

# (4) Parents: Medical emergencies

Most seizures are short and will stop on their own.

Generally, any seizure which continues to last for more than five minutes is classed as a medical emergency. Depending on the type of seizure, this may require emergency medication.

### **Emergency medication**

This can be:

- \* midazolam, which is given inside the cheek (buccal cavity) or into the nose
- \* rectal diazepam, a gel given through a special tube into the anus (rectum)
- \* rectal paraldehyde as a second line of drug if both midazolam and rectal diazepam are ineffective

Emergency medication always needs to be prescribed. This comes with an emergency care plan, which is drawn up by the child's doctor or epilepsy specialist nurse. It will state the dosage, when and how the emergency medication should be given and when to call an ambulance. There is more detailed information about emergency medication, such as how to store the medication and possible side effects, in our factsheet called 'Emergency medication' from our 'Treatment' series.

## **Status epilepticus**

This is always a medical emergency and requires emergency medication to stop the seizure. If the seizure continues despite emergency medication, hospital admission is necessary.

Status epilepticus can happen in several ways:



- \* the child has a tonic-clonic seizure which lasts five minutes, or longer than usual for that child
- \* the child has a focal seizure which lasts 10 minutes, or longer than usual for that child
- \* the child has an absence seizure which lasts between 10-15 minutes, or longer than usual for that child

Always speak to your child's epilepsy specialist nurse to get specific advice for your child's seizures and type of epilepsy.

Status epilepticus is rare and is more likely to happen if a child has uncontrolled seizures. It is more commonly linked to convulsive seizures but can also occur with any other type of seizure, which can be more difficult to detect.

## **Serial seizures**

If a child has one seizure after another without full recovery in between, it can become a medical emergency. Full recovery means return to full consciousness and normal breathing.

If there is no emergency medication or care plan in place, call an ambulance.

## **Prolonged seizures**

These are seizures lasting two minutes longer than usual, or five minutes in total.

If your child has already had one prolonged seizure, your child's doctor may draw up a care plan and prescribe emergency medication which you can administer yourself and keep at home. You should take this medication with you whenever you go out. Keep it in a secure place at home but one you can get to easily and quickly should you need it.



A care plan will include instructions on when and how much of the emergency medication to give and how to store it. It will also tell you when to call an ambulance.

If there is no care plan, phone an ambulance if the seizure lasts longer than five minutes or longer than the usual period for your child. Most ambulance crew can administer emergency medication, which should stop a prolonged seizure or serial seizures.

A prolonged seizure without medical intervention can turn into status epilepticus (see above), which is always a medical emergency.

### SUDEP

Tragically, a very small number of children and young adults die from epilepsyrelated causes every year.

Sudden Unexpected Death in Epilepsy (SUDEP) is rare, especially in children without other significant health problems. Parents may want to discuss SUDEP with the epilepsy specialist nurse who can explain this further and suggest ways of reducing any risks.

Like cot death, no one fully understands how SUDEP happens. It is thought that SUDEP occurs because of a problem with the respiratory (breathing) system or because of a cardiac (heart rhythm) problem during a seizure. Breathing is usually irregular and can often stop briefly during a seizure. In most cases, turning a child onto their side during or after a seizure helps the child to breathe normally again. If breathing stops after a seizure, changing the child's position or giving a gentle shake can encourage breathing again.

The following is a list of some of the more common risk factors for SUDEP. Being aware of these is important so that you can discuss this with your child's epilepsy specialist nurse to reduce these risks:



### Uncontrolled seizures, particularly tonic-clonic seizures – better seizure control may reduce the risk of SUDEP. Your child's epilepsy specialist nurse and doctor will work with you closely to try and achieve better seizure control through medication. For more ways to manage your child's seizures, please also see our Parent's factsheet 'No. 10 Managing seizure triggers'.

- Having sleep seizures this is considered a risk factor because a parent may not notice these seizures and may therefore not be able to carry out basic first aid or call an ambulance. Baby listening devices or seizure alarms can alert a parent to some types of seizures during the night. For more information on seizure alarms, please see our Parent's factsheet 'No. 11 Safety around the house'.
- Not taking medication as prescribed this may result in frequent or uncontrolled seizures. There are many ways to ensure your child is given or is taking their medication exactly as prescribed. These include pill boxes with a reminder alarm or setting a mobile phone alarm.
- Abrupt changes in medication or dosage changes to a child's medication should never be done unless these are prescribed and carefully monitored by a specialist. Abrupt and unsupervised changes can lead to prolonged seizures, which may require emergency medication or hospital admission to stop them. They may also increase the risk of SUDEP.
- Young adults this age group is particularly vulnerable because of factors often associated with their lifestyle. Many teenagers go through a phase of not wanting to take their medication, or taking them irregularly, which increases the risk of uncontrolled seizures. Young adults often find it helpful to have a confidential chat with their epilepsy specialist nurse or doctor, providing them with an opportunity to ask questions and discuss their reasons for not wanting to take their medication.
- \* Binge drinking and recreational drug use this can interfere with anti-epileptic drugs and can increase seizures. Other possible triggers associated with this



lifestyle are late nights or dehydration. A chat with an epilepsy specialist nurse will make teenagers aware of any risks and will allow them to make an informed decision.

The risk of SUDEP is very low in children and teenagers with well controlled epilepsy. It is overall very rare in children with epilepsy under 16.

If you want to talk to someone about this difficult subject, please phone our helpline on 0808 800 2200.

The charity SUDEP Action <u>www.sudep.org</u> can also provide more information and support.