

Atopic Dermatitis

ABOUT THE DIAGNOSIS

Atopic dermatitis (also called atopy) is an allergy to substances from the environment. Substances that can elicit such allergic reactions are called allergens or antigens.

Atopic dermatitis is a common problem in dogs and cats, although dogs are more likely to have it than cats. A genetic basis is suspected since it occurs more commonly in certain breeds and lines. Allergens that are well-recognized triggers for atopic dermatitis include pollens, molds, dander (shed skin cells), house dust, tobacco smoke, and a variety of other substances.

The primary symptom of atopic dermatitis is itching, and the problem typically first becomes apparent when a pet is between 6 months and 3 years old. Early symptoms in dogs may be mild and can include foot-licking, face-rubbing, ear problems, and scratching behind the elbows, all without any visible reason (no visible fleas, no plant material caught in the haircoat, etc.). The problem is often seasonal. As time goes on, the allergy worsens and more areas of the body become involved. Itching that at first occurred only seasonally may become present all year round.

Cats with atopic dermatitis can show several different types of skin problems. Some show hair loss on the abdomen (belly) and inner thighs or on the back. This hair loss is from overgrooming (licking, chewing) due to itching. Others may scratch around the face and neck. A condition called miliary dermatitis may develop, where small crusts (scabs) can be felt through the hair coat on the surface of the skin. Eosinophilic granuloma complex is another manifestation of allergies in cats; signs include raised, flat, reddened areas (plaques) on the skin or sores on the upper lip.

Diagnosis of atopic dermatitis may be challenging because many other types of skin problems produce the same degree of scratching, hair loss, and redness of the skin. For your veterinarian to reach the conclusion that atopic dermatitis is present (i.e., establishing the diagnosis), a combination of elements usually needs to be present:

- The typical history of the onset of itching (often seasonal, since pollens are a common cause of atopic dermatitis), plus
- Finding a typical pattern of skin lesions over affected areas, and
- The exclusion of other causes of itching.

Your veterinarian will use a thorough physical examination and often will need to perform several tests to rule out other skin problems such as mange mites, ringworm, bacterial infection, or flea allergy, any of which can cause itching and scratching that is identical in initial appearance to atopic dermatitis. Once the diagnosis of atopic dermatitis is made, treatment can be undertaken for comfort and relief of itchiness, or further tests can be conducted to determine which substances in the environment are triggering the atopic dermatitis in order to remove them or desensitize your pet to them as a part of treatment. These advanced tests include intradermal skin allergy tests and serum (blood) allergy tests.

LIVING WITH THE DIAGNOSIS

Atopic dermatitis cannot be cured, so efforts should be directed at managing your pet's symptoms. See the options discussed under Treatment. For a second opinion, the latest treatment options, or if initial efforts to control itching are not successful, consider consulting a veterinary dermatologist (www.acvd.org).

Atopic dermatitis can be a profoundly frustrating disorder both for the pet and the owner, since relentless chewing and licking can be intensely bothersome to both. With a proper diagnosis and with appropriate treatment, however, the majority of pets with atopic dermatitis become comfortable and lead normal lives.

TREATMENT

Several approaches can be taken for treatment. The best option for the pet's health is to perform tests to determine which allergens are causing the problem. Then, if possible, you can take steps to minimize or eliminate exposure to the allergens in your pet's environment. If the allergens cannot be avoided (such as when pollens from plants or trees are the cause), a series of injections of small amounts of the allergens can be used for gradually causing desensitization to the allergen. It is also important to look for other problems that may be contributing to the itching.

Many pets with atopic dermatitis are "polyallergic" and also have other sorts of allergies such as food allergy or flea bite allergy. These allergies compound the symptoms of itching and scratching. Therefore, working with your veterinarian to determine whether your pet has an allergic disorder beyond atopic dermatitis can be important if your pet is allergic both to airborne allergens and fleas, certain food ingredients, or other trigger substances.

