IMMUNOTHERAPY
(Hyposensitization, “Allergy Injections”)

INTRODUCTION: There are three main forms of treatment for allergic diseases: avoidance, medication and Immunotherapy or allergy hyposensitization. Immunotherapy is recommended when airborne “allergens” cannot be adequately avoided and medications do not sufficiently control the symptoms. The purpose of immunotherapy is to decrease sensitivity to the inhaled substances that cause respiratory symptoms. Extracts of the allergens to which a person is reacting (determined by history and skin testing) are given by injection in increasing doses to build resistance. After reaching a good maintenance dose, the interval between injections is progressively spaced and then continued for several years. The decision to embark on immunotherapy, therefore, requires an ongoing commitment. It is regarded as a major part on a treatment program and is given together with the avoidance of allergens and medications.

HOW IMMUNOTHERAPY WORKS: An allergy antibody, called IgE, is responsible for most allergy problems. Allergic individuals have more of this type of antibody “coating” cells found in the upper and lower airways, digestive tract, and skin than do nonallergic people. Allergic reactions occur when this allergy antibody combines with allergens in the environment. This reaction releases chemicals, such as histamine, that then cause the various allergy symptoms (e.g., nose congestion, itching, coughing and wheezing). Immunotherapy actually decreases allergic sensitivity in comparison with medications which control symptoms caused by the allergic reaction. Injections of extracts of the appropriate allergens decrease sensitivity in several ways: 1) They cause production of a new “blocking antibody,” IgG which combines with the allergen and blocks its reaction with the antibody, IgE, so that no chemicals are released. 2) The chemical-producing cells become less sensitive to the allergen and do not release their chemicals as easily. 3) In time, the production of the allergy antibody is decreased.

LIMITATIONS OF IMMUNOTHERAPY: It should be emphasized that immunotherapy does not cure allergies. Also, some patients do not respond adequately to immunotherapy, although in most, it causes a significant decrease in symptoms, and medicines may be used in lesser amounts or only occasionally. Immediate improvement is not to be expected. It takes approximately six months for the average person to begin demonstrating the positive effects of the injections. Please realize that we are aiming for long-term improvement.

Immunotherapy as a treatment to animal dander allergy is most effective when used in conjunction with avoiding the particular animal exposure. Food allergies are not treated with immunotherapy.

ADMINISTRATION OF ALLERGY INJECTIONS: The injections patients are given contain protein allergens which are specifically and individually prepared. Often, when an individual is highly allergic to many different substances, it is necessary to divide the materials into separate vials. Injections are started with the dilute vial and the volume of each injection slowly raised until an adequate dose is reached. Then, the next more concentrated vial is initiated. Schedules vary from patient to patient, but generally the dilution III vials is the weakest dilution. After the prescribed number of doses have been given from this vial, the patient will then progress to dilution II, and finally, to dilution I, which is the most concentrated. Injection treatments are given once a week until reaching the maintenance dose. This takes approximately four to six months depending on the individual’s ability to tolerate the injections without developing local
or generalized reactions. Once this dose is achieved, it is preferable that the patient return for a checkup with their dosage sheets to review the progress of the symptoms and the injections. With continued improvement, the frequency of injections can be reduced to every two weeks and successively to every three, and then four weeks, prior to their being discontinued.

Allergy injections are recommended for approximately three years in the average case. Typically, we prefer two years of good results before discontinuing the injections. Some people will need even longer periods of therapy. It is important that once improvement is seen, the injections can be continued as per your doctor's instructions, because an early discontinuation of these injections frequently can be followed by a relapse in symptoms.

RISKS OF IMMUNOTHERAPY INJECTIONS

Immunotherapy is part of an allergy treatment program developed for and carried out by patients with their physicians; wellness is the goal of this partnership. Generally, immunotherapy is quite safe. However, adverse reactions may occur since the treatment consists of injecting substances to which the patient is allergic.

REACTIONS TO IMMUNOTHERAPY: Minor discomfort may occur when you receive an allergy injection. Rarely, minimal bleeding from the upper layers of skin may occur. Occasionally, a hive or a larger area of swelling may appear as a warm, reddened lump at the site of injection. These local skin reactions will generally resolve over several hours or, in rare instances, a few days. If a large local swelling or welt (equal to or greater than the size of a quarter) develops after an injection, the next dose may be modified. You must inform the nurse of any local or generalized reactions before you receive additional allergy injections.

Despite all precautions, allergy injections can, in rare instances, cause a generalized reaction. This reaction can include symptoms such as nasal congestion, sneezing, wheezing and/or hives. Potentially life threatening symptoms could include throat swelling, difficulty breathing and low blood pressure resulting in severely reduced breathing capacity, nausea, light-headedness, shock or general collapse. There are very rare reports of death after an allergy injection. Adverse reactions usually begin soon after the injection and can be minimized by early treatment. Should you have any or all of the symptoms of such a reaction, you may require treatment in the doctor’s office or hospital. Therefore, we require that you remain in the office for 30 minutes after receiving the injections and be checked by the nurse before leaving. This waiting period is required for all patients, regardless of the length of time they have been on injections, because reactions are unpredictable and can occur even after a long period of uneventful treatment. Some patients require a longer waiting period after injections, as directed by the doctor and/or nurse administering the injections. Any symptoms or concerns arising after you leave the office should be immediately reported to one of the doctors at (858) 292-1144. IF YOU HAVE SEVERE SYMPTOMS, GO IMMEDIATELY TO THE EMERGENCY ROOM.

PRECAUTIONS: Allergy injections should generally not be given when significant wheezing or fever are present. Medical measures should be taken to alleviate the problem before injections are continued. Injections may be given when moderate symptoms of hay fever or a cold are present, and they may also be given while the patient is taking medications such as antihistamines, decongestants and bronchodilators. You must inform the nurse if you are taking BLOOD PRESSURE OR MIGRAINE MEDICATION OF THE BETA-BLOCKER TYPE (Blocadren, Cartrol, Corgard, Corzide, Inderal, Inderide, Kerlone, Levatol, Lopressor Normozide, Propranolol, Sectral, Tenoretic, Tenormin, Timolide, Visken, etc.), as this may put you at a higher risk for adverse reaction to allergy injections.

Please make sure that you fully understand the benefits and potential risks of your immunotherapy program. Your allergist and allergy nurse can provide further information about immunotherapy or answer any questions you may have about your specific program.