

SPECIFIC IMMUNOTHERAPY IN ALLERGIES

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Specific immunotherapy (SIT) is defined as the repeated administration of a specific allergen to allergic subjects with IgE mediated conditions, in order to provide long term relief of allergic symptoms and decreased inflammatory reactions during subsequent natural allergen exposure. Immunological changes during immunotherapy are complex and associated with the development of immunologic tolerance, change toward a Th1 lymphocyte cytokine profile, increase in allergen-specific IgG4 level, and decrease in specific IgE antibodies. Numerous well-designed placebo-controlled studies have demonstrated that SIT is effective in children with allergic rhinitis and/or conjunctivitis, allergic asthma and in treatment of stinging insect hypersensitivity. SIT has also shown long term benefit following discontinuation, and to prevent the onset of new allergen sensitivities, as well as the development of asthma in patients with seasonal allergic rhinitis. A limitation of the subcutaneous injection route of immunotherapy is the risk of potential severe side reactions, which include anaphylaxis. Therefore, SIT should only be administered by trained staff, in an allergy clinic facility, with an appropriate observation area, with immediate access to adrenaline and other resuscitative measures. All patients should be observed in the clinic for at least 30 minutes after administration of the injections. There is a low risk of severe systemic reactions in selected patients with appropriately administered SIT. In asthmatics SIT should not be initiated unless the patient's asthma is stable and well controlled. In order to improve safety and convenience, alternative routes of immunotherapy and allergen extract modifications have been tried. High-dose sublingual immunotherapy (SLIT) has been found to be effective in many studies in patients with allergic rhinitis and allergic asthma. Local side effects of itching and swelling in the mouth are trivial, and require no treatment or discontinuation of therapy. No serious side effects have been reported during SLIT.

Key words: Allergen ▪ Specific immunotherapy ▪ Asthma ▪ Allergic rhinitis.