

Patient information from the BMJ Group

Absence seizures in children

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Absence seizures in children

You might be worried if you've been told your child has absence seizures. These types of seizure can make learning difficult and increase the chance of accidents. But there are drug treatments that work well. And most children grow out of these seizures by the time they're 12 years old.

We've brought together the best research about absence seizures in children and weighed up the evidence about how to treat them. You can use our information to talk with your doctor and decide which treatments are best for your child.

What are absence seizures?

If your child has absence seizures it means they 'shut off' for a few seconds. They appear to stare blankly into space and don't know what's going on around them. They might fidget with their hands, and their eyes might flutter.



Absence seizures usually last less than 10 seconds, but they can happen many times in one day.

Absence seizures in children

There are two main types of absence seizure: **typical** and **atypical**. The two types are treated differently. Here we cover the **typical absence seizures**. These seizures used to be called **petit mal seizures**.

During an absence seizure a child loses consciousness for a short time. Seizures usually last less than 10 seconds. But: ^[1] ^[2]

- A child can have lots of absence seizures
- Some children have dozens of absence seizures in a day
- A few children have 100 absence seizures a day.

It can be hard to tell if your child has absence seizures. Before the seizures are diagnosed children are sometimes told off for being careless or not paying attention. Teachers are often the people who notice that something is wrong.

If your child gets absence seizures and is between the ages of 4 and 10 years, your doctor might say they have **childhood absence epilepsy**. ^[1] ^[2] This is a type of epilepsy.

Older children and adults can also get absence seizures but they'll usually get other seizures or symptoms as well. They might have a different type of epilepsy, such as **juvenile absence syndrome** or **myoclonic absence epilepsy**. ^[2] ^[3] To learn more, see our article on [Epilepsy](#) .

All types of epilepsy seizures happen because the brain's electrical activity is disrupted. Nerve cells in the brain become over-excited and fire signals in a random way. The result is a seizure.

We don't know very much about why seizures happen. Doctors think children probably get absence seizures because of a problem with the **genes** that control how their brain works. ^[1] ^[2]

Because a child's brain switches off for a few seconds during an absence seizure they might find it hard to learn, or they might have more accidents. ^[4] Treatment can reduce the number of seizures or might stop them altogether. Children who still get seizures may need to avoid some activities, such as climbing, swimming unsupervised, or riding a bike on busy roads.

What are the symptoms of absence seizures?

It can be hard to tell if your child has absence seizures, because the symptoms aren't always clear.

If you think your child gets absence seizures, there are some signs you should look for. Your child might: ^[5] ^[6] ^[7] ^[8]

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- Appear to 'blank out' or 'shut off' for a few seconds
- Stare into space
- Stop talking in the middle of a sentence
- Suddenly stop what they're doing (for example, if they're walking they might all of a sudden stand still)
- Flutter their eyelids, fidget with their hands, or walk around aimlessly.

Children lose consciousness when they have an absence seizure, even if their eyes are open. They don't hear, see, or remember anything that happens. And they usually won't know they've had a seizure.

Some people who have epilepsy get a warning sign before a seizure. (To learn more, see our article on [Epilepsy](#) .) For example, they might get a strange feeling or notice a strange smell. But if your child gets absence seizures, they have no warning.

It can be hard to diagnose epilepsy. If your child has a seizure that may be due to epilepsy, your doctor should arrange for them to see a specialist. The National Institute for Health and Care Excellence (NICE), the government body that decides which treatments should be available on the NHS, says that anyone who has had a seizure that might be due to epilepsy should be seen by a specialist within two weeks. ^[9]

Before making a diagnosis your child's doctor will ask lots of questions about your child and the symptoms they've been getting. They will also do some tests.



An EEG is a test that can show whether a child has absence seizures.

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Your doctor can probably tell whether your child has absence seizures by doing an **electroencephalogram (EEG)**. This test measures the electrical activity in the nerve cells of your child's brain. During an EEG: ^[5] ^[6] ^[8]

- Sticky pads will be placed around their head
- Wires from the pads will carry information about your child's brain activity to a computer
- The doctor might ask your child to breathe very fast (hyperventilate), because this usually sets off an absence seizure, which can then be seen in the clinic.

