

Tympanostomy Tube Insertion

Pressure Equalization (PE) tube insertion is a very common procedure performed in children with ear problems. It involves making a small incision in the eardrum, evacuating any middle ear fluid, and inserting a plastic tube. The tube remains within the eardrum on an average of six months to one year, but can stay in longer or shorter per individual. As the skin of the eardrum migrates outward in a normal fashion, the tube will extrude into the ear canal.

INDICATIONS:

The middle ear space houses the ossicles (ear bones) involved in sound transmission. Normally the middle ear is filled with air and has the same pressure as the outside environment. Some children are prone to ear infections or middle ear fluid known as otitis media with effusion (OME). Multiple ear infections are a problem which may result in multiple antibiotics, missed time from school, pain and discomfort, as well as potential permanent damage to the ear. OME can result in diminished hearing with its adverse effect on learning and language development. The two biggest indications for tube insertion are recurrent infections and persistent OME. The procedure is performed at the hospital under general anesthesia and is done on an outpatient basis. There is usually little to no discomfort.

FOLLOW-UP:

We recommend follow-up visits every four months until the tubes extrude. We also recommend custom-made earplugs to keep water out of the ears for bathing and swimming.

For the vast majority of patients, tube insertion is a highly successful procedure. Our goal is to reduce the number of infections and maintain optimal hearing and health of the ears at this important stage in a child's life.

RISKS:

Infection: Tube insertion is a highly successful procedure. Some children, however, can still experience either occasional or more frequent ear infections. Now that the middle ear has an opening, infections in the majority of cases will demonstrate themselves with bloody, crusty or yellowish ear discharge.

Early Extrusion/Prolonged Placement: Tubes may come out early (within the first six months). This may require reinsertion of the tubes if the fluid recurs. Also, tubes may not extrude at all. This may require surgical removal of the tubes.

Perforation: A small percentage (less than 10%) of children may be left with a small eardrum perforation after the tubes extrude. This may require surgical closure if the perforation does not heal by itself.

Need for Recurrent Tubes: Most children will only require one set of tubes. However, a significant percentage will require two or even more sets if their ear problems persist. Most children will eventually outgrow these ear problems by age 6 to 8.