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Editorial

Role of Immunotherapy in Allergic Reactions

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DESCRIPTION

Allergen immunotherapy, also known as desensitization or hyposensitization, is a medical treatment for environmental allergies, such as insect bites. Immunotherapy involves exposing people to larger and larger amounts of allergen in an attempt to change the immune system's response.

Meta-analyses have found that injections of allergens under the skin are effective in the treatment in allergic rhinitis in children. The benefits may last for years after treatment is stopped. It is generally safe and effective for allergic rhinitis, allergic conjunctivitis, allergic forms of asthma, and stinging insects. The evidence also supports the use of sublingual immunotherapy against rhinitis and asthma, but it is less strong. In this form the allergen is given under the tongue and people often prefer it to injections. Potential side effects related to subcutaneous immunotherapy treatment for asthma and allergic rhino conjunctives include mild or moderate skin or respiratory reactions. Severe side effects such as anaphylaxis during subcutaneous immunotherapy treatment are relatively uncommon.

Although medications available for allergy are usually very effective, they do not cure people of allergies. Allergen immunotherapy is the closest thing to cure allergy, reducing the severity of symptoms and the need for medication for many allergy sufferers.

Allergen immunotherapy involves the regular administration of gradually increasing doses of allergen extracts over a period of years. Immunotherapy can be given to patients as an injection or as tablets, sprays or drops under the tongue (sublingual).

Allergen immunotherapy changes the way, the immune system reacts to allergens, by switching off allergy. The end result is that its become immune to the allergens, so that it can tolerate them with fewer or no symptoms.

Allergen immunotherapy is not, however, a quick fix form of treatment. Those agreeing to allergen immunotherapy need to be committed to 3-5 years of treatment for it to work, and to co-operate with your doctor to minimise the frequency of side effects.

Allergen immunotherapy is usually recommended for the treatment of potentially life threatening allergic reactions to stinging insects. Published data on allergen immunotherapy injections shows that venom immunotherapy can reduce the risk of a severe reaction in adults from around 60% per sting, down to less than 10%.

Because there is insufficient proof of its usefulness, allergen immunotherapy is only sometimes suggested for the treatment of atopic eczema. Allergen immunotherapy does not produce instant results. Symptoms normally take at least 4-5 months to improve, and occasionally much longer.

Subcutaneous immunotherapy (SCIT), often known as allergy shots, is a traditional method of delivery that involves injections of allergen extract by a medical expert. Subcutaneous immunotherapy methods typically include weekly injections during the build-up phase, followed by monthly injections for 3–5 years during the maintenance phase. The patient is given injections with increasing concentrations of allergens one to two times each week during the build-up phase. The length of the build-up phase varies depending on how frequently injections are given, but it usually lasts three to six months.

The maintenance phase begins once the effective dose has been attained, and it varies based on the individual's response to the build-up phase. Allergy drugs are used while doing allergen immunotherapy. Immunotherapy has been given by injection for more than 100 years and many studies prove that it is effective. A number of studies published in the last five years have shown that very high dose sublingual immunotherapy (SLIT), where allergen extracts (tablets, sprays or drops) are retained under the tongue for a few minutes, then swallowed, can also be effective. SLIT has a longer history of use in Europe than in Australia and New Zealand, where it is used more commonly than injected immunotherapy.

The allergen extracts currently available in Australia and New Zealand for oral and injected therapy are very potent, and are

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not the extremely weak and ineffective extracts used by some medical practitioners ten or more years ago.

Allergy injections are given at a relatively low dose to begin with. It is done with a little needle that is unpleasant but not painful. The dose is gradually increased on a regular (typically weekly) basis until it reaches an effective (maintenance) level. This can take anything from three to six months. Depending on the degree of sensitivity, this dose may differ from patient to patient.

When the maintenance dose is reached, injections are given less frequently, usually once a month, but on a regular basis. Immunotherapy injections should always be given under medical supervision at a medical setting.

After the immunotherapy injection, we should stay at the medical facility for the duration indicated by the clinical immunology (30-45 minutes).