



Chronically itchy skin, recurrent ear infections, and chronic “hot spots” are all common symptoms of skin allergies in cats and dogs. The inflammation often leads to secondary bacterial or fungal skin infections, worsening the itchiness. Because skin allergies can look identical to parasitic infections (e.g., mange, flea infestation) or ringworm, it’s common to treat for these conditions before starting therapy for allergies. The two most common causes of skin allergies in pets are:

Food allergies: About 10% of skin allergies are caused by food. Common food allergens in pets include chicken, beef, corn, and wheat, but pets can develop an allergy to almost any food. Food allergies can develop even if your pet has been on the same diet for months or years. To determine whether food is the culprit, we recommend a “food elimination trial” for 6 to 8 weeks. This means feeding a protein and a carbohydrate that your pet has never eaten before, or hydrolyzed diets, which are foods made from proteins broken down to so that the body does not recognize them as allergens. During the elimination trial, *NO other treats or foods are allowed*. If the itching and skin infection resolves, we “challenge” the pet by feeding him his original diet to see if the symptoms recur. If the symptoms come back, we have diagnosed a food allergy. Food allergies are managed by avoiding the offending food items.

Atopic dermatitis: The majority of pets with itchy skin have a condition called atopic dermatitis (AD). This is an inherited predisposition for the body to overreact to common allergens, such as pollens, dust mites, or molds. Symptoms of AD may be seasonal (e.g., pollen) or may be year-round (e.g., dust mites). A veterinary dermatologist may be able to pinpoint specific allergens by performing an intradermal skin test on your pet, and create an “allergy vaccine”—an injection containing tiny amounts of the allergens. Unfortunately, not all pets improve with this treatment, and some have too many allergies to create an effective vaccine for them. For most AD cases, symptomatic treatment is important to keep your pet comfortable.

Symptomatic care for skin allergies in pets can involve many different approaches:

Bathing: Particularly important for pets with allergies to pollens or other environmental allergens, bathing helps to remove the offending substances and inflammatory debris to reduce bacterial or fungal overgrowth. Antimicrobial shampoo such as CeraSoothe Chlorhexidine Shampoo can help relieve bacterial or yeast infections. It is recommended that environmentally allergic dogs be bathed once to twice weekly, and your veterinarian may recommend a particular shampoo depending on your pet’s symptoms.

Fish oils: (*Do not give during a food allergy trial.*) Omega-3 fatty acids are anti-inflammatory and make up important components of the normal skin barrier. Supplementing your pet with fish oils is a safe and inexpensive way to reduce skin inflammation while also making the skin



more resistant to allergens. Purchase a product that lists the amount of EPA and DHA per capsule.

Dosage:

EPA: 180mg per 10 pounds of bodyweight

DHA: 120mg per 10 pounds of bodyweight

Antihistamines: Extremely safe, inexpensive, and easy to purchase, but only works for mild itching. Antihistamines can be added to all other allergy therapy options with potential for cumulative effects. We use similar antihistamines used for people, including Benadryl, Claritin, and Zyrtec. Some pets respond better to one antihistamine over another, so you may need to experiment to find one that works best for your pet.

Dosage:

Benadryl 25mg (diphenhydramine): 1 tablet per 25 pounds up to every 8 hours and/or

Zyrtec 10mg (cetirizine): 1 tablet per 22 pounds every 24 hours

Corticosteroids: Steroid medications, such as prednisone, are the most inexpensive and potent type of anti-itch medication we have. For pets who are causing damage to themselves by itching, steroids are the fastest way to alleviate the itch while other therapies are taking effect. Steroids are also effective at helping prevent ear and skin infections from allergies and at controlling inflammation and red skin. They will increase thirst, urination, and hunger in many dogs. We try not to use steroids long-term, as they can cause thinning of the skin, weakened muscles, poor hair coat, liver changes, and occasionally kidney changes. For this reason, they are tapered to be given every other day or less if used long-term. Blood tests are recommended after 3 months if well tolerated.

Atopica (cyclosporine): This medication is a non-steroid immunosuppressive medication. Atopica is a nice alternative to chronic steroid use, as it causes fewer side effects—but can take 4–6 weeks to become fully effective. Common side effect (approximately 30% of animals) is vomiting for the first week of therapy. This often resolves within a week and most patients do not act ill during this time. Other side effects include gingival hyperplasia (overgrowth of the gums), papillomas, infections, enlarged lymph nodes, and increased hair growth. This medication can be given daily or as little as twice weekly. It is effective at helping prevent ear and skin infections caused by allergies and at controlling inflammation and red skin. Blood tests are recommended after 3 months if well tolerated.



Apoquel (oclacitinib): This medication is a different class of immune suppressant called a JAK inhibitor. This medication is not a steroid, so we can avoid many of the side effects that we see with those classes of medications. Rarely it can cause decreased appetite, vomiting, or diarrhea. It is fast acting and relieves itch in about 85% of pets with atopic dermatitis. It can be stopped without tapering, but typically needs to be given every day. It is less effective at preventing ear and skin infections and does not work well for inflammation or red skin. It cannot be given in dogs less than 12 months of age.

Cytopoint (IL-31 antibody): This is a monoclonal antibody given in the hospital as an injection. It takes effect within 5 days of injection, works in 80% of patients, and lasts for 4–8 weeks in most dogs. It is safe with no reduction of the immune system and can be used in dogs less than 12 months of age. It is less effective at preventing ear and skin infections and does not work well for inflammation or red skin.

Allergy shots or drops: This specialized vaccine contains the environmental allergens that your pet reacted on an allergy test performed by a veterinary dermatologist. Allergy shots/sublingual drops work in 60–70% of patients but may take several months and up to a year to work. Since avoidance of an environmental allergen is nearly impossible, formulation of allergen shots/drops is the only specific treatment for environmental allergies. Most dermatologists allow you to choose between a shot or oral drops. You give the shots at home, starting with more frequent doses in the first few month, then tapering to every 20 days, for life. The sublingual drops is given once a day by mouth and is absorbed through the gums. This is our safest option for controlling moderate to severe allergies. About 1% of dogs on allergy shots develop an allergic reaction to them with swelling of the face, which requires emergency veterinary care. Therefore, you must monitor your pet after the shot is given for 1–2 hours. Some dogs are initially itchier after the shots, but often improve with time.

Antibiotics or antifungal medications: Chronic inflammation and self-trauma from licking and scratching make allergic pets highly prone to secondary skin or ear infections. Bacterial and fungal infections worsen itchiness. The other therapies listed for allergy management will often not be effective in the face of infection. We can check for secondary infections through a variety of means, including looking at samples collected from your pet's skin under the microscope or collecting skin cultures to determine the specific bacterial species present. Our goal is to first resolve the secondary infections, and then to reduce overall skin inflammation to prevent future infections.

Unfortunately, skin allergies cannot be cured. However, most cases can be well-managed with supplements and medications, and pets with allergies can lead very normal and comfortable lives.