**Immunotherapy/Allergy Vaccine Therapy (Allergy Shots)**

**How Does It Work?**

Allergy vaccine therapy is a process in which an allergic patient can become desensitized to those pollens and other inhalant allergens that trigger allergic rhinitis (nasal congestion), allergic conjunctivitis (itchy, teary eyes), asthma and bee sting reactions. Small doses of the actual allergic substance are injected weekly. Each week the dose is increased. Gradually a protective antibody, also known as Immunoglobulin G, is formed to block the allergic reaction.

The improvement induced by allergy vaccine therapy is gradual. Many patients notice an improvement within the first six (6) months at which time the patient should schedule a 6-month evaluation appointment. Progress is evaluated every six months to one year. Allergy vaccine therapy does not work in about 5% of patients.

**How Long Should Someone Receive Immunotherapy?**

A two (2) year period is adequate to assess the success of treatment. If maintenance full dose has been achieved, one should notice a significant improvement in symptoms.

At year 4 or 5, a trial of discontinuing the allergy vaccine therapy can be considered. After allergy vaccine immunotherapy is stopped, symptoms may return at a rate of 20% the first year, 30% the second year and up to 50% after three or more years.

**Who Might Consider Immunotherapy?**

Allergy vaccine therapy is recommended for patients who have significant allergies. This includes patients with seasonal allergies such as hayfever, or with chronic allergies such as mite, pet, or mold allergy. When these allergies result in 1) bothersome symptoms 2) frequent upper respiratory infections such as sinusitis and or asthma 3) require an “excess” of medications for control, then allergy vaccine therapy is usually helpful.

**How is Allergy Diagnosed?**

The most important diagnostic tool is the history of the illness. The patient’s description of the problem leads to a diagnosis 90% of the time. Allergy skin tests are used to confirm this impression and to define exactly which allergens are involved. For over 75 years allergy skin testing has been the best method of identifying allergens.

**Immunotherapy and Pregnancy**

Only because of the malpractice climate, allergy shots are usually not started for a woman during pregnancy, though there is no medical reason not to do so. If a woman has been receiving immunotherapy and becomes pregnant, she may safely continue the shots during the pregnancy. Immunotherapy has been used for 75 years and does not harm the baby.

**Reactions to the Allergy Shots**

There are two (2) kinds of reactions to allergy shots: Local and Generalized (Systemic).

**Local:** Reactions occur at the site of the injection on the arms (where the shot was given). *Redness & itching* are frequent and are not a reason to hold or decrease the dose. *Swelling or a lump* that is irritating are reasons to hold or decrease the dose. This might occur in the office during the 20-minute waiting period or at home over the next 24 hours. Patients are asked to tell the nurse before the next injection about any swelling. We want to know how large it is… *Is it the size of a dime, nickel, quarter, or larger?*

We can adjust the dose of future injections. *An ice pack and an antihistamine,* such as Allegra or Claritin, can be used to reduce any swelling. Claritin and Allegra are non sedating allergy pills. Allegra 60mg can
be taken 2 caps together to start then 1 capsule every 12 hours thereafter as needed or Allegra 180mg 1
capsule one time daily for any local reactions. However Claritin 10 mg can be taken 2 tablets together to
start then 1 tablet every 24 hours thereafter as needed. Claritin is available in a Redi-tablet or pill form.
Patients are asked to call the office during office hours to report these reactions.

**Generalized (Systemic):** Reactions occur when there is any chest tightness, breathing difficulty, throat or
lip swelling, hives, itchy throat, palms or generalized body itchiness, dizziness or an overall feeling of
warmth in the face and body. This usually occurs in the first 10 minutes after the injection but can occur
over the first hour. This is a strong reaction, not a minor feeling, which sometimes starts with a general
feeling of itchiness. Other times it starts with a tickle or tingling in the throat. If this happens,
immediately take Allegra (2) 60mg caps or (1) 180mg tab, or Claritin (2) 10mg tabs, or any full dose
antihistamine. Actually, the best antihistamine to take under these circumstances is Benadryl 25mg-50mg
or 1-2 capsules. Then either immediately call our office for further instructions or return to our office for
evaluation and treatment of this reaction. If the office is closed and you are unable to reach us, then
immediately go to the nearest emergency room. If someone else can drive you, this would be best.
Patients are requested to have an antihistamine (available from the nurse) with them in a purse, a pocket
or glove compartment of their car.

**Drugs To Be Taken Cautiously While On Allergy Vaccine Therapy**

If another physician wants to put you on any of the following medications which all contain a family of
drugs called **Beta Blockers**, it is important to notify him/her that you are on allergy vaccine therapy.

*If your are currently taking a Beta-Blocker, please notify your doctor or a nurse. Beta-Blocker
drugs can interfere with epinephrine (adrenalin) which is the most important drug used to treat
severe allergic reactions.*

The following is a list of Beta-Blockers used to treat high blood pressure:

| • Brevibloc                      | • Normadyne (Labetolol)            |
| • Blocadren (Timolol)           | • Normozide (Alph,Beta)           |
| • Cartrol (Carteolol)           | • Sectral (Acebutolol)             |
| • Corzide (contains Nadolol)    | • Tenoretic (contains Timolol)     |
| • Corgard (Nadolol)             | • Tenormin (Atenolol)              |
| • Inderide (contains Propanolol)| • Timolide (Timolol)               |
| • Kerlone (Betazolol)           | • Toprol XL (Metoprolol)           |
| • Lovatol (Penbutolol)          | • Trandate (Labetolol)             |
| • Lopressor (Metoprolol)(Toprol) | • Visken (Pindolol)                |
| • Lopressor HCT (contains Metoprolol) | • Zebeta (Bisoprolol) |
| • Inderal (Propanolol)          | • Ziac (contains Bisoprolol)       |

**Intraocular Beta-Blockers (eye medications) include:**

| • Betagan (Levobulol)            | • Betatopic S                      |
| • Betatopic (Betazolol)          | • Timoptic (Timolol)               |