

Otitis (Ear Infection)

Otitis externa means inflammation of the external ear canal. It is a very common ear complaint in dogs, and cats can also be affected.

What are the symptoms?

A dog with otitis externa may show any or all of the following signs:

- scratching at their ears, shaking their head, or rubbing their ears on the floor
- red, inflamed ears and perhaps scaly skin
- ears that are painful to touch
- an unpleasant smell
- a dirty discharge inside the ear

Otitis can be very painful and distressing and won't get better by itself. Untreated, it can lead to serious problems such as haematomas and middle ear infections.

Why does it occur?

There may be multiple factors involved.

Primary causes of otitis include:

- Allergies (such as atopy and food allergy) – the most common primary cause of otitis in dogs.
- Ear mites – common in cats and puppies
- Foreign bodies – eg. grass seeds

Secondary **bacterial or fungal infection** will often develop, and make the problem much worse.

There may also be other **predisposing factors**, which increase the risk of developing otitis. A moist, dirty, poorly ventilated ear canal provides the ideal environment for the growth of bacteria and yeasts/fungi. These predisposing factors include:

- The shape of a dog (or cat's) ear. A dog's ear canal is deep and curved. This means that dirt, wax and moisture can easily accumulate.
- Some breeds are more susceptible than others are. In spaniels for example, and similar breeds with long floppy ears, the ear flap (pinna) covers the canal opening. This restricts airflow and traps moisture.
- Excess hair inside the ear canals (common in poodles and terriers) can have a similar effect.
- A climate with high humidity +/- high temperature.
- Swimming or bathing where water gets into the ears.
- Excess wax production in the ear canals

Unfortunately, some dogs that are particularly prone to otitis may be difficult to cure completely and often suffer from relapses. Understanding the cause can help with the treatment and prevention of this condition.

Diagnosis:

Before we can start treating your dog, we need to know just what type of otitis they have. We do this by examining the ear, which includes looking inside the ear canal with an instrument called an *otoscope*. Because some cases of otitis can be associated with dermatitis or allergies, we may also want to look at the rest of your dog's skin – after all, the lining of the ear canal is really just a specialised type of skin. The type of treatment used will be different according to what we find.

Occasionally the cause is obvious – for instance ear mites (though very small) can often be seen directly with the otoscope. But ear mites are uncommon in adult dogs and in many cases we will need to take a swab of the discharge from the ear. We prepare and stain a slide of the discharge, and examine it under a microscope looking for bacteria or fungi. This test can be done while you wait, and will usually tell us all we need to know to begin treatment. If we see a particularly nasty bacterial infection, we may advise sending a swab to a pathologist for culturing.

Treatment:

Otitis externa is usually treated by putting drops or ointment directly into the affected ear. The drops will contain one or more of the following ingredients:

- An antibiotic - to kill harmful bacteria
- An antifungal - to kill fungi/yeasts
- An acaricide - to kill ear mites
- An anti-inflammatory - to reduce pain/swelling.

As well as the ear drops we will usually recommend that you use a **cleansing solution** to remove excess wax, dirt and pus from the ear canal. Without proper cleaning, it is often impossible for the ear drops to properly penetrate the ear canal and do their job. This is one of the most common causes of treatment failure.

We may also give antibiotic tablets to treat bacterial infections and/or anti-inflammatory tablets for the pain.

With ear mites all in-contact animals should be treated. You may need to apply an insecticide to the entire body.

Never use ear cleaner or drops not prescribed for your pet. They may be inappropriate and even harmful to the ear. Please turn the page for full instructions on the proper use of dispensed medication(s).

How to treat your dog's Otitis

Done properly, the treatment of your dog's ears will take only a few minutes each day and will ensure the fastest possible resolution of the problem.

Cleaning the ear:

Warm the cleansing solution by standing it in a bowl of warm water. Then lift the ear flap and apply liberally directly into the ear canal, until it overflows. Gently massage the canal between your thumb and forefinger. (The canal can be felt as a large solid tube lying just under the skin below the base of the ear). We can show you how to do this. Massage for 10 to 20 seconds to break up the wax - you should hear a squelching noise as you massage. Unless the ear is really sore, your dog may even enjoy this, because they've been trying to scratch this spot for ages!

Next (if they haven't done it already) let your dog shake its head and shake out some of the dirt and wax from the ear canal. (You'll probably want to do this outside!) Then, get some cotton wool and wipe away the visible dirt and wax. Repeat this process until the fluid coming out no longer looks dirty.

How often you do this depends on how dirty the ears are and how bad the infection is, but usually we recommend **once daily for 2-3 days and then twice weekly** until the problem is resolved.

If you are very careful you can use a cotton bud to clean the skin folds around the base of the ear, but never put a cotton bud down into the ear canal itself - you'll just push the wax further in!



Ear drops:

Shake the drops well before use. Then lift the ear flap and apply the drops directly into the ear canal and work them in by massaging the base of the ear. We'll show you how to do this. The label on the bottle will tell you how many drops to use. Normally you'll use them **twice daily for 10-14 days**, but it differs depending on the type of drops being used.

Follow the directions on the label!

Note: If you have used a cleansing solution, you should ideally wait a few hours before putting the ear drops in. If you don't, the drops will be diluted and shaken out along with the cleansing solution, and they won't work!

Summary of treatment plan:

- Use medication according to the label directions.
- Use the ear cleansing solution daily for a few days and then twice weekly.
- For most cases (with the exception of ear mites), use the ear drops twice daily for 10-14 days.
- Continue with the cleansing solution for 1-2 more days after you finish the ear drops.
- Make an appointment for a recheck as soon as the treatment course is finished (see below).

Rechecks are very important!

At the end of the treatment, it is very important that you make an appointment and bring your pet back for us to recheck the ears. Some cases may require a longer course of treatment for a complete cure, and you won't be able to tell this yourself. Most ear drops contain anti-inflammatory drugs that reduce the redness, swelling and soreness, but if the infection hasn't resolved, the problem may recur soon after you stop treatment. And when it comes back next time, it's much harder to decide how best to treat the problem, if we don't know how well the medication worked the first time!

If everything seems to be going OK, we suggest you stop using the ear drops 2-3 days before you come in for the recheck. Give the ears a final clean the day after you finish the ear drops. But don't put anything in the ear on the day of your appointment, as we'd like to examine the ear without any wet, oily ear drops in it.

If everything's fine, the recheck should be very quick, and there will often be no charge. However, if there is still a problem, we can continue or change the treatment - and the consultation fee will be reduced. So please don't forget to bring your pet back for his/her recheck.

Preventing a recurrence of the problem:

- Follow all instructions and make sure that you come back for your recheck(s).
- Check the ears regularly. Come and see us at the first hint of problems before it gets too bad.

Problem Cases:

In severe cases, including those where there is a poor response to treatment, or frequent recurrences, we may recommend one of the following:

- Anaesthesia - allows us to thoroughly clean and examine the ear canal, as well as check for grass seeds, tumours and other abnormalities.
- Culture & Sensitivity - by taking a swab from the ear and sending it to the laboratory, we can identify exactly what type of bacteria is in the ear. We can then use the most effective antibiotic to kill it.
- A work-up for allergies such as atopy or food allergy
- Regular at-home cleaning - every 1 - 4 weeks.
- "Pulse" treatment with antibiotic drops
- Surgery - may be required in severe cases, to alter or even remove the ear canal, but this is rare.