

## *Upper Cape Ear, Nose & Throat, PC*

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### **CANALPLASTY**

#### **Purpose**

Canalplasty is an operation performed to widen or remove growths from the ear canal. Eardrum perforations (holes) can be caused by trauma, infection, or as a complication of ear tubes. Sometimes hearing is also affected. Hearing loss can occur because of the hole, but also from scarring or erosion of the ear bones. The goal of a tympanoplasty is to close the hole in the eardrum and do whatever possible to reverse damage to the ear bones.

#### **Procedure**

Tympanoplasty is performed in a hospital or surgicenter. The operation can be done under local anesthesia with sedation, but is more commonly done under general anesthesia. Incisions are made inside the ear canal and often an incision behind the ear is also necessary. The eardrum is lifted up and the middle ear examined. If necessary, the ear canal is widened. Scar tissue is removed and the ear bones examined. If the ear bones are eroded it may be necessary to replace them with a prosthesis. A piece of fascia (tough fibrous tissue) is taken from behind the ear or from the cartilage in front of the ear. This fascia is placed under the eardrum to seal the hole. This piece of tissue serves as a scaffold for the eardrum to heal itself.

At the conclusion of the procedure the ear canal is packed to hold the tissues in proper position. The incisions are stitched closed and the patient taken to the recovery room. Most patients will be able to go home several hours after their procedure. If there are problems with dizziness or nausea patients can be kept overnight.

#### **Recovery**

Most patients will miss about a week of work or school. During this week you should rest with your head elevated. This minimizes bleeding and pain and helps the swelling to resolve. There will be some bleeding and discharge from the ear. A cotton ball is kept in the ear to absorb the drainage. This cotton ball should be replaced if it becomes saturated. If there is an external incision it should be cleaned gently twice a day with peroxide. After cleaning a light coating of antibiotic ointment should be applied to the incision. The incision should be kept dry. Sutures will be removed after one week. Some mild dizziness is common and will gradually pass. Narcotics will be prescribed for pain management.

The eardrum needs time to heal. You may not blow your nose until the doctor tells

you it is okay to do so. Forceful nose blowing may disrupt the repair. You should not fly for the first month after the operation, due to the pressure changes involved in air travel. It is also necessary to keep all water out of the ear. For showering and bathing cotton ball coated with Vaseline should be placed in the ear. The Vaseline will make the cotton waterproof and prevent water from entering the ear.

The packing in the ear will gradually dissolve. Your surgeon may clean part of the packing out in the office. It usually takes several weeks for the ear to heal fully, to the point where you will be able to resume all normal activity. If an incision was made behind the ear, the ear will be numb for several months. The sensation will gradually return.

### **Risks and Complications**

The ear is a very delicate structure containing the hearing organ, the balance organ, the nerve that moves the muscles of the face, and the nerve that supplies taste to the side of the tongue. The following risks are inherent in any ear surgery:

The purpose of the operation is to repair the eardrum. The repair will be successful in about 90% of cases. The patch to the eardrum may not take and the perforation may not close. In general, large perforations or perforations that have failed previous tympanoplasty have a higher failure rate. Failure rates are higher in smokers. If the hole does not close, it is possible to try again with a different technique.

Usually your hearing will be the same or better after the surgery. It is possible to have worse hearing, though this is very uncommon. Complete hearing loss in the ear is possible, but rare with this procedure.

The facial nerve is the nerve which moves the muscles of one side of the face. The nerve travels through the middle ear and must be carefully avoided during the surgery. Injury to the nerve is very uncommon.

The nerve that supplies taste sensation to the side of the tongue travels through the middle ear. This nerve can be stretched during the procedure. This can result in a metallic taste in the mouth. This is almost always a temporary condition. If the nerve is cut there will be a loss of taste sensation on the side of the tongue. You will still have intact taste sensation in the rest of your mouth and should not have a problem with loss of taste.

The balance organ is part of your ear. Temporary mild dizziness is common after ear surgery. Permanent dizziness is very rare after this type of ear surgery.

**I have read, understand, and accept the risks and possible complications of this operation. Alternative treatments have been discussed with me and I want to go ahead with the surgery.**

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Patient's Signature

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Date

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Witness