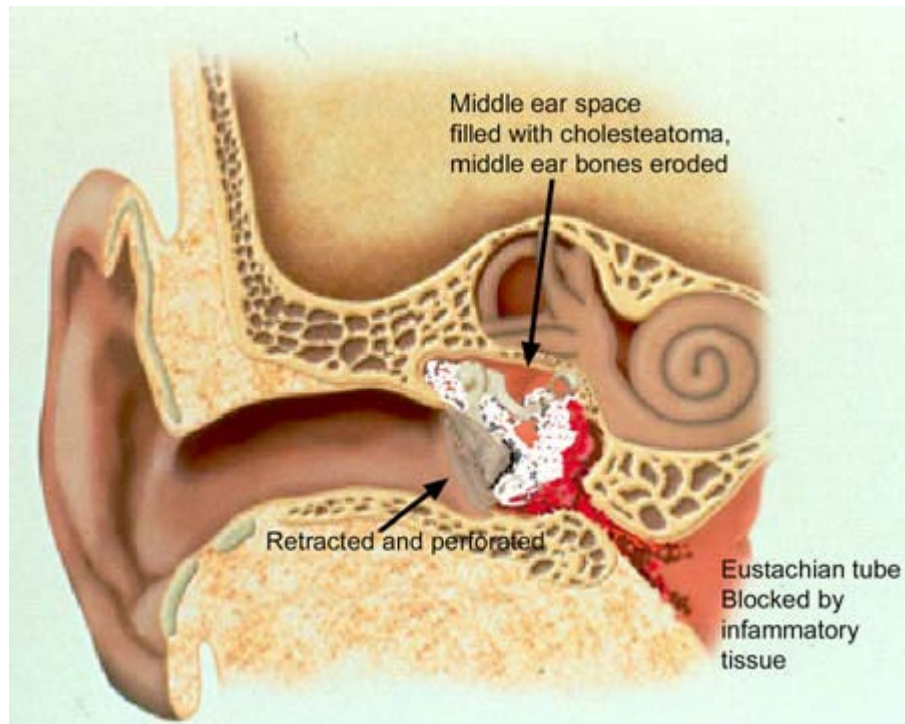


Cholesteatoma

What is a Cholesteatoma?

A cholesteatoma is a benign growth of skin and tissue in the middle ear.



A cholesteatoma can form in the middle ear in three ways.

The first is when a hole in the eardrum occurs due to chronic infection or trauma and the skin of the eardrum starts to grow through the perforation and into the middle ear.

The second is congenital, which means some patients are born with small remnants of skin which become entrapped within the middle ear

The third, which is the most common, involves an improperly functioning eustachian tube. The eustachian tube is responsible for maintaining healthy middle ear pressure. When this tube does not work properly, a negative middle ear pressure is generated and the eardrum begins to retract back toward the inner ear. Eventually a skin-lined sac forms which continues to grow and cause infection and bony destruction.

Symptoms of a Cholesteatoma?

- Conductive hearing loss.
- Discharge from the ear
- Bleeding from the ear
- Dizziness, vertigo, balance disruption
- Ear ache, headaches or tinnitus
- Facial nerve weakness

A history of ear infections should be taken seriously and investigated as cholesteatoma could be considered a possible outcome.

Treatment for a Cholesteatoma?

The primary goal of surgery for cholesteatoma is treating the infection. The secondary goal is to restore hearing.

1. Tympanoplasty

The cholesteatoma and/or retracted portion of the eardrum is dissected and removed. The eardrum is repaired using the covering of the chewing muscle as a template for tympanic membrane growth. The continuity of the ossicles is then restored using either the patient's own incus or an artificial prosthesis.

In order to allow clear visualization of the cholesteatoma, frequently it is necessary to remove the incus bone. Inner ear trauma leading to temporary dysquilibrium from overmanipulation of the stapes bone while dissecting the cholesteatoma from the surrounding structures can occur. Removal of the incus bone helps prevent inner ear trauma.

2. Tympanomastoidectomy

Frequently the mastoid bone located behind the ear must be explored to remove any cholesteatoma that may have spread there through the middle ear. Another reason to perform a mastoidectomy is to improve ventilation of the middle ear. This can be done

in addition to the tympanoplasty as described above. Whether the bony partition between the external ear canal and mastoid is removed or not depends on the extent of disease. This operation is done when an extensive cholesteatoma is encountered or one that is threatening to the inner ear or facial nerve.

In all circumstances, surgery involves general anesthesia and the procedure can last anywhere from one hour to three hours depending on the size of the cholesteatoma and extent of infection. The delicate procedure is performed using a high powered microscope. Patients typically go home either the same day after surgery or the next day depending on how they respond to general anesthesia.

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