

EAR INFECTIONS

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[Every effort has been made to ensure accuracy of information. However, this is not a substitute for prompt veterinary care. Any similarity to other publications is unintentional. Published online at Sealyhealthguard.org, 1/24/12]

Ear infections can be troublesome for many dogs of any breed, including Sealyhams. Problems with the ears can be caused by a number of things, such as foreign materials (spargrass, foxtails, etc.), ear mites, trauma, tumors, or concurring disease such as allergies or hypothyroidism. Because of this, it's important to see your veterinarian for a thorough exam. (Ear mites account for less than 10 percent of ear problems in dogs. Mites cause dark crumbly debris resembling coffee grounds.)

A dog's ear canal is L-shaped, making it hard to see & clean easily. Dogs with pendulous ears have less airflow to the ears. Those with a lot of hair in the ears, like the Sealy, need to have it trimmed & plucked for better air circulation. This moist, warm environment is what encourages microorganisms (bacteria or yeast) to grow. One source even stated that some breeds are more susceptible to ear infections because of the type of skin or glands in the ear canal. This includes the Basset hound, Beagle, Labrador & Springer Spaniel.

Symptoms of an ear infection are shaking, scratching, head tilt, odor from the ear (usually pungent), redness or swelling of the ear flap or canal, discharge, pain around ears, change in behavior. The most common cause of infection is yeast or bacteria (*Staph*, *Strep*, *E. coli*, *Pseudomonas*). Often, both yeast and bacteria are present.

Pseudomonas is a bacterium that can become resistant to antibiotics, so it must be treated decisively & thoroughly.

Persistent or recurring ear infections in both ears often indicate other diseases such as allergies or hypothyroidism. Chronic respiratory conditions can also weaken the immune system and make a dog more susceptible to ear infections. Allergies often cause dermatitis & itchy ears. They also result in inflammation & heat in & around the ears. Hypothyroidism may cause increased thickness of the skin & an increase of ear wax production, which encourages growth of microorganisms.

When you bring your dog to the vet for an ear infection, he'll use an otoscope to examine the ear, check for foreign bodies, look for inflammation & make sure the ear drum is okay. He'll do a thorough exam & take the dog's history. He will take a swab & examine a smear of it under the microscope to see if there are yeast or bacteria present. Many vets use topical products (Panalog, Tresaderm, Mometamax, for example) that contain a combination of antibiotics, antiinflammatories and antifungal ingredients. Several brands are effective for minor to moderate ear infections. If a thorough cleaning and flushing are required, your pet may need to be sedated.

Dr. June Cohron, a Sealyham breeder, ASTC member and veterinarian at the Animal Hospital of Stuarts Draft, Virginia spoke with me on this subject. She often suspects underlying allergies in cases of recurrent infections of both ears. She will suggest a hypoallergenic diet to check for food allergies after just one or two visits for ear problems. The diet will have both a novel [one the dog hasn't had before] protein and novel carbohydrate, like fish & sweet potato or venison and potato. The dog can't have any treats, bones, rawhides or pig ears during this time; those proteins could be what the

dog is allergic to. It takes 6-8 weeks to see if the diet change makes a difference. If the ear problems continue, she then tests for inhalent allergies.

Dr. Cohron takes an ear swab, as described above, and selects topical treatments accordingly. If the ear is particularly nasty or doesn't respond to her first treatment, she will do a culture. This can take 7-14 days. Acidic cleaners help inhibit yeast growth. Active ingredients in acidic cleaners can be acetic acid (vinegar), salicylic acid, malic acid, benzoic acid or boric acid. Some also contain cortisone for inflammation. Bacterial infections, particularly *Pseudomonas*, are inhibited at pH 8 (alkaline). Tris EDTA or T8 are examples of this. She warns that products containing gentamycin (Otomax, Mometamax, Gentocin Otic) must be used with caution because that antibiotic can be ototoxic, leading to deafness.

Antibiotics that some veterinarians use for tenacious *Pseudomonas* infections are oral quinolones such as enrofloxacin or orbifloxacin, Baytril or cefpoxime (Simplicef). Some will treat with oral antibiotics in conjunction with topical ointments or drops and ear cleaner. Some will also use antihistamines or antiinflammatories. Dr. June adds injectable Baytril to bottles of Tris EDTA along with oral Baytril in these tough cases. There is also a Baytril Otic (topical) that contains enrofloxacin & silver sulfadiazine. Silver sulfadiazine helps healing and is effective against *Pseudomonas* and several other bacteria. Tris EDTA binds metals which are important to the bacterial cell wall, thus killing the bacteria. Tris buffers the EDTA to a pH that's not irritating to the ear & to maximize the anti-bacterial effect. Tris EDTA gives extra power to topical antibiotics used with it.

Zymox HC Otic drops contain enzymes that break down the cell walls of bacteria, yeast & also break down wax. HC stands for hydrocortisone, 1%, to help with inflammation & itching. It can also be found without that ingredient. The enzymes in it are lysozyme, which breaks down cell walls, lactoferrin (found in clostrum, milk & saliva) and lactoperoxidase (found in milk & saliva) which are both bactericidal.

The latest issue of Dog Fancy reported that Intervet/Schering-Plough has developed Posatex Otic Suspension, an effective once-a-day treatment for otitis externa. This new product combines antibacterial, anti-inflammatory and antifungal medications: 1% orbifloxacin (broad-spectrum antibiotic), 0.1% mometasone furoate monohydrate (antiinflammatory) and 0.1% posaconazole (a potent antifungal). Ask your vet about it.

Chronic ear infections can cause swelling, hardening or closing of the ear canal; surgery may be required. Proper diagnosis and treatment are important before things go this far.

Dr. June says, "The best prevention of ear problems is minimizing allergies—feed a good consistent diet with just one protein source. For dogs that have some ear sensitivities, cleaning regularly (2-4 times weekly), using some sort of topical antiinflammatory like Synotic, and certainly keeping the ear canals free of clumped hair and debris (though I think over-plucking can lead to inflammation) is important for healthy ear maintenance. Sometimes a low dose of oral prednisone will be successful in controlling the inflammation in the ear canals that then allows the yeast & bacteria to overgrow."

Sources:

- Dr. June Cohron, DVM

- dogearyeastinfection.com
- peteducation.com
- animalpetdoctor.homestead.com
- workingdogs.com

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