

DOG EAR INFECTIONS: ULTIMATE GUIDE FOR DOG LOVERS

Dog ear infections are a known menace to dogs and their owners as they can be difficult to treat and are usually accompanied with an immense amount of pain and discomfort. Apart from the sense of smell, hearing is the next most important of a dog's senses as they are enhanced to pick up sounds at frequencies much lower than the human ear can detect. Unfortunately, dogs are extremely prone to ear infections and even though you ensure that your dog stays clean, it is almost impossible to stop him from running in the dirt. These infections are often recurrent, i.e. they keep coming back even after treatment. If you notice that your dog is constantly scratching at his ears until they appear reddish or sore then it is possible that he might have an ear infection. If this infection, whether mild or severe is left untreated, it can escalate to more severe problems for your dog, hence it is important that you pay close attention and treat infections as soon as they are noticed. This piece seeks to throw more light on the types, causes, symptoms and possible remedies for dog ear infections, and we will also look at different ways in which these infections can be avoided.

Types of Dog Ear Infections

Ear infections in dogs are generally of two types; the first kind is '**otitis media**', known to affect the middle and inner ear which is often a result of the spread of infection from the outer ear, and the second is '**otitis externa**', which occurs in the external or outer ear canal. These infections, if noticed early can be handled by your local veterinarian. It is important to note that the key to efficient treatment of these infections is early detection, so you should always pay close attention to your dog in order to notice any change in his behaviour.

What are the Causes of Dog Ear Infections?

The ear canal in dogs is structured in such a way that it tends to hold in fluid, thus leaving room for growth of bacteria. This is why dogs are so prone to ear infections. The causes of these infections depend on the kinds of ear infections your dog has.

For otitis externa, some of the most common causes are;

Yeast & Bacteria: these are the most common sources of ear infections for dogs. Usually due to a primary irritation, they cause ulceration and inflammation of the outer ear canal which leads to wax build up.

Seeds from grass: this is a major cause of otitis externa in the spring and summer time. They are usually noticed during a medical check-up.

Ear Mites infestation: mites are minute organisms that are seen (with an otoscope) moving in the ear canal. They are common in puppies and are extremely contagious and spread rapidly.

Allergies: this is a common underlying cause of ear inflammation in dogs. These allergies lead to redness of your dog's ears accompanied by the frequent itching. When an allergy is not immediately taken care of, bacterial growth will come along as a secondary infection.

Exposure to moisture: moisture will create a healthy growing environment for yeast and bacteria in your dog's ears, which could escalate to more serious infections.

Other causes of otitis externa are; adverse reaction to drugs, thyroid gland disorders, hair in the ear canal, injury, build-up of wax, excessive cleaning, endocrine gland disorders, untreated injuries, meningitis, virus, foreign objects etc.

For otitis media; these infections usually occur as a result of symptoms or infections of otitis externa that were left untreated. The infections of the outer ear canal can spread to the inner ear or middle ear.

What other factors could lead to ear infections in dogs?

This is a frequently asked question by many dog owners. Some factors can be changed while others cannot and therefore have to be managed.

1. His Ear type or Breed

The kind of ears your dog has determines how prone he is to these infections. Ear infections are mostly seen in floppy-eared dogs e.g. basser hounds, schnauzers and poodles as they have hairy inner ear flaps. Dogs with long ear flaps like spaniels, retrievers etc. provide a dark moist environment which could serve as a healthy place for bacterial and yeast growth.

2. His Diet

Food allergies often pose as underlying problems that show up as ear infections in dogs. If your dog feeds on a high sugar or grain diet then he is at a much bigger risk of ear infections than dogs with healthier diets. Yeast is present in every dog's body, but a high carbohydrate

intake will feed the yeast, causing it to grow past a healthy level thus causing a foul build-up that usually occurs in his ears.

3. His Environment

If you live in a swampy or usually rainy environment then you have to be extremely vigilant with your dog. Bacteria thrives in moist areas and if your dog's ears are not well dried after he has been out in the rain, it could lead to bacterial growth in his ear canal thus causing an infection. Chronic bacterial ear infections are usually the hardest to treat as they can spread rapidly into the inner ears.

