

Ear Infections and Your Pet

- Any pet can develop an ear infection, regardless of ear shape, exposure to water (swimming), or the amount of hair inside the ear canal.
- Underlying allergies or other illnesses can cause ear infections to develop.
- Diagnosis is based on physical examination findings, but diagnostic testing may be recommended to investigate underlying factors contributing to the infection.
- Treatment usually involves applying medication into the ears, but identifying and treating underlying causes helps ensure treatment success and reduces the likelihood of reinfection.

What Is an Ear Infection?

Ear infections generally begin as inflammation of the skin inside the outer ear canal. Once the inflammation is present, discharge, redness, and other characteristics of an ear infection become established.

Any pet can develop an ear infection regardless of ear shape, exposure to water (swimming), or the amount of hair inside the ear canal. Allergies and other systemic illnesses (illnesses that affect the entire body) are commonly involved in establishing ear infections and keeping them going.

The medical term for an ear infection is *otitis*. Ear infections tend to begin in the outer ear canal, but they can progress to involve the middle ear canal and inner ear.

What Causes Ear Infections?

Ear infections in dogs and cats are most often the result of an underlying problem. Conditions that can lead to development of an ear infection include the following:

- Allergies (food or inhalant allergy)
- Ear mites
- Polyps or other growths in the ear canal
- Systemic illnesses such as thyroid disease and adrenal gland disease (in dogs)
- Foreign bodies in the ears, including dirt, sand, or plant material

Ear infections begin with inflammation of the tissue inside the ear canal. Once the inflammation is established, bacteria and yeast take advantage of this environment to infect the ear. This means that when your veterinarian is trying to diagnose and treat an ear infection, the underlying cause must be considered, along with the ear infection itself and any other bacterial or yeast infections that may be complicating the condition.

What Are the Clinical Signs of an Ear Infection?

Ear infections are painful. Some pets may even try to bite someone who attempts to touch their ears or head. The clinical signs of otitis depend on the severity of the inflammation but may include the following:

- Shaking the head or rubbing the head and ears on the floor or on furniture
- Scratching the ears
- Discharge from the ears, which can sometimes have a very bad odor
- Redness of the ear canal and ear flap; the ears may also feel warm when touched

Treatment usually involves applying medication into the ears, but identifying and treating underlying causes helps ensure treatment success and reduces the likelihood of reinfection.

Some pets with severe otitis may cry or groan as they rub and scratch their ears. Some pets scratch so severely that their nails create wounds on the skin around their face, neck, and ears. If the otitis is severe or chronic, the outer ear canal can begin to thicken and become deformed. This thickening

Common Conditions

can make the ear opening very narrow, so cleaning the ears becomes more difficult. Ulcerations on the inside of the ear canal can also result from infection and trauma.

Chronic or severe ear infections that begin in the outer ear canal can damage the ear drum, causing hearing loss. Additionally, progression of the infection into the middle and inner ear can be associated with more severe clinical signs, including development of a head tilt, incoordination, inability to stand or walk, and increased pain.

How Is an Ear Infection Diagnosed?

A medical history and physical examination findings can provide valuable information for your veterinarian when trying to diagnose an ear infection. The medical history may include trying to determine how long the ear infection has been going on, whether it has occurred before, and whether any other signs of illness have been observed. Physical examination findings may reveal evidence of underlying illness, such as thyroid disease (in dogs).

Diagnosis of otitis is usually based on physical examination findings; redness, inflammation, discharge, and other changes within the ear can indicate an ear infection. Determining the cause of the infection generally requires diagnostic testing. For example, ear mites can be diagnosed by examining a small amount of ear debris under a microscope. If your veterinarian suspects a bacterial or yeast infection, he or she may recommend culture and sensitivity testing of the debris inside your pet's ear. To perform this test, your veterinarian places a small, sterile swab into the outer area of your pet's ear canal to collect some of the debris. This material is submitted to a diagnostic laboratory, which can analyze it to determine exactly which bacteria or yeast are present. This information helps your veterinarian determine the best medications to treat the infection. If an underlying illness such as thyroid disease, adrenal gland disease, or allergy is suspected, blood testing or other diagnostic tests may be recommended.

Your veterinarian will also likely clean your pet's ears to remove as much debris as possible before treatment begins.

How Is an Ear Infection Treated?

Your veterinarian will likely prescribe medication (usually ointment or drops) that can be placed directly into your pet's ear to treat the ear infection. If a secondary bacterial or yeast infection is present, oral antibiotics or antifungal medication may also be recommended. In some cases, your veterinarian may recommend oral or topical steroids to help reduce swelling and inflammation and make your pet more comfortable with having his or her ears handled. Of course, identifying and treating the underlying cause of the infection is critical to ensuring treatment success and reducing the chances of reinfection.

Thyroid disease and adrenal gland disease can generally be managed with medication, but therapy is long-term, frequently for the life of the pet. Similarly, pets that develop ear infections as a result of allergies may need to remain on a hypoallergenic diet or receive long-term treatment for inhalant allergies. In contrast, ear mite infestations resolve relatively quickly with treatment and only tend to come back if the pet is exposed to ear mites again.

In many cases, the ears may start looking better after only a few applications of medication. However, it is advised to give all medications as directed for the full course of treatment. Your veterinarian may recommend recheck exams during the course of treatment to monitor how well the condition is responding to therapy. Notify your veterinarian right away if your pet's ears begin to look worse, if the problem seems to return after treatment is completed, or if other signs of illness are observed.

Regular ear cleaning is an important part of treating otitis. If you are uncomfortable cleaning your pet's ears, ask your veterinary team to review ear cleaning procedures with you.

In some severe or chronic cases, surgery may be recommended to stop otitis from happening again.