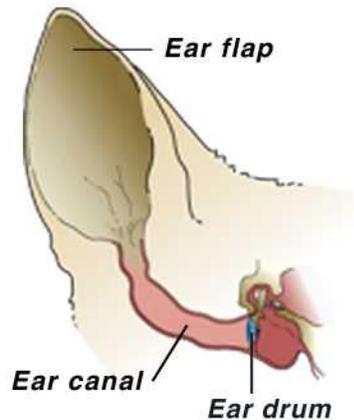


OTITIS EXTERNA (EAR INFECTIONS)

How common are ear infections in dogs?

Infection of the external ear canal (outer ear infection) is one of the most common types of infections seen in dogs. It is called *otitis externa*. Some breeds, particularly those with large, floppy or hairy ears like Cocker Spaniels, Miniature Poodles or Old English Sheepdogs, are more prone to ear infections, but ear infections may occur in any breed.



What are the symptoms of an ear infection?

Ear infections are painful. Many dogs will shake their head and scratch their ears trying to get the debris and fluid out. The ears often become red and inflamed and develop an offensive odor. A black or yellowish discharge commonly occurs.

Don't these symptoms usually suggest ear mites?

Ear mites can cause several of these symptoms, including a black discharge, scratching, and head shaking. However, ear mite infections occur most commonly in puppies and cats. Adult dogs may occasionally contract ear mites from puppies or cats that are infected. Ear mites will create an environment within the ear canal that often leads to a secondary bacterial and yeast (fungal) infection.

Since these symptoms are similar and usually mean an infection, why can't I just get some ear medication?

There are several kinds of bacteria and at least one type of fungus which commonly cause ear infections. Without knowing the kind of infection present, we do not know which medication to use. In some cases, the ear infection may be caused by a foreign body or tumor in the ear canal. Treatment with medication alone will not resolve these problems. It is important that your dog be examined to ensure that the eardrum is intact. Administration of certain medications can result in loss of hearing if the eardrum is ruptured. This can only be detected by a thorough ear examination by your veterinarian.

How do you know which drug to use?

First, the ear canal is examined with an otoscope, an instrument that provides magnification and light. This examination allows your veterinarian to determine whether the eardrum is intact and if there is any foreign material in the canal. When a dog is in extreme pain and refuses to allow the examination, it may be necessary to sedate or anesthetize the dog for a thorough examination.

The next step is to examine a sample of the material from the ear canal under a microscope to determine the type of organism causing the infection. Microscopic examination is important in helping the veterinarian choose the right medication to treat the inflamed ear canal. Culture and sensitivity tests are often used in severe or chronic ear infections.

How are ear infections treated?

The results of the otoscopic and microscopic examination usually determine the diagnosis and course of treatment. If there is a foreign body, wax plug or parasite lodged in the ear canal, the

dog is sedated for removal. Some dogs must be sedated to allow a thorough ear flushing and cleaning. Cytologic study of debris from the ear canal determines which drug to use. Many dogs will have more than one type of ear infection present (e.g., a bacterium and a fungus, or two kinds of bacteria). This situation usually requires the use of multiple medications or a broad-spectrum medication.

An important part of the evaluation of the patient is the identification of underlying disease. Many dogs with chronic or recurrent ear infections have allergies or low thyroid function (hypothyroidism). If underlying disease is suspected, it must be diagnosed and treated or the pet will continue to experience chronic ear problems.



Otoscopic exam of ear canal.

What is the prognosis?

Nearly all ear infections that are properly diagnosed and treated can be successfully managed. However, if an underlying cause remains unidentified and untreated, the outcome will be less favorable. Several examinations may be needed before the process is complete and we can expect ultimate success.

How important is it to treat an ear infection?

Dogs with ear infections are miserable. Their ears are a source of constant pain resulting in head shaking and scratching. Head shaking and scratching can also cause broken blood vessels in the ear flap called an ear hematoma, which requires surgical treatment. Chronic ear infections can penetrate the eardrum and result in an internal ear infection and permanent hearing loss.

My dog's ear canal is nearly closed. Is that a problem?

Closing of the ear canal is another result of a chronic ear infection. This is known as *hyperplasia*. There are medications that can shrink the swollen tissues and open the canal in some dogs. Severe cases of hyperplasia will eventually require surgery.

What is the goal of ear canal surgery?

The surgery for a closed ear canal is called a lateral ear resection. The goal of the surgery is to remove the vertical part of the ear canal and to eliminate the swollen tissue from the horizontal canal. Removing the vertical canal should be successful, but removal of large amounts of tissue from the horizontal canal is more difficult. In some cases, the entire ear canal is surgically removed which may result in permanent impairment of hearing.

Is there anything I need to know about administering medication in the ear?

It is important to get the medication into the horizontal part of the ear canal. Unlike our ear canal, the dog's external ear canal is "L" shaped. The vertical canal connects with the outside of the ear and is the upper part of the "L". The horizontal canal lies deeper in the canal and terminates at the eardrum. Our goal is to administer the medication into the lower part of the "L" - the horizontal ear canal.

The ear canal may be medicated by following these steps:

1. Gently pull the earflap straight up and hold it with one hand.
2. Apply a small amount of medication into the vertical part of the ear canal while continuing to keep the earflap elevated. Hold this position long enough for the medication to run down to the turn between the vertical and horizontal canal.
3. Put one finger in front of and at the base of the earflap, and put your thumb behind and at the base.
4. Massage the ear canal between your finger and thumb. A squishing sound tells you that the medication has gone into the horizontal canal.
5. Release the ear and let your dog shake its head. Many medications will contain a wax solvent and you will observe debris leaving the ear as your dog shakes its head.



If a second medication is to be used, apply it in the same manner.

When all medications have been applied, clean the outer part of the ear canal and the inside of the earflap with a cotton ball soaked in some of the medication. Do not use cotton tipped applicators to do this, as they tend to push debris back into the vertical ear canal.

*This client information sheet is based on material written by Ernest Ward, DVM.
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