4. His lifestyle

Does your dog love swimming? If yes then you just have to be very watchful of him. Ensure that his ears are perfectly dry after every swim to avoid growth of bacteria and yeast. Dogs love the outside and love to run in the grass. Unfortunately, this is where they might pick up grass seeds or parasites (mites) that work their way into their ears and cause infections.

How will I know my Dog has an Ear Infection?

Ear infections in dogs are quite easy to notice as dogs are very expressive especially when they feel any sort of discomfort. The most common symptoms of a possible ear infection in canines are;

- Sweet or fishy smelling odour emanating from his ears
- Continuous scratching of the ears
- impaired hearing
- Loss of balance
- Redness and swelling
- Bloody or coloured discharge
- Scabs and crusts on outer or inner ear
- Frantic head shaking or tilting
- Strange eye movements
- Loss of hair around the ear lobes
- Walking in circles

If you notice a frequent display of the above outlined symptoms in your furry friend, then it is time to take him to your vet doctor.

What happens to my Dog when his ear gets infected?

When your dog has an infection, his ear canal will become slightly red in colour, showing obvious signs of inflammation. The lining in the inner ears become thickened and a large amount of wax will be produced. Yeast and bacteria will grow and thrive in these conditions and cause more inflammation, thus worsening the infection. At this level of infection, his ears become very painful and this is when the shaking and tilting of the head becomes obvious. If left untreated, the extreme results of these symptoms are a very narrow ear canal with thickened skin, a breached ear drum and a severe infection of the middle and inner ear.

How will my dog be diagnosed with ear infections?

Your dog can only be diagnosed with an ear infection by your veterinary doctor. These infections are usually examined with the use of an otoscope (medical device used to look into the ear) to have a deep look into the ear canal. If your dog has an infection, the skin inside his ear canal appears deep red. The kind of discharge released from his ears can also be identified and samples will be collected and taken to the laboratory for further tests to determine the exact type of yeast, bacteria or parasite that is causing the infection. Since the canine ear canal makes a U-turn at the end, your vet will have to pull on the ear lobes to straighten the canal in order to enable him have a clear view of the ear drum. Infections of the middle ear are usually characterised by the presence of fluid or pus situated behind the ear drum and this observation will be used by your vet doctor to determine if your dog has an outer, middle or inner ear infection so as to enable him choose the most suitable treatment. However, in order for your vet to make carry out a correct diagnosis of the infection; he/she will have to be provided with ample information about your dog's medical history. The following information is usually required from dog owners;

- Duration of the symptoms
- What is your dog's current diet?
- What medication your dog is currently on?
- Does your dog have any allergies?
- How often are your dog's ears cleaned?
- Are the hairs in his ears trimmed?

- What are his recent activities?
- Has he had ear infections in the past? How often?

When all the needed information has been given to the vet, he will then begin to examine your dog's ears. The vet will check for vital signs of infection and bacteria. The examination process might include;

- Search for vital signs of infection like redness, crusts, swelling etc.
- Gentle touch of ears to check the level of pain
- Collection of tissue sample from the ears
- Examination of tissue sample collected from ear and tissue culture
- Deep examination using an otoscope
- X-rays and biopsies for the determined extreme cases

Will my Dog need an Anaesthetic during Diagnosis?

The answer is yes! Ear inflammation and infections come with so much pain and once the source of the infection has been located, your vet will need to begin intensive cleaning of your dog's ears. The ear canal is normally very sensitive to touch and gentle flushing or cleaning of the ears in order to remove all the exudate can be very uncomfortable, time consuming and painful for your dog, therefore he will have to be sedated. Your dog also needs to be sedated as these procedures are extremely precise and any sudden movement or jerks can lead to long term or permanent ruin to his ear drum.

How will my Dog be treated?

