

## Glue Ear

### 1. What is glue ear?

Glue ear is the accumulation of fluid (often thick and sticky), in the middle ear. It causes a temporary hearing loss by preventing the eardrum from vibrating. It may cause discomfort and ear infections. It is a very common condition affecting about a half of all children, usually only briefly in one ear at a time.

### 2. What is normally in the middle ear?

The middle ear is the region behind the eardrum. It is normally full of air and contains three little bones (ossicles) in a lever system. The eardrum collects sound waves and the ossicles transmit them through the middle ear into the inner ear. The nerve of hearing runs from the inner ear to the brain.

### 3. What is the eustachian tube?

The Eustachian tube runs from the back of the nose to the middle ear. It lets air up into the middle ear, and drains mucus that forms in the middle ear.

### 4. What causes glue ear?

If the Eustachian tube does not work properly, the fluid from the middle ear cannot drain properly so it accumulates. With time, the fluid thickens and becomes “gluey”.

### 5. What causes the eustachian tube not to work properly?

Children have immature Eustachian tubes (especially between ages 2-8). Also they are very prone to colds, nasal obstruction, allergy and large adenoids, causing Eustachian tube dysfunction.

### 6. What does glue ear do to my child?

Your child will usually have a mild to moderate hearing loss. This may cause problems with learning to talk, learning to read, responding to conversation at home or school, and even playing with friends (especially with background noise).

Occasionally your child may have discomfort in the ears (like the blocked feeling adults may get in aeroplanes or driving over mountains), and sometimes recurrent ear infections.

Some children have balance and clumsiness problems, sleeping problems (from night-time discomfort) and even behavioural problems (from not hearing parents’ or teachers’ instructions, and frustration).

### 7. What is done to treat it?

Most cases of recent onset Glue Ear will settle within six weeks. Antibiotics, nasal decongestants and antihistamines may speed up recovery, as may trying to blow air up the Eustachian tubes by inflating an Otovent balloon (available from Chemists).

- Sometimes, a minor operation is required.

### 8. When is surgery necessary?

If Glue Ear persists for more than six weeks, it has much less chance of settling in the following months, leaving the child with a prolonged hearing loss and the associated educational handicap. It is cured by the insertion of ventilating tubes. Occasionally adenoids, tonsils or nasal obstruction will be treated at the same operation.

### 9. What are ventilating tubes?

Under General Anaesthesia a small hole is made in the eardrum and the glue is sucked out with a little vacuum cleaner. A small ventilating tube (also called a “grommet”), with a tiny hole is placed in the eardrum to allow further fluid to drain and also to let the air back into the middle ear, allowing normal hearing.



### 10. What happens if ventilating tubes are not inserted?

If fluid persists, the hearing loss, and the educational handicap will persist. Over months to years the fluid will usually drain and the hearing return to normal.

Scarring, a permanent hole in the eardrum, or chronic infection will sometimes develop, leading to a permanent hearing loss. Rarely, a dangerous cholesteatoma will develop.

### 11. Are there any disadvantages with inserting the ventilating tube?

The procedure is performed under a short general anaesthetic and this has a miniscule risk. The Anaesthetist will check your child prior to the operation to ensure that he/she is healthy. If he/she has a cold, especially with a cough, or fever, the operation may be postponed.

The small scar on the ear drum is of no significance, as it is only 2mm long, and still vibrates. The scar is less of a problem than the scar if glue ear is neglected.

When the tubes are in place the child usually has normal hearing by the next day (and often complains that things sound too loud!). Occasionally the ear with the tube may become infected and will discharge mucus and pus. This usually clears up quickly with ear drops (and maybe antibiotics) from your G.P. If it does not, you should see Mr. Kleid.

### 12. What precautions must my child take when the tubes are in?

- If the tubes get wet, or the child gets a cold, the middle ear might become infected and start discharging. When washing hair or swimming, the ear should be plugged with Blu-tac, Silicone, or a moulded plug.
- Most children can swim with tubes in, provided they plug the ears.
- A set of “Doc’s Proplugs” will be given or posted to you after surgery.

### 13. What happens to the ventilating tubes?

- After about nine months the eardrum will push the tube out into the ear canal (never into the middle ear) and Mr. Kleid can simply remove it with special tweezers.
- As the eardrum pushes the tube out, it heals up all by itself, and usually the hearing remains normal.

### 14. Does glue ear come back?

- About 80% of children have no further problems, but 20% will develop the Glue Ear again and need to have tubes re-inserted.
- This is not a failure of the treatment but shows that the Eustachian Tube is still not working properly.