

Dermatology Clinic *for* Animals

Allergies | Causes

Skin problems are common in dogs and cats, and are one of the most frequent reasons that owners bring their pets to the veterinarian. There are many different reasons why a pet will itch and scratch. Fortunately, we can break most of the causes down into a few categories: allergies, skin parasites, and skin infections.

Allergies

POLLEN/ENVIRONMENTAL ALLERGY (ATOPY)

Just like people, dogs and cats can be allergic to pollen, dust and molds. But instead of sneezing and hayfever, pets most often show their allergies in their skin. Allergic cats may develop crusty dermatitis or lick their hair so much that they cause bald spots. Allergic dogs may scratch all over, but especially at their armpits, belly and ears. They may also have recurrent skin and ear infections and lick their paws. The signs usually start between 6 months to 5 years of age. Since food allergy and skin parasites or infections also cause itching, these diseases need to be eliminated as possible causes of itching before the diagnosis of atopy can be made. Some pets with pollen/dust allergies tend to have seasonal (warm weather) symptoms, others may have symptoms year round. Some pollen-allergic pets can be treated symptomatically during the itchy seasons with soothing shampoos/conditioners and anti-itch medications (antihistamines, fatty acids, occasional steroids). If present, secondary bacterial or yeast infections also need to be treated. Pets with continuous signs or itch that is not well-controlled with symptomatic medications or that need steroids too Atopy Pawfrequently should be allergy tested to find out what they are allergic to. Allergy testing can be performed with blood tests or skin tests (like scratch testing in people). Blood allergy testing is more convenient and can be performed by most veterinarians, but may be less accurate than skin testing. Skin allergy testing tests the actual organ that is involved in the allergy (the skin), so is more accurate than blood testing, and is typically performed by veterinary dermatologists. Once the allergy test results are known, allergic pets can receive allergy shots (just like people!) to desensitize them to the pollen. Although not a cure or a quick-fix, allergy hyposensitization injections help 70-75% of allergic pets to decrease symptoms and need for other medications, and address the cause of the allergies, not just the symptom.



FOOD ALLERGY

Animals with food allergy can show very similar signs as pets with pollen allergies, but the itching is not seasonal and animals can develop a food allergy at any time in their life—even if they have been eating the same food all along! Cats may develop crusty dermatitis or hair loss similar to pollen allergy. Besides itchiness, food-allergic dogs may also have ear or skin infections. The symptoms of food allergy usually do not improve much with anti-itch medications, and the diagnosis and treatment is to feed the pet a hypoallergenic diet using a protein source that they have never been exposed to before. Switching to another commercial diet usually does not help, because most of these diets have similar ingredients. A better alternative is a hypoallergenic diet with single unique protein ingredients such as fish, rabbit, duck, or venison, with a single carbohydrate such as potato or rice, and no other treats, table scraps, rawhides, milkbones, chewable supplements or other foods for at least 6-8 weeks. Some food allergic dogs require home cooked hypoallergenic diets. Blood or skin testing for food allergy is unfortunately not accurate in dogs and cats, and over the counter hypoallergenic diets may have ingredients not listed on the label (Click on this link for more information). If present, secondary bacterial or yeast infections also need to be treated. If the itchy symptoms have resolved in 6-8 weeks, new food allergens can be added one at a time every 2-3 weeks (ie. beef, chicken, lamb, wheat, corn, egg, milk etc.) to determine what the pet is allergic to and what other foods they may tolerate.

Skin Parasites

FLEAS

Fleas cause itching and hair loss due to the irritation caused by their bites, secondary bacterial infections, or to a flea bite allergy. Symptoms are often worse in warm weather when fleas are most numerous. Animals will often itch and lose hair on their back near their tail. Cats may also develop small crusts on their skin that are similar in appearance to tiny millet seeds (miliary dermatitis). In flea-allergic animals, even one fleabite can cause a reaction. With the availability of the effective veterinary prescription monthly flea treatment products, flea allergy has become easier to treat. Flea control in the home and yard is also important. Treatment of secondary bacterial skin infections and temporary anti-itch medication (steroids) are also often needed while the flea problem is being brought under control.

