ALLERGY & ASTHMA
CERTIFIED ALLERGY & ASTHMA CONSULTANTS

ALLERGY INJECTIONS

Allergy injections or allergy shots are terms often used to describe allergy immunotherapy.

GOAL: The goal of allergy injections is to make you less allergic to a particular allergy provoking substance. Injections to inhaled (pollen, mold, dust mite or animal dander) allergens do not entirely eliminate allergy symptoms, but they do result in considerable improvement.

MECHANISM: Allergy injections work by causing changes in your immunologic system. These changes occur gradually over a period of many months. Injections begin weekly and then progress to bi-weekly and finally monthly injection intervals. Weekly injections typically are necessary for the first 6-12 months. Injections begin with extremely dilute doses and then progress in a stepwise fashion until a concentrated therapeutic dose is achieved. Low doses are initially necessary since very strong doses could provoke an allergic reaction to the treatment itself. Improvement should not typically be expected in less than 6 months.

PROGRESS: The principal way to monitor progress with allergy injections is by evaluation of improvement of your symptoms and decreased need for medication. Commercial laboratory tests such as blood work are not able at the present time, to measure the changes that occur with injections.

Your nasal symptoms should improve by 50-80% while receiving allergy injections. Improvement in asthma is more difficult to quantify, since many factors besides allergy are known to aggravate wheezing (such as infection and exercise). Some patients fail to improve on allergy injections. The main reason for failure is the inability to reach a sufficiently concentrated dosage of the allergen.

DURATION: The typical duration of an allergy treatment plan is 3 to 5 years. During the bulk of this period, injections will be administered on a 2 to 4 week schedule. Improvement should be noted within the first year. Additional years of treatment are necessary for further improvement, as well as to maximize the chance for prolonged improvement, once injections are discontinued.

SIDE EFFECTS: The only risk of allergy injections is an allergic reaction to the injection itself, since allergy injections are made of the particular agent to which you are sensitive. You may develop local swelling to the injection, which typically subsides over a period of a few hours. Occasionally, individuals may develop "systemic" reactions with nasal symptoms, wheezing, hives or potentially even more severe anaphylactic reactions. Drop in blood pressure and severe throat restriction are extremely rare complications of allergy shots. Deaths from allergy shots have occurred but are exceptionally rare. Most severe allergic reactions to allergy shots begin within 20 minutes of injections. <u>It is, therefore, essential that the patient remain in the doctor's office for at least that 20</u>

minute period. This waiting period will allow the physician to effectively treat any bothersome reaction.

It is important to report any reaction to an allergy injection. Localized swelling may not occur for several hours and this can be reported at the time of the next injection. More severe reactions should be immediately brought to a nurses' or doctors' attention. In this regard, please report:

- sneezing, nasal congestion
- hives or itching
- dizziness
- wheezing or chest tightness
- swallowing difficulty
- abdominal cramps

Finally, patients on beta blocker medication used to treat high blood pressure, arrhythmia, heart palpitations, tremors, glaucoma and migraine headache, should typically not be receiving allergy injections. They may increase the risk of systemic reactions to allergy shots that are resistant to the treatment.

SUMMARY: Allergy injections are an effective way to decrease one's sensitivity to allergy provoking substances in the environment. If you have further questions regarding allergy injections, please discuss them with your nurse or doctor.