



## **How to Care for Your Child's Ear Tubes**

Ear tubes help protect your child from ear infections, build-up of middle ear fluid behind the ear drum, and the hearing problems that go along with these issues. Most tubes last 6-18 months, allowing most children to outgrow their ear problems as the head and eustachian tubes grow in size. Most tubes fall out by themselves. The chance of the tube falling inside is very rare.

Tubes that do not come out after two years need to be removed by your doctor to prevent further complications such as increased risk of permanent perforation, chronic ear drainage and infection, or development of skin ingrowth (cholesteatoma). After two years the likelihood that the tube will fall out on its own without surgical removal is very low.

The hearing may be checked prior to ear tube placement to establish a baseline and SHOULD ALWAYS be performed after the procedure to determine the hearing has returned to normal.

### **Ear Tubes and Water Precautions**

Some children with ear tubes may wish to wear ear plugs when swimming or with water exposure based on patient comfort. The ear plugs may keep water out of the ear canal and out of the ear tube. However, water does not usually go through the tube during swimming and therefore ear plugs are not necessary for most children.

If the water is clean (chlorinated- pool or shower/bathtub) there is no danger if there is a small amount that enters the ear. There may be an increased risk of infection with dirty water such as that from a lake or ocean.

Although most children with tubes do not require ear plugs be worn, they may be preferred in the following situations:

- Pain or discomfort when water enters the ear canal
- Drainage or discharge – current or frequent bouts
- Swimming in more than 6 feet of water or diving (increased pressure may push more water through the tube)
- Swimming in lakes/oceans or non-chlorinated pools
- If dunking head in soapy water in the tub

A variety of soft, fitted ear plugs are available, if needed, as are special neoprene headbands to cover the ears. NEVER use items from home to place into the ear as it may become trapped and require surgical removal. Once the tube falls out and the eardrum has healed, no further use of ear plugs is necessary.

## **Ear Tubes and Ear Infections**

Your child may still get an ear infection (acute otitis media) even with a tube in place. If an infection occurs, you will typically notice drainage in the ear canal or a foul odor.

If this occurs:

1. Do not worry: the drainage indicates the tube is working to drain the infection from the middle ear space. Most children do not have pain or fever with an infection when the tube is in place and working. There is no danger to hearing.
2. Ear drainage can be clear, cloudy, or even bloody. Brown drainage is typically wax.
3. The BEST TREATMENT for an ear infection with a tube in place is EAR DROPS ALONE (ofloxacin, Ciprodex, or Otovel), and NOT an oral antibiotic. This should be given for up to 10 days (inappropriate use longer than 10 days can cause a yeast infection). Pump the flap in front of the ear canal (tragus) a few times after placing the drops, which will help the medication enter the tube. ORAL ANTIBIOTICS may be necessary if your child is very ill or the infection persists despite drop use.
4. Ear drainage may build up or dry at the opening of the ear canal and should be removed to prevent skin irritation. It may be removed with a cotton-tipped applicator with peroxide or warm water.
5. Water should be kept out of the ear while an infection is present but blocking the ear canal with a cotton ball with the outside covered in Vaseline or ointment to serve as a barrier. Do not swim with an ear infection.

## **Possible Complications of Ear Tubes**

Complications of ear tubes are usually minor. Some children develop a white patch on the ear drum called sclerosis, or scarring. It DOES NOT affect your child's hearing or future change of developing ear infections. Some children develop a small depression or retraction pocket in the eardrum at the tube site after it falls out. Again, this does not affect the hearing and rarely requires further treatment. About 1-2 out of every 100 children will develop a small hole (perforation) of the eardrum after the tube falls out. The hole will often close on its own over time, and if not, may require patch placed in the operating room. More serious complications such as skin in-growth, hearing loss, or damaging surrounding structures are very rare.

## **Ear Tube Follow-Up and Aftercare**

Routine follow-up with your doctor every 6-10 months is important to make sure the tubes are in place and to check for any possible problems. All children need follow up with the ear doctor no matter how well they are doing. Children may feel well even when there is a problem developing with the tube. Once the tube falls out, there should be another follow up to ensure the eardrum has fully healed and there is no fluid buildup once again.

## **When to Call the Ear Doctor**

1. Your child's regular doctor can no longer see the tube in the ear
2. You are concerned your child has hearing loss, continued ear infections, or pain/discomfort
3. Ear drainage continues for more than 7 days or occurs frequently
4. Excessive wax build-up in the ear