

# DERMATOLOGY PEARLS

*Provided by Dr. Kimberly Coyner, DVM DACVD  
Dermatology Clinic for Animals of Las Vegas  
5231 W. Charleston Blvd.  
Las Vegas, NV 89146  
(702) 821-1002  
[www.dermvetvegas.com](http://www.dermvetvegas.com)*

## PEARL OF THE MONTH: SUBLINGUAL IMMUNOTHERAPY

**Sublingual immunotherapy** (SLIT) is the oral administration of allergen extracts (“allergy drops”) in an attempt to modify the immune response and “desensitize” an individual to these substances, thus creating relief of allergy symptoms. Most veterinarians and clients are familiar with **subcutaneous immunotherapy**, or “allergy shots,” for treating allergies. This method of immunotherapy has dominated the human and pet allergy field in the United States for more than 50 years. However, historically, “allergy drops” were actually used in people *before* shots! Much of the early research on SLIT was done in Europe, and currently in Europe sublingual therapy is a standard treatment for allergic people. Recently several major human medical organizations have critically reviewed the evidence for SLIT, and have published statements supporting the efficacy and safety of this treatment. Recent research on SLIT in human patients has highlighted the following points:

1. Several different protocols for dosing have been used. More research is needed to determine differences between these protocols.
2. SLIT is safer than “allergy shots” in people, because no generalized allergic reactions (anaphylactic reactions) occur during treatment, as can happen with injections. (Note, however, that allergy shot reactions are rare in dogs anyway).
3. Immunologically speaking, SLIT works somewhat differently than allergy shots. People who fail treatment with allergy shots may benefit from SLIT, and vice-versa.

There have been virtually no studies on SLIT in dogs – it’s a completely new type of treatment in veterinary medicine. At the Dermatology Clinic for Animals of Las Vegas, we are now working with Allergychoices Inc. to discover if SLIT is effective for **canine atopic dermatitis (AD)**. The UW-Madison School of Veterinary Medicine has been using a SLIT protocol that has been developed and used on thousands of human patients with success. What have they learned so far?

1. SLIT is easily administered by owners, and well tolerated by dogs.
2. SLIT does indeed seem to benefit some dogs with AD. So far, with a very limited number of cases, approximately 2 out of 3 dogs treated with SLIT have shown improvement. This is approximately the same response rate that we expect from conventional “allergy shots.”
3. They have some feeling that SLIT may work a little faster than shots. In patients so far, response seems to occur within 4 months of starting treatment.
4. They don’t definitively know if SLIT works in dogs that have failed allergy shot treatment, but have seen promising results in several cases so far.

### **Practical Points about Immunotherapy and SLIT Treatment**

1. Diagnostic evaluation and testing for SLIT is done in exactly the same way as is done for conventional allergy shots. Typically, this means initial evaluation to arrive at a clinical diagnosis of AD by eliminating other possibilities, such as food allergy, parasites, infections, etc. After this, allergy testing is performed, using either a blood test, a skin test, or both. Because there is currently no funded clinical trial for allergy drops, owners are responsible for paying these all hospital charges.
2. In considering “shots vs. drops” the owner must think about which form of treatment will be convenient for them to give. Allergy shots are given with small, nearly painless needles by the owner at home only once every 1-2 weeks, or longer in some cases. Allergy drops are given by squirting a very small volume (a few drops) into the dog’s mouth *twice daily*. The twice-daily treatment continues long-term. We do not yet know if the treatment interval for drops can be extended. The drops, which have a slightly sweet taste, must be dispensed directly into the mouth and *cannot be added to food or a treat*.
4. The cost of allergy drops is approximately the same as allergy shots – around \$35 per month. Because both shots and drops work gradually, we recommend an initial treatment trial of between 6 and 12 months. If the treatment works, it must be continued long-term, for at least a few years.
5. Patients must return to the clinic for brief visits at 3 months after starting shots or drops, at 6 months, and at 1 year. It is very important that we evaluate these patients to make any necessary adjustments in treatments. These visits are *required and necessary* for us to continue to provide treatment.

For further information on allergy drops, please contact Dr. Kimberly Coyner at 821-1002.