

Diagnosing and Treating Allergies – The Basics

Adapted from "Treating Allergy in 10 Steps" by the University of Tennessee College of Veterinary Medicine.

Overview

Many unlucky animals suffer from allergies. The most common allergic conditions in cats and dogs are:

- Food allergy
- Allergic dermatitis (also called atopy)
- Flea allergy dermatitis (FAD)
- Contact dermatitis

Any of these conditions can occur in any pet, and some pets have more than one type of allergy. If your pet is frequently chewing, licking, scratching, or shaking their head, or if they are suffering from chronic infections and/or hair loss, the culprit is likely allergic disease. If you think your pet has allergies, it is important to begin treatment and prevention promptly. Chronic diseases or skin infections can change a pet's immune system and skin, making it increasingly difficult and expensive to manage dermatitis.

Diagnostics

Allergic skin disease causes changes in the skin's structure and function, increasing susceptibility to infection. Up to 80% of pets with allergies have secondary infections. Infections cause more itching and make it harder to diagnose the allergy itself. Infections **must** be properly diagnosed and treated to give the pet relief. Some pets who were originally thought to have allergies instead have ectoparasites such as lice or mange. To determine if any of these are present, the following may be needed:

- Skin scrape and/or hair pluck: looks for mange, lice, etc.
- Flea combing: looks for evidence of fleas
- Skin cytology: microscopic examination of what is on your pet's skin (bacterial, yeast, white blood cells, etc.)
- Ear cytology: equivalent of skin cytology for ears - recommended as ear infections are common with allergies

If your pet has had initial diagnostics but is not improving with treatment, additional diagnostics may be indicated:

- Bacterial culture/sensitivity - to diagnose resistant or occult skin infections
- Fungal culture - to rule out ringworm
- Skin biopsy - to confirm or rule out other skin abnormalities, diagnose low-grade chronic mange

Treatment

No two allergic patients are the same. However, there are general rules for properly managing an allergic pet.

1) Treat all secondary infections

- Bacterial skin infections require treatment with oral or injectable antibiotics for a minimum of 3 weeks; severe or resistant infections may need treatment for 6 to 8 weeks or longer.
- Skin yeast infections require at least one month of topical treatment, and in some cases oral medication.
- Medicated shampoos or wipes are often used with oral medications to treat infection. Shampoos should be used at least twice a week in the initial phases. Wet the pet's skin with cool water (hot water will make allergies worse). Leave the pet lathered for 10-15 minutes before a cool water rinse.
- For ear infections, ears must be cleaned frequently and topical medication should be applied as directed.
- While treating your pet's infections, give their medication(s) as directed. **Do not** skip antibiotic doses or give them late; this can lead to resistant bacterial infections. **Do not** stop treatment early unless told to do so, especially ear medications. Ear medications often contain a steroid to control itching while the rest of the medication treats the infection(s). Some pets stop itching after a few days because the steroid is working, but it does **not** always mean the infection is completely cleared.
- Recheck exams (every 2-3 weeks) are necessary in the early stages of treatment. Infections do not always respond as expected to antibiotics, and must be carefully reevaluated to ensure that the pet is improving. **Failure to follow up will increase the chance of chronic or resistant infection, so be sure to bring your pet back regularly as instructed.**

2) Avoid Common Allergens

- Do not allow anyone to smoke in your house.
- Use a HEPA air filter to clean the air in your home.
- Use a high-efficiency dehumidifier to keep humidity below 40% and limit the growth of mold, fleas, and mites.
- Discard any foam or stuffed dog bed in the home older than one year; beds are a major source of dust mites.
- Wash all bedding once a week with hot water.
- Consider a spray to dissolve or denature allergens in the home (Allerase)..

3) Frequent Bathing

- Bathe your pet every 3-7 days (or as directed) with a gentle anti-microbial or oatmeal shampoo (ask your vet) and cool water. This will limit allergen absorption through the skin and help prevent secondary infections.

4) Consistent Monthly Flea Control

- Even if you have not seen fleas, your pet may have flea allergy dermatitis. Some animals are so allergic that the bite of a **single** flea is enough to cause itching. The **only** way to rule out flea allergy is monthly use of flea control.

5) Food Allergy Trial

- Even high-quality foods can trigger itching if a pet happens to be allergic to an ingredient in the food. To diagnose food allergy, the pet should be fed a diet with only one protein (rabbit, duck, venison, kangaroo, etc.) and one carbohydrate (potato, lentil, pea, etc.). They should not have had prior exposure to either the protein or the carbohydrate. Another option is a hydrolyzed protein diet, in which proteins are broken down into pieces too small to stimulate the immune system. Prescription diets are preferred for purity, but over-the-counter novel ingredient diets do exist. **They must be fed that food and only that food for 10-12 weeks**; during this time they cannot have **any** other foods, treats, or rawhides. They should also not receive chewable medications during this time frame. For pets on oral heartworm preventatives, a topical version is available for use during the food trial.

6) Oral and Topical Therapy to Reduce Allergic Reaction and Itch

- Antihistamines (diphenhydramine, cetirizine, hydroxyzine) are inexpensive and have minimal side effects. Talk to your vet about dosing options and timing, and **avoid the use of antihistamines that contain decongestants**.
- Use high-dose essential fatty acids (fish oil). Consult your veterinarian regarding dosing.
- Use anti-itch conditioners and sprays (with oatmeal and/or pramoxine) after bathing.
- Oral or topical steroid therapy may be used temporarily, but should not be used long-term.

7) Allergy Testing

- For pets with atopy, blood or skin testing can identify allergic triggers. This data is used to create a type of allergy vaccine (injectable for cats and dogs or oral for dogs) that slowly desensitizes the pet to allergens. Therapy has few side effects and helps ~75% of patients, but it is a **long-term** approach. Most pets take 6-12 months to improve, and injections should be continued for the life of the pet.

8) Apoquel Therapy

- Apoquel is an oral medication for dogs that specifically targets certain substances secreted by cells (cytokines) associated with itching and inflammation. Apoquel can be used both for short term and long-term treatment, and has minimal side effects. It is initially given twice a day, and then tapered to once-daily dosing if a longer span of treatment is needed. Apoquel is generally less expensive than Atopica, but also requires periodic blood testing to ensure a pet's immune system is not being over-suppressed.

9) Cytopoint Therapy

- Cytopoint is a monoclonal antibody (mAb) for dogs that targets and neutralizes a key itch-inducing cytokine known as (IL)-31. It is given as an injection at your vet's office. Cytopoint begins working within 24 hours, and provides 4 to 8 weeks of relief. It is safe in most animals with pre-existing conditions, and side effects are minimal and mild. No blood testing is required as it does not carry a risk of overall immune suppression. Cytopoint is similar to Apoquel in cost, but in patients who receive extended benefits (over 4 weeks), it may in fact be more cost-effective.

10) Cyclosporine (Atopica) Therapy

- Cyclosporine is an oral medication for dogs and cats that stops T-lymphocytes from stimulating the allergic reaction. It is effective in approximately 75% of patients, and is well-tolerated by most pets. It is used as a long-term treatment for allergies. It is expensive, particularly in large or giant-breed dogs. Treatments are initially given every day, but with time many pets can be tapered to doses every-other-day or potentially even less often, so as to reduce cost. It is sometimes combined with a medication called ketoconazole, which slows the body's processing of cyclosporine and allows it to be given even less often. Regular blood tests are required for pets receiving cyclosporine therapy.