

Choosing The Right Medication For Your Westie's Allergies: Partner With Your Veterinarian For The Best Results

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Those of us who know and love the West Highland White Terrier know that some of them really suffer from allergies. I am writing this article as an allergic Westie owner, a veterinary dermatologist, and an immunologist with the hope that the information here will help you make the best choices you can if you have an allergic dog. We have learned a lot about allergies in dogs over the last 10-15 years, and this new knowledge has resulted in the development of better diagnostic aids and targeted treatments that are safe and effective. The term allergic dermatitis refers to any of the skin allergies we see, including those caused by fleas, by foods, and by contact allergens (relatively uncommon in dogs). Atopic dermatitis is the inherited predisposition to develop reactivity to environmental triggers such as pollens or molds or mites or danders; reactivity to food can be part of this disorder. Atopic dermatitis is the most difficult to control because we can't control the trigger factors. We can control fleas and we can control what dogs eat, but we can't control pollination! It is better not to have allergies, but the veterinary profession has so much more to offer our beloved itchy pets in the 21st century.

When we discuss medications, it is always important to define what we mean by the terms "safe" and "effective." Safe doesn't mean no risk; it means low risk. I talk about benefit:risk ratio whenever I prescribe a medication for my patients as

TESSIE BELLE BEFORE



TESSIE BELLE AFTER



well as my own dogs. In most dogs with atopic disease, the itch and inflammation are moderate to severe. When a medication is called safe, the very low risk of a drug side effect pales when we consider the daily suffering our allergic dogs experience. We want our dogs to have the best quality of life that they can. When we use the term "effective," we mean that the treatment controls the disease so that any remaining itch is tolerable.

(Continued on page 10)



In my opinion, atopic dogs will always be more itchy than nonatopic dogs. But if they eat and play and sleep well, we and they can tolerate it.

It is also important to understand how medications are labeled when they are approved by the FDA. Drugs that dampen the immune response are called “immunosuppressive” which can sound scary; however, an overactive immune system is why dogs are itchy and red. Modern approaches reduce the immune response enough to keep dogs comfortable but not enough to prevent an otherwise healthy dog from fighting off viruses and bacteria. One of my favorite analogies to help explain this is the thermometer analogy developed by Dr. Thierry Olivry. He compares the immune system to a thermometer. Most allergic dogs have a “high temperature” immune system; we can give them a medication that cools it down so they are comfortable but they can still fight off infection. There are a very low number of dogs whose immune systems are marginal, and if they take

a drug that cools their immune response down, they might be at risk for infections. We can stop the medication and look for alternatives if these rare events occur.

Any new drug that affects the immune system is required by the FDA to have a warning that its use could increase susceptibility to infection and neoplasia. This warning is not based on the observation that these problems have occurred in dogs, but that the potential is there. Each of the companies that make these medications follows up on any adverse reactions that are reported, and this information is delivered to the FDA regularly.

Now let’s talk about treating our itchy dogs. Modern veterinary dermatologic care enables us to work with our veterinarians to develop an individualized approach to each patient, depending on his or her need. Customizing treatment is very important because allergies are forever. Atopic dermatitis is a lifelong inflammatory disease and our goal is to keep our dogs as comfortable as we possibly can throughout their lives. We do need to be realistic, though, because there will be flares. Our hope is that by partnering with our veterinarians we can reduce the flares and keep our dogs comfortable. Over half the dogs with atopic dermatitis itch year round and so they need treatment year round. We will start discussing our medication options, then talk about some of the things we, as owners, can do to maximize the benefit of the medications we use.

In the past, our only choice for the management of the itch associated with atopic dermatitis was to use a glucocorticoid (steroid). I call steroids the atom bomb of inflammation control. They are very effective and broad spectrum drugs, but they definitely have side effects that are undesirable, particularly if they are required over many years. Ciclosporin (Atopica®) offered the first effective nonsteroid treatment for atopic dermatitis. It is more targeted than glucocorticoids, in that it affects fewer parts of the immune system. Atopica® works to reduce the production of cytokines (inflammatory mediators) that promote an immune response. More recently oclacitinib (Apoquel®) and canine atopic dermatitis immunotherapeutic (Cytopoint®) have become available. The former is a drug that affects fewer inflammatory mediators than Atopica®, and Cytopoint® is a biologic agent that is specific for one cytokine (inflammation mediator) only. Apoquel® gets inside the cell to block the signaling of the molecules (cytokines) that stimulate allergic itch and inflammation. This drug works very quickly because it stops the signaling rather than the production of these itch and inflammation molecules. Most dogs will be much more comfortable within a few hours. Apoquel® was developed to be a replacement for steroids for short term use, but it has

(Continued on page 11)

(Choosing the Right Medication continued from page 10)

been shown to be safe when used over many months to years. By contrast, Cytopoint® is a biologic agent. Specifically, it is a monoclonal antibody that was developed to block the itch molecule interleukin-31. It is given by subcutaneous injection every 4-8 weeks, and can be used throughout the year if needed.