Most vet doctors will administer pain and infection relieving medications on your dog right away in order to make him more comfortable. Main treatments will begin immediately after your vet has gotten the test results back and has diagnosed the kind of ear infection your dog has. Depending on the information gotten from the test results, your vet doctor will decide if your dog should continue on the previous medication or he would need more effective ones.

Remedies for Dog Ear treatment

Medications for dog infections differ in intensity depending on the severity of the case and usually vary from natural home remedies, homeopathic remedies to topical and oral antibiotics as outlined below.

1. Natural Home Remedies for dog Infections

Some antibiotics administered to dogs put them at the risk of temporarily losing their sense of hearing with continuous use over time. This is where natural remedies come in. Depending on the severity of your dog's ear infection, natural remedies could be considered as an alternative source of treatment. It is important to note that prior to the administration of these natural remedies to your dog, you need to make sure his ears are thoroughly cleansed first so as to remove any built up dirt or debris in order to give the treatment free access to function. To clean your dog's ears, you will need;

- Water(warm)
- Cotton balls and swabs

To safely clean your dog's ears in a way that will be comfortable for him, you should;

- Ensure that the drops you are administering are at room temperature and slightly warmed. Drops that are too hot or cold can lead to shock or worse, increase the damage caused by the infection.
- Using cotton balls, gently wipe your dog's ears till they become dry
- Massage the base of your dog's ears gently, this will make him shake or tilt his head thereby allowing the treatment go deeper into his ears.

In the following segment, we will outline five top natural remedies for ear infections in dogs. These remedies are perfect for all breeds of dogs but you are advised to consult your vet doctor for clarity before administering them.

I. Organic Apple Cider Vinegar

Organic apple cider vinegar has great anti-bacterial, anti-viral and anti-fungal properties that can cure ear infections in your dog. Vinegar contains acetic and malic acid which aids to get rid of debris and residual dirt from the ears. You can use a syringe or a cotton ball soaked in the solution to administer at least ten drops of this mixture into your dog's ears daily for two

weeks. Ensure that your dog has no open wounds in his ears before using this remedy, if he does, you should dilute the solution using distilled water before administering it. Organic apple cider vinegar can be used daily as it prevents the growth of bacteria and yeast and also cures chronic ear infections in dogs over time.

II. Garlic Oil Drops

Garlic is known to have great anti-bacterial, anti-fungal and anti-microbial properties and is widely used in natural medicine to treat a large array of infections. Once garlic is crushed, the compound ‘allicin’, which is the active ingredient in garlic that fights infections, is released. Garlic oil gets rid of ear mites, treats inner ear fluids and swelling, prevents growth of bacteria in the ear and helps to keep the inner and middle ear canals clean and free of infections. To make the drops, you will need garlic, cheese cloth, olive oil (virgin), clear and dark coloured jars.

Instructions

- Cut the garlic into thin slices and place them in the clear jar
- Pour the olive oil into the jar till it completely covers the garlic and almost fills the jar
- Use few layers of cheesecloth to cover the top of the jar while stretching it so it does not touch the oil
- Use an elastic band to hold the cheesecloth in place
- Let the jar sit for about 10-14 days
- Once this period is up, strain the oil into a dark coloured jar in order to separate the garlic
- Store your garlic oil in your fridge

For mites infestation and other infections, administer 10 drops of your natural garlic oil in each ear, twice every day till your dog is completely free of the infection. For general cleaning, administer 10 drops of your garlic oil to your dog in each ear once every week.

III. Coconut Oil Drops

Coconut oil is an effective anti-fungal and anti-bacterial solution. Put 2-3 drops of coconut oil in your dog’s ear, 2-3 times a day for a week to help ward off bacterial growth and prevent infections. Coconut oil also acts as an effective cleansing agent. Dip cotton ball in the solution and use it to clean your dog’s ears often to avoid mites’ infestation.

