# Allergies

By Dr. Katharine Kancer

Allergies and skin conditions are the most common reason people bring their pet to the veterinarian. We understand allergies can be very frustrating. You may have tried multiple shampoos, foods, Benadryl and creams to no avail. That is where we can help. With new developments in diet, drug, and topical therapies, we have more tools than ever to provide your pet with relief. Common signs of allergies include itching, redness, ear infections, chewing or licking on their paws, hair loss, and scooting their rear (anal gland issues). Since our pets cannot tell us what makes them itchy and when, we use a stepwise approach to narrow down the list of possibilities, starting with:

#### I. Parasitic Causes

Fleas and mites are one of the top reasons our pets itch. Fleas tend to reside on the rear back, near the tail base. You may notice hair loss or biting in this area. We test for fleas by running a flea comb over their skin and checking for "flea dirt", which is the vomitus of fleas. Many animals are allergic to the saliva of fleas, so even if you don't see them and there is not a full infestation, just 1 or 2 fleabites can cause a hypersensitive allergic response and major itching. Mites, such as Demodex or Sarcoptes, live in the hair follicles and may cause hair loss all over the body or just concentrated around the face and feet. To check for these parasites, we do a skin scrape.

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### 2. Food Allergies

Food allergies are often due to the protein in the food, not to the grains as many companies and marketing ploys advertise. The top four most common allergens in dogs are beef, then chicken, then wheat, and finally dairy. In cats, the top four are beef, fish, chicken and dairy products. When we rule out food allergies, we perform a food trial that lasts 8-12 weeks where your pet only eats a prescription diet. While there are many over the counter diets that claim to be for allergies, the only diets we can use for a true food trial are hydrolyzed prescription diets. Hydrolyzation means tiny water molecules are added to the proteins during processing to break them into smaller pieces. Research shows small proteins are less stimulatory to the immune system than larger proteins. These diets also use limited and novel ingredients that most pets haven't eaten before (like soy). Food options for trials are: 1) Purina HA, 2) Hill's Z/D 3) Royal Canin Ultamino or 4) Royal Canin Hydrolyzed Protein (in no particular order). Food trials are VERY strict. Your pet can only eat the diet and not have ANY human foods, treats, bones, or even medicated chews (for example, heartworm or flea/tick medicine). During a food trial, we may switch your pet's parasite prevention to topical or injectable versions.









## 3. Environmental Allergies and Atopic Dermatitis:

When a dog has environmental allergies, their immune system over-reacts to normal environmental stimuli such as plant pollens, dust mites, molds, etc. This over-reaction is termed Atopic dermatitis, and is an inherited (genetic) disease. It causes allergens to be more easily absorbed across the skin because the skin barrier is defective. Once the allergens are in the body, they cause itching most commonly around the face, ears, armpits, abdomen, feet, and anus. Typically we see this present seasonally in a young (1-3 years) mostly indoor dog. However, these can affect can affect animals of all ages and lifestyles.

When dogs have Atopy, the best diagnostic option is to find out exactly to what they are allergic. This involves either a blood test or intradermal skin testing just as they do in humans. Once we know what your pet is allergic to, immunotherapy injections can be formulated. These are small amounts of the specific allergens injected monthly to desensitize the body. Over time, typically 6-12 months, these injections change the immune system's response to the stimulus and we see a huge (if not complete) improvement in the clinical signs.

### Helpful tips and reminders:

Before we can begin to control and treat allergies, we first need to rule out any other outside causes of itching. Hormonal diseases, like low thyroid levels, can cause itching as well as secondary infections from bacteria and/or yeast. Skin infections are quite common since the immune system is compromised from fighting off allergens. We frequently see these infections occur in the ears and on the underbelly. To rule out these causes, we run blood work and look at a sample of the skin under the microscope (cytology).

Finally it's important to remember that allergies and Atopy are never truly "cured". Atopy is a chronic disease and our goal is to mitigate the signs and keep your pet as comfortable as possible through a multimodal approach. We use a combination of fish oil (anti-inflammatory), bathing with medicated shampoos (to restore the skin barrier), food changes, allergy shots and medications (antibody specific and steroids), to help your pet have the highest quality of life possible. The medications we use are highly targeted towards different aspects of the immune system and/or specific messenger molecules (called cytokines). If you have used Benadryl in the past and not had good success, do not give up hope! Board certified dermatologists do not recommend Benadryl (diphenhydramine) to treat allergies because they are only effective about 20% of the time. Therefore, we use different medications as our first line of defense to help you and your pet achieve the relief you both deserve.

We are here to be a partner with you on this process, please let us know if you have any questions or concerns!