Febrile convulsions

What is a febrile convolution?
A febrile convolution (also known as a febrile seizure) is common. Approximately 3% of children aged 6 months to 6 years may have a convolution when they have a fever or high temperature.

A convolution is caused by a short burst of abnormal electrical activity in the brain. This is when the nerve cells send “mixed-up” signals to each other. These mixed-up signals may lead to a change in the child’s awareness or body movement. Sometimes people use other names for convulsions such as fits or seizures.

What causes a febrile convolution?
The febrile convolution or seizure happens when the normal brain activity is disturbed by a fever. It usually happens without warning. During the seizure your child may:

- become stiff or floppy,
- stare unresponsively, become unconscious or unaware of their surroundings,
- display jerking or twitching movements,
- be blue around the lips.

What should I do if my child has a convolution?
Remember, most seizures will stop within seconds or a couple of minutes, without any medical treatment.

- Stay calm.
- Note the time the seizure starts and ends if possible
- Stay with your child.
- Move the child away from potentially harmful objects e.g. furniture with sharp corners. Otherwise try not to move the child unless the seizure occurs in a hazardous area e.g. the bath or pool.
- Place something soft under your child’s head to stop their head hitting the floor.
- Roll your child onto their side. This is also known as the recovery position. If there is food in their mouth turn their head to the side, do not try to remove it.
- Unless you are giving your child emergency medication (such as midazolam), never put anything in the mouth of your child – it is impossible for your child to swallow their tongue
- Your child may become tired after the seizure. Allow them to rest and recover.

Should I call an ambulance?
Call 000 for an ambulance if:

- you feel worried.
- it is your child’s first seizure.
- the seizure lasts longer than 5 minutes.
- the seizure occurs in water and your child has trouble breathing.
- your child also has an injury.
- you suspect your child has inhaled some food or vomit.
- your child’s breathing doesn’t return to normal shortly after the seizure or your child remains blue around the lips.
- you are unsure that your child is safe and recovering normally after the seizure.
Why is my child sleepy after the seizure?
Your child will become tired after the seizure and will need time to rest and recover. If your child remains drowsy or difficult to wake after sleep, you should seek medical attention.

What can the doctors do for my child?
Even though the high temperature is usually related to a viral infection, your doctor will need to examine your child to try and determine the cause of the high temperature. Further investigations or blood tests may need to be done to rule out other causes for the fever and convulsion.

Can my child get another convulsion the next time they have a fever?
Yes. The chance of having another febrile convulsion in the following year is 30%, but this means that 70% (or 7 out of 10 children) will not have another seizure. The risk of a second seizure reduces every year and it becomes less likely after children turn 6 years old.

What does the future hold for my child?
The outlook for a child with simple febrile convulsions is excellent. There is no evidence of "brain damage" in these children. Your child is at only a very small risk of developing epilepsy in the future if they had a simple febrile convulsion.

What should I do when my child develops fever in the future?
To reduce the fever you can use medicines, such as paracetamol or ibuprofen. Give your child the dose that is recommended on the packaging for their age and weight. Remember that these medications will make your child feel better from the fever but they do not treat the infection that caused the fever. These medicines do not prevent the seizure from happening. You should take your child to see your local doctor if they look unwell, if you are concerned about them or if the fever persists.

Do not place your child in a cool bath to reduce the fever. This may lead to shivering which may actually increase your child’s temperature.

Is there any treatment available if my child has prolonged or more frequent febrile convulsion at home?
There is a medication called Midazolam that is sometimes recommended for children who have a history of febrile convulsions that last longer than 5 minutes. Most children do not need this medication. If you would like more information about this treatment you should talk with your doctor.

Are there any other medications available to prevent febrile convulsions?
Yes, however these medications have to be taken every day and they can have unwanted side effects. Because the outlook for children with febrile convulsions is so good, these regular medications are rarely necessary.

Remember:
- Regular paracetamol or ibuprofen will not prevent febrile convulsions.
- If your child has a fit stay with them and lie them on their side.
- Call an ambulance if the seizure lasts longer than 5 minutes or you are worried.
- It is important you see your doctor following a febrile convulsion to determine the reason for the fever.