IV. Boric Acid

The University of Melbourne performed an extensive study that showed that dogs diagnosed with ear infection recovered in two weeks with the use of boric acid. During the course of this research, dog owners were asked to use boric acid for a period of 2 weeks, and at the end of this time frame, it was recorded that over 90% of the dogs that received the boric acid treatment fully recovered from all infections. Boric acid is a strong antibacterial agent and is largely used for the inhibition of bacteria. For treating dog ear infections, place about 2-5 drops in each ear for a period of five days to cure the infections and relieve pain.

V. Aloe Vera Gel

Aloe Vera is awesome for soothing irritated skin. Applying at least two tea spoons of aloe Vera into each ear 2-3 times a day for few days during the infection will cure irritation, redness, itching. In order to fully cure ear infections, you can mix aloe Vera gel with more powerful natural remedies and use them consistently over a long period of time until the infection is gone. Due to the incredible soothing nature of aloe Vera gel, it can be used continuously over an extended period of time on any kind of ear infection without fear of adverse effects.

Natural home remedies bring a safe healing process for your dog. They are gentle but extremely effective mixtures and ointments that will cure and prevent ear infections in a soothing manner so that your dog remains comfortable throughout the process. Although these natural antidotes tend to take longer periods to cure the infections, you can be sure that the process is the safest as your dog is not exposed to harsh chemicals that may cause other problems or ones that he may be allergic to.

2. Homeopathic Dog ear infection remedies

Homeopathic remedies are not entirely common for treating ear infection in dogs but they are known to be very effective. They are mostly used for acute flare-ups and not for chronic dog ear infections. Administration of a homeopathic remedy depends on the kinds of symptoms your dog is exhibiting. Some of the most common ones are;

- **Belladonna:** this remedy is prepared using the entire plant and is used when your dog's ears appear hot and highly inflamed.
- **Pulsatilla:** this is a very helpful remedy for acute flare ups, swelling and redness

- **Hepar Sulphuris:** this is useful for dogs with heavily inflamed ears who also show signs of withdrawal
- **Phosphorus:** this is great for dogs suffering from cuts on the outer ear
- **Tellurium:** if your dog's ear discharge has a fish-like smell and he is experiencing severe hair loss under his ears then tellurium is an excellent homeopathic remedy. This is however very case sensitive so ensure that your dog exhibits all these symptoms before you treat him with it.

Before administering a homeopathic treatment to your dog, be sure to consult your homeopathic veterinary doctor for the right prescription and dosage that will be best for your dog's condition. Homeopathic treatment will require a lot of patience from you as a dog owner as the infections can worsen temporarily due to the fact that they focus on curing underlying issues first before attacking the obvious ones. This means that your dog is being cured from the inside out and the infections will only leave once the deeper issues have been cured. During the course of this kind of treatments, you might notice steam come out of your dog's ears often, this shows that the internal issues that might have led to the ear infections are being cured. Be sure not to administer any other kinds of treatments or supplements during this period as it might suppress the progress already made by the homeopathic treatment and further worsen the infections.

3. Topical antibiotics for dog ear infections

When it comes to effective treatment of dog ear infections, there is usually a wide pool of topical antibiotics to choose from depending on the type and severity of your dog's infection. Most medications are made up of antibiotics mixed with an anti-fungal agent and a steroid in order to make them more effective to combat the infections. Some common topical antibiotics used in the treatment of ear infections in canines are;

- **Tresadem:** made up of an anti-fungal mixed with neomycin as the anti-biotic and a steroid. It is administered in drops.
- **Otomax:** this comes as an ointment. Made up of an antibiotic (gentamicin) combined with an antifungal (clotrimazole) and a steroid
- **Panalogs:** this is a mixture of two anti-fungals known as nyastin and neomycin with an anti-bacterial and a steroid. It comes in various forms, either as an ointment, a cream or as tablets.

- **Mometamax:** made up of the anti-bacterial gentamicin mixed with an anti-fungal and a steroid.

It is important to note that some pets tend to have allergic reactions to some anti-biotic especially neomycin. If you notice that your dog's ears became worse with treatment, discontinue the medication immediately and consult your vet doctor.

