



Allergies in Dogs: Understanding and Treating Itching

At our animal hospital, we often see dogs with allergies as one of the most common reasons for their visit. Allergies can cause various symptoms, but the number one claim that Veterinary Pet Insurance pays out for is allergic otitis, which refers to ear infections caused by allergies.

Understanding Allergies: In humans, cells that release histamine and similar substances are found in the eyes, nose, and airways. When an allergic person encounters an allergen, they may experience a runny nose, itchy watery red eyes, and a cough. In dogs, the cells that store and release histamine are located in five areas of the skin: the side of the face, feet, axilla (front armpit), inguinal area (between the rear legs), and under the tail. Consequently, allergic dogs will lick and scratch these areas when they come into contact with an allergen. This behavior can lead to the development of "hot spots," ear infections, and skin infections. Moreover, a dog's saliva contains an iron-containing compound that can stain the fur a rust color in light-colored dogs.

Breeds Prone to Allergies: Certain breeds are more susceptible to allergies, including West Highland White Terriers, Labradors, Boxers, Shih-Tzus, Golden Retrievers, English and French Bulldogs, among others. It's important to note that most dogs have multiple allergies rather than a single one.

Types of Allergies in Dogs:

- 1. <u>Food Allergies:</u> These are usually year-round problems that primarily affect the ears and the area under the tail.
- <u>Seasonal Pollens</u>: Seasonal allergies commonly occur during spring and fall. In the northeast, trees pollinate in April, flowers and grasses in May and June, and weeds in September and October. Additionally, molds grow on dead leaves in October and November, exacerbating allergies during the fall season.
- 3. <u>Environmental Allergens:</u> Dust, mold spores, and dust mite excrement are examples of environmental allergens. Dogs that sleep on their owners' beds are particularly affected by these allergens. Mattresses and pillows can be significant sources of dust mite excrement.

Diagnosing Allergies: To diagnose allergies in dogs, we must first rule out other causes of itching, such as fleas, mites, lice, ringworm, bacterial infections, weakened immune system, hormonal diseases, and behavioral problems. This involves taking a complete history, conducting a physical examination, performing laboratory testing, and occasionally conducting treatment trials. Flea treatment is often initiated even if fleas are not immediately apparent since they can be a major cause of itching. Once a diagnosis of allergies is made, we focus on treating any secondary complications while determining the specific allergens affecting the dog.

Treating Allergies: Allergic dogs commonly experience secondary bacterial infections (circular red crusting lesions), yeast infections, and ear infections. It is crucial to treat these complications promptly to provide relief to the dog and reduce the owner's anxiety. Additionally, addressing these complications can significantly alleviate itching.

Eliminating the Offender: During the treatment of complications, we also aim to identify the specific allergens affecting the dog. The three main causes of allergies in dogs are food, seasonal pollen, and home environment. Allergies are cumulative, meaning that a dog may have a mild food allergy and not experience any scratching during certain months. However, when seasonal pollen is added to the mix, the dog may exceed its allergy threshold and start scratching. For such cases, eliminating the food component can significantly reduce seasonal allergies. If the dog sleeps on its owner's bed, dust mite allergies become a significant concern. Measures such as using dust mite covers on mattresses and pillows, washing sheets in hot water with bleach, and dry cleaning comforters are recommended.

Food Trials and Treatment Strategies: A food trial can help identify food allergies. The dog is placed on a prescription, hypoallergenic food for three months, during which it cannot be given any other food or treats. A stainless steel bowl should be used for food and water instead of plastic. Rawhides, table food, flavored vitamins, treats, and even flavored heartworm pills should be avoided. It is also important to address any secondary skin problems, such as fleas or bacterial infections, before conducting the food trial. After three months, the dog's itchiness is evaluated, followed by a challenge with the old food. If the dog's itching worsens significantly during the challenge, it is likely allergic to the old food.

Treatment Options:

- 1. <u>Immunotherapy</u>: Blood or skin testing can determine specific allergens, and allergy injections or oral treatments can be administered. It may take six to twelve months to see results, but 50-75% of animals show improvement.
- 2. Avoidance of Allergens:
 - Installing HEPA filters in the house.
 - Eliminating foods the dog is allergic to.
 - Preventing dogs from sleeping on beds to reduce dust mite allergies.
 - Washing the dog's feet after outdoor activities to remove pollen.
 - Keeping the dog's hair short and frequently bathing with a gentle shampoo and conditioner.
- 3. Medications:
 - Antihistamines can help a small percentage of dogs.
 - Corticosteroids are more effective but have significant side effects and should not be used long term. They can be administered orally, as a shampoo, or as a spray/leave-on rinse.
 - Omega-3 and Omega-6 Fatty Acids are safe and have mild side effects, making them beneficial.
 - Epidermal Barrier Support products are topical pour-on lipids that enhance the skin's defenses.
 - There are effective medications for itch control, providing relief within hours. They are not suitable for dogs under one year of age, dogs with certain cancers or infections, and can be used for short or long-term management. They have few side effects.
 - There are injections containing antibodies that bind to and neutralize a compound causing itching in dogs. It remains effective for four to eight weeks.

We hope this handout provides valuable information about allergies in dogs and their treatment options. Our team is dedicated to providing the best care for your beloved pets. If you have any further questions or concerns, please don't hesitate to reach out to us.