Swimmer's Ear

Insight into acute otitis externa

- What causes swimmer's ear?
- What are the signs and symptoms?
- How is swimmer's ear treated?
- and more...

Affecting the outer ear, swimmer's ear is a painful condition resulting from inflammation, irritation, or infection. These symptoms often occur after water gets trapped in your ear, with subsequent spread of bacteria or fungal organisms. Because this condition commonly affects swimmers, it is known as swimmer's ear. Swimmer's ear (also called acute otitis externa) often affects children and teenagers, but can also affect those with eczema (a condition that causes the skin to itch), or excess earwax. Your doctor will prescribe treatment to reduce your pain and to treat the infection.

What causes swimmer's ear?

A common source of the infection is increased moisture trapped in the ear canal, from baths, showers, swimming, or moist environments. When water is trapped in the ear canal, bacteria that normally inhabit the skin and ear canal multiply, causing infection of the ear canal. Swimmer's ear needs to be treated to reduce pain and eliminate any effect it may have on your hearing, as well as to prevent the spread of infection.

Other factors that may contribute to swimmer's ear include:

- Contact with excessive bacteria that may be present in hot tubs or polluted water
- Excessive cleaning of the ear canal with cotton swabs
- Contact with certain chemicals such as hair spray or hair dye (Avoid this by placing cotton balls in your ears when using these products.)
- Damage to the skin of the ear canal following water irrigation to remove wax
- A cut in the skin of the ear canal
- Other skin conditions affecting the ear canal, such as eczema or seborrhea

What are the signs and symptoms?

The most common symptoms of swimmer's ear are itching inside the ear and pain that gets worse when you tug on the auricle (outer ear). Other signs and symptoms may include any of the following:

- Sensation that the ear is blocked or full
- Drainage
- Fever
- Decreased hearing
- Intense pain that may radiate to the neck, face, or side of the head
- Swollen lymph nodes around the ear or in the upper neck. Redness and swelling of the skin around the ear

If left untreated, complications resulting from swimmer's ear may include:

Hearing loss. When the infection clears up, hearing usually returns to normal.

Recurring ear infections (chronic otitis externa). Without treatment, infection can continue.

Bone and cartilage damage (malignant otitis externa). Ear infections when not treated can spread to the base of your skull, brain, or cranial nerves. Diabetics and older adults are at higher risk for such dangerous complications.

To evaluate you for swimmer's ear, your doctor will look for redness and swelling in your ear canal. Your doctor also may take a sample of any abnormal fluid or discharge in your ear to test for the presence of bacteria or fungus (ear culture) if you have recurrent or severe infections.

How is swimmer's ear treated?

Treatment for the early stages of swimmer's ear includes careful cleaning of the ear canal and use of eardrops that inhibit bacterial or fungal growth and reduce inflammation. Mildly acidic solutions containing boric or acetic acid are effective for early infections.

How should ear drops be applied?

- Drops are more easily administered if done by someone other than the patient.
- The patient should lie down with the affected ear facing upwards.
- Drops should be placed in the ear until the ear is full.
- After drops are administered, the patient should remain lying down for a few minutes so the drops can be absorbed.

If you do not have a perforated eardrum (an eardrum with a hole in it) or a tympanostomy tube in your eardrum, you can make your own eardrops using rubbing alcohol or a mixture of half alcohol and half vinegar. These eardrops will evaporate excess water and keep your ears dry.

Before using any drops in the ear, it is important to be sure you do not have a perforated eardrum. Check with your otolaryngologist if you have ever had a perforated, punctured, or injured eardrum, or if you have had ear surgery.

For more severe infections, your doctor may prescribe antibiotics to be applied directly to the ear. If the ear canal is swollen shut, a sponge or wick may be placed in the canal so the antibiotic drops will enter the swollen canal more effectively. Pain medication may also be prescribed. If you have tubes in your eardrum, a non oto-toxic (do not affect your hearing) topical treatment should be used. Topical antibiotics are effective for infection limited to the ear canal. Oral antibiotics may also be prescribed if the infection goes beyond the skin of the ear canal.

Follow-up appointments are very important to monitor improvement or worsening, to clean the ear again, and to replace the ear wick as needed. Your otolaryngologist has specialized equipment and expertise to effectively clean the ear canal and treat swimmer's ear. With proper treatment, most infections should clear up in 7-10 days.

Why do ears itch?

An itchy ear may be caused by a fungus or allergy, but more often from chronic dermatitis (skin inflammation) of the ear canal. Otolaryngologists also treat allergies, and they can often prescribe an eardrop, cream, or ointment to treat the problem.

Tips for prevention

- A dry ear is unlikely to become infected, so it is important to keep the ears free of moisture during swimming or bathing.
- Use ear plugs when swimming
- Use a dry towel or hair dryer to dry your ears
- Have your ears cleaned periodically by an otolaryngologist if you have itchy, flaky or scaly ears, or extensive earwax
- Don't use cotton swabs to remove ear wax. They may pack ear wax and dirt deeper into the ear canal, remove the layer of earwax that protects your ear, and irritate the thin skin of the ear canal. This creates an ideal environment for infection.