

Atopic Dermatitis

What is atopy?

Atopy, or atopic dermatitis, is an allergic skin disease that causes itching. It is one of the two most common skin allergies in dogs and cats, along with fleas.

Causes

With atopy, the dog's immune system "overreacts" to foreign substances (allergens or antigens) in the environment. Typical allergens that cause atopy include pollens (from grasses, weeds and trees), dust mites and moulds. It was once thought that these allergens were inhaled (similar to asthma in people). It is now known that absorption of allergens through the skin is more important. Atopy is inherited, but it is a complex disease and its causes are not fully understood.

Symptoms

Pets with atopy will often itch all over, initially with no signs of any rash or skin lesions. Eventually, scratching, chewing and licking will cause redness, hair loss, dry flaky skin and a variety of other signs.

In **dogs**, the most commonly affected areas are the feet and legs, ears, face, armpits and underbelly. Affected dogs will lick their feet, scratch all over and sometimes rub their face on the ground. Saliva may stain white hair a reddish-brown colour, especially on the feet.

Often the first signs (and sometimes the only signs) occur in the ears. Redness in the ears or recurrent ear canal infections may be a sign of atopy.

Cats with atopy will commonly lick themselves, although their owner will not always see this. Typical signs include areas of hair loss or raw, inflamed skin lesions. Multiple small scabs over the body, and rubbing of the face, neck and ears may also be seen. Hair in the vomit or faeces may indicate excessive licking.

The first signs of atopy are usually seen between 1 and 3 years of age, though this is variable. Some puppies can show signs of atopy at 8-10 weeks, and older dogs may also develop atopy, particularly if they have been introduced to a new environment in the last few years.

Infections often occur as a result of the constant biting and scratching, and make the problem much worse.

Atopy may be either seasonal or year-round. It is common for animals to be allergic to more than one thing, which can make diagnosis difficult. Atopy will usually get worse every year, and a seasonal allergy will often develop into a year-round problem.

Diagnosis

There is no specific test for atopy. Diagnosis depends on careful consideration of all the symptoms, and ruling out all other diseases that could be responsible. Other diseases that could cause itching include fleas, mites, bacterial and fungal infections, and food allergies.

Diagnosis will involve some or all of the following:

- **Detailed History** is very important. We need to know when the problem started, when it is worst, what treatments have been used before, etc. The more information you can give us, the better we will be able to correctly diagnose the problem.
- **Examination** by a vet
- **Skin Cytology** - looking under the microscope for signs of bacterial or fungal infection.
- **Skin Scrapings** to look for mange mites.
- **Trichograms** (plucking hairs) - for mites or fungi
- **Trial therapy for Flea Allergy**
- **Trial therapy for Scabies** (Sarcoptic Mange)
- **Trial therapy with antibiotics** or antifungal drugs
- **Elimination Diet Trials** to test for food allergy.
- **Intradermal Skin Test** - to find out what allergens your pet reacts to. A dermatology specialist performs this test. All drugs are withdrawn prior to testing, your pet is sedated and an area of fur is shaved. Small extracts of various allergens are injected into the skin, and reactions are observed. **Blood Allergy Testing** may be an alternative if intradermal testing is not possible.

Some of these tests may need to be done more than once before a final diagnosis is made, or repeated later during the course of the disease.



Treatment

It is important to realise that atopy is a condition that usually requires life-long management. There is usually no complete cure, but most cases can be successfully controlled. A number of different treatments may need to be tried, or used in combination before a successful result is found. Even then, treatment modifications over the life of the dog are to be expected.

It is also important to understand the concept of the "itching threshold". A certain number of allergens may be well tolerated by your dog, and cause no signs of disease. But a small increase in the allergen load, may be enough to push the dog 'over the edge'. Other factors such as some fleas or a mild infection, a change in the environment, stress or boredom, may be enough to initiate itching and other clinical signs. The good news out of this is that we don't need to cure all of your dog's allergies. We just need to keep things down to a level where they experience little or no discomfort from them.

