

Patient leaflets from the BMJ Group

Glue ear

After an ear infection or a cold, some children get fluid trapped inside their ear. This can stop them hearing properly. This condition is often called glue ear. Often it will clear up on its own. But if it doesn't there are treatments that can help.

What is glue ear?

Your middle ear is the part of your ear just behind your ear drum. It's normally filled with air. This allows three small bones there to vibrate and send sound waves into the inner part of your ear where they are changed into signals that are carried by nerves to your brain.

When a child gets glue ear, their middle ear fills with fluid. The fluid is a bit like the thick mucus that can get stuck in your throat. The fluid can stop the eardrum and the three small bones from moving freely, so they can't carry sounds to the inner ear. This may mean your child cannot hear properly.

Your child may get glue ear inside one or both ears. About 40 percent of children have it in both ears.

What are the symptoms?

Poor hearing is the most common symptom. You may notice that your child:

- Seems not to listen to you
- Has the television on at high volume
- Has problems hearing if he or she can't see the person speaking
- Doesn't pay attention
- Is overactive
- · Asks, "What did you say?" more often
- Speaks more loudly or talks less
- Says words incorrectly or speaks less clearly
- Falls behind friends in his or her use of new words and speech patterns.

Poor hearing can have other causes, but glue ear is the most common reason for hearing loss among children. See your doctor if you think your child cannot hear properly. If a teacher or carer thinks your child could have a hearing problem you should take him or her to have a hearing test.

Your doctor will look in your child ears and may ask for another test, which checks how well the eardrum is working. If your child's glue ear doesn't go away, or it keeps coming back, your child may be referred to a specialist.

Glue ear

What treatments work?

Doctors usually recommend a period of watchful waiting to see if glue ear clears up on its own. (Watchful waiting is when your doctor regularly checks on your child rather than using a treatment.) If the fluid doesn't clear up and your child has a loss of hearing in both ears, then your doctor may recommend treatment.

Getting your child to blow up a special balloon with his or her nose may open the tubes leading from the middle ear to the back of their throat (the eustachian tubes) and improve your child's hearing. Children who do this are more likely to improve in three months than children who don't. The name of this device is Otovent. Your doctor can prescribe it or you can buy from a pharmacy for about seven pounds. The kit comes with 10 balloons, each of which can be used a few times. The balloon is attached to a small tube. Your child normally has to blow the balloon up with his or her nose three times a day and has to keep on using the balloon to keep their ears free from fluid. Some children find this hard to do.

If your child's glue ear does not go away, or if it keeps coming back, your doctor may suggest an operation to put in grommets. Your child might have their adenoids (lumps of tissue at the back of the nose) taken out at the same time. Grommets allow the fluid that has built up in the middle ear to drain away. They also prevent fluid from building up if your child gets any more ear infections.

Grommets may improve your child's hearing until he or she grows out of glue ear. But how much children's hearing improves after surgery varies a lot from child to child. Also, some children need another operation, once the grommets fall out. One study found that about half of all children with grommets need another operation within five years.

It's important to weigh up the possible benefits of surgery against the risk of problems. Having grommets put in can cause some discharge to come out of the ear. There's also a risk that your child may have a hole in their eardrum. This might heal on its own, or your child may need another small operation to close it.

Other treatments

There's not enough research to say whether steroid sprays that you put in the nose can help clear a child's glue ear. But we know that antibiotics, antihistamines and decongestants are unlikely to help clear up glue ear or improve hearing. Antibiotics also have side effects.

What will happen to my child?

About 4 in 10 children with glue ear get better without treatment within three months. But in some children, especially younger ones, glue ear lasts much longer. About 1 in 20 children who have glue ear when they are younger than school age have it for a year or more.

Even if fluid in the ear does clear up, it may come back. Between 3 in 10 and 4 in 10 children who get glue ear once keep getting it again. And the younger your child is the

Glue ear

first time he or she has an ear infection, the more likely he or she is to have more ear infections followed by glue ear.

As children get older, glue ear normally goes away completely. Problems with glue ear don't normally continue after age 6.

© BMJ Publishing Group Limited 2007. All rights reserved.

This information is aimed at a UK patient audience. This information however does not replace medical advice. If you have a medical problem please see your doctor. Please see our full Conditions of Use for this content http://besttreatments.bmj.com/btuk/about/12.html.

