



## Myringotomy and Pressure Equalizing Tubes

### **Indications**

Pressure equalizing tubes are put in for recurrent ear infections of the middle ear (commonly referred to as Otitis Media) and persistent fluid in the ears affecting hearing and speech. Symptoms of otitis media include fever, earache, and occasional drainage from the ear. In addition, children may experience increased fussiness and/or temporary hearing impairments. About 80% of ear infections respond to antibiotics. However, for the others, medications are not completely effective.

### **Why Infections Recur**

There are two main reasons why recurrent or persistent infections may recur or persist. The most common reason is that the bacteria or viruses responsible for these infections are not sensitive to the antibiotics. For this reason, your doctor may have used several different types of medications.

The second reason is that the middle ear space is not well aerated. The normal connection between the back of the nose and the middle ear (the eustachian tube) may not be functioning properly - a common situation in young children. This situation is more common in children exposed to tobacco smoke or who have a strong family history of airborne allergy.

### **Tympanostomy Tubes**

These are ventilation tubes that are inserted through the eardrum into the middle ear. Benefits include immediate restoration of hearing and a marked decrease in infection rates. The tubes are placed during a surgical procedure that is usually performed under general anesthesia in the Operating Room. The procedure takes about 20 minutes, and the child goes home or the same day.

Utilizing a microscope to visualize the eardrum, the doctor makes an incision. Any fluid found is drained and a small plastic or metal tube is inserted. The tube is about the size of the tip of a ballpoint pen and fits like a rivet or grommet in the eardrum. It's hollow and permits air to enter, and middle ear fluid to drain out. Tympanostomy tubes are not permanent and most fall out after 6 to 24 months. This usually happens after the infection has cleared up. About 10% of children may require a second set of tubes.

The eardrum usually heals completely. In about 2-5% of cases the hole may have to be repaired.

### **Risks and Complications**

Pressure equalizing tube insertion is a simple and very common ENT procedure. In adults, it can be done in the clinic, but in children, anesthesia must be used to assure immobility during the procedure. Risks and unexpected complications are extremely rare, but you must be informed of the following: Bleeding, scarring, infection, reaction to anesthesia, airway obstruction, persistent hole in eardrum, hearing loss, injury to hearing bones, ear drainage, cholesteatoma, tube extrusion with need for replacement, need for surgical removal of tubes (if retained unusually long).



## Pre-Operative Visit

The ENT scheduling clerk will arrange a pre-op appointment for you before the surgery date. You will be seen in ENT, then process in at the Admissions Center. Allow approximately 2-3 hours for the pre-op visit. Children who are being operated on must be accompanied by a parent. All patients must bring their health record to all ENT appointments. The physician will answer questions you may have regarding your concerns on the pre-op day.

## EAR TUBE SURGERY

1. Diet-For 12 hours after surgery, a light, non-fat diet is recommended due to possible stomach upset from anesthesia. Afterwards your child can resume a regular diet.
2. Usually there is minimal or no ear pain following surgery. If your child complains of pain or appeals in pain by pulling or holding the ear, give an appropriate dose of Tylenol (acetaminophen). Please monitor your child's temperature before administering the Tylenol.
3. Your child may return to school or daycare the day after surgery. Your child may fly in an airplane after surgery. There are generally no activity restrictions for your child after ear tube surgery unless you are told differently by your surgeon.
4. There may be a small amount of bloody drainage from the ears for 1 to 3 days after surgery. If the drainage persists for more than 1 week, please contact the ENT clinic. The drainage may be clear, yellow, green or blood tinged.
5. Fever (above 101.5°F oral) after ear tube surgery is uncommon and is usually the result of a preexisting viral or bacterial infection. Low grade fever (less than 101.5°F oral) may be due to the anesthetic, etc. and can be treated with fluids and Tylenol. Please contact your child's pediatrician if they develop high fevers or the fever lasts for more than 1 to 2 days.
6. Your surgeon may have instructed you to use antibiotic drops in the ears for a few days following surgery. It is important that you use the drops as directed in order to clear up any infection that may have been present at the time of surgery and to prevent plugging of the ear tubes. Sometimes the drops may irritate the ear and cause pain. Should this occur please discontinue the drops and contact the ENT Clinic.



7. Fluid or pus draining from the ear usually indicates an ear infection. Most children with ear tubes will have at least one ear infection during the time the tubes are in place. If drainage occurs your child needs to be seen by a physician. These infections are treated with antibiotic ear drops.
8. Water/Swimming: Unless your child will be diving more than 3-4 feet under the water, it is OK to allow your child to swim in a swimming pool with ear tubes. During bathing/showering do not immerse the head into water and limit as much water as possible from going into the ear. Please towel dry the water from the ears after swimming or bathing but avoid the temptation to use Q-tips. Ear plugs are usually not needed for children with ear tubes. About 1 in 8 children with ear tubes will be sensitive to water and develop drainage if their ears get wet. If water does get into the ears and an infection develops please contact the ENT clinic. Do not allow dirty water such as creek, river, lake or ocean water to go into your child's ears.