Allergy Testing Instructions for Dogs, Cats and Horses

Allergy tests for atopic dermatitis and insect bite hypersensitivity

Atopic dermatitis in dogs/cats/horses and insect bite hypersensitivity in horses are common allergic skin diseases associated with immunoglobulin E (IgE) antibodies to environmental allergens and insect saliva.

Allergic patients suffering from these chronic skin conditions often benefit from allergy shots (immunotherapy). Immunotherapy is a process in which offending allergens are injected subcutaneously in gradually increasing amounts, inducing tolerance. The main benefit of immunotherapy is its ability to reduce the severity of the allergic skin disease, and thereby reduce the allergic patient’s reliance on symptom-relieving drugs.

Successful immunotherapy begins with allergy tests. These tests do not diagnose a patient as having an allergic dermatitis, but rather identify offending environmental allergens or insects. Most, but not all, allergic patients have positive reactions on allergy tests. Two types of allergy tests are used: intradermal allergy tests identify reactions to allergens injected directly into the skin (see below), while serum allergy tests measure circulating allergen-specific IgE antibodies.

Which test is better? Each test has certain advantages and disadvantages, and for each patient, one test may be the more appropriate one. Factors veterinary dermatologists consider in selecting the most appropriate test include the condition of the skin, the overall health of the patient, the ability to withdraw certain medications (see below), the time of year, and even the species of the patient who is to be tested for allergies. In many cases, combining the two tests gives the best results.

Important note: We do not offer intradermal or serum tests for food antigens as these tests are not reliable for the diagnosis of food allergies in veterinary medicine.

Intradermal allergy test protocol

The intradermal allergy test is the procedure veterinary dermatologists perform most often to identify offending allergens. The patient is first sedated in order to avoid any discomfort. A rectangular area of hair is clipped on the side of the chest in dogs and cats, or the side of the neck in horses. Within a grid layout, or nearby small dots drawn on the skin, the skin is injected with small amounts of approximately 48 environmental allergens. This panel includes house dust mites, storage mites, pollens (trees, grasses and weeds), insects, fleas and molds. Within 15-25 minutes, redness and swelling is evident at the site of positive reactions. With the allergy test(s) complete, a determination will be made whether or not immunotherapy and/or allergen avoidance are appropriate. In horses, the test area needs to be examined a second time, 4 hours after the initial allergen injections.
Guidelines for Intradermal Allergy Tests

Intradermal allergy testing is a delicate procedure, so it is helpful to adhere to the following guidelines:

1. Females cannot be skin tested if in heat, pregnant or in false pregnancy.

2. The chest or the neck will be clipped. Please plan accordingly if the patient is to participate in a show.

3. If the patient’s allergy is seasonal, which means it is strictly limited to or worsens during spring, summer or fall, it is best to schedule testing from August to November.

4. Bring your dog or cat fasted. Since sedation is required, please do not feed your pet at least 6 hours prior to the scheduled appointment. Drinking water is allowed. This precaution is not necessary in horses.

5. Ensure that the patient is not currently on anti-allergic medications or other medications that may cause intradermal tests to be invalid.

The following withdrawal times (based on the most recent evidence-based guidelines published in our specialty’s peer-reviewed journal) are recommended:

- **a. Long-acting injectable steroids** Depo-Medrol, methylprednisolone acetate  
  - **28 days**
- **b. Oral steroids** Prednisone, prednisolone, Vanectyl-P, dexamethasone, triamcinolone  
  - **14 days**
- **c. Steroidal topical skin, ear and eye medications**  
  - **Aurizon, Surolan, Canaural, Tresaderm, Otomax, Mometamax, Synotic, Topagen, Cortavance, Fuciderm, hydrocortisone cream, Cortisothe shampoo, Dermacool HC, Malacetic Wipes HC, Burow’s HC, BNPH, prednisolone for the eye etc.**  
  - **14 days**
- **d. Oral antihistamines and some tranquilizer medications**  
  - Amitriptyline, diphenhydramine (Benadryl), hydroxyzine (Atarax), cetirizine (Reactine), chlorpheniramine (Chlor-Tripolon, Novo-Pheniram), clemastine (Tavist), clomipramine (Clomicalm), acepromazine (Acevet, Atravet), fluoxetine (Reconcile) etc.  
  - **7 days**

**Important notes:** You must not discontinue any medications without consulting your family veterinarian first, in order to safely follow the suggested drug withdrawal times above.

If drug withdrawal is not possible, a dermatology consultation is still a valuable option. In many patients, we can alter the drug regimen to allow testing at a later date.

6. Do not bathe the patient for 5 days prior to the appointment.

7. The following medications do not need to be discontinued: Essential fatty acid (evening primrose oil, fish oil, Derm Caps, 3V Caps, EFA Caps, Actis Omega, Omegaderm, Welactin, Omega-Fend etc.), oral ciclosporin (Atopica), topical tacrolimus (Protopic), NSAIDS (Carprofen, Anafen, Ketoprofen, Metacam, Rimadyl, Deramaxx, Previcox), antibiotics (cephalexin etc.), antifungals (ketoconazole), oral pentoxifylline, immunotherapy (allergy shots), ear cleaners, flea medications, insect repellants, thyroid / heart / antiseizure medications, glucosamine, chondroitin sulfate, all other medications/supplements.

8. After meeting with the owner, a thorough examination of the patient and review of the medical history, we will present the various diagnostic and treatment options and their costs.

9. Be aware that intradermal test requires that the patient stay with us for several hours (typically 2-3 hours for dogs and cats and 4-5 hours for horses). **We cannot guarantee that the intradermal test will necessarily be performed on the day of the first appointment but it is usually possible.**

10. If you have any questions about these guidelines, please do not hesitate to call the dermatology service at: **519-824-4120 ext. 54615** or email us at: dermatol@uoguelph.ca.