

# Myringotomy & Tympanostomy Tubes

## What is a Myringotomy?

An operation to make a small opening in the eardrum is called a myringotomy. (This word sounds like **my**-rin-GOT-oh-me.) The tubes that are put into the opening are called tympanostomy tubes. (This word sounds like tim-pan-OST-oh-me.)

## Why does my child need tubes?

Your child's ear doctor may suggest tubes because your child:

- has had a number of ear infections.
- has a build-up of fluid in the space behind the ear drum. This space is called the middle ear.
- has an eardrum that is not moving back and forth or vibrating freely.
- has inward movement or retraction of the eardrum.

Tympanostomy tubes help the middle ear be filled with air instead of fluid. These tubes let fluid drain out of the middle ear, which improves hearing.

Normally, the middle ear is filled with air. There is a tube which connects the middle ear to the back of the nose. This is called the eustachian tube. (This word sounds like you-stay-shun.) The eustachian tube allows air in and out of the ear so that the pressure on both sides of the eardrum is the same. The equal pressure allows the eardrum and the three tiny middle ear bones, also called ossicles, to vibrate when sound waves bounce onto the ear drum.

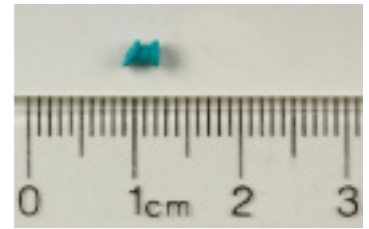
Children can get fluid build up in their middle ear because their eustachian tube is shorter than an adult's. When fluid builds up an infection is more likely to occur in the middle ear. Fluid in the ear may cause hearing loss because the eardrum cannot vibrate freely. The child may have an uncomfortable feeling of a plugged or popping ear.

## What happens during the operation?

Your child is given medication so she or he is asleep for the operation. This is called general anesthetic or a general. The operation takes about 5 to 10 minutes.

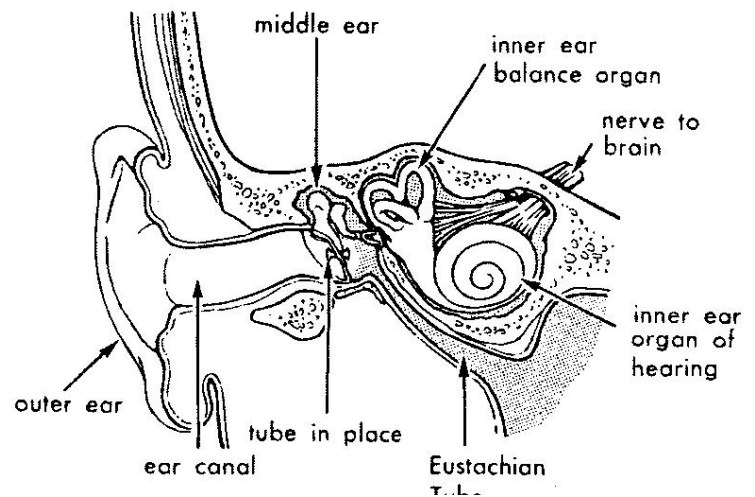
The Ear, Nose and Throat Surgeon, or ENT Surgeon, looks through a microscope and makes a small opening in the ear drum. Any fluid which has collected behind the eardrum drains through the opening.

A small plastic tube, like a tiny straw, may be placed in the opening. The tube is two to three millimeters long. It usually can only be seen in the ear with special equipment.



The tube allows air into the middle ear. This keeps the air pressure inside the middle ear equal to the air pressure outside of the eardrum.

The tube usually improves hearing and prevents further inward movement or retraction of the eardrum.



## What should I expect for my child after the operation?

**Your child may complain of an ear ache or discomfort in the ear.** If this occurs, give pain medication called acetaminophen such as Tylenol® or Tempra®. Read the package to know how much to give and how often to give it. If there is discomfort it is usually mild and should only last less than 8 hours.

**Your child may be sick to his or her stomach after the operation.** Feed your child very small amounts of liquids you can see through such as ginger ale, water, or apple juice, not milk. Increase the amount slowly. Your child can eat what he or she usually does as soon as he or she feels well enough.

**A small amount of bloodstained fluid draining from the ears for one to two days** after the operation is normal. If there is yellow, smelly or bloody ear discharge after the 2nd day, please contact the ENT Clinic Nurse or your ENT Doctor. This type of drainage is called otorrhea. (This word sounds like “oh- tor-re-a.”)

Give ear drops for the first few days if your ear doctor ordered them. This may help to prevent the tube from becoming blocked. Keep the extra drops in case your child needs them later to treat otorrhea.

