

Allergy and Atopy Treatment in Dogs

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This article will help you better understand allergy treatment in pets. Treatment options for [atopy](#), [food allergies](#), and [contact dermatitis](#) will be discussed.

About 90% of allergic pets can be effectively controlled with the following treatments. Some dogs might only require a fatty acid supplement or a simple change in diet to keep their allergies under control, whereas, some animals may need to incorporate several or all of the following treatments to be effective. I will give treatment options for all three allergy types. Remember that many animals may have allergies to more than one allergen and may also have both food and atopic allergies.

Atopy

[Atopy](#) or (inhalant allergy) is by far the most common cause of allergies in dogs. Many of these pets suffer from intense itching and usually have a seasonal pattern initially, but it may turn into a year-round problem. Other animals may show only mild signs, and treatments for dry skin, skin infections, or [fleas](#) may solve most of the problem.

Avoidance

This can be a very important part of managing atopy. While it may be impossible to completely eliminate all of the offending agents, many can be reduced with minimal effort on the part of the owner. For avoidance therapy to have any benefit, the offending agents must be identified through intradermal skin testing. Avoidance is rarely a complete treatment in itself, but is used in conjunction with other treatments.

Allergen	Avoidance Suggestions
House dust House dust mites	Keep pets out of room several hours when vacuuming
Molds	Use a plastic cover over pet's bed Wash bedding in very hot water Avoid letting pets sleep on stuffed furniture Avoid stuffed toys Keep pets in uncarpeted rooms Run air conditioner during hot weather
Pollens	Keep pets out of basements Keep pets indoors when the lawn is mowed Avoid dusty pet foods Clean and disinfect humidifiers Use dehumidifiers Avoid large numbers of houseplants
	Keep dogs out of fields Keep grass cut short Rinse dog off after periods in high grass and weeds Keep pets indoors during periods of high pollen season

Topical therapy

Topical therapy consists of shampoos and rinses and topical anti-itch solutions. Topical therapy offers immediate, but short-term relief. I recommend bathing atopic dogs at least once every two weeks with a hypoallergenic shampoo or colloidal oatmeal shampoo. Hydrocortisone shampoos may also be used. Weekly or even twice weekly shampoos may offer increased relief for some dogs.

Topical solutions containing hydrocortisone offer some relief. They are the most practical in treating localized itching. Creams or salves are often used on the feet and between the toes and sprays are used on the abdomen or other areas with less hair. These products are very poorly absorbed into the bloodstream, and when used in moderation, do not create long-term side effects or problems associated with injectable or oral steroids. In addition, cooling salves and lotions may also be used. Care must be taken with these to ensure that they do not make the coat too greasy. Dogs may tend to lick off these preparations. After applying these preparations, it is recommended to get the pet involved in some activity to prevent him from licking the treated area.

Fatty acids

Fatty acids have been recommended for years to improve coat quality and shine. Recently, new research has shown that certain fatty acids - the omega-3 fatty acids - are also very beneficial in the treatment of allergies in dogs and cats. Omega-3 fatty acids work in the skin to help reduce the amount and effects of histamine and other chemicals that are released in response to allergies. Not every allergic pet responds to omega-3 fatty acids. Some pets show improvements, others have a complete cure, and others show no change after being on the omega-3 fatty acids. Most pets need to be on the omega-3 fatty acids daily for several weeks to months to notice significant improvement. Omega-3 fatty acids are very safe and have very few side effects. Studies show that when omega-3 fatty acids are used in conjunction with other treatments, such as antihistamines, the use of steroids can be decreased or discontinued. Be sure to use an omega-3 fatty acid supplement derived from fish oil. Other types of fatty acids (such as omega-6 fatty acids) can actually make some allergies worse. It is often best to use the omega-3 fatty acid supplements in conjunction with a diet lower in fat.



Biotin

[Biotin](#) is one of the B vitamins. Several studies have shown that dogs suffering from dry skin, seborrhea, and dry, itchy allergic skin greatly improved when supplemented daily with biotin. Biotin is often used in combination with fatty acids to treat dogs with allergies. Biotin is very safe and there are no side effects or toxicities. Biotin may be found as a supplemental powder containing just biotin, or as a supplement such as brewers yeast, which contains other ingredients.

Antihistamines

Antihistamines are widely used in both the human and animal medical fields. Most of the antihistamines used in veterinary medicine are antihistamines that were designed for and used primarily by humans. Antihistamines have been shown to be effective in controlling allergies in up to 30% of dogs and 70% of cats. When used as part of a treatment plan including fatty acids and avoidance, the percent of respondents goes much higher.

Every animal will respond differently to each of the different antihistamines. Therefore, several different antihistamines may have to be used before an effective one is found. Every antihistamine has a different dose and risk of side effects. Antihistamines should be used with veterinary guidance. Some common side effects include sedation, hyperactivity, constipation, dry mouth, and inappetence. The correct antihistamine given at the proper dose should not cause unwanted side effects. For severely itchy dogs, mild sedation may be a positive and desired side effect.

Antihistamines come in several forms including H1 and H2 blockers. While the H2 blockers (Claritin, Seldane, and Hismanal) have been shown to be very effective in treating human allergies, they have not been shown to be effective in treating canine or feline allergies, and are therefore, not recommended for pet use. There are many different H1 antihistamines available on the market, but veterinary use is usually restricted to the following.

