



Glue Ear - possible tests

This factsheet has been produced for parents and carers who have read a basic guide to glue ear such as Deafness Research UK's *Ear infections and glue ear in children* and who want further information about tests that may be carried out to aid the diagnosis of glue ear.

WHAT SHOULD I DO IF I SUSPECT MY CHILD HAS GLUE EAR?

If you are a parent and you suspect your child has a hearing difficulty or glue ear, consult your family doctor. If this is within a few days it is likely that your child's hearing will remain affected. However, note down and report signs of bad or affected hearing in case it improves by the time you get to see the doctor.

WHAT WILL HAPPEN AT THE DOCTORS?

If your family doctor suspects that your child has glue ear, (s)he will check your child's general health, ask about previous ear problems or current symptoms and look in the ears. (S)he may arrange for a hearing test while monitoring the symptoms. This is because for at least half the children who have it, glue ear clears up naturally within three months.

These are some of the tests your child might have:

Otoscopy

The doctor will look in your child's ears using an instrument called an otoscope to see if there is any inflammation in the ear canal and also to check the condition of the eardrum. The appearance of the eardrum can suggest whether fluid may be trapped behind it. If it can be seen clearly, this test can also show if the eardrum has burst (perforated).

Tympanometry

A better way to check whether there is fluid trapped in the middle ear is a test called tympanometry. This shows how flexible the eardrum is. For good hearing the eardrum needs to be flexible so that it can pass the vibrations created by soundwaves through to the little chain of bones in the middle ear space and from there into the inner ear.

During the test, a small tube with a soft rubber tip is placed at the entrance to the ear canal and puffs of air are sent into the ear at different pressures. If the eardrum is rigid, because there is fluid ('glue') trapped behind it, there will be little movement when air pressure is applied. This is measured according to how much sound is reflected back out of the ear by the eardrum. From this, the tester will know whether your child has glue ear, but won't be able to tell how well (s)he can hear. To check hearing, a hearing test (audiometry) is required.

Audiometry

Audiometry tests for the quietest sounds a child can hear – usually the sounds are high and low pitched tones (or whistles). Sometimes children are asked to listen to names of toys and to point out the toy they think they have heard. A school-aged child will usually be asked to press a button when they hear a sound presented through earphones. Younger children respond by playing a game, such as putting a peg in a board when they hear the sound. Infants generally won't wear earphones, but the tester can tell if they can hear sounds by watching the child turn towards a loudspeaker, or towards a sound-making toy. By decreasing the level of the sound the tester can work out the quietest sounds that the child can hear.

If the condition continues, the GP will refer your child to an Ear, Nose and Throat (ENT) specialist. Treatment will only be given if the glue ear causes significant symptoms for a prolonged period of time.

FURTHER INFORMATION

Other information on glue ear available from the Deafness Research UK Information Service includes:

Ear infections and glue ear in children: A guide for families – leaflet

Glue ear: A guide for teachers – factsheet

Glue ear: Spotting the signs – factsheet

Glue ear: Treatments – factsheet

Communication tips for helping a child with glue ear - factsheet

If any of your questions concerning glue ear have not been answered, contact the Deafness Research UK Information Service for further assistance. Our Information team will either answer your enquiry directly or refer it to one of our scientific or medical advisers.

Open: 9.00 a.m. to 5.00 p.m., Monday to Friday (a message can be left at other times).

Freephone: 0808 808 2222

Textphone: 020 7915 1412

E-mail: info@deafnessresearch.org.uk

or click the 'ask question' option from our website homepage:

www.deafnessresearch.org.uk

Deafness Research UK is the leading research charity for people with hearing and related ear problems.

It runs a wide-ranging research programme, which includes identifying the genes that cause different types of deafness, research into glue ear – the commonest cause of deafness in pre-school children, tinnitus (head noises which affect nearly 5 million people in the UK) and, ultimately, finding a cure for deafness through the regeneration or replacement of cells vital for hearing.

You can support us by making a donation or joining the Deafness Research UK League of Friends. For more information call us on 020 7833 1733 or write to:

Deafness Research UK, 330-332 Gray's Inn Rd, London WC1X 8EE
Charity no. 326915

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