4. Oral Anti-biotic for Ear infection in Dogs

Dogs that are undergoing treatment for ear infections often need additional anti-biotic especially for the very stubborn infections. Oral anti-biotic like enrofloxacin are good for persistent bacteria while cephalexin is usually used for tough ear infections. However, Oral anti-biotic is mostly used if the bacteria are seen to be invading the cells instead of living outside the cells.

Please note that if your dog's ear drums appear to be ruptured, you should avoid ear medications that contain alcohol, aminoglycosides and detergents. Anti-biotic are extremely effective for curing ear infections in dogs and in a short period of time. However, be sure to check for allergies before administering them to your dog.

Sometimes, the administered medications don't work and it leaves dog owners in a confused state. There are few reasons why the approved medication for your dog's ear infections might not work. Some of which are;

- Ear canal is constantly moist due to excessive use of ear cleaners
- Presence of yeast and bacteria in the ear leading thus irritating secretions
- Allergies

Are there side effects to these medications?

Unfortunately, the answer is yes! Some dogs may experience swelling, redness or overall irritation while taking some certain kinds of medication. Studies also show that some dogs tend to experience temporary loss of hearing while on anti-biotic medication. Some of the most common side effects include;

- Hearing loss
- Impaired balance
- Diarrhoea

- Weight loss
- Anorexia
- Increased thirst
- Frequent urination
- Enzyme elevation

Some side effects are less common than the ones mentioned above. Some of which are panting, weight gain, heightened appetite, vomiting and change in behavioural pattern.

How can I prevent the occurrence of side effects?

You should inform your vet of any allergies your dog might have as this will help him/her tailor the prescribed medication in a way that it won't cause adverse effects. Anti-biotic should not be administered to dogs that are allergic to gentamicin as they can lead to serious health problems. Medication containing corticosteroids should not be administered to pregnant dogs as it can lead to premature birth and other birth defects. If these medications are administered in high doses over a long period of time, it can lead to delayed wound healing and even permanent loss of hearing.

What is the recommended Dosage?

This depends on what your vet prescribed. You should make sure that you follow your veterinarian's dosage instructions strictly and try to administer all medication to completion even if your dog's ears appear to have healed.

What happens if I miss a Dosage?

It's common for dog owners to miss a dosage but not to worry, if this happens, apply the medication immediately you remember. If the next dose is close to the missed one, skip the missed dosage and continue the regular schedule.

How can I deal with chronic Dog ear infections?

If the infections keep coming back even after your dog has been treated many times, then it could be due to a disorder in his immune system. Firstly, you'd want to rule out a leaky gut problem. If your dog has this problem, he becomes extremely prone to bacterial infections. Some of the causes of a leaky gut are;

- **Drugs and toxins:** this is concerned with unscrupulous use of steroids, flea treatments, inflammatory and anti-inflammatory drugs and also anti-biotic thus causing an imbalance in the healthy amount of gut bacteria.
- **Poor Diet:** constantly feeding your dog with processed foods wheat, rice, food preservatives and additives will lead to a leaky gut. The most recommended diet by experts is the raw diet.
- **Excessive vaccination:** over vaccinating your dog causes severe havoc to his immune system thus causing his system to develop new allergies in a bid balance his immune system.

If your dog is constantly stressed or anxious, then it could cause an imbalance in his endocrine system which could lead to more serious problems. Improve your dog's diet to 95% raw food in order to boost his immune system to be able to combat chronic ear infections. Changing his diet to raw foods will also reduce his carbohydrate intake thus fixing the leaky gut problem.

How can I help my Dog recover from Ear infections?

Early detection, prompt diagnosis and treatment are the keys to a speedy recovery of your dog from ear infections. As a dog owner, you will need to pay ample attention to your dog in this period as certain measures will have to be taken to ensure that he doesn't suffer a relapse. Irrespective of the kind of infection your dog was treated for, some general measures like keeping water away from his ears ,ensuring that he takes all the prescribed medication and taking him for regular check-ups as recommended by your vet are necessary to ensure a smooth recovery process for your pet. Most dogs respond quickly to treatment and the infection clears up on consistent use of the medication. However, there are few reasons why your dog might be taking too long to recover. Some of which are;

- **Sudden change of the cause of infection:** an infection that was formerly diagnosed as bacterial can change to a yeast infection thus rendering some of the prescribed medication useless.
- **Obvious resistance to commonly used medications:** your dog might show resistant or allergic reactions to some medications and in this case, a new set of medications has to be administered.

