

IMMUNOTHERAPY

ALLERGEN IMMUNOTHERAPY FOR ALLERGIC DISEASE

Allergen immunotherapy (SCIT) or allergy shots treats allergic diseases. The process involves gradually administering increasing amounts of allergens (the proteins your allergic to) leading to reduced reactions to allergens (immunologic change called tolerance). SCIT is currently the only treatment that alters the allergic immune response causing allergic disease. Medications only cover up symptoms of allergy. After several months of SCIT, patients undergo less nasal reaction to allergen challenges and see an improvement in symptoms of allergic rhinitis or asthma.

The allergic antibody (IgE) typically increases after your worse allergy season. This post-seasonal spike can be eliminated by SCIT. The body uses an allergic blocking antibody called IgG to do this. Levels of this good blocking antibody may continue to rise over many months of SCIT and elevated levels may persist for many years after immunotherapy is completed. Immunotherapy also results in several changes in white blood T cell responses to allergens. These changes may contribute to immunologic tolerance to the allergen. Changes in another allergic white blood cell called basophils is also affected. The ability of basophils to fully release histamine in response to the allergen is reduced.

Allergic Rhinitis, Allergic Asthma, and Atopic Dermatitis respond to SCIT. The administration of SCIT to children with allergic rhinitis can help prevent the subsequent development of allergic asthma. SCIT is not usually initiated during pregnancy, although it may be continued in women who were receiving the therapy prior to becoming pregnant. SCIT is appropriate for both adults and children, and there are no defined age limits for its administration. When proposing SCIT for pediatric patients, most clinicians wait until a child is at least five years of age so that they are mature enough to cooperate with repeated injections. Children are believed to derive potentially greater benefit from immunotherapy, due to the potential of SCIT to prevent progression to more severe disease and allergic asthma. For this reason, therapy will occasionally be started in very young children.

SCIT is usually recommended for the treatment of allergies and respiratory disease only after a trial of medications. Medications are relatively easy for most patients to use and, when effective, provide relief more rapidly than immunotherapy, however they never lead to a “cure” of allergy.

WE OFTEN SUGGEST SCIT IF WE SEE:

- An inadequate or partial response to environmental control and medications.
- Medication resistant symptoms.
- Patients with side effects related to medication use.
- Cost burden associated with chronic medication use.
- Non-compliance with maintenance medication regimens (i.e. teens)

At present, there is consensus that an initial course of immunotherapy should consist of three to five years of maintenance treatment. After this, the clinician and patient should meet to review overall impact on quality of life, and based upon these factors, decide if treatment will be continued. We believe two allergy seasons free of symptoms suggests the discontinuation of SCIT.

