

Cat and Dog Allergies

Allergy and Signs of Allergy

Cats and dogs can be allergic to one or more different things and to help describe their allergies, there are three main groups of allergies. Within each group, your pet may be allergic to something very specific but generally the groups overlap; allergy is like a Venn diagram. This means, your pet may be allergic to things from one or all of the three main groups. The main groups are:

1. Flea allergy

Cats and dogs can be allergic to the saliva of fleas which is injected into the skin when they bite. This is the most common type of allergy and in cats it typically causes over grooming and in dogs, scratching and nibbling. The skin develops little red spots (papules) and in cats, they are felt as widespread crusts (this is called miliary dermatitis).

2. Food allergy

Food allergies can arise even when cats and dogs have been eating the same food for months to years. A food allergy is a reaction to a particular protein or food chemical and the reaction manifests in the skin. Common proteins that cats and dogs are allergic to include chicken, fish, gluten and egg. Cats that have a food allergy generally scratch around the head and neck but in dogs, any dog that is considered to be itchier than “normal” could have a food allergy.

3. Atopic dermatitis

Atopic dermatitis is basically a reaction to an environmental allergen, comparable to hay fever or asthma in humans. The environmental allergen may be seasonal, for example pollen, or be present all year round, for example house dust mites. For seasonal atopic dermatitis, cats and dogs only itch when the allergen is in abundance thus at certain times of the year. Cats and dogs with atopic dermatitis appear to scratch their body, lick and chew their paws and rub their face.

Diagnosing Allergy

To try to find out what your pet is allergic to, dermatologists follow a step-by-step approach in order to rule out the different groups. The approach starts by taking a detailed history from you about your pet to gain information about parasite control, diet, etc. The dermatologist will then perform a general, physical exam and then focus on the skin and areas of concern (lesions).

To rule out skin parasites, simple tests such as coat brushings, hair plucks and skin scrapes can be performed. All these samples are viewed under the microscope and if parasites are present, they can be viewed. In some cases, further testing is required and

samples will need to be sent to an external lab, for example testing for fox mange involves taking a blood sample.

The next step is to diagnose and treat any existing skin infections; due to the composition of their skin, cats and dogs with allergy are very susceptible to getting secondary bacterial and/or fungal infections. Skin infections can also be very itchy and therefore complicate the diagnostic approach.

Once the skin is free of infection, a diet trial may be performed. A diet trial involves gradually stopping your pet's current food and introducing a diet recommended by the dermatologist. The dermatologist will choose a diet most appropriate for your pet and the trial lasts six to eight weeks. If your pet has a food allergy, you should notice an improvement after about six weeks; you should notice an overall reduction of itching. If food allergy is the presumptive diagnosis and once the trial is complete, your pet will be re-challenged meaning they will be fed their previous diet and response monitored. If this change causes itching, then the diagnosis of food allergy is confirmed.

Atopic dermatitis is a diagnosis made by ruling out parasites, secondary infections and food allergy. It can be very difficult to find out exactly what your pet is allergic to in the environment and physically minimise exposure to it, but there are two tests that can be performed to help. These tests are usually only performed in young to middle aged cats and dogs and when owners are interested in immunotherapy as a form of treatment (see below). The two tests are:

1. Allergy blood test

This test simply involves a routine blood test and the blood sample is sent to an external lab to find out what your pet is allergic to. The blood is tested against an extensive profile of allergens such as parasites, grass pollens and tree pollens.

2. Allergy skin test

The allergy skin test is slightly more invasive than the blood test and your pet will be admitted into hospital for a few hours. The procedure involves sedating your pet, clipping a small square of hair on its side, injecting tiny amounts of allergen into the skin and assessing the response.

The dermatologist will decide which test is the most appropriate for your pet but commonly they are performed together. Once the results are back, you will be informed and a plan made about how to use the results most effectively.

Treatment

Cats and dogs with flea allergy are treated and managed by giving regular flea treatment; the dermatologist will advise a product for you to use. Majority of the flea life cycle is in the environment so hoovering carpets and washing bedding can help

eliminate the immature stages. Furthermore, the dermatologist may recommend a household spray for you to use.

If a diagnosis of food allergy is confirmed, then the treatment is pretty straight forward and involves avoidance of the food/s your pet is allergic to. The dermatological prescription diets are nutritionally complete and can be fed long term. However if your pet was fed a home cooked diet as part of its trial, you may be referred to a nutritionist to make sure the diet is sufficient of micronutrients.

Atopic dermatitis requires life-long management to control the condition as best as possible. The management is usually multimodal, meaning it includes different therapies given in various ways. The different therapies are:

- **Anti-itch medication.** This medication comes in the form of tablets, capsules, liquid and injection. The dermatologist will discuss with you all the various options and select the most appropriate. The aim of anti-itch medication is to provide treatment for as long as necessary and then taper to the lowest possible dose to make your pet comfortable. In some cases, treatment may even stop.
- **Immunotherapy.** Immunotherapy can be started after the necessary tests (above) and vials are made containing the allergens your pet is most allergic to. Your pet will receive regular injections at the vets to start with (induction phase) and then monthly injections (maintenance phase). Theoretically, immunotherapy works by desensitising your pet to the allergens it is allergic to so that in its day-to-day life when it is exposed to these environmental allergens, it does not react. This type of therapy takes six to eight months to have its full effect so initially, your pet may require anti-itch medication. Furthermore, immunotherapy is not effective in every cat and dog and may be discontinued.
- **Antibacterial/antifungal shampoos, foams, wipes and pads.** Cats and dogs with atopic dermatitis have a “weaker” skin barrier and as a result, the normal micro-organisms that live on the skin can take advantage and over grow or cause infection. Therefore, to keep numbers under control, the dermatologist may recommend a washing/cleaning regime.
- **Antihistamines.** Antihistamines may be given to enhance the effect of concurrent medication and/or to reduce the allergic reaction in the skin.
- **Essential fatty acids (EFAs).** It is thought that EFAs improve skin barrier function and there is no contraindication to give them. They can be added to the diet or found in specific dermatological diets.

As previously mentioned, it is possible for your pet to have more than one type of allergy and in these cases, treatment is holistic. Furthermore, it is very common for your pet to have a dermatological flare up: it will start itching more and the skin will appear red. It is important for you to contact the dermatologist during a flare to regain balance and control of skin. Management of skin allergies is life-long and owner understanding, and compliance is essential for success.