CONDITION

Swimmer's ear

Swimmer's ear is painful inflammation or infection of the outer ear canal.

WHAT IT IS
Inflammation and infection of the outer ear canal

BODY SYSTEM
Ear and hearing

MAIN SYMPTOMS
Ear pain, canal itching, discharge, muffled hearing

WHAT CAUSES IT
Usually bacteria after moisture or skin damage

HOW IT IS DIAGNOSED
Ear examination with an otoscope

MAIN TREATMENT
Medicated ear drops and keeping the ear dry

CAN IT BE CURED?
Yes, most cases clear with treatment

IS IT AN EMERGENCY?
Sometimes, with facial weakness or infection spreading beyond ear

LONG-TERM OUTLOOK
Usually complete recovery; recurrence can occur

Overview

Swimmer's ear is inflammation of the outer ear canal. This is the passage that carries sound from the opening of your ear to your eardrum. The medical name is otitis externa .

Despite its name, swimmer's ear does not only affect swimmers. Water trapped in the canal can soften and damage its protective skin, but scratching, ear-cleaning tools, hearing aids, and skin conditions can cause similar damage.

Bacteria can then grow in the irritated canal. Fungi cause a smaller number of cases. Some people have inflammation without a clear infection, especially when eczema, psoriasis, or an allergic reaction affects the ear.

Swimmer's ear is different from a middle ear infection, which develops behind the eardrum. It can be very painful because the inflamed canal has little room to swell. Most cases clear with

suitable ear drops and measures that keep the ear dry.

Symptoms

Symptoms often develop over a few days. They may affect one or both ears, although one-sided symptoms are more common.

Typical symptoms include:

Hearing can become temporarily reduced when swelling, discharge, or debris blocks sound from moving through the canal. Hearing usually returns as the blockage and inflammation clear.

The outer ear may become tender. Swelling can sometimes narrow the canal almost completely. A fever is not typical of a simple case and may suggest that infection has spread beyond the canal.

Long-lasting otitis externa may cause ongoing itching, flaky skin, and mild discomfort rather than sudden severe pain. Symptoms lasting longer than three months are generally described as chronic.

- Pain inside the ear, sometimes becoming intense
- Pain when the outer ear is pulled or the small flap in front is pressed
- Itching or irritation in the ear canal
- Redness and swelling around the canal opening
- Clear, cloudy, or pus-like discharge
- A blocked feeling or muffled hearing

Causes and risk factors

The ear canal normally protects itself with earwax and a thin, water-resistant skin barrier. Earwax is not simply dirt. It helps repel water, traps debris, and maintains conditions that limit bacterial and fungal growth.

Swimmer's ear can develop when that barrier is disturbed. Common triggers include:

Warm, humid conditions can make it easier for bacteria to grow. However, swimmer's ear is not caused by poor hygiene. In fact, repeated cleaning can remove protective wax and create tiny breaks in the skin.

People with diabetes or a weakened immune system have a higher risk of a rare but serious

infection that spreads into nearby tissue and bone. This is called necrotizing otitis externa . It is sometimes known by the older term "malignant otitis externa," but it is an infection, not cancer.

- Swimming or frequent exposure to water
- Water remaining in the ear after bathing or showering
- Scratching the canal with fingernails, cotton swabs, or other objects
- Earbuds, earplugs, or hearing aids that irritate or trap moisture
- Eczema, psoriasis, or another skin condition
- Hair products, cosmetics, or metals that cause an allergic reaction
- A narrow ear canal or heavy earwax buildup

Diagnosis

A healthcare professional usually diagnoses swimmer's ear by asking about your symptoms and examining the ear. An otoscope is a lighted instrument used to look into the ear canal and toward the eardrum.

The examination may show redness, swelling, discharge, flaky skin, or debris. Tenderness when the outer ear is moved supports the diagnosis.

It is important to check the eardrum when possible. A hole in the eardrum or an ear tube affects which drops can be used safely. Severe swelling may make the eardrum difficult to see at first.

Laboratory testing is not usually needed for a straightforward first episode. A sample of discharge may be sent for testing when symptoms are severe, keep returning, do not improve with initial treatment, or occur in someone at higher risk of complications. This can identify bacteria or fungi and help guide treatment.

Other problems can resemble swimmer's ear, including a middle ear infection with drainage, a foreign object, an allergic skin reaction, or a boil in the canal.

Treatment and management

Treatment aims to control infection or inflammation, relieve pain, and allow ear drops to reach the affected skin.

Medicated ear drops are the main treatment for most uncomplicated cases. Depending on the likely cause and the condition of the eardrum, these may contain an antibiotic like amoxicillin or

doxycycline , an anti-inflammatory steroid like prednisone or hydrocortisone , an acidifying medicine, or an antifungal medicine. The choice matters because some products should not be used when the eardrum has a hole or an ear tube is present.

A healthcare professional may gently remove discharge or debris that blocks the canal. This is usually done with suction or careful cleaning under direct view. You should not try to remove deep debris yourself.

If swelling prevents drops from entering, a small absorbent wick may be placed in the canal. The wick carries medicine inward and is removed or replaced as the swelling settles.

Pain relief can be useful while treatment begins. A pharmacist or healthcare professional can help you choose a non-prescription option that is suitable for your health and other medicines.

During recovery:

Oral antibiotics are usually unnecessary because drops deliver medicine directly to the canal. They may be considered when infection has spread into skin outside the ear canal or when a person has factors that increase the risk of deeper infection.

