

What Are Pressure Equalization (PE) Tubes?

Ear tube (or pressure equalization tube) placement surgery is a procedure to implant synthetic ear tubes into the ear drum. Ear tubes provide ventilation for the middle ear space behind the ear drum.

The tubes can be placed in one or both ears. Standard tubes, commonly used in children, last 6 to 24 months and typically fall out on their own. Long-term tubes, typically used in people with chronic ear problems, are shaped like a T to stay in place longer.

After the ear tubes have been in place for 3 years they will need to be removed by a surgeon.



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What conditions do ear tubes treat?

Conditions that may require a myringotomy (to create an opening) with ear tube insertion include:

- Fluid in the ear that does not go away on its own or causes problems with hearing, balance, or speech
- Ear infections that are frequent or do not resolve with other treatments
- Retracted eardrums with signs of negative pressure build up

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- Eustachian tube dysfunction (ETD), which occurs when the eustachian tubes don't open or close properly. When the Eustachian tube is blocked this can cause unequal pressure in the middle ear. Conditions that contribute to this include chronic allergies
- **Barotrauma** due to air pressure changes, such as during air travel or scuba diving

What do I need to buy before my procedures?

- □ Vaseline
- Cotton balls
- □ Ear drops using prescription from your provider

What are my instructions before the procedure?

- If your tubes are placed in a clinic setting, no special preparation is needed. You can eat and drink as usual.
- If you need surgery with anesthesia, then the surgical team will explain your instructions to you before the procedure (within 30 days). We explain your care and follow safety guidelines to help you achieve the best healing after surgery.

What can I expect after the surgery?

Improvement of your ear symptoms, such as:

- Pressure
- Normal hearing or return to baseline
- Less ear infections
- Decreased dizziness or tinnitus
- Need for less medications long term

What foods or fluid restrictions do I have after the surgery?

There are typically no dietary restrictions after tube placement. You may return to normal foods and drinks. If your procedure is performed in the surgery center, you will be also following the precautions you received at discharge.

What kind of activity can I do after the surgery?

- Resuming normal activities is fine but avoid any sports or activity that may cause trauma to the ear for first 72 hours.
- There are no limits on flying.
- You may choose to use ear plugs, with or without a headband, when you swim in lake or ocean water. Ear plugs are not necessary during bathing or when swimming in a chlorinated pool, but they may be helpful if your ears are sensitive to water.
- After you swim in lake or ocean water, use ear drops once at the end of the day. Put 3-4 prescription antibiotic drops into the ear with the tube.
- Avoid diving. It may cause pain and pressure with ear tubes.

How will I take care of the surgery sites?

- Clean your hands before preforming any care.
- Drainage, which is sometimes bloody, may occur for several days after surgery. Keep the clean and dry.
- Place a cotton ball with a thin coat of Vaseline into the ear while showering for the first 3 days after surgery.
- Apply ear drops as prescribed the day of the procedure. If the drops seem to be bothering, you; try warming them by carrying the bottle in your pocket for approximately 30 minutes before using them.
 - When giving the drops, puddle the drops above the ear canal then massage the skin/cartilage in front of the ear canal for 5-10 seconds to help pump the drops into the ear canal.

Ear drainage

If your ear develops drainage which is cloudy, milky, discolored, or foul smelling, this indicates there is an ear infection. Treat the ear infection with prescription ear drops as follows:

- Place 4 drops prescription ear drops into the affected ear(s) twice a day for 7 days.
- If drainage continues after 5 days of using the drops, please call the OTO Call Center at (734) 936-8051 and they will connect you to the nurse support team for further discussion.

How do I manage pain at home?

Placing ear tubes is generally less painful than an ear infection. If you experience discomfort take acetaminophen (Tylenol®) or ibuprofen (Motrin).

- Ask your doctor before taking them if you are taking other medications or have other conditions.
- Narcotics (opioids) are not needed.

When can I return to work?

- If your procedure was performed in a clinic you may return to work the same day.
- If anesthesia was used, then you will have at least 24 hours after being discharged before returning to work.

When should I call the doctor?

Call your doctor if you have any of the following symptoms:

- Fever over 100.4 degrees Fahrenheit by mouth
- Excessive bleeding/drainage with smell from your ear (s)
- Inability to keep fluids or foods down
- Strong pain despite taking pain medications as your doctor or nurse instructed you

What is the contact information?

- Monday -Friday from 8:00am -5:00pm:
 - Call the Otolaryngology nurses (734) 936-8051
- Afterhours, on weekends, or on holidays
 - Call hospital paging at (734) 936-6267 and ask for the Otolaryngology (ENT) resident on call for your surgeon.

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