Itching and Allergies in cats and dogs

Coping with an itchy pet can be an extremely frustrating experience and can truly test the limits of the human-animal bond. What makes it so frustrating is that there are hundreds of different allergens that can cause itching from pollens to molds to food to dust mites to fleas. Some of these allergens can be more itchy than others and some pets can respond differently than other pets. Even more frustrating is that some animals will respond to one form of treatment just fines where another will not respond at all. To make it even more difficult animals with allergies are predisposed to having secondary bacterial and yeast infections which hinder treatment as well. The bottom line is allergies in dogs and cats is an extremely complex process and there is not one cure for every animal.

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." While dogs can rarely have respiratory allergies, more commonly they experience the effects of allergies as skin problems (red, crusty, bumpy skin, ear infections, licking at feet). This is sometimes called eczema or atopic dermatitis. In cats, itching is often manifested by excessive grooming with hair loss, especially along the belly and legs. You may also see redness and a rash called 'miliary dermatitis' develop.

Atopic Dermatitis (Environmental Allergies)

Atopic dermatitis (AD) or atopy is an allergic skin disease caused 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. In many cases atopy is seasonal, producing itching or worsening of itching in the warmer months, however this is not always the case. Generally atopy in dogs begins between 1-3 years of age, but it can occur anytime.

Flea Allergy

"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. Fleas can survive in your home even in the winter, so flea allergy can present as a year round issue.

Food Allergy

Less commonly, some pets develop specific hypersensitivities to components of their diets. In dogs, the allergen usually is a major protein or carbohydrate ingredient such as **beef**, **chicken**, **pork**, **corn**, **wheat**, **or soy**. Likewise in cats, the allergen is also a major protein or carbohydrate such as **beef**, **chicken**, **fish**, **corn**, **wheat**, **or soy**. The best way to diagnose food allergy is to feed a specific prescription diet. This includes hydrolyzed diets where the proteins are broken down to an extent they are no longer reactive to the body. Another option is novel protein diets, which are formulated without any of the above proteins (often they have duck, rabbit or even kangaroo). Diets over the counter are often not as effective since they often process their foods on the same machines as their other diets. Food trails can take 6-8 weeks to see effects and your pet has to be on this diet only

Treatment Options

Before doing anything else, it is important to clear up secondary bacterial or yeast infections which can be common with pets with allergies. Your vet may prescribe oral antibiotics or anti-yeast medication as well as prescription topical shampoos to help clear these infections.

Bathing and Reducing Allergen Exposure

For dogs with atopy bathing is very important and often one of the most important to ways to help reduce allergen exposure and reduce itching. There are many therapeutic shampoos that can be used to restore the skin's natural barrier or to assist in general itch relief. Other ways to reduce allergen exposure are to avoid stuff toys and washing bedding regularly to minimize dust exposure (some animals are allergic to dust mites). Use an air filtration system. Keep your pet away from the lawn while it is being mowed.

Making the Skin Less Reactive

Since it is unlikely that the patient is going to be able to avoid airborne allergens (pollens, for example, travel miles in the breeze), we are left with treating the patient. These medications may just be seasonal when the allergen is present; however, many dogs are allergic to multiple allergens and so year round therapy may be required. Below are a list of multiple drugs that may be recommended. Remember there is not one treatment for every dog, so there may be some trail and error.

Antihistamines

Similar as in people, antihistamines are usually the first line of defense we reach to. They are very safe but only 30-50% of dogs and cats will respond to any given antihistamine. Fortunately, there are numerous antihistamines to try and often it is possible to find one that works by trying a different one sequentially. Antihistamines and omega 3 fatty acids synergize with each other so it is a good idea to use omega 3 fatty acids in conjunction with antihistamines.

Omega 3 Fatty Acid Supplements

Omega 3 fatty acids are in products such as salmon and flax seed oils. These may help to reduce inflammation in the skin and may also benefit your pet's coat. These supplements often come in either pill or liquid form. It takes a good 4-6 weeks to build up enough omega 3 fatty acids in the body to see a difference.

Steroids

These cortisone-type medications (prednisone, prednisolone, triamcinolone, dexamethasone etc.) are very useful for controlling itching and they often do an excellent job for many dogs. A higher dose is used at first but this is quickly tapered down once the condition is controlled. An atopic dog or cat will respond within days. Side effects of steroids include: excess thirst, excess hunger, and excess urination. If used for a long duration (months to years) they can suppress the immune system leading to infections (especially urinary tract infections). They may also be linked to diabetes and should be used cautiously in animals with a heart condition. They cannot be used with certain medications, such as NSAIDs (carprofen, meloxicam)

Immunotherapy drugs (Apoquel and CADI)

Apoquel and Canine Atopic Dermatitis Immunotherapeutic (CADI or Cytopoint) are newer drugs that are also very effect. They work by targeting specific interleukins which are essential in the pathway to cause allergies. They are quiet effective and works about 80-90% of the time. They do not appear to have significant side effects that we know of at this time. Apoquel comes in a pill form that is generally given

daily chronically. CADI is an injection given by the vet or veterinary nurse that needs to be administered anywhere from 3-6 weeks – duration is different for every case.

From: Foil, Carol (DVM) – *Dermatology* and Brooks, Wendy (DVM) – *Airborn allergies* both found at www.veterinarypartner.com