

Itch and allergy: Overview

Coping with an itchy pet can be an extremely frustrating experience for you, the pet owner, and can truly test the limits of the human-animal bond. Persistent scratching and chewing by the pet can also result in self-excoriation and open wounds. The following information is intended to provide the pet owner with a basic understanding of the most common underlying causes of itching and allergies in small animals.

The Most Common Causes of Chronic Itching

The common causes fall into two groups: external parasites and allergies. External parasites that most commonly cause chronic itching dermatitis include fleas and sarcoptic mange. We often recommend therapeutic trials for sarcoptic mange in chronically and severely itchy dogs since the mites can be difficult to actually find. We always recommend stepped-up flea control and monitoring for fleas, as flea infestation can really make allergy worse!

What are Allergies?

Allergy is a state of hypersensitivity in which exposure to a harmless substance known as an allergen induces the body's immune system to "overreact." The incidence of allergies is increasing in both humans and their pets. People with allergies usually have "hay fever" (watery eyes, runny nose and sneezing) or asthma. While dogs can rarely also have respiratory allergies, more commonly they experience the effects of allergic hypersensitivities as skin problems. Though there are a variety of presentations, this can often be seen as redness and itching, recurring skin or ear infections, and hair loss. This is sometimes called eczema or atopic dermatitis.

What are the Major Types of Allergies in Dogs?

1. Flea Allergy

Flea allergic dermatitis is the most common skin disease in dogs and cats. For the flea allergic patient, 100% flea control is essential for the pet to remain symptom-free.

"But doctor, I never see fleas on my pet." You may not see them, but that doesn't mean they aren't there. The allergy is caused by the flea's saliva, and it only takes a few bites to induce the problem. Also, the itchy pet often scratches so much that adult fleas are removed, making them hard to find.

"If fleas are the problem, why is my pet still itchy in the winter?" In warm climates or in our homes, fleas may survive in low numbers year-round. Because flea allergy is so common, we recommend that complete flea control be instituted before proceeding with diagnostics for other allergies and that year-round flea control be maintained for all allergy patients.

2. Food Allergy

Some pets develop specific hypersensitivities to components of their diets. The allergen usually is a major protein or carbohydrate ingredient such as beef, chicken,

pork, corn, wheat, or soy. Minor ingredients such as preservatives or dyes are also potential allergens. The diagnosis of food allergy requires that we test your pet by feeding special strict diets that contain only ingredients that he has never eaten before. This is often achieved by feeding a prescription diet for a period of 10 to 16 weeks, and discontinuing all other treats, table scraps, supplements, flavored heartworm preventatives, etc. If the signs resolve, a challenge is performed by feeding the former diet and watching for a return of the itching. If this occurs, a diagnosis of food allergy is confirmed.

3. Atopic Dermatitis

Atopic dermatitis (AD) is an inherited predisposition to develop skin problems from exposure to variety of commonplace and otherwise harmless substances including the pollens of weeds, grasses and trees, as well as house dust mites and mold spores. Diagnosis of AD is made based on the results of intradermal skin testing or by in vitro blood testing. Evaluating the results of these tests helps us compile a list of allergens for a "vaccine" to decrease the pet's sensitivity. Sometimes multiple skin and/or blood tests are necessary to accurately assess the patient's allergies. A food trial to rule out food allergies must be done before a diagnosis of atopic dermatitis can be made.

4. Secondary Infections

Allergies are often the underlying cause of recurring skin and/or ear infections. Bacterial and yeast infections, though secondary to the allergy, can cause an increase in your pet's level of itching. Long-term treatment with antibiotics and anti-yeast medications is commonly required, along with medicated bathing programs.

Can Allergies be Cured?

Unfortunately, there is no cure for allergy and it is usually a life-long problem. We seek to control the signs of allergy and improve the quality of life for both you and your pet. We will try to formulate the best program of management that suits all involved with your pet's care.

Can I have the Itching Treated without the Expense of Diagnostic Testing?

Symptomatic drug therapy can help to reduce itching. Antihistamines help some pets. Steroids, such as prednisone tablets in particular, are often employed to stop the itch. However, without addressing the underlying cause, the itching will return. Long-term use of steroids can result in many health problems. A very promising new medication is available, called Apoquel, which can dramatically reduce itch without the side effects of steroids because it targets very specific inflammation-causing chemicals. However, the best long-term strategy for allergy control is still diagnosis of the underlying cause of the allergy and more specific treatment if possible.

