

# Veterinary Specialists of Alaska, P.C. Client Information Sheet: Ear Disease

## **Understanding Ear Disease**

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Ear disease (otitis externa, otitis media) is very common. Signs of ear disease include: head shaking; scratching at the ears; crying if the ears are touched; redness, sores, and/or black, brown or yellow foul-smelling discharge from the ear canals; "hot spots" at the base of ears; hematoma formation on the ear flaps and excessive wax found in the canals. In order to successfully treat ear disease, it is important that the underlying cause for the ear infection be determined.

## What are the causes of ear disease in pets?

Ear infections are associated with a wide variety of causes. Dogs that grow large amounts of hair in their ears (Poodle, ShiTzu, Lhasa Apso, Bichon Frise), dogs with floppy ears (Poodles, Cocker spaniels, Basset hounds, Beagles, Labrador/Golden retrievers), dogs that swim often, and dogs whose ears are plucked repeatedly, cleaned with irritating solutions such as alcohol or peroxide or that have cotton swabs pushed deep down into the canal are all predisposed to the development of ear disease. Some dogs such as the Chinese Shar Pei are born with very narrow (stenotic), folded ear canals that predispose them to infection due to lack of air circulation and drainage.

However, dogs without these risk factors can also develop ear disease. Foreign objects (grass awns, ticks, balls of hardened medication) and polyps or tumors can cause ear disease, often only in one ear. If disease is present in both ears in a young animal, ear mites (especially common in cats/kittens), and allergy (food or environmental) should be considered. In middle-aged to older animals with both ears affected, hormonal imbalances (hypothyroidism, Cushing's disease), and autoimmune diseases (especially if only the ear flap is involved) need to be considered.

A rational step-wise plan to systematically eliminate or "rule-out" the possible causes for your pet's ear disease typically begins with a thorough examination of the ear canal. In many cases, sedation is required to allow this examination. The goal of this examination is to identify any foreign bodies or tumors present in the canal and to determine if the tympanic membrane (eardrum) is intact. Allergy testing is performed to rule out allergies as the underlying cause of ear disease in many patients. Allergy testing may include food elimination diets, intradermal (skin) testing or serologic (blood) testing for atopy. Thyroid and cortisol testing may be recommended to rule out hormonal disease. Biopsy of the ear canal or ear flap may be recommended if autoimmune disease, seborrhea, or tumor is suspected. Failure to find an underlying cause for recurrent ear infections leads to frequent relapses and failed treatment. Consequently, accurate identification of the underlying cause is one of the most important steps in treating and preventing ear disease!

# While looking for an underlying cause, how is the ear infection best treated?

The causative organism(s) must be determined before the ears can be properly treated. An ear swab of the exudate is done and examined with a microscope to evaluate for the presence of yeast, bacteria and ear mites. Depending on the organism found, a bacterial culture and sensitivity may be performed to identify the type of bacteria and what antibiotic is needed to resolve the infection. Often the ear canals are filled with hardened wax, pus and old medication. A thorough ear flush performed under general anesthesia to remove this material is essential for successful treatment. Using the video-otoscope, the ear canals, ear drum and middle ear are viewed on a screen as they are flushed with saline and ear cleaner. Many animals feel better and hear better after this procedure. Ear flushes may need to be repeated monthly until the infection is resolved, though more than one deep ear flush is rarely needed.



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## How long do I need to treat my pet's ears?

Most patients with infections involving only the external canals (otitis externa) are treated with an ear cleaner applied once a day or every other day and with ear drops applied twice a day for 21-30 days. Very long-standing cases or cases with middle-ear involvement may be treated with oral antibiotics or antifungals as well as topical medication and may require 2-4 months of continuous therapy to clear. Some dogs require weekly treatments for life to keep their ear disease under control. For example, some allergic dogs require weekly medicated baths. The ears are flushed and medicated at the same time. It is essential that you use the medication for the length of time prescribed. Many pets will feel better long before the infection is fully resolved deep in the ear canal. Infection will recur and will be more difficult to eliminate if treatment is stopped too soon.

# How often should my dog's ears be re-checked?

Re-examination is performed 2-4 weeks after treatment begins. During this visit, the ear canals are examined with an otoscope, and ear cytology swabs are repeated, to assess progress and response to medication. Treatment and re-examinations are repeated until the ears have returned to a completely healthy condition internally as well as externally. Once infection has resolved, periodic re-checks of the ears are performed by your veterinarian every 2-3 months. This may help prevent infection from re-developing. A maintenance program of ear cleanings and medication for home use can be planned to help prevent relapses.

Plug of debris and hair fills lower ear canal



After removal of debris a large hole in ear drum is visible



We hope that this information pamphlet was helpful to help you. Please do not hesitate to call or ask at your next appointment if you have any questions or concerns.

Your VSOAK Team