There are numerous options available, and usually the best result will be achieved with a combination of treatments. A number of factors need to be considered, including seasonality, the amount of skin involved, risks and cost. We'll work with you in coming up with the most practical treatment plan for you and your pet.

- **Avoidance.** The ideal way to treat an allergy is to not let your pet be exposed to that allergen any more. Unfortunately, this is rarely possible. For example, pollens are air-borne, so a dog may react to pollens from a plant that isn't even found in your yard. However, if the allergen can be identified, it may be possible to limit exposure, and this can dramatically reduce the problem.
- **Shampoos** are very important. Atopic dogs should be bathed every 4 - 14 days. The aim is to remove allergens from the skin (before they can be absorbed), moisturise and soothe the skin. The ideal is a gentle hypoallergenic shampoo containing colloidal oatmeal. We recommend *Aloveen* (shampoo and conditioner).
- **Corticosteroids** (also called "steroids"), such as prednisolone tablets, are anti-inflammatory drugs. They will block the allergic reaction, and reduce scratching. They are commonly used and very effective. However the possibility of side-effects means that their use must be kept to a minimum. Common side effects are increased thirst and appetite (leading to weight gain). More serious side-effects are uncommon, but can occur with long-term use. To avoid this, the minimum dose should be used, and given as infrequently as possible. Normally tablets are given daily until itching is controlled (3-7 days), then no more than every second day. If good control is maintained, then the dose should be reduced.

Long-acting steroid injections are a reasonable option in cats, but should be avoided in dogs wherever possible.

Creams and Lotions containing steroids may be a good alternative to tablets, but their use is limited to cases where only small areas of the body are affected, and where it won't be immediately licked off.

In the long term, the use of steroids of any kind should ideally be limited to seasonal cases (where signs are

seen for less than 4-6 months of the year), or cases where there are only occasional flare-ups.

- **Atopica (cyclosporin)** is a new development in the treatment of atopy. Extensive trials have found it be at least as effective as prednisolone, without the side effects. However, it takes longer to work, and is much more expensive, particularly for large dogs.
- **Antihistamines** are worth a try in all cases of atopy. They are rarely of much benefit if used alone, but may be useful when combined with other treatments. They may improve the response to corticosteroids and/or reduce the amount that has to be given. The response to antihistamines is very individual and it is usually necessary to try at least 3 different ones to find what works best in your pet. Antihistamines are very safe, and the older ones generally work better than the newer, more expensive ones. They sometimes cause temporary sedation, but this will resolve (with adjustments to the dose if required). We can give you a copy of our information sheet on antihistamines, which has a list of drug names and doses to try.
- **Dietary Fatty acid supplements** are recommended for all cases of atopy. Although they do not often stop the scratching if used alone, they can lead to significant improvement when used in combination with other treatments. They will also make the coat look much better. Omega 3 and Omega 6 fatty acids in appropriate proportions are the most important. They can be found in deep-sea marine fish, flaxseed, sunflower and safflower oils. However, the easiest way to administer fatty acids is via a commercial product such as *Megaderm*, which can be added daily to the food. Fatty acids are very safe. Commercial diets rich in fatty acids may be another option. These include *Royal Canin Skin Support* and *Eukanuba Response Formula*.
- **Immunotherapy** (also called desensitisation or hyposensitisation) is the ideal treatment for non-seasonal atopy. A dermatologist performs intradermal skin testing to determine exactly what your pet is allergic to. They then prepare an extract of the allergen(s) that can be injected at regular intervals (usually weekly). We can do this for you, or you can learn to do it yourself. In time, this can cause the immune system to become less reactive to the allergen(s). Immunotherapy has good results in 60-70% of cases. Sometimes, a complete cure is achieved, but usually booster injections will be required from time to time.
- **Antibiotics** are important to treat secondary infections, which can tend to recur.
- **Flea Control** is also important for all dogs with atopy. Many atopic dogs are also allergic to flea bites.
- The treatment of any other complicating diseases is also important. This may include things such as **food allergy, ear infections and anal sac disease**.
- Because atopy is an inherited problem, it is not recommended that you breed with atopic pets.

If you have any other questions about managing your pet's atopy, please phone us or make an appointment.