- **Improper cleansing of the Ear:** your dog's ears have to be properly cleansed or flushed so that the medications can have free access to the source of the infections and work on curing them.
- **Shallow treatment:** in the cases where the ear drum is affected by the infection, you need to ensure that the medications reaches deep into your dog's ears
- **Cutting short his treatment:** it is important that you continue administering the medication to your dog for as long as your vet recommended. Becoming inconsistent or stopping medications when your dog has not fully recovered will lengthen his recovery period.
- **Allergies**

Your dog needs more attention and monitoring in this period. As a dog owner, you have to be vigilant and watch him closely in order to prevent a relapse.

How can I avoid a Recurrence?

A relapse of an already treated infection occurs for various reasons. Most times, the infection persists because it was not completely cured previously. A recurrence of ear infections in dogs mostly occurs when dog owners fail to take their dogs for check-ups after the infection appears to have healed. You can't see deep into your dog's ears so it is crucial to his health that you take him to your vet where he can be thoroughly checked to avoid a recurrence. However, if your dog appears to have ear infections regularly, then it might be due to other potential causes of the problem such as, food allergies, hormonal imbalance etc.

How can I adequately prevent Dog Ear Infections?

For dog ear infections, prevention is always recommended as most times, the infections are not easy to treat. Certain conscious measures have to be taken in order to protect your dog from these infections. Some effective ways to prevent ear infections in your dog are;

- Check his ears regularly for abnormal signs like redness, swelling etc.
- Clean his outer ears using as often as recommended by your vet using a cotton ball dipped in a prescribed solution
- Keep his ears dry at all times especially after baths or time in the pool
- Take him to the groomers often to get excess ear hairs removed or trimmed

- Use prescribed ear flushes often
- Avoid feeding him with foods that are laced with too much carbohydrate and switch up his diet to raw meals often to boost his immune system
- Consult a holistic vet to help prevent ear inflammations caused by allergies
- Ensure he gets tested for thyroid gland abnormalities and treat any hormonal imbalances he may have
- Keep the humidity low in the house with the use of a dehumidifier
- Avoid excessive use of ear cleaners or medications over an extended period of time
- Calm your dog before cleaning his ears as aggressive cleaning can lead to damage of his delicate skin thus leaving him prone to ear infections. Veterinary doctors usually sedate dogs in order to clean their ears effectively.
- Do not use cotton-tipped sticks to clean your dog's ear canal as you may unknowingly push dirt and debris into his inner ear.
- Be sure to follow the prescription correctly and take him to your vet for regular check-ups
- Do not overlook whining or other signs of discomfort your dog might exhibit as these are often signs of an ear infection
- Use only cotton balls to clean his ears
- Keep him away from other sick dogs as ear infections such as mites' infestation tend to be very contagious.
- Treat underlying causes of the infection first to prevent a recurrence

Carrying out effective treatment of dog ear infections can be quite an ordeal as they tend to be very persistent. If your dog has shown any of the above mentioned symptoms then you should take him to a vet to fully assess the situation. Although homeopathic and natural remedies are equally as effective as topical treatment, beginning treatment on your own without the opinion of a vet can be harmful to your dog and possibly lead to more serious health issues. Hence, if you want to use alternative medicine to treat your dog's ear infections, be sure to get the professional opinion of your veterinary doctor first before you administer treatment. As a dog owner and lover, you want your dog to be healthy at all times, however, being as close as you are to your dog, it is easy to forget that dogs are animals and most times do not know how to protect themselves from substances and places that might harm them. This is where your dog needs you the most. We advise that you employ the

preventive measures outlined above every day to ensure that your dog stays happy, healthy and free of any ear infections!