

**Have you noticed this about your child?  
Then perhaps they have ...**

## **Glue Ear**

### **What is glue ear?**

Glue ear is a build up of a sticky glue-like fluid in the middle ear behind the ear drum. The movement of the bones in this part of the ear are then impeded by the sticky mucus. Glue ear can cause temporary deafness. Glue ear is a very common condition in young children and it is more common in winter. In most children glue ear clears up naturally over time, but some children get persistent glue ear. Glue ear can become a more serious problem if it becomes infected which, if left untreated, can cause permanent, conductive hearing loss. Glue ear usually ceases to be a problem by the age of ten years and the condition nearly always improves before adolescence. This is because of the improved size and angle of the eustachian tube that ventilates the middle ear.

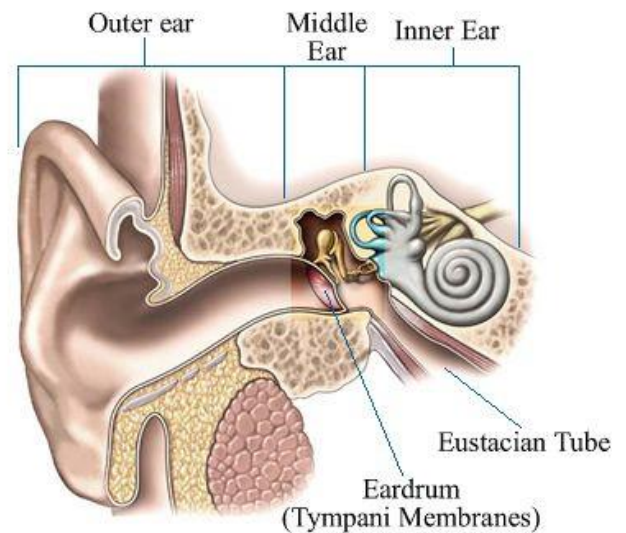
### **What causes glue ear?**

Many children can get glue ear because of:

- a cold or catarrh
- allergies to pets, pollen or dust

Some children with palate problems or with particularly small eustachian tubes can have recurring or even semi-permanent glue ear.

When we hear normally, sound waves enter the ear and move along the ear canal until they reach the ear drum causing it to vibrate. A chain of three small bones (ossicles) in the middle ear link the eardrum to the inner ear. These bones transmit the vibrations from the eardrum to the cochlea in the inner ear, where there are thousands of tiny sound receptors. From here the 'sound' is passed along the nerve of hearing to the brain.



To allow the eardrum and small bones to vibrate freely the middle ear needs to be full of air and the bones need to be lubricated with moisture from the lining of the middle ear. This moisture would normally seep down the eustachian tube to the throat without being noticed. Air reaches the middle ear through the eustachian tube. This connects the middle ear to the back of the nose and throat. The eustachian tube opens naturally when you swallow or yawn.

Children have a smaller, more horizontal eustachian tube than adults. This means that it is more likely to become blocked or constricted and this will stop it opening properly. The result of this can be a vacuum in the middle ear. Once this vacuum has formed the lining of the middle ear becomes inflamed. The thin fluid begins to seep out from this lining into the middle ear space. Unable to flow through the constricted eustachian tube fluid starts to collect in the middle ear and thicken around the middle ear bones, thus becoming the consistency of glue (hence the term 'glue ear'). When this happens the vibrations of the eardrum and small bones becomes sluggish, resulting in temporary conductive hearing loss. This is also what happens when a child has an ear infection.

### **What are the symptoms of glue ear?**

It is not always obvious when a child has glue ear. Glue ear can affect hearing but it tends to be a fluctuating problem – the hearing problem comes and goes and it may be that one or both ears are affected at the time and different ears at another time.

The child might:

- complain of earache
- say they have full or popping ears
- have a visible discharge from one or both ears
- suffer with frequent coughs, colds and catarrh
- have a louder or softer voice than usual
- not always respond when talked to or turn when their name is called
- find it difficult to concentrate and quickly get tired and irritable
- be slow to develop speech
- have immature speech sounds
- find it difficult to hear especially when there is background noise
- be slow to respond to simple verbal instructions
- give inappropriate answers to questions
- have difficulty locating directional sound
- say 'pardon' or 'what' all the time
- have particular difficulties with verbally related skills (phonic work, sound blends, discrimination of sounds)
- sit nearer to the TV or other sound source, or ask for them to be turned up louder



## How is glue ear treated?

Treatment offered by the GP will depend upon how long and how often a child has suffered with glue ear, how bad the problem is and whether language development has been affected. Some GPs may prescribe antibiotics or decongestants.

If a child is referred to an audiology/ENT department, they will:

- have a hearing test which will assess the level of hearing loss
- have a tympanometry test which assesses the movement of the ear drum and can detect the presence of fluid

Depending on the results of this the child may:

- be fitted with one or two hearing aids
- be recommended for grommets surgery



A grommet is a tiny plastic tube which is inserted into the ear drum, under anesthetic, to drain the fluid from the middle ear. It is usual for grommets to be inserted in both ears. Grommets do not cure the condition but alleviate the symptoms, i.e. discomfort and hearing loss. The grommet ventilates and equalizes the pressure in the middle ear (the ventilation comes through the ear canal rather than the poorly functioning eustachian tube). The grommet will stay in place for approximately 12 months from

the time of insertion and is expelled naturally. Some children may require a second or third grommet.

## Useful classroom strategies to support a child with glue ear:

- Make sure that the child can see the face of the person speaking to them so that they can lip read to aid listening and concentration
- Use clear speech with normal intonation and rhythm to help with understanding
- For whole class delivery, seat the child at the front and to the side of the group so that they are able to see you and their peers
- It is good practice for the adult to repeat or reiterate peer contribution.
- Give clear context and written/visual cues to the session
- In whole class discussion, try to adopt the 'one person speaks at a time' rule
- When giving instructions gain the child's attention first
- Try to reduce background noise (eg by closing doors and windows) and keep the child away from noisy equipment (eg a fan heater or computer) when you are expecting them to listen
- An adult needs to monitor access and engagement, especially in group situations when several groups may be working and more than one person talking at a time
- Let the child sit close to the sound source when watching film clips, listening to audio etc. Listening to a recorded voice may be difficult so where possible use a 'live' voice instead
- Play listening games to help develop listening skills and auditory memory
- If a child has grommets, please discuss water-based activities (e.g. swimming) with parents, as water must not get into the ear canals
- If a child has hearing aids, please follow management guidelines
- Please be aware hearing levels can fluctuate. If a child is complaining they cannot hear or their hearing aids are too loud, please contact parents as their hearing may have changed and parents will need to contact audiology



Information about the SENSS local offer is available at: <https://www.oxfordshire.gov.uk/cms/content/services-support-children-learning>

Further strategies and resources available at: <https://www.oxfordshire.gov.uk/cms/public-site/early-years-sen-toolkit>