Cholesteatoma

Information for patients and families

Read this pamphlet to learn about:

- The symptoms of a cholesteatoma
- Treatment for a cholesteatoma
- Having surgery to remove a cholesteatoma

What is a cholesteatoma?

A cholesteatoma (ko-less-tee-ah-tome-ah) is an unusual growth of skin in the middle ear behind the eardrum. It is a lump that has grown from the ear drum and never leads to cancer. It usually grows because a retracted (sucked-in) part of the ear drum sheds layers of old skin that are collected inside the ear. Over time, the cholesteatoma can get bigger and destroy the delicate bones inside and around the middle ear. It will cause:

1. Bone erosion
2. Infections
Although uncommon, cholesteatoma can lead to:

- hearing loss
- dizziness
- facial paralysis (not being able to move your face)

In extreme conditions a cholesteatoma can start to affect the brain. It can cause pus to pool in the brain (called an abscess) or an infection of the membranes covering the brain and the spinal cord (called meningitis).
How the cholesteatoma forms

[Diagram showing the stages of cholesteatoma formation]

What causes a cholesteatoma?

It can form in 3 ways:

1. Some people are born with small pieces of skin that become trapped in the middle ear.

2. A torn eardrum that happens because of chronic ear infections or an injury. This can make skin from the outer part of the eardrum grow through the hole and into the middle ear.
3. An Eustachian tube that does not work properly. This is the most common reason for a cholesteatoma to form.

The Eustachian tube’s job is to pass air from the back of the nose into the middle ear to even out ear pressure. If it is not working properly then the air in the middle ear gets sucked in by the body faster than it can be replaced and the low pressure makes a pouch or sac by stretching the eardrum. This turns into a cholesteatoma when it fills up with dead skin.

We do not know exactly why the Eustachian tube stops working properly. Some reasons why the tube stops working include:

- allergies
- sinusitis
- having middle ear infections often (especially in childhood)

**What are symptoms of a cholesteatoma?**

Watch for these common symptoms of a cholesteatoma:

- The ear may drain and this may sometimes have a bad odour
- Your ear feels full or there is a lot of pressure in your ear
- Hearing loss
- Dizziness or muscle weakness on the face (the side of the infected ear)
- New and very painful headaches on one side of the head

See your doctor if you have any or all of these symptoms.

**How is a cholesteatoma diagnosed and treated?**

- Your specialist can tell you if you have a cholesteatoma by checking your ear.
- Your specialist may carefully clean your ear and give you antibiotic ear drops. This treatment can stop the fluid leaking from the ear (drainage) by controlling the infection
- For large or complicated cholesteatomas, you will usually need surgery.
How does surgery treat my cholesteatoma?

During surgery the cholesteatoma is removed to give you a safe and dry ear without infection. Surgery will either save the hearing you have or give you back the hearing you lost in the affected ear. Depending on the surgery and how much damage there is in the middle ear, your doctor will decide if you will need to have one surgery or two.

If you need a second surgery it will usually be done 6 to 12 months after the first surgery. With the second surgery the doctor will try to bring back your hearing and at the same time check the middle ear and mastoid bone for any left over cholesteatoma.

What if I need surgery to treat my cholesteatoma?

If you need surgery, then you may need to have these tests:

- hearing and balance
- CT scans of the mastoid bone and inner ears

These tests will tell your doctor how much hearing you have left in the ear and how much harm the cholesteatoma has done.

Follow-up after the surgery

Follow-up office visits after your surgery or surgeries are very important. At the visit your doctor will check to see if the surgical site is healing well and if the cholesteatoma is coming back.

In special cases where an open mastoidectomy cavity is created, you will need to visit the doctor every few months to clean out the cavity to prevent new infections.
It is very important to remember that an ear cholesteatoma can be very dangerous and should never be ignored.

If a cholesteatoma is not dealt with it can lead to infection spreading into the areas around the middle ear, including the inner ear and brain.

This can lead to:

• deafness
• brain abscess
• meningitis
• death

Who can I call if I have questions and concerns?

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