

Dog Tips

Put This in Your Dog's Ears to Nix Nasty Infections

Study shows it brings symptomatic relief against all bacteria species tested, including multiple strains of drug-resistant bacteria. A second solution for resistant infections effectively zaps even pseudomonas and MRSA. Plus, the daily TLC trick to prevent these nasties in the first place.

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STORY AT-A-GLANCE

- Otitis externa inflammation or infection of the outer ear canal is a common problem in dogs, but preventing it is easy
- An ear infection is caused by a fungus (typically yeast) or much more commonly, bacteria
- It's extremely important to find out what type of organism is causing your dog's ear infection so that the correct medication is given
- Nontoxic alternatives such as manuka honey and green clay may also provide symptom relief in dogs with resistant bacterial ear infections
- Prevention is the best cure for your dog's ear infections, which means checking her ears daily and cleaning them as often as necessary

Editor's Note: This article is a reprint. It was originally published November 28, 2018.

Recurring ear problems are very common in dogs. Otitis externa is the medical term for inflammation or infection of the outer canal of the ear, and some dogs are more prone to the condition than others. I suspect many persistent ear infections in dogs are treated, but never actually resolved. I also think we don't talk enough about the importance of routine ear maintenance for canine companions.

There are two basic causes of ear problems in dogs: **chronic inflammation**, and infection. Untreated inflammation can lead to infection. If your dog's ears are warm to the touch, red, swollen or itchy, but there's little to no discharge, chances are the problem is inflammation. However, if one or more of those symptoms is present along with obvious discharge, it's usually a sign of infection.

How Dogs' Ears Become Inflamed

1. The most common reason for ear inflammation in dogs is allergies. An allergic response to food or something in the environment can cause inflammation throughout your pet's body, including the ears. A dog with allergy-related ear inflammation will sometimes run his head along furniture or the carpet trying to relieve his misery.

He may also scratch at his ears incessantly, or shake his head a lot. If you see any of these behaviors, check your dog's ears for redness and swelling.

- 2. Another cause of ear inflammation is moisture, also known as "swimmer's ear." We see this primarily during the summer months when dogs are outdoors playing in lakes, ponds and pools.
 - Wet ear canals and a warm body temperature are the perfect environment for inflammation and/or infection to develop. That's why it's important to thoroughly dry your dog's ears each time he comes out of the water, has been outdoors in the rain or snow and after baths.
- 3. The third major reason for ear problems is wax buildup. The presence of earwax is normal, but dogs have varying amounts. Some dogs need their ears cleaned daily, while others never have a buildup. Certain breeds produce more wax than others, such as Labradors and other retrievers who tend to love the water. If you have one of these breeds, you should get your dog accustomed to having her ears cleaned while she's a puppy.

Other breeds, such as Bulldogs, Cocker Spaniels and Poodles can also produce an abundance of wax that needs regular attention.

When Inflammation Turns to Infection

Ear infections in dogs usually involve the outer canal, which is surprisingly deep. The medical term for these infections is otitis externa, but if the infection recurs or never really clears, we call it chronic otitis. There are a number of things that can cause otitis including:

- Foreign material in the ear, such as from a plant like a foxtail
- Water in the ear that creates a moist, warm environment
- Excess glands in the ears that produce wax and sebum
- Narrowing of the ear canal
- Heavy, hanging ears

If your dog has an ear infection, it's very important to identify whether it's a bacterial or fungal infection, or both, in order to treat the problem effectively.

The Difference Between Fungal and Bacterial Ear Infections

By far, the most common cause of fungal ear infections in dogs is yeast. Yeast is always present on the bodies of animals, but when the immune system isn't in prime condition, the fungus can grow out of control and cause an infection. Most dogs prone to yeast infections need to have their ears cleaned and dried frequently. If the problem seems chronic or there's a persistent infection that just won't clear up, there's probably an underlying immunological cause that should be investigated.

For much more information on yeast, including how to deal with yeasty ears, view my video and article on **yeast infections in dogs**. Bacterial infections of the ear are actually more common than fungal infections. Bacteria are either pathogenic or nonpathogenic. Pathogenic bacteria are abnormal inhabitants of your pet's body, picked up from an outside source, for example, contaminated pond water.

