Allergy Testing Instructions

For Horses

ALLERGY TESTS FOR ATOPIC DERMATITIS

Atopic dermatitis in horses is a common allergic skin disease associated with elevated immunoglobulin E (IgE) antibody level in response to environmental allergens.

Allergic patients suffering from these chronic skin conditions often benefit from desensitization (or immunotherapy). Immunotherapy is a process in which offending allergens are administered as subcutaneous injections in gradually increasing amounts in order to induce 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, 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 than the other. Numerous 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), 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

NWVDS does not offer intradermal or serum tests for food allergens. If food allergies are suspected, we will recommend an elimination diet trial.
**INTRADERMAL ALLERGY TEST PROTOCOL**

The intradermal allergy test is the procedure veterinary dermatologists perform most often to try 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 neck. Within a grid layout, or nearby small dots drawn on the skin, the skin is injected with small amounts of approximately 60 environmental allergens. This panel includes house dust mites, storage mites, pollens (trees, grasses and weeds), insects, yeast and moulds.

Within 15-25 minutes, redness and swelling is evident at the site of positive reactions. Late phase reactions can be seen after 3-4 hours. With the allergy test(s) complete, a determination will be made whether or not immunotherapy and/or allergen avoidance are appropriate.

House dust mites and storage mites are important environmental allergens involved in the pathogenesis of atopic dermatitis worldwide. The tiny pollens of wind-pollinated plants are also implicated.

**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 or pregnant.

2. The side of the neck will be clipped. Please plan accordingly if the patient is to participate in a show.
3. 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:**

<table>
<thead>
<tr>
<th>Medication Type</th>
<th>Withdrawal Time</th>
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<tbody>
<tr>
<td><strong>Oral and injectable steroids</strong></td>
<td>14 days</td>
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<tr>
<td>Prednisolone, dexamethasone, triamcinolone</td>
<td></td>
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<tr>
<td><strong>Steroidal topical skin and eye medications</strong></td>
<td>14 days</td>
</tr>
<tr>
<td>Tresaderm, Panolog, Topagen, Cortavance, Isaderm (previously called Fuciderm), hydrocortisone cream, Cortisoothe shampoo, Dermacool HC, BNPH, prednisolone for the eye etc.</td>
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<tr>
<td><strong>Oral antihistamines and some tranquilizer medications</strong></td>
<td>14 days</td>
</tr>
<tr>
<td>Amitriptyline, diphenhydramine (Benadryl), hydroxyzine (Atarax), cetirizine (Reactine), chlorpheniramine (Chlor-Tripolon, Novo-Pheniram), clemastine (Tavist), acepromazine (Acevet, Atravet) etc.</td>
<td></td>
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</tbody>
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**IMPORTANT NOTES**

You must not discontinue any medications without consulting your regular 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.

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

5. **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.), topical tacrolimus (Protopic), NSAIDS (Flunixin, Carprofen, Ketoprofen, Phenylbutazone, Previcox), antibiotics (Sulfadiazine/Trimethoprim etc.), antifungals (ketoconazole), oral pentoxifylline, subcutaneous and oral immunotherapy (allergy serum), insect repellants, glucosamine, chondroitin sulfate, all other medications/supplements.

6. 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.

    **If you have any questions about these guidelines, please do not hesitate to call or email us.**

**NWVDS Contact Information:**
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**Equine consults take place at:**
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