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Allergy skin tests – "Scratch testing"

During an allergy skin test, your skin is exposed to allergy-causing substances (allergens) and then is observed for signs of a local allergic reaction, like redness and mild swelling.

Dr. Macdonald's scratch allergy testing identifies allergies to cats, dogs, dust mites, mould, western tree mix, grass mix, weeds and feathers.

Along with your medical history, allergy tests can confirm whether signs and symptoms, such as sneezing, wheezing and skin rashes, are caused by allergies. Allergy tests can also identify the specific substances that trigger allergic reactions. Information from allergy tests can help your doctor develop an allergy treatment plan that may include allergen avoidance, medications or allergy desensitization (immunotherapy).

Who is suited for scratch testing:

Allergy skin testing is widely used to diagnose allergic conditions such as:

- Hay fever
- Allergic asthma
- Dermatitis/eczema (although food allergy testing is often more likely to find the underlying cause).

Skin testing is helpful for people who aren't sure what they are allergic to. Identifying key triggers helps target avoidance efforts and possibly target desensitization techniques.

Who isn't suited for scratch testing?

Skin testing can be used for people of all ages, including infants and older adults. Sometimes, however, skin tests aren't recommended. Dr. Macdonald may advise against skin testing if you:

- Take medications that interfere with test results. These include antihistamines, many antidepressants and some heartburn medications. We may determine that it's better for you to continuer taking these medications than to temporarily discontinue them in preparation for a test. Because medications clear out of your system at different rates, you may need to stop taking certain medications for up to 3-7 days. Medications that can interfere with skin tests include:
 - Antihistamine, such as Allegra, Aerius and Reactin (Claritin, Benadryl, Chlor-Trimeton, Zyrtec, others)
 - Tricyclic antidepressants, such as amitriptyline, doxepin (Sinequan), and/or tryptaline
 - Heartburn medications, in the class called H2Blockers or the Histamine 2 Blockers such as cimetidine (Tagamet) and ranitidine (Zantac)
 - Bronchodilators (salbutamol) for asthma do **not** affect the test. Short term low dose oral corticosteroids have no effect.

- Have a severe skin disease. If conditions such as eczema or psoriasis affect large areas of skin on your arms and back the usual testing sites there may not be enough clear, uninvolved skin to do an effective test.
- Are highly sensitive to suspected allergens. You may be so sensitive to certain substances that even the small amounts of them used in skin tests could trigger a severe allergic reaction (anaphylaxis).
- **Pregnant women should not be tested.** Vega testing would be a better alternative.
- **Severely asthmatic patients** can be tested but should have their asthma well under control before the visit, and should arrive with their blue inhaler (bronchodilator eg: salbutimol) for the visit.

Safety:

Scratch testing rarely causes any kind of serious reaction. The most common unpleasant effect of skin testing is slightly swollen, red, itchy bumps (hives) at the sight of testing. Hives may be most noticeable during the test. They usually go away within a few hours, although they can persist for a day or two. (A mild over the counter cortisone cream can be applied to relieve the itching and redness if desired).

Very rarely, allergy skin tests can produce a severe, immediate allergic reaction. Dr. Macdonald's office has appropriate emergency equipment and medications available. If you develop a severe allergic reaction in the days after a skin test, call Dr. Macdonald right away and/or visit the emergency room.

What to expect during your scratch test:

Dr. Macdonald will perform the test on your inner forearm for adults and on the back for children. The new allergy tests aren't painful. Because the needles used in these tests barely penetrate your skin's surface, you won't bleed or feel more than mild, momentary discomfort.

After cleaning the test site with alcohol, Dr. Macdonald draws small marks on your skin and applies a drop of allergen extract next to each mark. She then uses a tiny, thumb tack type of instrument to introduce the extracts into the skin's surface. The drops are left on your skin for 15 minutes, and then Dr. Macdonald observes your skin for signs of allergic reactions.

To see if your skin is reacting the way it's supposed to, the doctor introduces two additional substances into your skin's surface:

- **Histamine.** In almost everyone, this substance causes a skin response, so it's used as a positive control. If you don't react to histamine, the skin test may be difficult or impossible to interpret.
- **Glycerin or saline.** In almost everyone, these substances cause no reaction. It is used as a negative control. If you react you may have sensitive skin, so your reactions to the allergen extracts will need to be interpreted with caution.

After the test

If an allergen causes an allergic reaction to a skin test, you'll develop a raised, red, **itchy** bump that may look like a mosquito bite. Dr. Macdonald will then measure the bump's size.

After she records the results, she will clean your skin with alcohol to remove the marks and allergen droplets. Together, you will discuss the results and possible treatment options.

Results

Before you leave the office, you'll know the results of your scratch test.

A positive skin test means that you may be allergic to a particular substance. Usually, the bigger the bumps the greater the degree of sensitivity. A negative skin test means that you probably aren't allergic to that particular allergen.

The accuracy of skin tests can vary. You may react differently to the same test performed at different times. Or you may react positively to a substance during a test but not react to it in everyday life. A correlation between your history of symptoms and the scratch test is essential.

In general, skin tests are most reliable for diagnosing allergies to airborne substances, such as pollen, pet dander and dust mites. It is not a good test for diagnosing food allergies – Vega testing or blood testing are the preferred methods.

Your allergy treatment plan may include natural and/or pharmaceutical antihistamine medications, allergy desensitization, environmental changes or dietary changes. With test results that identify your allergens and a treatment plan to help you take control, you'll be able to reduce or eliminate allergy signs and symptoms.

Allergy desensitization options include:

1. **Miller method** – one or two time procedure done in Dr. Macdonald's office. See the Miller Method handout. This technique effectively reduces or eliminates allergies in 70% of patients and it is inexpensive, very fast, safe and painless.

2. Sublingual immunotherapy (SLIT)

This technique is gaining popularity among allergist (MD's) and naturopathic physicians due to good scientific results, safety and ease of use. Daily oral drops given for 2 years result in full desensitization in 85% of patients.

Clinical experience with SLIT spans more than 30 years. In other parts of the world, especially in Europe, sublingual treatment has become increasingly commonplace. In 1998, the World Health Organization referred to it as a "viable alternative" to injection allergy desensitization therapy. Favorable results with more than 50 double-blind, placebo-controlled studies have been published in peer-reviewed journals.

- ◆ Cochrane Collaboration, the world's most-trusted international healthcare organization, also concluded that allergy drops SLIT significantly reduce allergy symptoms and the use of allergy medications.
- ◆ The safety profile for sublingual immunotherapy is superior to injection allergy desensitization done in MDs offices. Systemic adverse reactions are three times less likely with SLIT and no anaphylactic reaction (life threatening) have ever been recorded for over 30 plus years of sublingual treatment.
- ◆ Dr. Macdonald dispenses SLIT (sublingual immune therapy) for patients wishing to try this method to gain freedom from their allergies.

Handouts\scratch testing