TYMPANOMASTOIDECTOMY

Purpose: Tympanomastoidectomy is an operation used to treat patients with serious ear problems. It is commonly done for chronically infected ears and in patients with a cholesteatoma. A cholesteatoma is a skin cyst which usually originates as an in-growth from the eardrum. The skin cyst creates destruction in the ear as it grows. It is also commonly a cause of infections. If an ear with a cholesteatoma or chronic infections is left untreated, there may be progressive hearing loss, dizziness, or erosion into the brain. The goal of the surgery is to create a dry, safe ear. It is sometimes necessary to do a second operation called a "second look" to make sure all of the disease has been eradicated. This is done six months after the initial procedure.

Procedure: Tympanomastoidectomy is an operation done in the hospital under general anesthesia. The operation takes several hours to perform. Incisions are made inside the ear and also behind the ear. The mastoid bone is opened as well as the middle ear. The cholesteatoma or the chronically infected tissue is removed. The eardrum is then patched using the lining of a muscle behind the ear. The incisions are then closed and packing is placed in the ear to hold the tissues in place while they are healing. A dressing is wrapped around the head and the patient goes to the recovery room. Patients are usually kept overnight for observation. They are discharged the following morning as long as they are not nauseous or too dizzy.

Recovery: Most patients will miss about one to two weeks of work or school. Patients are seen in the office one week after the operation for suture removal. They are then seen periodically for removal of the packing. Most normal activity can be resumed after the first week, but it is important to follow these instructions until the doctor says otherwise:

- Do not blow your nose. This could cause pressure to build up in the ear and displace the patch on the eardrum.
- Do not let any water in your ear. This could cause an infection. A piece of cotton coated with Vaseline should be placed in the ear to keep water out while showering.
- No air travel for the first 6 weeks due to the pressure changes which occur in the ear.

Risks and Complications

- There will be raw surfaces inside your ear which may take several months to heal. The ear often will continue to have drainage during this healing phase. Hearing is always diminished initially due to the packing. It usually improves as the packing dissolves. It will be several months before you will know what your final hearing result will be. It is necessary to cut some of the sensory nerves when the incision is made behind the ear. This will cause your ear to be numb. This numbness almost always returns to normal, but this takes several months.
- Any surgery involving the ear always carries the risk of hearing loss. Sometimes it is necessary to remove some or all of the ear bones to eliminate the disease in the ear. The primary goal of the surgery is to eliminate the disease. Sometimes the patient's hearing will be worse than before the surgery if it is necessary to remove ear bones. It is possible to reconstruct the hearing mechanism with a prosthetic ear bone. This often needs to be done as a "second look" operation.
- It is also possible to sustain damage to the inner ear hearing. This damage could be permanent and there is the risk of total hearing loss. Every effort is made to prevent this complication, but it can still occur.
- The nerve which moves the muscles of the face travels through the middle ear and mastoid. This nerve travels in a well-known path and needs to be carefully protected. A facial nerve monitor may be used to help protect the nerve. Despite the greatest care, it is still possible to injure this nerve. An injury to the facial nerve cause loss of movement of the facial muscles of one side of the face.
- The eardrum is patched as part of the procedure. If the patch does not take there may be a persistent perforation (hole) in the eardrum. Further procedures may be required to correct this.
- The nerve which supplies the side of the tongue with taste also runs through the middle ear. This nerve may be stretched or cut during the operation. This can lead to a metallic taste in the mouth. There are several other nerves which also supply taste within the mouth, so you would still be able to taste.
• The balance system of the ear can be damaged, though this is a fairly rare complication. Permanent balance problems are fairly rare.

• Tinnitus, or ringing in the ears, can occur with any ear surgery. It is usually temporary, but can be permanent.

• The mastoid and ear sit directly below the brain. If the bone which separates the ear and mastoid from the brain is penetrated, fluid from around the brain can leak out into the ear. This is a very uncommon complication. It usually resolves with conservative measures, but may require additional surgery to stop the leak.

• There is always the risk that the ear problems may recur. Sometimes patients need additional surgery to eradicate their problem. With cholesteatomas, a second surgery is often necessary to make sure the cholesteatoma is gone. Often reconstructive hearing surgery is done at this second look.

We ask that you sign below to indicate that you have read, understand, and accept the risks and complications of this operation. Alternative treatments have been discussed with me and I want to go ahead with the surgery.