Could This Uncommon Allergy Fix Help Your Itchy Dog?

Many people don't like giving their pets an injection, and most pets don't love being on the receiving end. Here's an effective option for your furry companion's skin allergies that doesn't involve shots.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- Sublingual immunotherapy (SLIT) is a variation on allergen-specific immunotherapy (ASIT), which most of us refer to as allergy shots
- Sublingual means "under the tongue," and the treatment is delivered with a dispenser that sprays a few drops of allergen solution on the mucosa under the tongue; the drops are absorbed rough the moist tissue of the mouth and processed by specialized cells that help the immune system develop tolerance for specific allergens.
- The biggest benefit of SLIT over ASIT is no injections; probably the biggest drawback is that to be effective, the therapy must be administered daily, and sometimes several times a day.
- Uncontrolled studies on dogs show that SLIT is as effective as allergy shots, and dogs that for a variety of reasons can't tolerate injections also do well with sublingual administration.
- An additional options for allergic pets is regionally specific immunotherapy (RESPIT®), which is designed to be effective without the need for allergy testing

Sublingual immunotherapy (SLIT) is a variation on allergen-specific immunotherapy (ASIT), more commonly known as allergy shots or allergy injections to treat atopic dermatitis (skin allergies) in dogs, cats, and horses. SLIT is common in Europe and is used to treat respiratory and skin allergies in people. The technology has only more recently made its way to the U.S. for use with animals.

Sublingual immunotherapy is given orally, delivered with a metered pump dispenser that sprays a few drops of allergen solution onto the tissues under and around the tongue.

Sublingual Drops vs. Allergy Shots

SLIT is very similar to allergy shots in that the concentration of doses increases over time. The cost is also about the same for the two delivery systems. And if an animal is temporarily receiving other medications for allergies, those meds won't interfere with immunotherapy whether delivered by injection or sublingually.

The way the sublingual delivery works is the allergen solution is absorbed through the moist tissue (mucosa) under the tongue, and is processed by specialized cells that help the immune system develop tolerance for the specific allergen(s) the animal is sensitive to.

SLIT also differs from allergy shots in terms of how often it is given. SLIT drops are typically given daily, sometimes several times a day, for the duration of therapy.

At this time, the ideal total duration of treatment is not known for dogs. However, in humans, daily administration of SLIT is continued for two to five years, after which, if the patient is stable, treatment is discontinued and the effect appears to be permanent. Whether this will be the case with dogs is not yet known.

Are Under-the-Tongue Drops Effective?

SLIT studies to date have been primarily uncontrolled trials. Results of a small **study** of dogs with dust mite allergy conducted at the University of Wisconsin by Dr. Doug DeBoer showed 80% clinical benefit, including significant increases in IgG and reductions in IgE for specific allergens.[1]

Another **study** reported the effectiveness of SLIT in sensitized Beagles that resulted in significant changes in antiallergic cytokines such as transforming growth factor beta and interleukin-10 in treated animals.

Dr. DeBoer also conducted an open trial of dogs with atopic dermatitis who had never received allergy shots, and about 60% showed significant improvement.[2] And in dogs who can't receive injections for either behavior-related reasons or due to an anaphylactic reaction, 50% were successfully treated with sublingual administration.[3]

Pros and Cons of Sublingual Immunotherapy

Probably the greatest advantage of SLIT is that it doesn't involve an injection. Many pet owners don't love the idea of giving their dog or cat shots, and pets don't love being on the receiving end of them, either. Most dogs seem to easily accept sublingual drops and even like the taste.

Another benefit is that SLIT doesn't appear to bother allergy sufferers who have had severe reactions to allergy injections. This includes both people and dogs.

One of the bigger drawbacks to SLIT is that successful treatment requires daily discipline in giving the drops, which some pet parents find challenging.

Another issue is that according to one supplier of the allergy drops, adverse reactions occur in 4% of dogs. Most reactions are mild and transient, occur at the start of treatment and then disappear within a few days to a week of continued treatment. The most common reaction is worsening of symptoms, usually increased itching. Some dogs are reported to rub or scratch at their mouth after receiving the drops, which probably indicates the area of delivery is itchy. A few dogs also experienced gastrointestinal (GI) upset, including vomiting.

If You Have a Pet With Environmental Allergies

I've had good success using a sublingual product called regionally specific immunotherapy, or RESPIT®. RESPIT® is an immunotherapy product that doesn't depend on allergy testing. It uses a mixture of the most significant regional allergens instead. So, if you've just moved to the midwest in the middle of ragweed season and your dog is suffering miserably, this may be a great option.

If your dog or cat has been diagnosed with **atopic dermatitis**, an allergic skin condition, I recommend asking your veterinarian about sublingual immunotherapy (SLIT), which can often successfully resolve the underlying problem instead of just addressing the symptoms.

Most pets require an "immediate relief" protocol (including therapeutic **bathing**, herbs and nutraceuticals that reduce inflammation), in addition to beginning a desensitization protocol of any kind. Desensitizing pets is one of the best long-term solutions for managing allergies, and thankfully, there's a needle-free option available.

Sources and References

dvm360 January 1, 2014

[1] DeBoer, D. et al. Veterinary Dermatology, 1 April 2016

[2,3] DeBoer D, Morris M. Vet Dermatol 2012;23(Suppl 1):65