



# ALLERGIES AND YOUR DOG

Allergies are the body's response to foreign proteins. In an allergic dog, the body's immune system 'over-reacts' to the foreign protein particle. These proteins may be found in the environment (e.g. pollens, grasses, dust mites, etc), or in food (the protein source is by far the most common allergen in food). Labrador Retrievers are a breed commonly affected by allergies. The most common types of allergy in the dog include allergies to fleas and food, contact allergy, and inhaled allergy (also known as atopy).

## What happens to the dog when he/she encounters the allergen?

Allergic dogs most commonly present with **generalized itching**. Dogs may chew, lick, and scratch anywhere and everywhere on his or her entire body,

although the feet, face and ears may be the most commonly affected areas. In the case of licking, saliva will often stain lighter coloured fur, leaving a reddish/brown pigment behind.

In humans, inhaled allergens cause respiratory problems, hay fever or asthma. Although dogs will occasionally have respiratory signs, they more commonly experience pruritus (itching) in response to the allergen.

Constant scratching may also predispose your dog to a secondary skin infection involving either bacteria or yeast. Not only do these infections create a very strong, unpleasant odor, they also make the scratching much worse. Unless these infections are treated, they will not resolve on their own, and will only lead to more scratching.

## I have recently adopted a dog that appears to have a history of allergies. What should I do? What can I expect long term?

If you adopt a dog that appears to have skin issues, he/she should be evaluated by a veterinarian. Your veterinarian will evaluate the seriousness of the skin lesions, as well as assess for secondary infections. Parasites such as fleas and mites also cause scratching, and will need to be ruled out.

Once the examination is completed, and the results of the testing are in, your veterinarian will set a treatment plan. This will include some or all of the following:

- Antibiotics (for bacterial infection)
- Antifungals (for yeast infection)
- Antiparasiticides (in case of mites or fleas)
- Shampoos (bathing with a medicated shampoo can reduce the presence of surface bacteria and yeast, and often provide temporary relief from the itching)
- Anti-pruritic medication (to help relieve the itch) - your dog will likely be on one of these medications long term
  - This is one of the most important components of the treatment plan. Continued scratching will just continue the cycle of

secondary infections and skin damage.

- Corticosteroids have historically been the most common type of medication used to stop the itch. They are very fast acting and extremely effective. Long term side effects exist, and veterinarians have moved to other medications in more recent years.
- A new medication called **Apoquel** has recently been released and has been found to be very effective in controlling the itching of allergic dogs, without the long term side effects of corticosteroids.

A key factor in getting the allergies under control is close follow up and monitoring with your veterinarian. It's very important that the secondary infections are completely resolved several days prior to stopping the antibiotics/antifungals, and close monitoring of the resolving irritation, redness and lesions is crucial. You can likely expect weekly follow-ups until all of the clinical signs have resolved.

Once the infections have cleared, the close monitoring and diligence will fall in your hands! You will want to monitor your new dog for recurrence of scratching, and the presence of new lesions. Allergies can be kept under control by maintaining the lowest amount of medication required to keep your pet comfortable and attempting to avoid the offending allergen (if known).

## Can I find the cause of my dog's allergy?

Narrowing down the cause of your dog's allergy is not always easy. It can be especially difficult when you're dealing with a newly adopted dog, whose history regarding feeding, duration and seasonality of the scratching, and response to previous treatment (if any) is unknown. It may take several months, further testing, and trial and error, before you're able to identify your dog's allergy triggers. It's important to keep in mind as well, that dogs may have a combination of food and environmental allergies, further complicating the process.

## Food allergies

- the location of the lesions may make your veterinarian suspicious of food allergies. Chewing and biting at the feet



and hind end, and chronic or recurrent ear infections is often suggestive of a food allergy.

- poor response to anti-pruritic medication (once all secondary infections have resolved, and parasites have been ruled out) may also indicate a food allergy
- food allergies can develop at any point in a dog's life. A dog that has eaten the same diet for several months to years, may suddenly develop an allergy and become unable to tolerate an ingredient in the food.
- although tests for food allergies do exist, they are highly inaccurate, and not recommended. The only way to rule a food allergy in or out is to do an **elimination diet trial**. This involves feeding a hypoallergenic diet or a novel protein (i.e. a protein that your dog has never been exposed to in the past - a bit more difficult when you're dealing with a dog with unknown history) diet **exclusively** for a minimum of 10-12 weeks to evaluate the response. This means no treats, table scraps, or chews while the diet trial is underway. Veterinary diets, rather than pet store diets are recommended for these trials, because these foods are specifically made with this purpose in mind, so are specially made to avoid cross-contamination with any other protein source. At the end of the trial period, the previous diet is often reintroduced to determine if the scratching resumes. If it does, that helps to confirm that an allergy does, in fact, exist.

#### Environmental allergies

- you may notice a seasonal pattern to your dog's scratching - various grasses, and pollens are present at different times of the time and may cause flare ups.
- although we often consider environmental allergies to only include plants and pollens, dogs can react to indoor allergens as well, including dust mites, cigarette smoke, textiles and materials, and even cats!
- environmental allergies typically respond quite well to regular

administration of the antipruritic medications mentioned above

- intradermal or blood serum testing can help to identify some of the environmental triggers affecting your dog's allergies. Immunotherapy or 'allergy' shots, individually tailored to reflect your dog's specific allergens can be administered, in an attempt to desensitize your dog's response allergy response.

#### Are there any other tools or supplements I can use to help control my dog's allergies?

Multi-modal therapy is often required to maintain a good level of comfort for you dog, and to prevent flare ups. Although anti-pruritic medication is often required long term, or during particularly bad times of year, there are products you can use to help to reduce the frequency of administration.

- Omega Fatty Acids: OFAs in high doses have an anti-inflammatory effect and can help reduce the allergy response. It's important to remember that all OFAs are not created equal! Choosing a high quality product with the correct ratio of omega 3 to omega 6 fatty acids is essential in their effectiveness. Your veterinarian can help you to select an appropriate product for your itchy dog. (\*Liquid products are a better choice for food allergy dogs, as gelatin capsules contain beef and may create an allergic response.)
- Products that repair skin barrier defects: Animals that have allergies often have a genetic predisposition

for an imperfect skin barrier, allowing for allergens to easily enter the body and create a response. Licking, scratching and self trauma also break down the barrier and exacerbate allergy signs. Products in the form of topical 'spot-on' liquids, foaming mousses, and even some foods contain ingredients like *ceramides* and *phytosphingosines* to help the skin naturally repair itself and reduce its penetrability.

- Antihistamines: Although not effective in all dogs, some antihistamines have been found to reduce the allergy response in dogs, and help to reduce the amount of anti-pruritic medication required. Response is determined by trial and error, and an antihistamine should be used consistently for a period of 2 weeks, in order to properly evaluate it's effectiveness. Your veterinarian can provide you with an appropriate dose, as well as advice on what antihistamines are safe to use in your dog.

Although allergies are chronic and lifelong, and can be a source of frustration for owners (and the dog!) to deal with, there are so many tools at our disposal to help your dog to live a very comfortable, itch-free (and smell-free!) life!

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