Some options for symptomatic itch relief besides antihistamines and steroids include the following:

Fatty Acid Supplementation

The discovery of anti-inflammatory properties of evening primrose oils and fish oils in humans has led to similar products on the market for our pets. These products are not analogous to the oil supplements that are recommended as food supplements to make a pet's coat shiny; instead; these are true anti-inflammatory drugs capable of relieving joint pain, cramps, and itchy skin. The supplement alone is helpful in 10%

to 25% of itchy dogs; we often recommend its use in combination with antihistamines to boost the efficacy.

Cyclosporine (Atopica)

<u>Cyclosporine</u> is an immune system modulating drug originally developed for use in organ transplant patients, but which is also useful in other immune-mediated diseases. Since allergy is an immune-mediated condition, cyclosporine was investigated as an alternative to corticosteroids and found effective for most patients. Currently this medication is being marketed only for dogs and one dog in three will develop an upset stomach when starting the drug (though this resolves or is manageable with dose modification). It is slow to take action and can be expensive, especially for larger dogs.

Topicals to Try

When using any dip on inflamed skin one should be aware that the use of cool water is considered much more soothing than warm water.

Colloidal Oatmeal Shampoos and Creme Rinse - At first, these products were only available for human use, as powdered soaks to pour into bath water.

Once their value in itch management was determined, their use quickly spread to the veterinary field. Colloidal oatmeal actually pulls inflammatory toxis out of the skin, generally yielding 1 to 3 days of relief. The creme rinses are meant to yield longer acting relief. They are available plain or combined with local anesthetic forumlas to soothe itch.

Lime Sulfur Dip - This product kills parasites, ringworm fungi, and bacteria.

It also dries moist, weeping skin lesions and helps dissolve surface skin proteins that are involved in itchiness. Many veterinary dermatologists recommend it regularly to control itch; however, it has several disadvantages. *It smells terrible*. The sulfur ingredient smells like rotten eggs and this is how your bathroom or bathing area will smell during the pet's bath. This dip can stain jewelry and clothing and will temporarily turn white fur yellow.

Other Shampoos

Itchy skin can be the result of skin infection, excess oil accumulation, yeast infection, even parasitic infection. The list goes on. The shampoo products listed above can be used against any itchy skin disease but it should be noted that there are many other shampoo and creme rinse products that can be used against the specific skin diseases listed. If some other type of shampoo product has been prescribed to you for an itchy skin disease, it is important that you use it allowing at least a good 10 minutes of skin contact time before rinsing.

TEN MINUTES OF SKIN CONTACT IS THE MINIMUM REQUIREMENT FOR ANY MEDICATED SHAMPOO. PREMATURE RINSING WILL NOT ALLOW FOR THE THERAPEUTIC BENEFIT TO BE REALIZED.

Other Topical Products

Topical ceramide – Products such as Allerderm which help restore some of the normal protective components of the skin which has been found to be deficient in these chronic itchy pets

Colloidal Oatmeal Sprays and Lotions - Same principle as the shampoo. These products pull inflammatory toxins out of the skin. Oatmeal products have become very popular and are available as shampoos, creme rinses, soaks, sprays, and lotions.

Humilac Spray - This moisturizer may be applied as a spray or mixed in water as a dip. It is helpful for dry skin but can also be used in combination with lime sulfur as lime sulfur is naturally drying to the skin.

Witch Hazel - This product has a cooling effect on the skin that is soothing for both animals and for people with sun burn. It is available as a spray or lotion.

Aloe Vera Gel - If possible, obtain 100% aloe vera gel from a health food store. Products containing aloe are much more available but are generally not as effective and not meant to be licked away by a pet. Aloe vera gel comes from the aloe vera succulent and contains enzymes which break down inflammatory proteins and enhance healing. Pure aloe vera gel is not harmful for pets who want to lick it off.

Topical Steroids? - It seems clear that taking steroids orally may be harmful to the body with chronic use but are topical cremes safe for long term use? We now know that topical steroids (cortisone cremes and related products) are absorbed through the skin and into the bloodstream but the hormonal side effects with topical use do seem blunted. For small irritated areas (hot spots), topicals can provide excellent relief without the systemic effects of hormones.