If your child has an absence seizure

There are several things you can do if your child has an absence seizure. ^[10]

Stay calm. Don't shake your child. Don't shout at them or try to get them to 'snap out of it'.

Stay with your child until they come out of the seizure.

Call an ambulance if:

- The seizure lasts more than five minutes
- Your child has had two or more seizures in a row without coming round
- It's the first time your child has had an absence seizure.

Take your child to the accident and emergency department if they:

- Have a different type of seizure for the first time (for example, your child falls to the ground or their limbs twitch and jerk)
- Are hurt and need medical treatment.

How common are absence seizures?

Absence seizures aren't common.

Less than 1 in 1,000 children under 15 get absence seizures. ^[11]

Girls are more likely than boys to be affected. ^[11] ^[12]

What treatments work for absence seizures?

Treatments can't cure epilepsy. But they will probably cut down the number of absence seizures your child has or stop them altogether. Drug treatments can cause side effects.

Key points about treating absence seizures

- It can take your doctor a few tries to find the right drug treatment for your child.
- Some children need two epilepsy medicines.
- All epilepsy medicines have side effects, so you and your child's doctor must decide whether the benefits of a treatment are worth the problems it might cause.^[9]
- Some medicines that are used to treat other types of epilepsy can actually make absence seizures worse.^{[16] [17]} So it's important to get the right diagnosis.

For all the medicines given below, your child's doctor will start the treatment at a low dose and gradually increase it. You should never change your child's dose or stop the treatment without speaking with your doctor.

Epilepsy medicines can interfere with each other and with some medicines used to treat other illnesses.^[18] Don't forget to tell your child's doctor and their pharmacist about their epilepsy medicine when they are being treated for other illnesses.

Which treatments work best? We've looked at the best research and given a rating for each treatment according to how well it works.

Treatment Group 1

Treatments for absence seizures in children

Treatments that work, but whose harms may outweigh benefits

- [Valproate](#)
- [Ethosuximide](#)
- [Lamotrigine](#)

Treatments that need further study

- [Clonazepam](#)

What will happen to my child?

Most children grow out of absence seizures.

About 9 in 10 children who get absence seizures grow out of them by the time they are 12 years old.^[13] But a few children continue to have them as adults.^{[13] [14]}

Absence seizures in children

About 1 in 10 children who get absence seizures start to get generalised tonic clonic seizures as they get older.^[13] These seizures make you fall and pass out. Children who get this type of seizure stop having absence seizures, and they have generalised tonic clonic seizures only rarely. To learn more, see our article on [Epilepsy](#) .

Drug treatments for absence seizures work well.^{[13] [14] [15]} And most children do not need to take epilepsy medicines for the rest of their life. If your child stops having seizures after taking an epilepsy medicine for a while, your doctor might stop the treatment gradually to see if the seizures come back.^{[14] [15]}

About 1 in 3 children with childhood absence epilepsy have problems with learning or behaviour. This might be because they don't know what is going on while they have absence seizures. Or it might be because their epilepsy medicine makes them drowsy or slows down their thinking.^[14]

Treatments:

Valproate

In this section

Valproate is often the first drug doctors try when they are treating absence seizures in children.^{[9] [19]} You may also hear this called sodium valproate. The brand names include Convulex and Epilim.

Good-quality studies (called [randomised controlled trials](#)) found that taking valproate works just as well as taking another drug called [ethosuximide](#) .^{[20] [21] [22]} Both drugs cut the number of seizures by at least half in 8 in 10 children.

Other studies have found that taking valproate works better for controlling seizures than taking a drug called [lamotrigine](#) .^{[23] [24] [25]}

Valproate can cause side effects. Your child might:^[18]

- Get an upset stomach
- Put on weight
- Get shaking hands (tremors)
- Lose their hair temporarily.

There's also a small chance that valproate might cause your child to have a drop in the number of [platelets](#) they have (a condition called **thrombocytopenia**) or problems with their [liver](#) .^{[22] [16]} But these problems are rare.

