



**DERMATOLOGY:**  
**Atopic Dermatitis**

**Background**

Atopy is a very common and frustrating chronic condition seen in veterinary practice. Atopic dermatitis, the manifestation of atopic disease, is estimated to affect 10% - 15% of the canine population. 93 out of 100 dogs with allergic dermatitis are diagnosed with atopy versus food allergy.

The pathogenesis of atopic dermatitis is not completely understood. Multiple cell types, including Langerhans' cells and T lymphocytes, appear to be involved. Atopy is usually caused by a genetic predisposition for developing a hypersensitivity reaction, acute or delayed, to common environmental allergens, such as house dust mites, pollens, and mold spores.

**Clinical Signs**

The primary clinical sign of atopic dermatitis is pruritus. The face and paws are most commonly involved, but many dogs have generalized pruritus by the time they are presented to a veterinarian. The typical presentation of atopic dermatitis is a dog from a breed predisposed to atopy (e.g. Retrievers, Boxers, and Terriers) that has developed pruritus and skin lesions between 6 months and 3 years of age.

**Diagnosis**

No single clinical sign suggests a definitive diagnosis of atopic dermatitis. A diagnosis is made using a combination of diagnostic criteria supporting clinical history and elimination of other possible causes of skin disease. Pyoderma and Malassezia Yeast dermatitis can be primary causes of pruritus or secondary pathogens of traumatized skin that may result in pruritus, thus complicating the diagnosis of the underlying primary dermatoses (e.g. atopy). Accurately diagnosing primary disease and managing secondary infections are key factors in a successful outcome.

**Treatment**

Treatment options include immunotherapy, pharmacotherapy, frequent bathing or topical barrier treatments, and avoidance of allergens.

With all of these options, Immunotherapy (hyposensitization) from intradermal allergy testing offers the best outcome and is the preferred treatment.

Immunotherapy targets the cause of the allergic reaction, and generally has a low incidence of adverse effects. Immunotherapy involves one or more injections at varying intervals, as there are no standard protocols for canine hyposensitization. A minimum two years of therapy is recommended. Various authors have reported 75% of immunotherapy responses as "good-to-excellent" in dogs.

Pharmacotherapy includes cyclosporine (Atopica®), corticosteroids, antihistamines, tri-cyclic antidepressants, and essential fatty acids.

Corticosteroids are used in atopic dermatitis for their ability to quickly and effectively reduce inflammation and pruritus. According to the ACVD task force on canine atopic dermatitis, glucocorticoids have been the most commonly prescribed drugs for treatment of atopic dermatitis. Unfortunately, steroids can have a wide array of side effects ranging from minor to life-threatening. The ACVD task force does not recommend long-lasting steroid formulations for the treatment of canine atopic dermatitis.

The response to treatment with Atopica® has been reported as "good-to-excellent" in 50%-70% of cases. While there are a variety of treatment options for canine atopic dermatitis, an accurate diagnosis is imperative to a successful outcome. A majority of atopic dogs will have secondary skin infections so all atopic patients should have

cytologic skin exams performed, and appropriate anti-microbial therapy prescribed.

As with all drugs, side effects may occur. In a field study, the most common side effects were gastrointestinal signs. Gingival hyperplasia and papillomas may also occur during the initial dosing phase. Atopica® is not for use in reproducing dogs or dogs with a history of malignant neoplasia.

MVS offers Dermatology Service at all locations. Please call us for appointments and consultations.

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