Environmentally-induced Atopic Dermatitis

Atopic dermatitis, or atopy, is a common allergic condition in dogs and cats. Your pet has been diagnosed with environmentally-induced atopic dermatitis (EIAD). In EIAD, an allergic reaction occurs when aeroallergens (like pollens) are absorbed through the animal's skin (percutaneously) and cause the animal to itch (licking, scratching, rubbing, chewing, biting). Secondary skin and ear infections are common, which also contribute to the itching. The onset of AD is generally less than 3 years old, and the areas affected are most commonly the face, paws, ears, abdomen, armpits, groin, insides of the thighs, backs of the thighs, front limbs and perianal area. The earliest symptom of EIAAD is pruritus (itching) in the absence of any lesions. This pattern of distribution of itching is indistinguishable from the distribution in food-induced atopic dermatitis (FIAD), but it is distinguishable from that of flea bite allergy, which is generally confined to the caudal 1/3 of the body (the “pants” area, or the rump, tail, groin and thighs). About 50% of allergic animals have more than one allergy, so we often see a combination of environmental allergies, food allergies and/or flea allergy.

EIAD is usually very responsive to steroids, at least initially, but it can become non-responsive over time. EIAD can either be strictly seasonal, or it can be year round with seasonal exacerbations or improvements. If your pet is itchy year round with no seasonal changes, then FIAD must be ruled out prior to diagnosing EIAD. This means we will likely recommend an elimination diet trial first before pursuing testing for environmental allergies.

Atopic dermatitis cannot be cured, but in most cases, it can be controlled. Usually, steroids are used, and while they are very effective anti-inflammatory and anti-itch medications, they only control the symptoms and do nothing to control the underlying allergic disease. Additionally, they have many side effects, many of which are very detrimental to your pet’s long term health. The caveat to that is that steroids are often necessary ADJUNCT treatments, to reduce inflammation and itching in order to keep your pet comfortable while we are addressing the underlying allergic disease.

Allergen-specific immunotherapy (ASIT, or allergy shots) is typically used to control atopic dermatitis. Intradermal (skin) testing and/or serum allergy testing are used to identify the environmental aeroallergens your pet is allergic to. Once we identify what your pet is allergic to, we will design allergy shots specifically for him/her to control the allergic disease. ASIT is effective in controlling atopic dermatitis in ~ 75% of patients. For those patients that cannot tolerate the allergy shots, or those in which the allergy shots are not effective in controlling the symptoms, we have other medications that we can use to treat the allergic disease.

It is important to remember that treating atopic dermatitis is more than just changing the way the immune system reacts to allergens. AD patients also have poor barrier function of their skin, allowing more allergens to be absorbed through the skin, allowing over-colonization of bacteria and yeast on the skin, and allowing excess water loss into the environment from the deeper layers of the skin. We can improve the barrier function of the skin with topical products (moisturizers, emollients, and others) and fatty acids. If we address both components of the disease, we will have much better success at reducing clinical signs. No allergic animal is going to go without flares of itching or secondary infections, regardless of how well controlled the allergic disease is, but treating the allergic disease itself, rather than just the symptoms, will reduce the frequency and severity of these flares.

Secondary skin and ear infections are common in AD, and need to be treated as they arise, but without controlling the allergic disease itself, they will continue to recur much more frequently. Treating these symptoms without addressing the underlying allergy can lead to multi-drug resistant bacterial infections and chronic changes that can be difficult to reverse. Any concurrent allergic diseases (flea allergy, food allergy) also need to be addressed and controlled in order to provide the best quality of life for your pet. Routine flea control is important to control any concurrent flea allergy that is present, and your veterinarian may recommend a 12-week elimination diet trial to rule in/out concurrent food allergy.

Frequent bathing with appropriate shampoos (as directed by us or your veterinarian) help mechanically remove pollens from the skin (so less are absorbed), control secondary infections and decrease itching, contributing to the comfort of your pet and improving the success of other therapies. Sometimes, topical therapy is sufficient to control bacteria and yeast and itching, but sometimes, systemic antibiotics or antifungals or anti-itch medications are needed. Topical therapy in the ears may be needed if your pet has recurrent ear infections.

At Animal Skin Ear & Allergy Clinic, we look forward to working closely with you and your veterinarian to provide the best possible care for your pet, using a multi-modal approach to controlling the allergic disease as well as the symptoms and giving your pet long-term relief and quality of life.