Allergy Shots

Allergy Shots FAQ

What do Allergy Shots Treat?

Allergy shots (immunotherapy) are an extremely effective treatment for allergies and asthma. The allergy and asthma specialists at The Asthma Center use allergy shots (immunotherapy) injections to treat allergic patients who have moderate to severe symptoms of upper respiratory allergies, allergic asthma, or insect sting reactions not adequately controlled by environmental avoidance or medications.

How Do Allergy Shots Work?

Allergy shots contain the allergens that you are sensitive to, which may include pollen, dust mites, cat dander, mold, insect venom etc. Unlike medications, allergy shots do not directly suppress symptoms; instead they initiate processes that seem to “turn off” the abnormal immune reaction that we term “allergy.” The result is that you become less sensitive to the allergen(s) injected and need fewer medications. Most patients benefit from such therapy. It usually takes 1-2 years of therapy to achieve the desired results although some patients show benefit early. If no response is seen within 1-2 years of allergy shots, therapy is discontinued.

How Long Do I Take Allergy Shots?

A course of allergy shots often lasts 3-6 years. Allergy shots begin with a very low dose, then are built up gradually on a
regular basis (usually once a week) until a therapeutic or “maintenance dose” is achieved. The highest tolerated maintenance doses are given every 3 weeks. It is important to maintain allergy shots at the proper time interval. Missing allergy shots for a short vacation or for some other acute medical problem is acceptable.

You will be re-evaluated occasionally with skin testing while on allergy shots and subsequent changes in the extract or schedule may be necessary to obtain the best results. We will usually consider discontinuing injections when you have minimum symptoms and have a normal or near-normal exam for at least one year.

Most patients will continue to do well after stopping allergy shots, and some will have a slight increase in symptoms controllable with medications. A small number of patients, however, will require resumption of allergy injections. Other guidelines (which The Asthma Center specialists will review with you) are used for stopping shots when used for asthma and insect sting reaction.

**Can I Have a Reaction to Allergy Shots?**

While most patients do not normally experience reactions other than minor reactions, it is important for you to know about potential reactions. The types of reactions are outlined below.

Local reactions (swelling, itching, heat, redness or tenderness) at the site of injection may occur in most patients receiving shots. These local reactions usually resolve within 24 hours or less. Local reactions may occur immediately or several hours after your injection.

Systemic reactions may consist of any or all of the following
symptoms: itchy eyes, nose or throat; runny nose; nasal congestion; sneezing; tightness in the throat or chest; coughing or wheezing; swelling of tissue around eyes, tongue, throat or hives beyond injection site. Also, some may experience lightheadedness, faintness, nausea, vomiting, diarrhea, stomach or uterine (menstrual-type) cramps, drop in blood pressure and in some extreme conditions, loss of consciousness reactions and/or heart rhythm problems which may be serious but rarely fatal.

Large local reactions in general and systemic reactions may occur in 1-5% of the patients and usually occur during the build-up phase although they can occur at any time during the course of treatment. These reactions necessitate a dosage adjustment. The overwhelming majority of these reactions occur within 30 minutes of the injection and should be reported immediately to the nurse or physician so that they may be reversed with medications while in the office.

IT IS THE RESPONSIBILITY OF EACH PATIENT TO REMAIN IN THE OFFICE FOR 30 MINUTES AFTER EACH INJECTION TO MAKE CERTAIN THAT YOU DO NOT EXPERIENCE AN ALLERGIC REACTION. REPEATED DISREGARD OF THIS WAITING PERIOD FOR PATIENT SAFETY MAY BE CAUSE FOR US TO DISCONTINUE IMMUNOTHERAPY.

If after leaving the office you experience significant swelling or tenderness in your arm, please tell the nurse prior to your next injection. In addition, if after leaving the office you experience a generalized reaction, please immediately return to the office during office hours or proceed to the nearest emergency room. Patients who cannot keep a regular allergy injection schedule are discouraged from continuing injections since an erratic injection schedule is associated with a higher incidence of reactions.
What are Alternative Routes to Allergy Shots?

Although allergy shots (Subcutaneous Immunotherapy, or SCIT) are the most common form of immunotherapy in the U.S., some other methods of allergen-specific therapy have been investigated and proven effective in controlled studies.

- Nasal immunotherapy: Allergens are sprayed onto the nasal mucosa. This technique is not currently available or FDA-approved, though it appears to be effective. Clinical trials have revealed frequent local side effects.
- Sublingual Oral immunotherapy (SLIT): Allergens are orally ingested. This technique has proven effective in some studies, and three products are FDA-approved. Oral immunotherapy offers some promise as a future treatment for food allergy as well.

Understanding Sub-lingual Immunotherapy

In a 6-year study comparing subcutaneous immunotherapy (SCIT) to sub-lingual immunotherapy (SLIT), Tahamiler, et al (2008) enrolled 193 patients with allergic rhinitis due to dust mite allergy. Half the participants received SCIT, while the other half received SLIT for 3 years, followed by 3 more years of follow-up. Prick tests showed a greater reduction in sensitivity with SCIT. No systemic reactions occurred in either group. However, side effects with SLIT included oral pruritus (48%), rhinitis (31%), and gastro-intestinal symptoms (12%). SLIT studies generally revealed a 30% reduction in symptoms.

SLIT appears to work best as a mono-therapy, when a single allergen, such as grass pollen, is the cause of symptoms. SLIT
is more effective for patients suffering from mild to moderate symptoms. SLIT does not appear to work well when used to treat patients with multiple allergies. SLIT may be significantly less effective than SCIT, especially when multiple allergens need to be administered as part of the treatment program.