What is Myringotomy and tubes?

Myringotomy is making a surgical opening in the ear drum. Myringotomy tubes are small tubes that are surgically placed into your child’s ear drum by an Ear, Nose, and Throat surgeon. The tubes may be made of plastic, metal, or Teflon. They are placed to help drain the fluid out of the middle ear and equalize the pressure in the ear in order to reduce the risk of ear infections. These tubes usually remain in place 6-18 months and may fall out by themselves. It is impossible to predict how long a tube will last.

During an ear infection, fluid gathers in the middle ear, which can affect your child's hearing. Sometimes, even after the infection is gone, some fluid may remain in the ear. The tubes help drain this fluid, and prevent it from building up. About one million children each year have tubes placed in their ears. The most common ages are from 1-3 years old. By the age of 5 years, most children have wider and longer Eustachian tubes (a canal that links the middle ear with the throat area), thus, allowing better drainage of fluids from the ear, and better ability to equalize pressure in the middle ear.

Who needs ear tubes?

The insertion of ear tubes may be recommended by your child’s Ear, Nose, and Throat physician if several of the following conditions are present:

- Fluid in the ears for more than three or four months following an ear infection
- Fluid in the ears and more than three months of hearing loss
- Changes in the actual structure of the ear drum from ear infections
- A delay in speaking/speech development
- Repeated ear infections that do not improve with antibiotics over several months

The risks and benefits of ear tubes

The risks and benefits will be different for each child. It is important to discuss this with your child’s physician and surgeon. The following are some of the possible benefits that may be discussed:

- Ear tubes help to reduce the risk of future ear infections.
- Hearing is restored in some children who experience hearing problems due to fluid in the middle ear.
- Speech development is not harmed.
- Ear tubes allow time for the child to mature and for the Eustachian tube to work more efficiently. By the age of 5 years, the Eustachian tube becomes wider and longer, thus, allowing for better drainage of fluids from the ears.
- Children’s behavior, sleep, and communication may be improved if ear infections were causing problems.

The following are some risks that may be discussed:

- Some children with ear tubes continue to develop ear infections.
- There may be a problem with the tubes coming out.
- The tubes usually fall out in about a year. After they fall out, if ear infections recur, they may need to be replaced.
- If they remain in the ear too long, the surgeon may need to remove them.
- After they come out, they may leave a small scar in the eardrum. This may cause some mild hearing loss.
- About 30 percent of children with tubes have to have tubes reinserted within five years.
- Some children may develop an infection after the tubes are inserted which causes drainage from the ear canal.
- Sometimes, after the tube comes out, a small hole or perforation may remain in the eardrum. This hole may need to be repaired with surgery.
Post-op care

Your child may have a small amount of blood-tinged drainage for 1-2 days after the operation. Your child’s ear may be slightly sore for the first several hours after the operation. If he/she has pain, you may give the recommended dosage of acetaminophen (Tylenol). Drainage is normal for the first 48 hours after surgery.

Children with a tube in or perforation of the ear drum should not have the following put in their ear canal: topical pain medications (such as Auralgan), wax removal preparations (such as Debrox, Ceruminex), “swimmers ear” preparations, and home remedies such as oil, peroxide, vinegar and alcohol.

Diet and activity

Immediately after surgery, your child will do best with a liquid diet. When he/she is up and acting normally, a regular diet may be started. On the day after surgery, your child may return to usual activity, including school or daycare.

Ear drops

Drops are often prescribed after surgery. Begin using these drops on the evening of surgery, as directed by your doctor. Your doctor may recommend additional use of drops if there is drainage for more than 72 hours after surgery, since persistent drainage is a sign of ongoing infection. If the drainage continues for more than seven days, or if other symptoms arise, please call our office.

When using drops, warm first by holding in the hand for a few minutes. After placing the drops, pump the front of the ear next to the opening of the ear canal several times. This helps to propel the drops into the canal and through the tube.

Ear infections

The primary purpose of tubes is to provide additional ventilation to the ear and thereby decrease the frequency of ear infections. However, children with tubes can still develop middle ear infections. Drainage from the ear, which may be thin, thick or blood tinged, is the most common sign. Your primary care physician can successfully treat these infections. If drainage persists despite medical therapy, please call our office to make an appointment.

Water precautions

Do your best to prevent bath water from filling your child’s ear canals. The ears should not be completely submerged in water. However, water splashing on the outer ear should not cause a problem. If your child does like to place his/her head completely under water in the bath, keep the water at a very low level.

During hair washing, some children will wear an inflatable visor designed to keep water off of their face. Other parents simply hold the child’s ear down and cup their hand over the ear as they rinse the hair. Very young children will often reach up and remove whatever you place in their ears. Most families find they can successfully observe water precautions without purchasing ear plugs. However, what works best for each child and family is variable. The following types of ear protection can also be tried:

• Cotton lightly coated with Vaseline
• Silicone putty-type ear plugs
• Other types of waterproof ear plug (eg. Doc Proplugs)
• Ear Band-It
• Custom-made ear plugs

If water does get in your child’s ears, simply tip his head to each side. There is an excellent chance that the water will not have gone through the tiny opening in the tube. However, if you do observe drainage over the next few days, an infection has most likely developed.