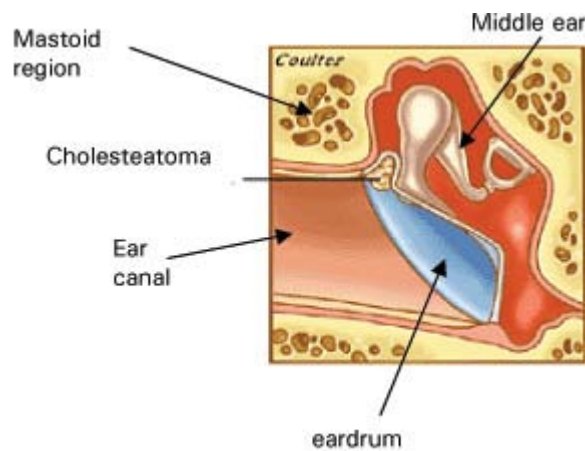


Cholesteatoma

Connecticut Pediatric Otolaryngology

What is Cholesteatoma?

Cholesteatoma is a type of cyst made up of abnormal skin growth which accumulates in the middle ear (behind the eardrum). It is often described as a pearly round mass behind the ear drum. Retraction of the eardrum is the usually the first step in the formation of a cholesteatoma. If not properly treated, chronic negative pressure leads to progressive retraction pockets and cholesteatoma formation. If left untreated, the cholesteatoma will grow. This may lead to destruction of the small delicate bones of the middle ear (ossicular chain) and other structures of the middle ear space and nearby structures (mastoid, facial nerve, brain).



What are some of the symptoms of a cholesteatoma?

- Foul-smelling ear drainage (perforation)
- Ear pressure or fullness
- Hearing loss in one ear
- Pain or numbness in the ear or around the ear
- Dizziness, facial muscle weakness

Types of cholesteatoma?

- Congenital (present at birth)- caused by trapped skin cells in the temporal bone (bone on side of head) during fetal development which migrates into middle ear space. Usually identified in early childhood behind a normal appearing eardrum. Incidence -1 per 10,000.
- Acquired (develop after birth). Incidence- 6 per 1000
 - Primary- the result of long-term severe retraction of the eardrum
 - Secondary- the result of injury to the eardrum (perforation, trauma to eardrum, ear drum surgery)

How is cholesteatoma treated?

- Treat infection/drainage: Initial therapy will be aimed at controlling the infection by stopping the drainage in the ear. Treatment of this will consist of careful cleaning of the ear, taking antibiotics and using ear drops.
- Obtain diagnostic tests: Hearing tests, Head CT scan (temporal bone))
- Surgery:
 - Often surgery is required to remove the cholesteatoma. The goal of the surgery is to remove the cholesteatoma and if possible preserve the child's hearing. The extent of the surgery will vary depending on the severity of the cholesteatoma.
 - Often a mastoidectomy will need to be done during the surgery in order to clear the entire cholesteatoma. A small incision is made behind the ear to allow access to the mastoid region.
 - In some cases, the cholesteatoma causes destruction of structures of the ear that are important for hearing (such as the tympanic membrane and 3 small hearing bones). Reconstruction of the middle ear structures is sometimes possible in order to restore hearing, but may require a second surgical procedure.
 - The surgery is performed under general anesthesia. In most cases, the child may go home on the same day as surgery.
- Follow-up: Cholesteatoma sometimes recur. Follow-up visits after surgery are very important to identify any recurrence. If open mastoidectomy cavities are created during the surgery, patients will often require routine office visits for clean-out of the mastoid cavity.