So how do we choose the right medication for our pets? Most veterinarians agree that it is best to avoid the use of long term glucocorticoids because of the risks associated with them. Glucocorticoids affect almost every cell in the body. Their effects on the immune system make dogs more susceptible to infections in the skin, bladder, and other organs; there can be muscle weakness, thinning of the skin, and changes in function of the liver, kidneys, and adrenal glands. Glucocorticoid can affect heart function and even behavior. In the short term, glucocorticoids can increase water drinking and urination; our dogs may urinate in the house and/or beg to be let outside more often. And even in the short term, behavior can be changed. Dogs may be more grouchy than normal with other dogs in the house and even with us. Having said that, glucocorticoids have been the mainstay of treatment for years. Whereas they were my first choice as a dermatologist to control itch in an allergic dog, they are now my last choice. If your dog needs to take glucocorticoids for any disease, partner with your veterinarian to achieve the lowest possible dose that controls the disease. I have lived with 5 atopic dogs who have taken glucocorticoids, and each of them has struggled with excess urination, often in the house.

When would we choose Apoquel®? Apoquel® is a great choice when we want to stop the itch quickly. It is absorbed into the body rapidly and stops itch in many dogs in less than 4 hrs. In fact, when compared to prednisolone (a glucocorticoid), it is just as effective. Apoquel® is a great choice for a dog that develops a hot spot associated with fleas or other allergies. It has a very flexible dosing schedule that allows us to use the drug for the time needed. Apoquel® has been approved by the FDA for use in dogs one year of age or older, and because it does dampen parts of the immune system, it shouldn't be used in a dog with a serious infection (e.g. pneumonia or urinary bladder), or a dog with an active cancer. The most common side effects are upset stomach and diarrhea, but these side effects occur in less than 5% dogs. Much more rarely, dogs can develop viral papillomas (warts), demodicosis, and infections in organs other than the skin. I have found that the vast majority of dogs tolerate Apoquel® extremely well, and it has given my patients a quality of life that they had never had before. If your dog does well with Apoquel® taken once a day, then it can be used for long term

allergy management. For more information you can type this URL into your web browser.

<https://www.apoqueldogs.com/>

When would we choose Cytopoint®? Many of us would prefer that our dogs not have to take a drug every day for years. In that case, Cytopoint® can be a great choice because it is not a drug and it is not immunosuppressive. It affects one cytokine only and that cytokine (IL-31) is not essential for normal immune function. As a biologic agent, it can be ideal for the management of atopic dermatitis. The USDA recently expanded the label, so Cytopoint® can be used for any allergic itch, which is great for dogs in which we would hesitate to use Apoquel® (e.g. dogs less than a year of age, dogs with serious infections, and dogs with active cancer). We are recognizing allergies in dogs as young as 4-6 months, and it is great to have an option other than steroids to control their itch. Side effects have been rare; they include the possibility of hives but this side effect is extremely uncommon. It is given as an injection every 4-8 weeks, or as needed to control itch. It doesn't require daily administration of a pill and it is great for those of us who travel a lot. If you have tried Apoquel® for your dog and it hasn't provided the relief you for which you hoped, consider Cytopoint®. A recent publication from Colorado State University showed that 70-80% of dogs who were poor responders to Apoquel® did very well with Cytopoint®. For more information on Cytopoint®, visit the website listed below.

<https://www.cytopoint4dogs.com/>



(Continued on page 12)

When would we choose Atopica®? Atopica® has been used successfully for over 15 years, and has a history of efficacy and safety recently lauded in the Veterinary Journal in 2014. Veterinary dermatologists have used this drug successfully to help control the itch of atopic dermatitis, particularly during the induction phase of allergen immunotherapy. It is not good for sudden itch, because it takes a good 4-6 weeks to be fully effective. The most common side effect is vomiting and diarrhea, which can occur in 20-30% of dogs; in most dogs, these gastrointestinal side effects are transient and easy to control. Some dogs will develop gingival hyperplasia (overgrowth of gum tissue) and Westies appear to be a breed predisposed to this side effect. Atopica® is approved for use in dogs six months of age and older, and should not be given to dogs with cancer or serious infections. As an owner and a veterinary dermatologist, I would choose Atopica® for those dogs who failed to respond well to Apoquel® or Cytopoint®. If a dog is doing well with Atopica and you have been able to reduce the dose to 2-3X a week, I would not recommend changing just to try something new. We don't want to fix what isn't broken! For more information about Atopica®, please visit the website below.

