

# Myringotomy and Tympanostomy Tube Placement Information Brochure

**Please keep this as a reference for after surgery**

## **Indications:**

Fluid in the middle ear and/or ear infection is most often the result of Eustachian tube dysfunction. The Eustachian tube, which connects the middle ear and the back of the nose, functions to ventilate the middle ear space. Allergies, cold/flu, or upper respiratory infections can create an environment that causes the Eustachian tube to become blocked or swollen, which prevents adequate ventilation of the middle ear space. Chronically infected tonsils and adenoids have also been linked to recurring middle ear fluid or ear infection. Persistent middle ear fluid and frequent ear infections can cause earaches and hearing loss. Tympanostomy tube placement is recommended to treat persistent fluid in the middle ear and/or frequent ear infections. Tube placement may also be recommended as treatment for a thinning and retracted ear drum.

## **About Tubes:**

Tubes are inserted into the ear drum to allow middle ear ventilation, which then allows the Eustachian tube to heal and start functioning adequately. This will rid the middle ear of fluid, typically decreases the number of ear infections and improve hearing.

## **Types of Tubes:**

There are two types of tubes, short term and long term. The short term tubes are very small (diameter of 1.5 mm) and look like small buttons. They are very safe and will come out of the ear drum after approximately 6-12 months, which is usually long enough for the Eustachian tube to start functioning normally. The long term tubes have feet that open up behind the ear drum, which allows them to stay in place for longer periods of time, sometimes years. Occasionally this type of tube has to be removed and the ear drum repaired. These types of tubes are only used with severe chronic ear problems.

## **Adenoids and Tonsils:**

Older children, at least 2 years of age, may require a tonsillectomy and/or an adenoidectomy in addition to the tube placement to further help improve Eustachian tube function.

## **Risks and Complications:**

Most children only require one set of tubes. However, if the middle ear fluid or ear infections return after the tubes come out, a second or third set of tubes might be necessary.

Even with tubes in place, further ear infections with drainage through the tube can occur. This is typically treated with antibiotic ear drops and sometimes antibiotics by mouth.

Short term tubes are safer than long term tubes since the ear drum heals as the tubes come out. Rarely does this type of tube cause the ear drum to perforate, which could require surgical repair. The repair can be done with a patch or small fat tissue graft from the ear lobe. The long term tubes have a higher risk of tympanic membrane perforation, so they are avoided if possible. This type of tube often has to be removed by the doctor and the ear drum repaired.

**Surgery:**

For adults, tubes can be done in the office without the need for general anesthesia. For children, the procedure is done at a surgery facility. An anesthesiologist will administer general anesthesia through a mask that fits over the nose and mouth. Note that intubation is not required for this procedure. Using a microscope, a small incision is made in the ear drum, this is called a myringotomy. Fluid behind the ear drum is then suctioned and the tube is inserted into the opening. The surgery is typically short lasting, approximately 10 minutes.

**Immediately After Surgery:**

The doctor will instruct you about the need to continue antibiotics by mouth. A sample bottle of eardrops will be given with the instructions following surgery, 3 drops in each ear 3 times a day for 3 days. The patient will be able to go home after approximately 20-30 minutes after the procedure. It is normal for a small amount of ear drainage to occur for a few days after the procedure. Regular activities and diet can be resumed immediately. Any low grade fever or irritability can be treated with Children's Tylenol.

**In the Weeks/Months After Surgery:**

The initial follow-up appointment will be in 1-3 weeks after surgery. Hearing tests will be repeated to verify hearing has returned to normal levels. Follow-up appointments will be made every 4-6 months to monitor the tubes. Ear drainage is a sign of infection and is usually suggestive of an upper respiratory infection. Please contact our office if you notice any drainage.

After the tubes come out, if the middle ear fluid or ear infection recurs, another set of tubes may be necessary.

Due to the small diameter of the tube, it is not common for water in the ear canal to get into the middle ear through the tube and cause infection. Therefore, it is okay for young children to bathe, shower and swim in chlorinated swimming pool water without using swim plugs. Older children, who are more active in the water, or those with long term tubes will need swim plugs. These can be made in our office; please contact our audiologist to schedule an appointment.

If you have any questions or problems, please call the office at (806) 791-0188.