

Canine Atopic Dermatitis

Also called:

- Allergies
- Atopy
- Environmental allergies
- Grass allergy
- CAD

What is atopic dermatitis?

Atopic dermatitis is one of the most common causes of chronic itching in dogs. Atopic dermatitis is caused by an allergic reaction (hypersensitivity) to one or more substances in the environment. Various substances, called allergens, can trigger atopic dermatitis. They are often the same allergens implicated in human allergic conditions such as hayfever and asthma.

What are the symptoms of atopic dermatitis?

Dogs with atopic dermatitis are usually itchy. The face and feet may seem particularly irritated. The skin on some parts of the body may be reddened, moist, or damaged due to scratching or chewing. The ears may also be inflamed, and recurrent ear infections are quite common in these patients. Skin infections can also occur. Less often, dogs with atopic dermatitis have other signs of “allergies” including runny eyes or nose. The symptoms usually start when the dog is 1 to 5 years old. Unlike many humans, dogs do not “grow out” of their allergies – so we almost always recommend treatment.

Why does atopic dermatitis develop?

A combination of factors predisposes dogs to atopic dermatitis. Both their genetic make-up and environment may interact to allow atopic dermatitis to develop. The condition is caused by an inappropriate immune reaction rather than by the allergens themselves.

How are dogs exposed to allergens?

Many allergens are airborne and found nearly everywhere. Some are present year-round (such as housedust, dust mites, and some molds) while others are found at high levels only at some times during the year (such as pollens). Dogs may either inhale the allergens or contact them through the skin.

How is atopic dermatitis diagnosed?

The diagnosis is based on your observations and on our physical examination, as well as by ruling out other causes of allergies, primarily parasites and food.

Can we test my dog for allergies to find out to what he/she is allergic?

Allergy testing is used by most veterinary dermatologists for the purpose of formulating an allergy vaccine, not to make the diagnosis. There are several methods to perform the test:

- **Intradermal test (IDT).** To perform an IDT, pets are sedated (dogs) or anesthetized (cats), an area on the chest is clipped of hair, and about 50 allergens are injected into the skin. A red swelling is interpreted as meaning that the pet is possibly allergic to that allergen. It is best if dogs have not eaten the morning of their test. Certain medications (prednisone, antihistamines and topical cortisone) have the potential to influence the test, but usually do not. We will assess these with you as we plan for the IDT.
- **Percutaneous prick test (PPT).** Dr. Carnett developed a testing technique for pets that is preferred in human allergy testing – the percutaneous prick test. Instead of injecting allergens into the deeper layer of skin, the dermis, pinpoint pricks are made with a device that also delivers a drop of allergenic extract on to the skin surface. Similar to IDT, the reactions are graded subjectively based on size and inflammation, in comparison to positive and negative controls. The PPT causes very little discomfort and we are usually able to perform the test on awake dogs laying on their sides, aided by lots of petting to keep them calm. The disadvantage is that it is a new technique in dogs and cats, with much less experience to draw upon. We recommend that prior to a PPT, patients should be off of oral cortisone, topical cortisone, and antihistamines for 4 weeks, 2 weeks, and 1 week, respectively.
- **Blood, saliva, hair tests.** Blood (serum) tests performed by different companies on the same samples have been shown to have poor agreement with one another. In independent studies, blood, saliva, and hair allergy tests have reported positive reactions to tap water, cow serum, and fake fur from a stuffed animal. For this reason and others, **we do not routinely recommend them.**

How is atopic dermatitis treated?

Atopic dermatitis can be treated in many different ways. Limiting your pet's exposure to his allergens is most effective, but not usually practical – it may mean relocating to a different climate! Other treatments are usually necessary. These include:

Immunotherapy (Hyposensitization)

This is the only treatment that can cure allergies. Beginning this treatment before the allergies are too severe increases the odds of a successful outcome. An extract made from allergens that your pet is sensitive to can be given to induce “tolerance” to these substances. When these substances are then encountered in the environment, your pet should be much less sensitive to them. Two routes of administration are available: subcutaneous injections or oral. Owners usually give these at home.

Traditionally, veterinary dermatologists have based the immunotherapy vaccine ingredients on the results of an allergy test. SkinVet Clinic also offers an innovative approach to allergy immunotherapy: RESPIT®, or Regionally-specific Immunotherapy. Allergens are selected on the basis of what occurs in your region, the seasonality of your pet’s signs, and what other pets have responded to in the past. The efficacy of RESPIT is similar to that of customized immunotherapy extracts. You and your pet avoid allergy testing, while still being able to benefit from immunotherapy, which controls allergy symptoms in about 65% of pets.

Anti-inflammatory and anti-itch treatments

Apoquel®, Atopica®, fatty acid supplements, prednisone, or other medications may be very helpful to reduce itching in your pet. Apoquel and Atopica are the only FDA-approved non-steroidal drugs for the management of canine atopic dermatitis. Apoquel (oclacitinib) blocks the receptor for IL-31, a molecule that signals itchiness in dogs. At SkinVet Clinic, we have extensive experience prescribing Apoquel for hundreds of dogs and carefully monitoring their responses. In addition to Apoquel, IL-31 can also be blocked with a monoclonal antibody, Canine Atopic Dermatitis Immunotherapeutic (originally known as CADI, now as Cytopoint™), given as a subcutaneous injection every 4-8 weeks. It can be truly amazing to provide chronically itchy dogs such quick relief without using steroids. Since each atopic dog is very much an individual, some dogs need a “trial” with different drugs to find one that works best.

Topical therapy

Medicated shampoos and conditioners can provide relief to many dogs. Bathing removes the allergens that are adhering to the surface of the skin, and the medicated ingredients also help to reduce itching and control secondary infections. Using lukewarm water cools the skin to reduce itching.

Antibacterial and antifungal medications

Because dogs with atopic dermatitis are prone to recurrent bacterial and yeast infections of the skin and ears, we may need to address these infections in addition to treating the atopic dermatitis. These might include Convenia®, Simplicef®, cephalexin, fluconazole, or ketoconazole. Topical therapy with antibacterial and antifungal shampoos, like Duoxo® Chlorhexidine PS, can help resolve and prevent infections.

Flea control

It is also very important for any dog with atopic dermatitis to be on a year-round, comprehensive flea control program. Atopic dogs tend to be more sensitive to the bites of fleas, so we would like even occasional fleabites to be prevented. The flea products that we most often recommend are NexGard®, Bravecto®, Vectra® 3D, Trifexis®, Comfortis®, and Revolution®.

Managing this lifelong condition takes some patience. By using various combinations of therapy, and altering the treatment when needed, we can help atopic dogs feel and look their best.