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Greenville Ear, Nose & Throat

## Myringotomy and Tube Placement: Risks and Complications

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Healthy middle ears are ventilated by a tube—called the eustachian tube—that connects the middle ear space with the nose and throat. When this tube does not function properly, frequent ear infections, fluid buildup, middle ear pressure or hearing loss can develop.

Ventilation tube placement often is recommended for these conditions:

- Frequent or long-lasting middle ear infections
- Middle ear fluid buildup
- Middle ear pressure related to eustachian tube problems
- Hearing loss related to fluid buildup or eustachian tube problems

Performing a myringotomy and ventilation tube placement begins by viewing the ear through an operating microscope. The surgeon then makes a tiny incision (myringotomy) and places a small plastic or metal tube (ventilation tube) through this opening in the eardrum to allow proper ear ventilation and drainage.

Ventilation tubes re-establish normal middle ear ventilation and allow drainage of fluid or infection. These tubes serve as a temporary bypass of the eustachian tube until the eustachian tube can mature and function properly.

Ventilation tubes can reduce the number of ear infections, stop fluid buildup, prevent or reverse chronic middle ear pressure, and prevent or correct hearing loss related to fluid buildup or eustachian tube problems. The tubes are designed to fall out on their own 6-18 months after placement. By that point, the eustachian tube should have matured or normalized so that it can work correctly.

### Risks and Complications

**Otorrhea:** Drainage from the ears after ventilation tube placement is common. On occasion, however, drainage may be ongoing.

**Eardrum perforation:** Ventilation tubes are designed to fall out on their own. Usually, the eardrum heals after the tubes fall out. In rare cases, a perforation (hole) in the eardrum remains. This hole may heal on its own. If it does not, surgery (called a myringoplasty) may be needed.

**Eardrum scarring:** Frequent ear infections, chronic inflammation and surgery may result in scarring. The scarring usually is minor. However, if extensive scarring develops, it may affect hearing.

**Cholesteatoma formation:** Very rarely, skin grows through the incision in the eardrum and forms a cyst (cholesteatoma). If a cyst does occur, surgery is needed to remove it.

**Hearing loss:** Ventilation tubes are designed to prevent or reverse hearing loss related to frequent infections, fluid buildup or eustachian tube problems. However, placement of the tube itself may, in very rare cases, result in hearing loss.

**Infection:** Ventilation tube placement should cut the frequency and severity of ear infections. Still, occasional infections may occur that will require treatment. Preventing contaminated water from entering the middle ear space will lessen the chance of infection greatly.

**Bleeding:** A small amount of bleeding is common. In rare cases, bleeding may be heavy or last a long time.

Occasionally, a tube may fall out earlier than 6 months or fail to come out at all. If the tube does not come out, surgery will be required to remove it.

In addition to the most common risks and complications listed above, unforeseen complications associated with any operation may occur.