

Canine Atopic Dermatitis

Canine atopic dermatitis (allergic dermatitis, canine atopy) is an inherited predisposition to develop allergic symptoms following repeated exposure to some otherwise harmless substance, an "allergen," such as dust mites or pollen. Most dogs begin to show their allergic signs between 1 and 3 years of age. Due to the hereditary nature of the disease, several breeds, including golden retrievers, bulldogs and Old English sheep dogs are more commonly atopic, but many dogs, including mixed breed dogs can have atopic dermatitis.

Atopic animals will usually rub, lick, chew, bite or scratch at their feet, muzzle, ears, armpits or groin, causing hair loss, and reddening and thickening of the skin. In some cases several skin problems can "add" together to cause an animal to itch where just the allergy alone would not be enough to cause itching. These problems include air borne-allergens (pollens, etc.), allergens in food, and allergens from parasites (fleas, etc.) and also bacterial or yeast infections of the skin. Eliminating some but not all of the problems may allow a patient's itchiness to go away. Therefore it is important to treat any other problems that could be making your pet itch while dealing with allergy.

Diagnosis

Atopy is usually a clinical diagnosis, but sometimes owners want to know exactly what is causing the itchiness.

Specific diagnosis of atopic dermatitis is based upon the results of intradermal testing and/or in vitro (blood) testing. Many medications can interfere with our ability to properly skin test your pet, so you may be asked to stop some of your pet's medications before testing.

Treatment

1) *Antihistamines*: This medication works in 20% of atopic patients. Your pet can take antihistamines for life. The only side effect usually seen is drowsiness. Several types may be tried to find the one best for your pet.

2) *Avoidance of the allergens*: This can be helpful for house dust mite allergies. Pollen exposure can be reduced by using air-conditioning and air filters, avoiding the outside early morning and late afternoon, wiping down with moist cloths after going outside and frequent bathing.

3) *Oral Steroids (prednisone, temaril p, triamcinolone, etc.)*: These drugs have potential side effects and are reserved for adult animals, those with short seasonal problems or where other therapy is not possible or is ineffective. Typically, treatment is started at one dose and then tapered off to every other day usage.

4) *Topical Steroids*: Topical usage is safer than oral usage. It can be very helpful if itching is localized (e.g., eyes, ears). It can be used for more

widespread disease in the form of sprays: ZN7 Derm (zinc based) or steroid spray.

5) *Cyclosporine (Neoral®)*: This immunosuppressive agent can be used at low doses to treat allergy successfully in about 60% of patients. It can also be used to lower needed dosages of steroids. The major short-term side effect is gastrointestinal upset. The long-term safety is not completely known. The dosage can often be lowered after a few weeks of successful treatment.

6) *Fatty acid supplements*: Certain types of oils can reduce allergic symptoms in some patients. We can give fish oil capsules in conjunction with a low-fat diet or prescribe special prescription diets with the fish oil content raised. This therapy can help improve response to antihistamine therapy.

7) *Allergen Specific Immunotherapy*: This involves giving an allergy vaccine injection that is made up specifically for your pet, usually for the lifetime of the animal. After an initial series of injections, periodic boosters will be needed (every 1-3 weeks). 60% to 80% of animals will improve with the vaccine. Results may not be seen for up to 6 months. When results are not seen in 9 to 12 months, a re-evaluation is necessary.

9) *Bathing*: Atopic skin is sensitive and subject to drying. Only specially designed hypoallergenic shampoos should be used on your allergic dog. Cool water should be used and rinsing should be thorough.

*By Dr. Carol S. Foil, DVM, Diplomate A.C.V.D., and
Dr. Sandra R. Merchant, DVM, Diplomate A.C.V.D.*