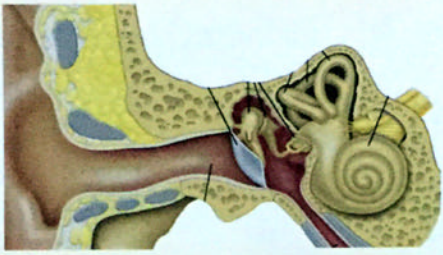
الشراكة الطلابية

مشروع التثقيف الصحي
Health Education Project

Cholesteatoma

Cholesteatoma

It is a destructive and expanding keratinizing squamous epithelium in the middle ear and/or mastoid process.
Cholesteatoma is a type of skin cyst located in the middle ear.



Causes

There are two types: congenital and acquired. Acquired cholesteatomas can be caused by a tear or retraction of the ear drum. Usually cholesteatomas in adults are acquired through the above reasons. Less commonly the disease may be congenital, when it grows from birth behind the eardrum. Congenital cholesteatomas are more often found in the anterior aspect of the ear drum, in contrast to acquired cholesteatomas that usually arise from the pars flaccida region of the ear drum in the posterior-superior aspect of the ear drum.

Presentation

The patient may have a recurrent ear discharge. Granulation tissue and a discharge (through a marginal perforation of the ear drum) may be seen on examination. A cholesteatoma cyst consists of desquamating (peeling) layers of scaly or keratinised (horny) layers of epithelium, which may also contain cholesterol crystals. Often the debris is infected with Pseudomonas Aeruginosa.

If untreated, a cholesteatoma can eat into the three small bones located in the middle ear (the malleus, incus and stapes, collectively called ossicles), which can result in nerve deterioration, deafness, imbalance and vertigo. It can also affect and erode, through the enzymes it produces, the thin bone structure that isolates the top of the ear from the brain, as well as lay the covering of the brain open to infection with serious complications.

Both the acquired as well as the congenital types of the disease can affect the facial nerve that extends from the brain to the face and passes through the inner and middle ear and leaves at the anterior tip of the mastoid bone, and then rises to the front of the ear and extends into the upper and lower face.

A history of ear infection or flooding of the ear during swimming should be taken seriously and investigated as cholesteatoma should be considered a possible outcome.

