

Medicine: Ear problems

Skin and ear problems constitute about 75% of the non-preventative health visits in dogs. Skin and ears problems that are often related (see the article on Allergies). How do you know your dog (or rarely cat) has an ear problem? What are the causes? What can be done to fix the problem? How do you keep it from coming back? These questions are asked quite frequently. Unfortunately, with ear problems there are no easy answers and ear problems are frequently chronic and recur.

Symptoms of a dog with an ear problem are:

- head shaking
- odor from ears
- discharge from ears
- swollen ear pinna (the floppy part of the ear)
- scratching at the ears
- pain when the ears are touched
- head tilt, dizziness

These symptoms can vary in intensity and can be in one ear or both. If your dog is exhibiting any of them, they need to be examined.

What are the causes? Most people who bring in their dogs for an ear infection think that they have ear mites. This is rarely the case. Ear mites are a common cause of ear infections in young puppies and kittens but rare in a well cared for adult dog.

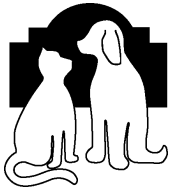
First of all, the infections that dogs get are yeast and bacterial organisms that are normally found in the ear canal. They're re not really all that contagious. The infection is secondary to another problem in the ear.

- **Conformation:** dogs with heavy ears narrow canals, and heavy ears are at risk of infection because the ear conformation traps heat and moisture. Heat and moisture in the dark ear canal act as an incubator. The ear canals of dogs are long and somewhat vertical, letting a large amount of water to be trapped. Breeds: Poodles, Spaniels, Retrievers, Sharpeis, and Bichons

- **Excessive Moisture:** Dogs that swim a lot or get bathed frequently or live in a high humidity climate

- **Excessive Wax Production:** due to inflammation in most breeds, or a primary problem in Spaniels from skin maturation or glandular disorders

- **Trauma/Irritation:** from foreign material (such as foxtails and grass awns), cotton



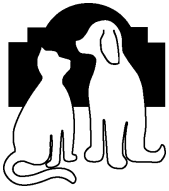
tipped applicators (Q-Tip's), Topical medication irritation

- **Obstruction:** Severe inflammation/infections can decrease the diameter of the ear canal. Tumors can block the canal as well
- **Systemic disease:** Immune suppression, concurrent disease, Auto-Immune skin disease
- **Allergies:** Very, very common. Allergies can cause skin and ear problems, or just ear problems
- **Miscellaneous:** sun exposure, fly bites, vascular disorders, hypothyroidism

Of all of the causes, we see most commonly: allergies, conformational, water, and excess wax production most commonly. All of these causes lead to inflammation or a decrease in immunity of the ear, which allows the bacteria, and yeast in the ear grow to large numbers.

What do we do if your dog is brought in for an ear problem? This is a two-step process. First the infection needs to be treated. But also, almost more importantly, the cause needs to be addressed as well or the infection will come back.

- First a detailed history is taken. Questions about other skin problems, previous ear problems, swimming/bathing etc. are all very important to help and find the cause.
- Next a thorough physical examination is performed. This will include a skin exam as well as looking down the ears with an otoscope. If your dog is difficult for this some sedation maybe required
- A swab will be used to collect some discharge. This swab will be used to make a slide to check under a microscope to see what the infection is. It could be yeast, bacteria, or both. Different organisms are treated with different medications.
- A culture may be taken as well. We take cultures if the infections are recurrent, there is severe pus or bleeding from the ears, or the eardrum is ruptured. A ruptured eardrum is VERY common with ear infections. They require more aggressive treatment. A ruptured eardrum not treated aggressively enough is the most common cause of recurrent ear infections in dogs. Cultures tell us exactly what the organism is, and more importantly, what antibiotic is best suited to treat the infection.
- The ears will then be cleaned/flushed. This allows for a through evaluation of the ear canal and gives a fresh start for home care. If your dog is uncooperative or if a deep flushing is required, then anesthesia is recommended.
- Medications will be sent home. For a mild infection, topical medication is used. For severe infections or eardrum ruptures, oral medication will be required. As with any medication, there is a chance, although small that the medication may make things worse, either due to irritation or a reaction, or by creating a superinfection of resistant bacteria. The mainstay of treatment though is to use a good quality ear cleaner. The goals of using a cleaner are to clean out



wax and debris, dry out the ear (astringent), and lower the pH of the ear. All of these help to reduce risk of recurrence. The best cleaners have acetic or lactic acid as the primary ingredient.

- The re-check appointment is crucial to make sure the infection is gone. We generally re-check in 10 days for uncomplicated cases and at 7 and 30 days for complicated ones.

The infection is gone, now what? Clearing the infection in most cases is the easy part. Keeping the infection from coming back is more difficult.

- Keep those ears clean. Using the cleaner every week religiously is one of the best things that can be done. It takes about 5 minutes once a week. While not a guarantee against re-infection it really helps a lot.

Treat the cause:

- Conformation: keep those ear canals free of hair, keep the underside of the hair flap shaved.

- Keep moisture levels low. After swimming and bathing, pour in the cleaner and massage well. It has astringent properties and will help to dry the ear canal

- Wax production: there are various drugs and solutions to do this. They need to be used religiously as well. If these are needed, your veterinarian will let you know.

- Allergies need to be treated. Please read the article about allergies for more information

- Hypothyroidism (low thyroid level) is easy to treat with a thyroid supplement. A simple blood test can test for this disease

- Kill all ear mites. Pretty easy to do.

- For the other, rarer causes most can be treated with medication.

I'm doing everything right, and the ears are still a problem. Unfortunately, we see too many dogs that have had chronic changes to the ears or won't respond. With every infection, scar tissue and mineralization of the canal occurs. This leads to increased risk of infection. Eventually, the ear canal gets so small that the infection can no longer be treated with medication alone. These dogs are candidates for a surgical approach to relieve their symptoms. For these advanced surgical procedures, we refer to specialists. For unresolved ear cases, we also refer to dermatologists. Veterinary dermatologists also deal with ears (remember ear and skin problems are related.)