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There is a very small risk that taking valproate might make your child more likely to think about suicide or harming themselves.^[26] If you are worried about any changes in mood or behaviour in your child, see your doctor straight away.

Ethosuximide

In this section

Ethosuximide is one of the main treatments for absence seizures.^[9] ^[19] The brand names for ethosuximide are Emeside and Zarontin.

Good-quality studies (randomised controlled trials) showed that taking ethosuximide works just as well as taking another drug called [valproate](#) .^[23] ^[20] ^[21] ^[22] Both drugs cut the number of seizures by at least half in 8 in 10 children.

Other studies have found that exothosomide works better than a drug called [lamotrigine](#) at controlling children's seizures.^[23]

Ethosuximide can cause side effects. Your child might:^[18]

- Get an upset stomach
- Lose their appetite
- Lose weight
- Feel sleepy
- Get headaches
- Find that bright light hurts their eyes
- Behave slightly differently.

There's a small chance that ethosuximide will cause a problem with your child's liver or blood, or cause them to have a serious rash.^[16] But these problems are rare.

Lamotrigine

In this section

Lamotrigine is usually used only if [valproate](#) or [ethosuximide](#) don't work. Or your child's doctor may prescribe lamotrigine if your child can't take one of the other drugs because of side effects. Lamotrigine can be prescribed with valproate in children aged 2 to 12 years, or on its own in children over 12. The brand name is Lamictal.

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There isn't much good research about how well lamotrigine works compared with having no treatment. But one small study (a [randomised controlled trial](#)) found that 6 in 10 children who took lamotrigine had no seizures in a four-week period. ^[27]

Most of the studies we found have compared lamotrigine with other drugs. Most studies suggest that lamotrigine doesn't work as well as the two other drugs usually used to treat absence seizures, valproate or ethosuximide, especially in the longer term. ^[24] ^[28] ^[23]

Lamotrigine can cause side effects. Your child might: ^[27]

- Get an upset stomach or stomach pain
- Get headaches
- Lose their appetite
- Feel dizzy.

There's also a chance that your child will become confused or have numbness in part of their body. Sometimes a skin rash can develop, which could be serious. ^[29] ^[30]

A very rare side effect of lamotrigine is a kind of meningitis, called aseptic meningitis. ^[31] If your child gets a rash or flu-like symptoms while taking lamotrigine, take them to a doctor straight away.

There is a very small risk that taking lamotrigine might make your child more likely to think about suicide or harming themselves. ^[26] If you are worried about any changes in mood or behaviour in your child, see your doctor straight away.

Clonazepam

In this section

Clonazepam is only occasionally used to treat absence seizures in children, because it has serious side effects. It might be used if other treatments haven't helped. Side effects of clonazepam include sleepiness, clumsiness, hyperactivity, and changes in personality. ^[32] The brand name for clonazepam is Rivotril.

There is some evidence that taking clonazepam may help to reduce absence seizures in children. ^[32] But we need more research to know whether this treatment works.

Further informations:

Glossary:

genes

Absence seizures in children

Your genes are the parts of your cells that contain instructions for how your body works. Genes are found on chromosomes, structures that sit in the nucleus at the middle of each of your cells. You have 23 pairs of chromosomes in your normal cells, each of which has thousands of genes. You get one set of chromosomes, and all of the genes that are on them, from each of your parents.

randomised controlled trials

Randomised controlled trials are medical studies designed to test whether a treatment works. Patients are split into groups. One group is given the treatment being tested (for example, an antidepressant drug) while another group (called the comparison or control group) is given an alternative treatment. This could be a different type of drug or a dummy treatment (a placebo). Researchers then compare the effects of the different treatments.

platelets

Platelets are small disc-shaped particles found in your blood (along with red blood cells and white blood cells). Platelets form the clots that stop the bleeding when you've been cut. People who don't have enough platelets have problems with bleeding too much.

liver

Your liver is on the right side of your body, just below your ribcage. Your liver does several things in your body, including processing and storing nutrients from food, and breaking down chemicals, such as alcohol.

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