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Ear tube insertion

Ear tube insertion involves placing tubes through the eardrums. The eardrum is the thin layer of tissue that separates the outer and middle ear.

Note: This article focuses on ear tube insertion in children. However, most of the information could also apply to adults with similar symptoms or problems.

Description

While the child is asleep and pain-free (general anesthesia), a small surgical cut is made in the eardrum. Any fluid that has collected behind the eardrum is removed with suction through this cut.

Then, a small tube is placed through the cut in the eardrum. The tube allows air to flow in so that pressure is the same on both sides of the eardrum. Also, trapped fluid can flow out of the middle ear. This prevents hearing loss and reduces the risk of ear infections.

Why the Procedure is Performed

The buildup of fluid behind your child's eardrum may cause some hearing loss. But most children do not have long-term damage to their hearing or speech, even when the fluid is there for many months.

Ear tube insertion may be done when fluid builds up behind your child's eardrum and:

- Does not go away after 3 months and both ears are affected
- Does not go away after 6 months and fluid is only in one ear

Ear infections that do not go away with treatment or that keep coming back are also reasons for placing an ear tube. If an infection does not go away with treatment, or if your child has many ear infections over a short period of time, the health care provider may recommend ear tubes.

Ear tubes are also sometimes used for people of any age who have:

- A severe ear infection that spreads to nearby bones (mastoiditis) or the brain, or that damages nearby nerves
- Injury to the ear after sudden changes in pressure from flying or deep sea diving

Risks

Risks of ear tube insertion include:

- Drainage from the ear
- Hole in the eardrum that does not heal after the tube falls out
- Persistent or permanent hearing loss

Most of the time, these problems do not last long. They also do not often cause problems in children. Your health care provider can explain these complications in more detail.

The risks of any anesthesia are:

- Breathing problems
- Reactions to medicines

The risks of any surgery are:

- Bleeding
- Infection

Before the Procedure

Your child's ear care provider may ask for a medical history and physical exam of your child before the procedure is done. A hearing test is also recommended before the procedure is done.

Always tell your child's provider:

- What medicines your child is taking, including medicines, herbs, and vitamins you bought without a prescription.
- What allergies your child may have to any medicines, latex, tape, or skin cleaner.

On the day of the surgery:

- Your child may be asked not to drink or eat anything after midnight the night before the surgery.
- Give your child a small sip of water with any medicines you have been told to give your child.
- Your child's provider will tell you when to arrive at the hospital.
- The provider will make sure your child is healthy enough for surgery. This means your child has no signs of illness or infection. If your child is ill, the surgery may be delayed.

After the Procedure

Children most often stay in the recovery room for a short time and leave the hospital the same day as the ear tubes are inserted. Your child may be groggy and fussy for an hour or so while waking up from anesthesia. Your child's provider may prescribe ear drops or antibiotics for a few days after the surgery. Your child's provider may also ask that you keep the ears dry for a specific period of time.

Outlook (Prognosis)

After this procedure, most parents report that their children:

- Have fewer ear infections

- Recover more quickly from infections
- Have better hearing

If the tubes do not fall out on their own in a few years, an ear specialist may have to remove them. If ear infections return after the tubes fall out, another set of ear tubes can be inserted.

Alternative Names

Myringotomy; Tympanostomy; Ear tube surgery; Pressure equalization tubes; Ventilating tubes; Otitis - tubes; Ear infection - tubes; Otitis media - tubes

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