Do not use leftover drops or home mixtures without advice. Products containing alcohol, peroxide, or acids can be painful and may be unsafe if the eardrum is damaged.

- Keep the affected ear dry
- Avoid swimming until symptoms have cleared
- Do not place cotton swabs, fingers, or tools in the canal
- Use prescribed drops for the recommended course
- Avoid wearing an earbud, earplug, or hearing aid in the affected ear if it worsens irritation

Complications

Most cases resolve without lasting problems. Possible complications include temporary hearing reduction, repeated infections, and persistent inflammation of the canal skin.

Infection can occasionally spread into the skin around the ear, causing cellulitis . Signs may include increasing redness, warmth, swelling, or tenderness extending beyond the canal.

Chronic inflammation can cause the canal skin to thicken. Rarely, scarring narrows the canal and contributes to repeated blockage or hearing difficulty.

Necrotizing otitis externa is uncommon but serious. The infection spreads from the ear canal into nearby tissue and skull bone. It mainly affects people with diabetes, a weakened immune system, or other major health problems. Severe pain that seems out of proportion to the

examination, pain that is worse at night, ongoing discharge, or facial weakness needs prompt assessment.

Prevention

Not every case can be prevented. Narrow ear canals, skin conditions, and the need to use hearing devices may continue to increase risk. However, protecting the canal's skin and reducing trapped moisture can help.

After swimming or bathing, tilt your head to let water drain. Dry the outer ear gently with a towel. If water remains, you can use a hair dryer on its lowest heat and fan setting, held well away from the ear.

Do not insert cotton swabs or other objects into the canal. If earwax is causing blockage, ask about safe removal rather than digging it out.

A well-fitting swim cap or earplugs designed for swimming may help some people. Stop using earplugs if they rub, trap water, or repeatedly irritate your ears.

Drying ear drops may sometimes be suggested for people with repeated episodes. They should not be used when you have active ear pain or drainage, ear tubes, a damaged eardrum, or previous ear surgery unless a healthcare professional has confirmed they are safe.

If eczema, psoriasis, or an allergy affects your ears, managing that condition may reduce repeated inflammation.

Living with it and what to expect

With effective treatment, pain often begins to improve within 48 to 72 hours. The infection commonly clears over about a week, although a badly swollen canal can take longer to settle. Improvement is not guaranteed on this timetable.

Blocked hearing may be one of the last symptoms to resolve because swelling and debris need time to clear. Lasting hearing loss is not expected after an uncomplicated episode.

If symptoms are not beginning to improve within two or three days of treatment, the ear should be reassessed. The canal may need cleaning, a wick may be needed, or the original treatment may not cover the cause.

Some people have repeated episodes after swimming or when using hearing aids, earbuds, or earplugs. Finding the trigger and protecting the canal can reduce recurrence. A hearing device may also need its fit checked and should be cleaned according to the manufacturer's

instructions.

Chronic otitis externa can come and go over months or years, particularly when linked to a skin condition. Treatment then focuses on controlling the underlying skin inflammation and avoiding irritants as well as treating any infection.

Most people can return to their usual activities after pain and discharge have resolved. Swimming should wait until the canal has healed and any clinician treating the episode says it is safe to resume.

When to get medical help

Arrange a routine appointment if you have ear pain, discharge, increasing itch, or a blocked ear that could be swimmer's ear. Earlier assessment is sensible if you have had ear surgery, an ear tube, a known hole in the eardrum, or repeated episodes.

Contact a healthcare professional promptly if:

Seek urgent or emergency care for facial weakness, difficulty swallowing, confusion, severe dizziness, swelling spreading quickly around the ear, or severe illness. These symptoms are not typical of uncomplicated swimmer's ear and need immediate assessment.

- Symptoms are not improving within 48 to 72 hours of starting treatment
- Pain is severe, worsening, or repeatedly wakes you
- Redness or swelling spreads outside the ear canal
- You develop a fever or feel generally unwell
- The canal becomes completely swollen shut
- You have diabetes or a weakened immune system and develop ear pain or discharge

Common questions

Is swimmer's ear contagious?

Usually not. It commonly results from bacteria already present on the skin taking advantage of a wet or damaged ear canal. Normal contact with another person does not usually spread it.

Can swimmer's ear go away without treatment?

A mild irritation may settle when the ear is kept dry, but an established infection can worsen or last longer without suitable treatment. Ear pain or discharge should be assessed rather than treated with leftover or homemade drops.

Why does my ear hurt when I touch or pull it?

Moving the outer ear also moves the inflamed canal skin. Pain when pulling the ear or pressing the small flap in front of the canal is a common feature of swimmer's ear, although it does not confirm the diagnosis by itself.

Can I swim with swimmer's ear?

It is best to avoid swimming while the canal is painful, swollen, or draining. More water can irritate the skin, wash out medicine, and delay healing. Return to swimming after the episode has cleared and any recommended treatment is complete.

Can I use hydrogen peroxide or rubbing alcohol?

Not during an active, painful episode unless a healthcare professional specifically recommends it. These products can irritate inflamed skin and may be unsafe if the eardrum is damaged. Preventive drying products also require caution in people with ear tubes, drainage, previous surgery, or a hole in the eardrum.

Is swimmer's ear the same as an ear infection?

It is one type of ear infection, affecting the outer ear canal. A middle ear infection develops behind the eardrum and often follows a cold. The treatments are different, so an ear examination can be important.

Sources

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