You will not be able to see the tubes in place. Your child will not be able to feel them. Most tubes slip out of the ear drums themselves and the ear drums heal on their own. This usually takes about 6 to 9 months. For some children it happens sooner and for other children it takes longer.

## When can my child start normal activities?

- Your child can start to do their normal activities the day after the operation. This includes going to school.
- If it is cold, windy weather your child may be more comfortable if the ears are covered.
- Plane flights and changes in height will not bother your child's ears as long as the tubes are in place and open.

## What are the most important things for me to do?

### 1. Keep your child's ear free of fluid.

#### Bath Care:

- Keep bath water out of the ears. Keep your child sitting up in the bath. Do not let your child put her or his head or ear under the bath water.
- To wash her or his hair use small amounts of shampoo. Rinse the hair with clean tap water.
- Some doctors suggest children wear ear plugs when bathing. Talk to your ENT Doctor about this.

#### Swimming:

- **Talk to your ENT Doctor for advice about swimming and protecting the ears. Not all Ear, Nose and Throat Doctors agree that water proof ear plugs are needed for swimming and bathing.**
- Swimming in pools with chlorine or in most areas of the ocean is less likely to cause otorrhea than swimming in lakes, ponds, lagoons, rivers, or hot tubs. Water in lakes, ponds, lagoons, rivers, bath tubs and hot tubs usually has more bacteria and germs in it and is more likely to cause a clearish discharge, pus or blood to drain from your child's ears. This is called otorrhea.
- **Your child can take swimming lessons** with tubes in her or his ears. Keep the ears under water only a second or two. Make sure your child's head does not go below the water surface more than three hands lengths or 40 centimetres. No diving.

*If your child needs ear protection.....*

- You can make a simple waterproof ear plug by covering a marble sized cotton ball with petroleum jelly.
- Silicon Ear Putty or non customized ear plugs might also serve as waterproof ear plugs. Silicone Ear Putty is one size fits all. The non-customized ear plugs need to be fitted by the ENT Clinic Nurse before buying them at the BC Children's gift shop. Foam or ribbed ear plugs are not waterproof.

- You can buy specially made water proof ear plugs for your child. These are called swim molds. The ENT Clinic can give you a list of places that make them. It is important for you to know that they can be expensive, can be easily lost in the pool and your child may out grow them in 6 to 12 months
- An “Aqua Earband” may also be suggested. It is made of material that gives an extra layer of waterproof protection. You can buy it at the BC Children’s gift shop.

## 2. Do proper ear care.

- Use a moist cloth to clean the outer part of the ear. Wax usually comes out on its own. **Do not clean any part of the ear canal with cotton tipped swabs.** It is not safe. They can harm the ear drum or skin in the ear canal.
- If your child has a clearish discharge, pus or blood draining from her or his ears, it is best treated with the ear drops the doctor prescribed to prevent the tube from being blocked.
  - First soak up the discharge with a twisted piece of Kleenex.
  - Have your child lay down with the affected ear facing the ceiling.
  - Place the drops in the affected ear(s).
  - Pump the skin and cartilage in front of the ear which is called the tragus.
  - Do these steps two times a day for seven days until the otorrhea stops.

## 3. Follow up with the ENT Doctor.



Call the office at 604-875-2113 to make appointments:

- 6 to 12 weeks after the operation.
- Every 6 months after the first visit for the next few years until the tubes fall out, the ear drums have healed, and your child’s middle ear has not had fluid in it or an infection for at least one winter.
- A hearing test is usually done at the same time. Hearing tests are currently available at B. C. Children’s Hospital in the morning clinics.

## 4. Watch for signs of infection.

### Call your family doctor if:

- an earache does not go away within 5 days of the operation.
- drainage is yellow or smelly or both yellow and smelly
- your child’s temperature goes above 37.8 to 38.8 degrees Celsius or 100 to 102 degrees Fahrenheit for more than 3 days.

Your child may have an ear infection that needs treatment with antibiotic eardrops. It would be very uncommon for your child to need oral antibiotics. Your doctor will order these. Follow the directions carefully when giving the drops. Please ask questions. If after using them awhile, your child says the drops sting or that he or she can taste the drops, this usually means the ears are clear of infection. Stop using the drops.

If discharge is still there for three to four days after using the drops call the clinic so your child can be checked out. Your child needs to be seen at the clinic in the next three to four days.

## 5. Call if you need help or have a question



The ENT Clinic Nurse is happy to help you. Please feel free to call her at: 604-875-2345, ext. 7053 or call free anywhere in BC:

1-888-300-3088 ext. 7053

## Its good to ask!

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