Symptoms

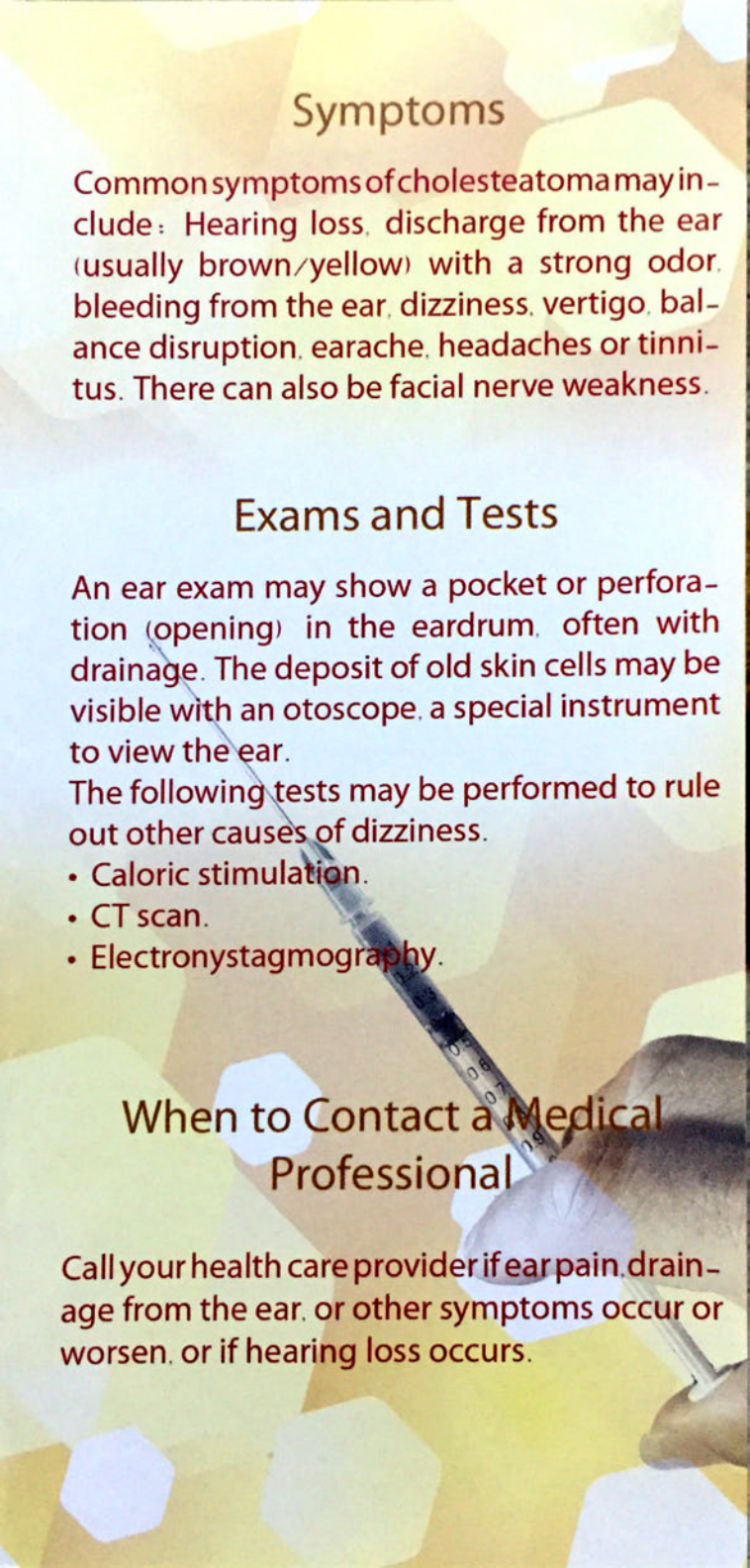
Common symptoms of cholesteatoma may include: Hearing loss, discharge from the ear (usually brown/yellow) with a strong odor, bleeding from the ear, dizziness, vertigo, balance disruption, earache, headaches or tinnitus. There can also be facial nerve weakness.

Exams and Tests

An ear exam may show a pocket or perforation (opening) in the eardrum, often with drainage. The deposit of old skin cells may be visible with an otoscope, a special instrument to view the ear.

The following tests may be performed to rule out other causes of dizziness.

- Caloric stimulation.
- CT scan.
- Electronystagmography.



When to Contact a Medical Professional

Call your health care provider if ear pain, drainage from the ear, or other symptoms occur or worsen, or if hearing loss occurs.

Treatment

Surgery is performed to remove the sac of squamous debris and a mastoidectomy is performed. Cholesteatomas of the middle ear may be congenital and in some cases can be removed through the ear canal. The majority of cholesteatomas require that an incision be made behind the ear to expose the tumor adequately.

Prognosis

Even after careful microscopic surgical removal, 10% to 20% of cholesteatomas may recur, which then require follow-up checks and/or treatment.

Possible Complications

- Brain abscess.
- Deafness in one ear.
- Dizziness (vertigo).
- Erosion into the facial nerve (causing facial paralysis).
- Labyrinthitis.
- Meningitis.
- Persistent ear drainage.
- Spread of the cyst into the brain.

Prevention

Prompt and complete treatment of chronic ear infection may help to prevent some cases of cholesteatoma.

Tumor or not?

The status of cholesteatomas as tumors is currently unresolved. There is some evidence to support the hypothesis that cholesteatomas are low-grade tumors however. recent studies have failed to show consistent DNA instability in cholesteatomas.

For more info please visit: www.hep-ksu.info or contact: 014786100 ext 1422

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