Skin that is inflamed due to scratching and chewing from atopic dermatitis is prone to bacterial or yeast infections that can themselves also cause even more itching. A simple sampling off the surface of the skin (skin scraping) and examination of the harvested skin cells under a microscope can identify whether these complications exist; antibiotic or anti-yeast treatment can make an enormous difference in such cases.

Finally, long-term and/or high-dose treatment with cortisone-like medications may limit the skin's natural defenses and allow opportunistic infections, such as sarcoptic mange, to develop. This, too, causes more itching and scratching; the simple skin scraping procedure described above is the test of choice for identifying sarcoptic mange when it is present, and elimination of sarcoptic mange is straightforward and highly effective.

Therefore, elimination of as many causes of itching as possible (e.g., fleas, food allergies, secondary skin infections) can control a pet's symptoms, even if the atopic dermatitis itself is not treated. Consult your veterinarian on carrying out these steps and also to have your pet checked for skin infections.

Several medications are used for treating itching caused by atopic dermatitis or allergies in general. Antihistamines are helpful in some pets. Omega-3 fatty acids can help ease skin inflammation. Corticosteroids (cortisone-like medications) are often used for reducing inflammation and itching, and are usually very effective. However, corticosteroids are powerful medications that can have serious side effects when used long term, so they should be used at the lowest dose possible and for as limited an amount of time as possible, or on an intermittent, as-needed basis. Cyclosporine is a powerful immunosuppressive medication that has been approved for the treatment of itching caused by atopic dermatitis in dogs. It works as well as corticosteroids in controlling itching and produces far fewer side-effects, but is more expensive. The newest medication for treating atopic dermatitis, oclacitinib, appears to be very effective in many dogs. Consult your veterinarian about

the various medications that are available. Often the best response is individualized and some degree of trial and error is needed to find the best combination for a particular pet.

DOs

- Realize that tests are needed to look for other skin disorders that mimic atopic dermatitis, and to look for complicating or secondary disorders that are occurring on top of atopic dermatitis. The value of these tests lies in identifying anything other than atopic dermatitis that would require a specific, different treatment.
- Realize that atopic dermatitis itself often is a diagnosis of exclusion, meaning it is the explanation for itching and scratching when no other cause can be found.
- Give all medications exactly as instructed.
- If your pet has been tested to determine what substances it is allergic to, try to avoid contact with those substances.
- Eliminate as many other causes of itching and skin inflammation as possible.

DON'Ts

- Don't assume that "cortisone pills" (glucocorticoids) are the only solution to treating an allergy. Although the simplest and most effective in the short term (days), they only suppress the allergy and can cause serious health problems long term.
- Don't forget the value of a second opinion. Veterinary dermatologists are experts at skin diseases of dogs and cats, can differentiate atopy from other disorders, and are aware of the latest treatments. Veterinary dermatologists are known as Diplomates of the American College of Veterinary Dermatology and can be recommended by your veterinarian; see www.acvd.org for a complete listing.

WHEN TO CALL YOUR VETERINARIAN

- If symptoms suddenly worsen.
- If signs of ear disease are noticed (head shaking, pawing at ears, pain on touching the ears), because atopy may produce otitis externa (inflammation of the ear flap) as part of allergic skin disease.

SIGNS TO WATCH FOR

- The following is to be expected as a common response to medication: if your dog receives corticosteroids (cortisone), it is common that he/she will drink more water than usual, be hungrier than usual, and may pant more than usual (dogs).
- Sudden increase in itching; this could result from the onset of secondary bacterial or yeast infections.
- Ear problems, such as redness, head shaking, odor; many allergic pets are prone to ear disease.

ROUTINE FOLLOW-UP

- The frequency of recheck examinations depends upon the severity of your pet's symptoms and the treatment methods used. If corticosteroids (cortisone) are part of your pet's treatment program, periodic blood tests may be recommended to look for problems that can result from corticosteroid use.

ADDITIONAL INFORMATION

- Since atopic dermatitis is an inherited condition, pets affected with this disease should not be used for breeding.

Other information that may be useful: "How-To" Client Education Sheets:

- How to Deal with Incessant Scratching
- How to Assemble and Use an Elizabethan Collar



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