

CENTRAL OHIO EAR, NOSE AND THROAT, INC.

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INSTRUCTIONS FOR VENTILATION TUBE INSERTION

- 1) If the patient develops a severe cold or fever before admission, please contact the office.
- 2) On the day of surgery, the patient should have nothing to eat or drink after midnight the night before surgery.

WHAT TO EXPECT FOLLOWING SURGERY

- 1) The patient may leave the hospital approximately one hour after surgery.
- 2) There may be some drainage from the ear for 2 to 3 days following surgery.
- 3) The plastic tubes usually will stay in place for 3-15 months following surgery. Most tubes will not have to be removed because they usually fall out on their own. I will follow the patient in the office every three months.
- 4) If the tubes are not out within two years, they need to be removed.

WHAT TO DO

- 1) Swimming is not allowed for two weeks following surgery. After this period, swimming is allowed with the following exceptions:
 - a. NO UNDERWATER SWIMMING.
 - b. NO DIVING.
 - c. NO JUMPING OR SLIDING INTO THE WATER.
 - d. NO EAR PLUGS SHOULD BE WORN UNLESS INSTRUCTED.
Call our office and special ear plugs will be prescribed.
 - e. OUR AUDIOLOGIST CAN MAKE SPECIAL EAR PLUGS FOR PATIENTS SO THEY CAN SWIM.
- 2) The patient may return to school the day following surgery.
- 3) Hair may be washed one week after tube insertion.
- 4) The patient is allowed to eat everything. No gum chewing for two weeks.
- 5) Flying is permitted after the patient has had surgery.
- 6) It is important to avoid smoking around the patient. There is a correlation between smoking and ear infections.

PLEASE CALL FOR AN APPOINTMENT AND RETURN TO THE OFFICE ONE WEEK AFTER THE OPERATION.

INFORMATION AND INSTRUCTIONS ABOUT VENTILATION TUBE PLACEMENT IN THE MIDDLE EAR

Ventilation tubes, which are placed in the eardrum to relieve pressure and/or fluid in the middle ear space, are a common procedure done in the United States. They were invented in 1954 and now, along with Tonsillectomy and D & C, constitute the three most common procedures performed in the United States. These tubes are usually put in for recurrent ear infections numbering at least three to four infections per year. They are also put in for a conductive hearing loss secondary to fluid in the middle ear space. People who are at risk for developing this problem are premature children, children who have had cleft palate surgery, people who have immune deficiencies and people who have a problem with their Eustachian tube (the tube that drains the middle ear to the back of the throat).

Ventilation tubes are usually used for recurrent ear infections. The tubes perform two primary functions. They ventilate the middle ear space and drain the fluid that is present. They usually work for 80-85% of all people for whom they are inserted. These tubes stay in for three to fifteen months.

The whole question of middle ear fluid is a puzzling one. In children, nobody knows exactly why it develops. Theories include that of hypertrophied adenoids and a possible allergy problem. Frequently in adults, fluid develops in the middle ear space following a cold or a plane flight. Rarely, fluid in the middle ear space results as a tumor of the nasopharynx.

A candidate for having ventilation tubes will be seen in the office and an examination will be done by the physician. If the patient is deemed a candidate for ventilation tubes, a hearing test will be done before the tubes are placed. This will document any hearing loss or the presence of fluid.

The procedure for inserting ventilation tubes is quite simple and the same for children and adults. A small slit is made in the eardrum. The ventilation tube is inserted in the eardrum slit. The tubes are inserted with a microscope because they are very small.

A child under the age of fifteen usually benefits from having general anesthetic in an outpatient hospital setting. The reason for this is that it is very difficult to have a child lie still for the procedure. The patient comes to the hospital in the morning, the ventilation tubes are placed in surgery and the patient is then discharged approximately one hour after they wake up from anesthesia. They should have nothing to eat or drink after midnight the night before surgery.

For adults the procedure can be performed in the office using a local anesthetic. The anesthetic, Phenol, is applied to the eardrum. This numbs the eardrum and stops any bleeding that might occur when the slit is made in the eardrum.

Complications include bleeding, scarring of the eardrum, or tympanosclerosis, perforation of the eardrum, a retraction pocket or cholesteatoma formation. Bleeding occurs because the eardrum is a vascular structure which means a lot of blood vessels supply it. Bleeding will occur out of the ear for a couple of days. Drops are sometimes prescribed for this. The drops prevent a possible swimmer's ear which might develop from blood being in the external ear. Tubes allow fluid to drain from the middle ear and fluid, if present, will drain out of the ear, also.

A perforation of the eardrum may occur after ventilation tube placement. This is a small hole left in the eardrum after the tubes fall out. In most cases this hole closes on its own without doing anything. Rarely, it needs to be closed surgically. This is done by taking a graft or small piece of fascia, or tissue under the skin, from behind the ear and placing it over the eardrum.

A retraction pocket can also occur after the ventilation tubes fall out. The eardrum closes over and a lot of negative pressure results in the middle ear pulling the eardrum inward. A retraction pocket is an indication for having another ventilation tube inserted because it can form a cyst-like structure called a cholesteatoma. A cholesteatoma is similar to a sebaceous cyst which forms on the skin. If a cholesteatoma forms, a mastoid-type surgery would be needed to remove it.