



ALLERGIES OF DOGS AND CATS

When it comes to allergies, people aren't the only ones affected; dogs and cats are also susceptible to this annoying and very uncomfortable affliction. While animal allergic reactions occasionally manifest themselves with respiratory problems like sneezing or watery eyes, a more typical reaction is chronic itching of the skin. Animal allergies are most commonly divided into four categories: food, fleas, atopy (inhalant) and contact allergies. Unfortunately, some animals may be susceptible to more than one type of allergy at the same time. These may act in an additive manner to increase the level of discomfort and make diagnosis and control more difficult.

To understand how we diagnose and treat allergies it is helpful to understand how **allergens** (substances that cause allergies) interact with the body. A key role is played by the body's immune system, which acts to fight off illness and infection. Normally, potential allergens like pollen or digested food proteins are ignored by the immune system, as they are not a threat to the body's health. In the case of an allergy, the immune system has been armed with **antibodies** to react to specific allergens as if they were an invading infection, resulting in clinical signs that may include itchiness, skin changes, secondary ear infections, and, less commonly, respiratory signs, urinary tract problems and/or intestinal abnormalities. Thus, **allergies consist of three components: the allergen itself, the interaction between the allergen and the body's immune system and the clinical signs resulting from that interaction.**

While the best treatment is to completely eliminate the animal's exposure to the allergen, it is often impossible to do so and alternative therapies must be sought. **Symptomatic treatment** often includes the use of antihistamines (e.g., Benadryl, Claritin) and/or corticosteroids to control the itch. **Immunotherapy** is a process by which small doses of the specific allergens themselves, given by injection, are used to help the immune system build up a tolerance to them, lessening the clinical signs. **Medicated shampoos** for bathing may also help lessen your pet's discomfort. Oral **fatty acid supplements** have also been shown to have a beneficial effect for some pets with allergies.

Animal allergies have been categorized into four groups. Our approach to diagnosis and treatment of each varies:

- **ATOPY** (Inhalant allergies) is usually seasonal but may be year-round. Although the underlying cause of this allergy is often unknown, it appears there may be a hereditary component. It may cause a pet to rub the face and ears, scratch the body and lick the paws. Atopy usually is first seen in animals between 1 and 4 years old. Because it is usually impossible to completely eliminate the allergens from your pet's environment (e.g., weeds, grasses, house dust mites), many pets with atopy are treated symptomatically when needed. Many atopy patients also respond well to immunotherapy.
- **FOOD ALLERGY** usually occurs year-round. Like atopy, food allergies can cause itching which makes the animal scratch and lick the skin. Vomiting and/or diarrhea may also be seen. Because an allergy is caused by the animal's abnormal reaction to a common substance, virtually any food can produce allergic reactions in dogs and cats. To confuse matters even more, your pet could develop an allergy to a food you have been feeding for months or years.

As blood testing cannot identify specific food allergens, food allergies are diagnosed by placing the pet on a *hypo-sensitization diet trial*, which measures the pet's response to a prescription diet fed over a 1-3 month period. As this diet lacks the proteins that may stimulate the immune system **it is crucial that you do not feed your pet any other foods, treats, biscuits, rawhides or flavored medications during this period.** Once a diagnosis has been established, the prescription diet may be continued indefinitely and other single food items may be tried to see how the pet responds. Food allergies usually do not respond to symptomatic treatment with antihistamines or corticosteroids.

- **FLEA ALLERGIES** are most common during flea season but may flare up anytime there are fleas on the animal or in its environment. It may affect pets of any age and cause animals to scratch and bite mainly at the hind end of their body. As flea allergic animals react to the flea's saliva, fleas do not need to be seen on the pet for the reaction to be present. Management of flea allergies involves controlling fleas in the environment as well as treating *all* animals in the house. Corticosteroids may also be used for short periods to control severe itchiness. Your veterinarian is the best source for help in combating a flea allergy.
- **CONTACT ALLERGIES** occur when the pet comes in direct contact with the allergen. Some examples may be the cedar chips in a dog bed or a detergent used to wash items the pet contacts. Treatment usually involves eliminating the pet's exposure to the offending allergen. Sometimes a short course of corticosteroids will also be used to break the itch/scratch cycle.

While the diagnosis of a specific allergy may be straightforward for some animals, complicating factors make allergy diagnosis difficult in many. First, the additive nature of allergies, as well as the variable manifestation of clinical signs often makes it difficult to distinguish which specific allergy components may be affecting your pet. Second, some pets do not respond as expected to allergy testing (i.e., dogs with atopy testing negative on blood testing). Third, other diseases (skin parasites, hypothyroidism, bacterial and/or fungal infections) may produce signs very similar to those of allergies. Thus, other tests may be necessary to confirm the diagnosis of allergic disease in your pet.

To summarize, allergies, which occur when the pet's immune system inappropriately responds to allergens, are diagnosed and treated based on whether they are suspected to be caused by food, fleas, inhaled allergens or direct contact with the allergen. Allergies must be distinguished from other causes of skin disease in dogs and cats. As allergies are usually a lifelong affliction for your pet, treatment strategies including avoidance (for food and contact allergies), ridding the environment of allergen as much as possible (for flea and atopy), immunotherapy treatment to help build up a tolerance (for atopy), along with appropriate use of medications and shampoos to help your pet be as comfortable as possible. If you suspect that your pet has an allergy, or have any questions please feel free to contact the clinic.