DEMODEX MITES

Demodex mites can cause patchy hair loss especially on the face and feet/legs) with only mild itching, or infected dogs can be very itchy if secondary bacterial infections develop. This mite is more common in puppies and immunosuppressed animals, and is not contagious to other pets or to people. Treatment options include oral antiparasite medications such as Bravecto, Nexgard, Simparica, weekly prescription antiparasitic dips, or daily oral antiparasitic prescription medications such as ivermectin or milbemycin. Skin scrapings are monitored monthly by the veterinarian to determine when it is safe to stop medication, and most dogs are treated for an average of 3-4 months. Herding breeds such as Collies, Shelties, Aussies, Border Collies and sheepdogs should not receive ivermectin due to risk of lethal toxicity, and all treatments should be prescribed and monitored by a veterinarian.



Skin Parasites CONTINUED

SCABIES INFECTION

Scabies infection is very itchy and contagious to other dogs, and dogs may lose hair and be crusty on their ears and elbows. Scabies mites can be very difficult to find, and often we will trial-treat for scabies based on the dog's symptoms and appearance, even if we cannot find mites on the skin scrapes. Treatment options for scabies range include antiparasitic prescription medications such as Revolution spot on, or Bravecto and Nexgard chewable tablets; older treatment options include ivermectin or milbemycin given every 1- 2 weeks for 6 weeks or weekly prescription insecticidal dips for 4-6 weeks. With scabies, all dogs in the household must be treated at the same time, even if they are not showing signs yet, because some dogs can carry the mites and have no symptoms. Dogs with scabies may also have secondary bacterial or yeast skin infections which contribute to the itch. Again, herding breeds should not receive ivermectin due to risk of lethal toxicity, and all treatments should be prescribed and monitored by a veterinarian.

Infections

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CAUSES

Although the main reason for a pet's itchy skin may be allergies or parasites, they often get secondary bacterial or yeast infections which can keep the itch going even if the underlying cause is treated. These infections can cause red, crusty, flaky skin, hair loss, pimples, and red bumps. Yeast infection can cause skin to look thickened and "elephant-like."

DIAGNOSIS

Diagnosis is made by the veterinarian with analysis of skin samples under the microscope. Skin infections should be treated with a 2-6 week course of appropriate oral antibiotics or antiyeast medication prescribed by a veterinarian. Medicated shampoos and conditioners can also be helpful. Animals that have recurrent infections need to be screened for allergies or hormonal conditions and have the underlying cause identified and treated.



Allergies | Treatments

Pets with allergies to pollen, grass, or dust are affected with atopic dermatitis or atopy. People with allergies have symptoms such as runny eyes and sneezing, but animals with allergies more commonly show symptoms such as scratching, licking of the feet, and recurrent skin and ear infections. These symptoms can occur only during certain seasons, if the main offending allergens are seasonal pollens, but can occur all year round if the allergens persist in the environment year-round (such as house dust mites and human dander). Atopic dermatitis typically starts in dogs between the ages of 6 months to 5 years and can occur at any time of life in cats.

SYMPTOMATIC ALLERGY TREATMENT —————> **CYCLOSPORIN**

Cyclosporin (brand name Atopica) is an oral medication which can be used as a non-steroid way to reduce allergic skin inflammation and itching. It is more expensive than steroids and is helpful in approximately 80% of allergic dogs to control itch. Cyclosporin is given orally daily for 4-6 weeks, then the dose and frequency is slowly decreased to the lowest possible dose needed for comfort (some dogs need it daily, and in some the dose can be reduced to every 2-3 days). Cyclosporin has fewer side effects than steroids, but because it is still an immunosuppressive drug (it is the same medication used to prevent organ transplant rejection in humans), regular physical examinations with bloodwork and urine testing should be performed in pets on long term treatment. Potential side effects include vomiting and diarrhea, and more rarely skin or internal infections and benign growths on the skin or gums.

SYMPTOMATIC ALLERGY TREATMENT —————> **APOQUEL**

Apoquel (chemical name oclacitinib) is an oral medication licensed for the treatment of both acute allergies and chronic atopy in dogs >12 months of age. It can be used instead of steroids to treat dogs with occasional seasonal pollen or flea allergy flares, and to control itch in allergic dogs while the underlying cause is addressed. This drug is a janus kinase inhibitor, similar to the human rheumatoid arthritis medication Xeljanz. Apoquel acts to reduce production of inflammatory allergic proteins and also to reduce the sensation of itch transmitted by nerves. It is intermediate in cost between steroids and cyclosporine and acts very rapidly (within hours) to reduce itching, but is less effective if skin or ear infections are present and can make infections worse. It appears so far to have very few side effects (occasional GI upset). Since this is a relatively new drug, and since it does affect the immune system, regular examinations and labwork are still recommended.



Non-steroidal immune modulators/ immunosuppressants

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