

# PE tube insertion

## ear tubes

Ear tubes are known by several names: tympanostomy tubes, ventilating tubes, pressure equalizing tubes or most frequently, PE tubes. They are tiny hollow tubes made of a soft material. PE tubes decrease the frequency of ear infections by allowing air in and helping fluid to drain into the throat. Preventing fluid from staying in the middle ear can help restore and preserve normal hearing. The small tubes that are used do not cause hearing loss or long term damage to the eardrum.

## the surgery

PE tubes are inserted under general anesthesia as an outpatient. A microscope is used to see into the ear and a small incision is made in the eardrum. Any fluid or infection present in the middle ear is suctioned and the tube is placed into the incision where it remains in place without the use of stitches. The surgery takes 10 – 15 minutes and children remain at the hospital 1 hour afterward.

## postoperative care

Most children are back to normal within a few hours of surgery. Since an opening into the middle ear has been created, there may be drainage of fluid. The drainage may be clear, yellow, orange, green, brown, pink or bloody. There may be a small amount of crusty drainage, drainage into the ear canal or drainage dripping from the ear. A prescription for ear drops will be given. Please use the drops as directed by your physician. In some children, these drops cause a burning sensation. Very often, children tolerate drops better if they are warmed to room temperature first. This can be done by placing the drops in a pocket or close to the body for 15 – 20 minutes before giving. Please call the office nurse if there is discomfort for more than a few minutes after the drops are given or if postoperative ear drainage continues for more than 3 days.

- Ciprodex: \_\_\_\_\_ drops to the RIGHT LEFT BOTH ears, \_\_\_\_\_ times a day for \_\_\_\_\_ days
- \_\_\_\_\_ drops to the RIGHT LEFT BOTH ears, \_\_\_\_\_ times a day for \_\_\_\_\_ days

## nausea and vomiting

Some children have nausea and vomiting from the general anesthesia. This should stop within a few hours. Please call the office nurse if nausea and vomiting continue for more than 12-24 hours.



**fever**

A low grade fever is normal for a few days after surgery and acetaminophen (Tylenol) should be given. Please call the office nurse if the temperature is over 102°F

**pain**

Most children have no pain after surgery. Some children have ear pain or fussiness for a few days after surgery which is usually relieved with acetaminophen (Tylenol) or ibuprofen (Advil, Motrin). Please call the office nurse if the pain or fussiness is severe or not relieved with acetaminophen (Tylenol) or ibuprofen (Advil, Motrin).

**diet**

Begin with a clear liquid diet, progress to a light diet and then to a normal diet as your child feels like eating.

**activities**

Normal activities may be resumed as soon as your child feels up to it.

**hearing**

Many children experience an immediate improvement in hearing after the fluid is removed from the middle ear and PE tubes have been inserted. This may cause children to be frightened by normal sounds because they may seem loud. Children usually adjust quickly to these louder sounds.

**protection from water**

After PE tubes are inserted, prevent dirty water from entering the ear canals. Dirty water can carry bacteria into the middle ear through the tube and cause an ear infection. Dirty water includes lake, river, ocean and non-chlorinated water. Dirty water should be avoided or children should wear silicone ear plugs when exposed to dirty water. Silicone ear plugs are available at most pharmacies. They should be placed in the outer ear to block the canal, but not directly in the canal itself. There is generally no need for ear protection for bathing, showering, or swimming in chlorinated water. When bathing, the hair should be rinsed with fresh water from the tap. In specific cases, different instructions may be given.

**ear infections**

PE tubes will prevent ear infections from developing most of the time. However, some children develop an ear infection despite the tubes. Children with tubes will usually have drainage from the ear with an infection. The drainage may be clear, yellow, orange, green, brown, pink or bloody. If your child develops ear drainage, use the drops as directed and notify the office nurse. If needed, acetaminophen (Tylenol) or ibuprofen (Advil, Motrin) may be given. If you do not have a prescription or have run out of drops, call the office nurse for a prescription. Over the weekends and on holidays, the doctor on call can be reached through the emergency phone number from 9:00 to 5:00. Please call the office nurse if the ear drainage does not resolve in 7 days, if there is significant pain or if there is swelling of the ear or ear canal.

## rejection of the tubes

Because PE tubes are a foreign material to the body, the tubes will eventually be rejected or pushed out the eardrums. Depending on the type of tube, this will most often occur 6 to 12 months after the tubes have been placed. Most children will not need a second set of PE tubes have fallen out, the child has outgrown the need for tubes. Approximately 15% of children will need another set of tubes to be inserted.

## follow up

A postoperative office appointment is needed after surgery. At the time of the surgery, your physician will inform you when to schedule the appointment. Periodic appointments are needed until the PE tubes are out or until your child no longer has problems with ear infections. These visits are to check the status of the PE tubes and to check the condition of the eardrum. Please call the office nurse with any questions or concerns.

- Appointment with physician in  4 – 6 weeks  1 year  \_\_\_\_\_
- Appointment with audiology in  4 – 6 weeks

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*This handout is for general information only and should not be considered complete. For more specific information, please ask your child's health care provider.*

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