



IMMUNOTHERAPY

Allergen immunotherapy, also known as allergy shots, is a form of treatment that is aimed at decreasing sensitivity to allergens. Allergens are the substances that trigger allergy symptoms when someone is exposed to them. Immunotherapy has been shown to prevent the development of new allergies and, in children, it can prevent the progression of the allergic disease from allergic rhinitis to asthma. Allergen immunotherapy can lead to the long-lasting relief of allergy symptoms after treatment is stopped.

Immunotherapy is recommended for people with allergic asthma, rhinitis, conjunctivitis and allergies to stinging insects. Immunotherapy for food allergies is not recommended. The best option for people with food allergies is to strictly avoid that food. Children can receive immunotherapy as well. Five is the youngest recommended age to start immunotherapy in the United States for several reasons, including the difficulties younger children may have in cooperating with the immunotherapy program. There is no upper age limit for receiving immunotherapy. In considering immunotherapy in older persons, consideration must be given to the other medical conditions (such as cardiac disease) that are more frequent in older individuals, which could potentially make immunotherapy more risky.

The decision to begin immunotherapy is based on many factors including the length of the allergy season and severity of symptoms; how well medications and avoidance measures control allergy symptoms; the desire to avoid long-term medication use; the time commitment of immunotherapy; and cost (varies depending on region and insurance coverage).

Immunotherapy should be given under the supervision of a physician in a facility equipped with proper staff and equipment to identify and treat adverse reactions to allergy injections. Ideally, immunotherapy should be given in the prescribing allergist/immunologist's office but if this is not possible, the patient's allergist/immunologist should provide the supervising physician with comprehensive instructions about their immunotherapy treatment.

Allergen immunotherapy works like a vaccine. Patients receive allergen injections with increasing amounts of an allergen over several months. The body responds to the injected amounts of the allergen by developing an immunity or tolerance to it. As a result, allergy symptoms can be decreased or minimized when the patient is exposed to that allergen in the future. There are two phases to immunotherapy. In the **build-up phase** injections are given 1-2 times per week with increasing amounts of allergens until the full (maintenance) dose is reached. The length of this phase ranges from six to twelve months. In the **maintenance phase**, injections are given every 2-4 weeks. Patients may notice decreasing symptoms during the build up phase but it may take as long as 12 months on the maintenance dose to see an improvement. The effectiveness of immunotherapy appears to be related to how long the treatment lasts and the dose of the allergen. If immunotherapy is successful, maintenance treatment is generally continued for 3 to 5 years. The decision to stop immunotherapy should be discussed with the allergist/immunologist after 3 to 5 years of treatment. Some individuals may experience lasting remission of their allergy symptoms but others may relapse after discontinuing immunotherapy. Therefore, the decision to stop immunotherapy must be individualized.

Failure to respond to immunotherapy may be due to an inadequate dose of allergen; missing allergens not identified during the allergy evaluation; high levels of allergen exposure (i.e. inadequate environmental control); and significant exposure to non-allergic triggers (e.g., tobacco smoke). If a patient hasn't seen improvement after a year of maintenance therapy, he or she should work with their allergist/immunologist to discuss possible reasons treatment failed and other treatment options.

Local reactions to immunotherapy are fairly common and consist of redness and swelling at the injection site. These reactions can occur immediately or several hours later. Systemic reactions are much less common and result in allergy symptoms such as sneezing, nasal congestion or hives. Rarely, a serious systemic reaction, called anaphylaxis, can occur. In addition to the symptoms associated with a mild systemic reaction, symptoms of an anaphylactic reaction can include swelling in the throat, wheezing or a sensation of tightness in the chest, nausea, dizziness or other symptoms. Systemic reactions require immediate treatment. Most serious systemic reactions develop within 30 minutes of the allergy injections and this is why it is recommended you wait in the office for 30 minutes after your allergy injections. Your allergist/immunologist is trained to monitor for such reactions and his or her staff is trained to identify and treat systemic reactions.

Check with your insurance carrier regarding coverage, deductibles, co-payments, and the need for referrals. The billing code for the preparation of allergen extract is 95165 or 95145-95149 (). For administration of allergy shot(s), the billing code is 95115 or 95117. Applicable diagnoses are asthma (493.0), allergic rhinitis (477.8, 477.0), allergic conjunctivitis (372.14), and anaphylaxis due to insect sting (995.0).



Informed Consent for Immunotherapy (Allergy Shots)

Immunotherapy is a treatment used to relieve symptoms of hay fever (allergic rhinitis) or allergic asthma by administering injections of substances such as pollen, mold spores, dust mites, animal dander or insects to which an individual has been found to be allergic by skin testing. Immunotherapy initiates processes that seem to “turn off” the abnormal immune reaction that we term “allergy.”

Local reactions are common and consist of swelling, itching, or tenderness at the site of the injection. These reactions usually subside within a day.

Large local reactions and generalized (systemic) reactions are infrequent. They may occur at any time during the course of treatment. Generalized 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; wheezing; lightheadedness; faintness; nausea; vomiting; hives; swelling; and shock. Fatal reactions have occurred but are exceedingly rare.

Allergy injections should be administered in a medical facility with a physician present since occasional reactions may require immediate therapy. It is necessary to remain in the medical facility for 30 minutes after each injection so that prompt treatment can be initiated if you develop a serious reaction.

I do hereby give consent for _____ to receive allergy shots and any other procedures or treatments that may be required if a reaction occurs. I certify that I understand the general nature of my (my child’s) condition, the proposed treatment, the expected outcome, the risks of treatment, and reasonable alternatives.

I have read the above information regarding immunotherapy and understand it. I have been provided the opportunity to ask questions regarding the potential side effects of immunotherapy, and these questions have been answered to my satisfaction.

Signature of patient (or parent if patient is a minor)

Date

Signature of witness

Date