<https://us.atopica.com/>

Now that we have great choices to control the itch, what can we do to maximize control of atopic dermatitis? I still believe in allergen immunotherapy, whether given by injection or drops; it is the only treatment we have that can change the abnormal immune system. It can prevent the progression of the disease and reduce the need for medication over the lifetime of the dog. While we don't have firm evidence, many veterinary dermatologists believe that this approach works better when a dog is young. Their immune systems are more plastic and better able to be molded. The best candidates are young dogs who have moderate to severe itch nearly year-round. I do think that Westies can do very well with immunotherapy. My three certainly did. I tell people that this approach is an investment in their dog's future. It won't work today but hopefully in a year the dog will need less

medication. We can use Atopica® or Apoquel® or Cytopoint® as we wait for the immunotherapy to work.

One of the most important aids in the management of atopic dermatitis is the best ectoparasite control we can provide. We know that even in dogs without classic flea allergy, fleas will induce flares of atopic dermatitis. We now have isoxazolines, the best and fastest flea and tick killers ever, and these medications kill mites and lice as well. There are 4 brands: Simparica®, Nexgard®, Bravecto®, and Credelio®. You can speak with your veterinarian about which product they would recommend. The International Committee on Allergic Diseases of Animals recommends that an oral fast acting flea control medication be given to all atopic dogs year round. Using good ectoparasite control helps our anti-itch medications work better.

Bathing can be tremendously helpful to dogs with allergies. It reduces infection and removes allergens from the skin. I favor the shampoos with skin barrier lipids in them. Dogs with atopic dermatitis have a more porous skin that increases their susceptibility to infection and very dry skin. Using shampoos, sprays, mousses, or spot-ons with phytosphingosine (e.g. DOUXO®), ceramides (e.g. Biohex™), or fatty acids (e.g. Dermoscent® line) help the skin repair itself and reduce infections.

It is important to learn whether your dog has food allergy along with pollen allergy. In spite of all the advertising, none of the serum, hair, or saliva tests with claims to diagnose food allergy are effective in telling us what foods are allergenic in our dogs. Two of our veterinary dermatology colleagues recently published papers in which they reported the results of sending fur from a stuffed dog, along with saline, to these labs. The stuffed dog had lots of positive reactions! And so did sterile saline! The only effective way to diagnose food allergy is to use a diet containing ingredients your dog hasn't eaten before for at least 8 weeks. Then challenge with the old diet. Your veterinarian can help you pick the right diet for your dog. Even if your dog doesn't have food allergy, good nutrition helps! Diets that contain the right balance of omega fatty acids

(Continued on page 13)



have been shown to reduce skin inflammation and even a little bit of the itch. Again, this approach can maximize the benefit of our anti-itch medications.

What do we do when our allergic dogs flare? It is very important to come back to basics before we worry about a medication failure. Are we giving our flea control correctly? Could our dog have become infested with the scabies mite? Coyotes, red fox, and raccoons can carry this mite into our backyards even in cities, and we don't always find these mites on skin scraping. Has our dog developed an infection with staphylococcal bacteria or yeast? Our new targeted allergy medications were never

meant to control the itch of these infestations and infections. It is true, though, that some dogs are so allergic that they can break through what we are doing and need some extra help during bad pollen seasons, even if they don't have fleas or infections. We can give Cytopoint® with Apoquel® or Atopica® or even steroids if needed. We do not like to mix steroids with Apoquel® or Apoquel® with Atopica® for longer than 3 or 4 weeks, but Cytopoint can be administered with any of these medications.

Living with an allergic dog can be hard, but we now have many good choices to treat their disease. Work with your veterinarian to find the way for your dog.

New Laboratory For CMO Testing

By Kay McGuire, DVM, MS

Most Westie owners have been submitting the genetic test swab for Craniomandibular Osteopathy (CMO) to Optigen. Optigen has been sold to the Mars Company which supplies the Wisdom Genetic and Health Panel. The Wisdom S is a genetic profile that will test for all known Genetic mutations, even those which do not affect our breed. The average cost of this profile is \$150 with an approximate two week turnaround time.

Vetgen Laboratories will now process the CMO test for \$55/sample. Go to Vetgen.com for information. The test is prepaid online or by telephone, **(800) 483-8436 (US & Canada)**. If you have multiple samples and call Vetegen's number between 9 AM-4 PM EST, they will provide a small discount. They will supply the test kit and return mailer.