Nonpathogenic bacteria are typically staph bacteria that are normal inhabitants of your dog's body. Occasionally these bacteria can overgrow and overwhelm the ear canal. Any normal, helpful bacteria can grow out of control and cause an infection in a dog with an underperforming immune system.

Why an Accurate Diagnosis Is so Important

Veterinarians diagnose yeast infections with cytology, which means looking at a smear of the ear debris under a microscope. An accurate diagnosis of a bacterial ear infection requires an ear culture. Your veterinarian will swab your dog's ear and send the sample to a lab to determine what type of organism is present, and what medication will most effectively treat it. Never let your veterinarian simply guess at what bacteria is causing your pet's ear infection. Instead, ask them to find out.

It's very important to finish the medication your veterinarian prescribes, even if your dog's ear infection seems to clear up before the medication is gone. Stopping the medication early can lead to regrowth of resistant organisms. In addition, while your dog is being treated for an ear infection, be sure to keep his ears clean and clear of gunk so the topical medication you put into the ears can reach the infected tissue.

Natural, Nontoxic Treatments for Bacterial Ear Infections

Unfortunately, these days more and more ear infection culture results are showing the presence of bacteria that are resistant to most conventional medications. These are cases in which complementary therapies are not only a last hope, but can provide highly effective, nontoxic relief.

One example: A 2016 study tested the effectiveness of **manuka honey** to treat bacterial ear infections in 15 dogs.¹ Researchers applied 1 milliliter (mL) of medical grade honey in the dogs' ears for 21 days. The results showed the honey "promoted rapid clinical progress," with 70% of the dogs achieving a "clinical cure" between seven and 14 days, and 90% by day 21.

In addition, the bacteria-killing activity of the honey worked against all bacteria species tested, including multiple strains of drug-resistant bacteria. It's important to note that it doesn't appear the antimicrobial activity of honey is enough on its own to resolve every ear infection. Most of the dogs in the study had complete symptom relief by day 21; however, several still had bacterial infections.

Another remedy for resistant ear infections that's receiving a lot of attention is medicinal clay. Green clay has been shown to effectively treat a variety of bacteria that have been implicated in chronic ear infections, including pseudomonas and MRSA.²

Preventing Ear Infections

As I mentioned earlier, some dogs are much more prone to ear infections than others. If your pet is one of the unlucky ones, I recommend checking his ears daily or every other day at a minimum. It's wax, moisture or other debris collected in the outer ear canal that invites infection.

The solution is simple, but you must do it consistently: Clean your pet's ears when they're dirty. If his ears collect a lot of wax every day, they need to be cleaned every day. If his ears don't produce much wax or other gunk you can clean them less often, but you should still check them every day and take action as soon as you see the ear canal isn't 100%

clean and dry.

If you think your dog might already have an ear infection, it's important to make an appointment with your veterinarian before you begin a cleaning regimen. In many cases an infection leads to rupture of the eardrum, which requires special cleaning solutions and medications. For healthy canine ears, a few of my favorite cleaning agents include:

- Witch hazel
- Organic apple cider vinegar mixed with an equal amount of purified water
- Hydrogen peroxide, a few drops on a cotton round dabbed in coconut oil
- Green tea or calendula infusion (using cooled tea)
- One drop of tea tree oil mixed with 1 tablespoon coconut oil (for dogs only never cats)
- Colloidal silver

Please never use rubbing alcohol to clean your dog's ears! It can cause burning and irritation, especially if the skin is inflamed. Use cotton balls or cotton rounds only to clean the inside of the ear canal. You can use cotton swabs to clean the outer area of the ear, but never inside the canal, as they can damage your dog's eardrums.

The best method for cleaning most dogs' ears is to saturate a cotton ball with cleaning solution and swab out the inside of the ear. Use as many cotton balls as necessary to remove all the dirt and debris. Another approach is to squirt a small amount of solution directly into the ear, then follow with cotton balls to wipe the ears clean. However, this method may make your dog shake her head wildly, drenching you in ear cleaning solution!

Just a few minutes spent cleaning and drying your pet's ears as necessary (this means daily, in many cases) will make a huge difference in the frequency and severity of ear infections — especially in dogs who are prone to them.

Sources and References

dvm360 September 24, 2018

¹ <u>Veterinary Dermatology. 2016 Apr;27(2)</u>

² Scientific Reports, 2016; 6: 19043