

Allergen Immunotherapy

Also called:

- Desensitization
- Hyposensitization
- Allergy vaccination
- RESPIT

Background

Allergy immunotherapy is the process of administering allergenic extracts to a pet in order to make them more tolerant of allergens. This is the only treatment for allergies that can retrain the immune system, in essence curing a patient of allergies. Common allergens are house dust mites, grass pollens, weed pollens, tree pollens, and fungal spores.

Veterinarians have used immunotherapy for over 40 years to treat pets with skin allergies (atopic dermatitis or “AD”). Immunotherapy provides significant relief from itching to most pets with allergies (about 65% respond to treatment). The selection of ingredients is traditionally based on either a blood test or an intradermal test (IDT) (“skin test”). Blood (serum) tests performed by different companies on the same samples have been shown to have poor agreement with one another. For this reason and others, we do not routinely recommend them.

To perform an IDT, pets are sedated or anesthetized and about 50 different allergens are injected into the skin. A red swelling is interpreted as meaning the pet is possibly allergic to that allergen. Some subjectivity is involved in scoring the reactions and interpreting their significance in a given patient.

At SkinVet Clinic, we have developed a testing technique for pets that is preferred in human allergy testing – the percutaneous prick test (PPT). Instead of injecting allergens into the deeper layer of skin, the dermis, pinpoint pricks are made with a device that delivers a drop of allergenic extract on to the skin surface. Similar to IDT, the reactions are graded subjectively based on size and inflammation, in comparison to positive and negative controls. One of the principal advantages of PPT over IDT is that it causes very little discomfort. We perform most of the tests on awake dogs laying on their sides, aided by lots of petting to keep them calm.

A third alternative for choosing the allergens to include in allergy immunotherapy mixtures is regionally-specific immunotherapy (RESPIT®), a product developed by Dr. Plant to make allergy relief available without allergy testing. RESPIT includes 20-22 allergens selected to be representative of the major botanical allergen groups that

cause allergies in a geographic region. In a recent study, RESPIT was found to be approximately as effective as is reported for allergen immunotherapy based on test results.

Once the allergens have been selected for immunotherapy, they are administered either by subcutaneous injection or as a spray in the oral mucosa (cheek). The routes of administration are believed to be equally effective, with the major difference being the frequency of dosing: daily for the oromucosal spray and weekly for the injectable. With time, the injection frequency is often reduced. Pet owners usually learn to administer allergen injections themselves. Since the response is gradual, pets usually require additional forms of therapy to remain comfortable at first.

Immunotherapy has traditionally been recommended to continue for the life of your pet. Our goal at SkinVet Clinic is to discontinue AIT after 3 years if your pet has remained comfortable for an extended period of time.