

# Ettinger & Feldman – Textbook of Veterinary Internal Medicine

## Client Information Sheet

### Canine Atopic Dermatitis

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#### What is atopic dermatitis?

*Atopic dermatitis* (atopy) is an inherited predisposition to develop allergic symptoms after repeated exposure to some otherwise harmless substance (an “allergen”) such as dust, dust mites, grasses, or pollen. Most dogs begin to show their allergic signs between 1 and 3 years of age. A few dogs may show clinical symptoms as early as 6 months of age. It is also unusual to see clinical symptoms start after 7 years of age. Because the hereditary nature of the disease, several breeds, including golden retrievers, Labrador retrievers, most terriers, Irish and English setters, lhasa apsos, dalmatians, bulldogs, beagles, miniature schnauzers, pugs, boxers, American cocker spaniels, and Chinese shar peis are more commonly atopic.

#### What are the symptoms of atopic dermatitis?

Atopic animals 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 offending substances can “add” together to cause an animal to itch where each individual substance alone would not be enough to cause an itching sensation. These substances include not only airborne allergens (e.g., pollens) but allergens in food and from parasites (e.g., fleas) as well. Itching can also be exaggerated by bacterial or yeast infections of the skin. Sometimes, eliminating some but not all of the problems, a pet’s itchiness may go away. Therefore it is important to treat any other problems that could be making your pet itch while dealing with allergy.

#### How is the diagnosis made?

*Diagnosis* of atopic dermatitis is based on clinical signs (areas of itching) and often, an *initial* seasonality to the skin problem. However, some dogs will have no seasonality to their itching from the onset of their symptoms. In addition, many seasonally allergic dogs soon begin to scratch and rub year round.

#### What treatment is available?

*Treatment* can include avoidance of the substance, therapy to control the itching (symptomatic therapy), or specific therapy (desensitization vaccine) in an attempt to desensitize your pet to the specific substances to which he/she is found to be allergic. Specific therapy will be based on the results of a skin or blood test to detect reaction to the specific allergic substance.

Complete avoidance of the allergic substance may not be practical, but decreased exposure may be feasible. If your pet is allergic to pollen, decreasing the outdoor exposure especially at dusk and dawn is helpful. Your pet should never be walked through fields with high grass or weeds and should not be outside when the lawn is cut. If your pet has an allergy to fungi or molds, it should not be kept in rooms with high moisture levels (bathroom or laundry room) or allowed to be in areas of increased dust (crawl spaces under the house). Control of house dust or mites in the home can be a major undertaking, consisting of removing carpeting, covering mattresses, regular washing of the bedding, high-efficiency vacuums, avoiding stuffed toys, and frequent damp mopping of the areas most frequented by your pet.

Antihistamines and fatty acids are two therapies, when given in combination that can decrease the itching sensation in about 10% to 20% of atopic pets. Your pet can be on antihistamines and fatty acids for life with no long-term problems. The only side effect usually seen with antihistamines is drowsiness. Several different types of antihistamines may need to be tried to find the one that works the best. These two combined therapies should be given for a few months before a decision is made concerning their effectiveness.

The use of other nonsteroidal drugs besides antihistamines and fatty acids to control your pet's itching may be warranted. Some of the drugs that have been effective in controlling the itch include cyclosporine, misoprostol, and pentoxifylline.

Steroids (prednisone, cortisone) can also be used to alleviate the itch. However, these drugs have potential side effects and are reserved for pets for whom other therapy is not possible, therapy is ineffective or to control a severe itch for a short period of time.

Products applied topically to the skin (shampoos, cream rinses, leave-on conditioners, gels, lotions, sprays) with anti-itch properties may also be of benefit. These products will usually need to be applied daily (sprays, gels, lotions), or a few times weekly (shampoos, cream rinses, leave-on conditioners). It is most important that your pet be bathed in cool water because warm/hot water increases the itch sensation.

Desensitization vaccines can be formulated for your pet on the basis of results of a skin test or blood test. After an initial series of injections, periodic boosters are needed (every few weeks) for the remainder of your pet's life. 60% to 80% of animals improve with such vaccines. However, desensitization takes time. Improvement may not be seen for 3 to 6 months or longer. If results are not seen within 9 to 12 months, a reevaluation of the vaccine usage is necessary.

Allergies are a lifelong problem and tend not to just go away. The best chance for success in treatment is seen when you can spend the time and effort in utilizing symptomatic therapy on your pet or utilizing symptomatic therapy while your pet is undergoing the process of desensitization. Only by trial and error can the optimal therapy be formulated. *Time and patience is the key!*



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