually well controlled, but not outgrown.
- **Infantile spasms** – also called West syndrome. Onset occurs during the first year. Clusters of jerks cause the baby to fall forward. It is a serious form of seizures. It may precede other forms of epilepsy and be associated with developmental delay.

- **Lennox-Gastaut syndrome** – onset age is one to eight years. Includes mixed seizure types such as drop attacks and convulsions. It is difficult to treat, and developmental delay is common.
- **Temporal lobe epilepsy** – this form can start at any age. It involves complex partial and simple partial seizures, with staring and confused behaviour. Can include generalised seizures. Treatment may include surgery.
- **Frontal lobe epilepsy** – can also start at any age. Seizures often occur during sleep and may include vigorous motor activity.

Understanding the diagnosis

When epilepsy is thought to be due to a genetic disposition to seizures, it is called idiopathic epilepsy. Where epilepsy is the result of an illness, brain lesion or brain injury, it is called symptomatic epilepsy. Sometimes, it is not possible to pinpoint the cause of the condition.

Understanding the pattern of epilepsy in a child can be a slow process and a frustrating time for parents. It may not be possible to know all the answers about a child's condition at the time of diagnosis. The picture may only become clear as the child grows.

Treatment of epilepsy

Medication can often prevent seizures from recurring. However, it is not prescribed for every child who has a seizure. Whether or not to prescribe medication, and what type of medication, will depend on:

- The type of epilepsy your child has
- Whether your doctor thinks there is a high risk of further seizures
- The age of the child
- The presence of developmental or behavioural problems
- The attitude of the child and the family.

Starting a child on medication is always a difficult choice for parents. Medications have potential side effects and most parents worry about this. However, when treatment is recommended, the doctor also considers the risks that seizures present to your child, and the effect that seizures may have on learning and behaviour. Treatment is not recommended lightly and the decision to treat is usually based on sound clinical evidence.

When several medications do not succeed in controlling seizures, additional options for treatment include surgery, vagal nerve stimulation (a device which electrically stimulates the vagus nerve is implanted) and the ketogenic diet (a high-fat, low-carbohydrate diet).

Epilepsy and learning

Children with epilepsy have the same range of intelligence and abilities as other children. However, some children with epilepsy will develop learning difficulties. This is usually due to a coexisting condition, such as an underlying brain abnormality, or it might be related to the child's frequent seizures. Sometimes, the medication is a contributing factor as it may cause drowsiness or hyperactivity. When a learning difficulty is identified in a child, there are strategies available – both medical and educational – that can be implemented. Your epilepsy counsellor will be able to advise on this matter.

Epilepsy and behaviour

Behavioural disturbances can occur in any child, whether or not they have epilepsy, and it can be difficult for parents to know the cause. The factors that affect learning in a child with epilepsy may also affect behaviour. In addition, low self-esteem can result from overprotection, lack of discipline or the child feeling different to other children. Parents may find that discussing the issue with teachers or an epilepsy counsellor is helpful. These workers also provide a gateway to additional support services.

Sport and play

Children with epilepsy should be encouraged to participate in, and enjoy, a full school and social life. Teachers and activity supervisors are often concerned about caring for a child with epilepsy. Where an activity carries risk, general restrictions are sometimes wrongly imposed on all children with epilepsy. Risks are best assessed on an individual basis. Video games, for example, will trigger seizures in less than three per cent of children with epilepsy.

Additional safety precautions or adaptations to various activities may lower risks to an acceptable level. There are some activities that require closer supervision than others, for example:

- **Swimming** – supervision by a competent adult is good practice for all children in and around water, such as diving or bathing.
- **Cycling** – all children should wear a bike helmet and cycle away from busy roads.
- **Climbing** – trees and rocks present risks if the child's seizures are not well controlled.

Find support and information if epilepsy is diagnosed

If your child is diagnosed with epilepsy, it's a good idea to learn as much as you can. Some suggestions that may help include:

- There are many types of epilepsy. Seek out the information that is specific to your child.
- Choose a doctor with whom you and your child can discuss your epilepsy questions freely.
- Your child will have questions about the seizures. Answer these clearly. Your epilepsy organisation will have age-appropriate material you can borrow.
- Your child will sense any fear and embarrassment you may have about epilepsy. If you can adopt a positive approach to the condition, your child will have a positive model to follow.
- Make sure that anyone who cares for your child is informed about the epilepsy and knows how to help your child if a seizure should occur.
- As your child gets older, it is important to help them take responsibility for their epilepsy – for example, remembering to take their medication at the right times without you prompting them.
- Remember to keep a balance between protecting your child and fostering independence.

Epilepsy and the family

Try to keep the epilepsy in perspective for the child and for the rest of the family, including grandparents. Siblings can feel overlooked when one child has additional needs.

Epilepsy is sometimes related to family genetics. If you are planning a baby and you are concerned about the potential risks of epilepsy, ask your doctor to explain any risks in your case. Genetic risks do not apply to all epilepsies and, in most cases, are fairly low.

Where to get help

- Your family doctor
- NURSE-ON-CALL Tel. 1300 60 60 24 – for expert health information and advice (24 hours, 7 days)
- Paediatrician
- Paediatric neurologist
- Epilepsy Foundation of Victoria Tel. (03) 9805 9111
- Epilepsy Helpline Tel. 1300 852 853
- Children's Epilepsy Program, Royal Children's Hospital Tel. (03) 9345 5661

Things to remember

- Epilepsy is common in children and can be confused with other conditions. An accurate diagnosis is essential.
- Seizures usually respond well to medication and most children will enjoy a normal and active childhood.
- The impact of epilepsy will vary for each child. Try to keep epilepsy in perspective for your child and your family.
- Remember to keep a balance between protecting your child and fostering independence.

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Better Health Channel

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