Antihistamine	Trade Name	Possible Side Effects
Diphenhydramine	Benadryl	Sedation, dry mouth
Hydroxyzine	Atarax	Sedation, no dosage for cats
Clemastine fumarate	Tavist	Sedation, dry mouth
Chlorpheniramine	Chlor-Trimeton	Lethargy, diarrhea

Immunotherapy (Hyposensitization)

[Immunotherapy](#) has been described as the mainstay of treatment for canine atopy. It is indicated in animals where the avoidance of antigens is impossible, symptoms are present for more than 4 to 6 months out of the year, and fatty acids and antihistamines do not provide satisfactory results.

An animal must undergo intradermal skin testing prior to hyposensitization. After the antigens to which the animal is allergic have been identified through testing, a commercially prepared injection containing the altered antigens is injected into the dog. Depending on the type of product used, a series of weekly or monthly shots are given. The animal then becomes de-sensitized to the offending allergens. Success is as high as 80% with this treatment plan. Treatment is time consuming and requires a dedicated owner and veterinarian. I feel that this treatment is an excellent option in severe cases of atopy, especially in young dogs. This testing and treatment option is currently grossly underutilized in the veterinary profession, but is gaining in popularity. If you have an allergic pet that is not responding to conventional treatment, seriously consider this as a treatment option.

Steroids



Almost everyone out there has an opinion on steroids and many of them are bad; that is, unless they were suffering from severe itching, coughing, or pain and had to take steroids for relief, in which case, they may sing their praises. Steroids are extremely effective for relieving severe itching and inflammation. The problem is that they can have many short and long-term side effects, if not used correctly. I have seen steroids grossly abused when used as a cure-all without proper diagnosis of a condition or using other alternative treatments. At the same time, I have also seen veterinarians and owners refuse to use them to alleviate severe itching and pain when they were clearly the best choice and should have been used. Steroids are a drug, and just like any other drug, they can be misused. If used correctly, they can be as safe as any other drug that we use. The problem is that they work

so well that they are often overused. Because of their potential side effects, they should be used very carefully, and at the lowest effective dose. They are usually reserved as one of the last lines of treatments, but if nothing else works, use the steroids.

Steroids are usually administered in one of two forms, injectable and in tablet form. The steroids being discussed here are corticosteroids and are not the anabolic steroids used by body builders. Anabolic steroids are a completely different drug and have no application in treating animal allergies. There are many different forms of corticosteroids currently available on the market. They vary widely in their duration of activity and strength.

Steroids have a wide range of activity and affect several different systems within the body. They are closely involved with the skin, immune, and endocrine system. The effects on the immune and endocrine system can create the widespread and multisystem side effects seen with their use.

Injectable: Injectable forms of steroids include betamethasone, dexamethasone, flumethasone, methylprednisolone, and triamcinolone. These agents are usually given intramuscularly and have between one week and six months duration depending on the product, the dose, and the individual animal.

Oral supplementation allows a more accurate and tailored dose, but injectables may be preferred in several situations. Injectables are preferred in animals that are very difficult to give pills to, and in animals that need immediate relief. Once the injection is given, it is impossible to reverse its effects and side effects. With oral administration, if unwanted side effects appear, the product can be discontinued and the side effects will diminish.

Steroids can be used effectively and safely, if a careful dosage schedule is followed.

Oral: Most of the injectable forms of steroids also come in a tablet form. As mentioned earlier, it is much easier to customize an individual dosing program with the tablet form. The affected animal usually begins with daily therapy for a period of three to five days, and then the dose is reduced to every other day dosing. If the animal needs to be treated for more than a couple of weeks, then the dose is halved weekly until a minimum therapeutic level can be established. The goal with all steroids is to use the minimum dose necessary to alleviate the symptoms. By taking this approach, the side effects are eliminated or reduced.

Side Effects: The potential side effects associated with steroid use in dogs are numerous. Side effects can appear with any duration or form of steroid therapy. Each animal responds differently to each type of treatment. However, the number and severity of the side effects are very closely related to dose and duration of treatment. Most of the side effects associated with minimum effective dose short-term therapy are mild and resolve once therapy stops. The most common symptoms include increased water consumption, increased urination, increased appetite (weight gain), depression, hyperactivity, panting, and diarrhea.

Long-term use has the risk of creating more permanent and severe damage. Some high dose, long-term side effects include increased incidence of infections, poor hair coat and skin, immunosuppression, diabetes mellitus, adrenal suppression, and liver problems. The potential problems can be severe, however, it must be stressed that these side effects are dose dependent. Despite the potential side effects, steroids can be used effectively and safely, if a careful dosage schedule is followed. Still, because of the availability of safer yet effective therapies, steroid use is reserved until all other treatment options have been exhausted. Several studies have shown that if fatty acids and antihistamines are used concurrently with steroids that the

amount of steroids needed to offer relief is greatly reduced.

Food Allergies

The treatment for [food allergies](#) is avoidance. Once the offending ingredients have been identified through a food trial, then they are eliminated from the diet. Short-term relief may be gained with [fatty acids](#), antihistamines, and steroids, but elimination of the products from the diet is the only long-term solution.

Contact Allergies

Contact allergies are not very common in dogs and cats. They are usually detected through scratch testing and avoidance. The best treatment is avoidance. If that is not possible, then fatty acids, antihistamines, biotin, and topical shampoos can be used to control the itching. Because the allergic dog's feet become inflamed and itch, many owners think their pet has contact allergies from the grass, carpet, etc., when in reality, they are probably suffering from atopy or food allergies.