

Patient leaflets from the BMJ Group

Middle ear infection

If your child has been pulling on their ear, and crying more than usual, they may have an ear infection. Your child should get better in a few days. Painkillers can help. Antibiotics may help some children, but aren't always needed.

What is middle ear infection?

Ear infections usually start when your child gets a cold, a sore throat or another common infection. The infection may be caused by germs called bacteria and viruses. The infection spreads down a tube called the eustachian tube, which connects your middle ear to the back of your nose. The middle ear is the part of your ear behind your eardrum.

When the infection gets into your child's ears, it makes them swollen, blocked and painful. Fluid called mucus builds up behind the eardrum. This makes it hard for your child to hear and causes pain. Sometimes the eardrum bursts and you see fluid coming out. The tear in the eardrum will heal after a few days.

Ear infections are very common, especially in young children.

Anyone can get an ear infection. But children are more likely to get them than adults. Children who go to nursery or a play group are most likely to get them, because infections spread easily among groups of children.

What are the symptoms?

The most common symptoms are ear pain and a high temperature. If your child's eardrum bursts, you may see fluid coming out of their ear. Babies who have an ear infection might cry more than usual and hold or tug their ear.

Other signs of an ear infection in children include being irritable, or having trouble sleeping, keeping balance or hearing.

Not all children with ear infections need to see a doctor. If your child can talk and tell you their ear is hurting, a **painkiller** might be all they need. This is the treatment that your paediatrician or GP might suggest if they think your child has an ear infection.

But if you're unsure what's wrong with your child, or painkillers don't seem to be working, then you should take them to your doctor.

What treatments work?

Most children recover from ear infections in a few days without any medicine. Taking painkillers can help in the meantime. Some children may need antibiotics, but they do have side effects. There are some things you can try to reduce your child's chances of getting more ear infections.

Middle ear infection

Medicines

Painkillers, such as **paracetamol** and **ibuprofen**, can't cure your child's ear infection. But research shows they will probably make your child feel better by relieving the pain. You can buy paracetamol and ibuprofen for children at a pharmacy.

Some children feel sick, vomit or have stomach pain after taking these painkillers. This is slightly more likely with ibuprofen. Usually these problems are mild and won't stop your child taking the medicine.

Taking too much paracetamol can damage your child's liver and kidneys. Make sure your child takes the recommended dose for their age. Check any other medicine that your child is taking, such as cough syrups, as many of these also contain paracetamol.

Antibiotics may help your child recover from an ear infection faster. Antibiotics are drugs that kill bacteria. But your child may get better anyway without antibiotics. Also, antibiotics don't work for all ear infections. Examples of antibiotics used to treat ear infections (and their brand names) include amoxicillin (Amoxil), cefaclor (Distaclor) and co-amoxiclav (Augmentin).

Most doctors are now careful not to prescribe antibiotics unless they think a child does need them. This is because antibiotics may not work as well in the future if they are used too much. This is called **antibiotic resistance**.

Your child may get an upset stomach, diarrhoea or a rash from taking antibiotics. But these side effects are usually mild.

If your child gets several ear infections in a year, your doctor may prescribe antibiotics for a few months without a break, to try to prevent more ear infections. It might work. But there is a risk your child may get side effects, or that the antibiotics may not work so well in future.

Things you can do to avoid your child getting more infections

It's almost impossible to stop your child getting colds and other illnesses that can lead to ear infections. But there are some things that might help your child avoid them.

- Don't smoke near your child.
- It isn't always possible, but you could try to keep your child away from other children who have colds or other infections.
- If you are pregnant or a very new mother, consider breastfeeding. Breastfeeding seems to protect children from ear infections.
- Try not to let your child use a bottle lying down.
- Don't give your child a dummy.

Children who get lots of ear infections might benefit from having a **flu or pneumococcal vaccination**. Ask your doctor if a vaccine might help your child.

Middle ear infection

Surgical treatments

Doctors used to put small tubes called **grommets** into children's ears, to try to prevent repeated ear infections. Grommets keep open a hole in the eardrum, so fluid can drain out more easily. This operation is still done for glue ear, if a child is having problems hearing. But there isn't much evidence that it works to stop children getting repeated ear infections. One study showed that children might get fewer infections in the six months after having the operation, but the benefits wore off after that.

What will happen to my child?

About 8 in 10 children who have an ear infection get better without any treatment after two days to three days.

But some children get ear infections again and again. Children who have repeated ear infections may have problems with their speech and language. Sometimes this leads to problems in school. But it doesn't affect children's growth or development in the long term. As your child gets older, they are less likely to get ear infections.

Ear infections can cause other problems if they don't clear up properly. After an ear infection, fluid can get trapped inside your child's ear (glue ear). It can stop your child hearing properly, which can make learning difficult.

Rarely, an ear infection can spread to the large bone behind your child's ear. This can cause bad pain, swelling and tenderness behind your child's ear. So if your child's ear infection doesn't seem to get better, you should see your doctor.

© 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>.

BMJ Group