

## Allergy Immunotherapy

There are three basic approaches to treatment of allergic diseases (such as allergic rhinitis, hay fever, sinus problems, and asthma). These approaches are: (1) avoidance of the offending allergens, (2) allergy and asthma medications, and (3) allergy immunotherapy, also known as allergy shots. The main advantage of allergy immunotherapy is that it is the only way that we have at present to actually *decrease the severity* of your allergic problems. Medications and environmental controls only work as long as you continue to take the medication or continue to avoid the allergen. Allergy immunotherapy can actually make you less allergic. In addition, after a course of immunotherapy, most patients will experience a prolonged *remission* of their allergies after stopping allergy shots. This is not to say that the allergies are completely gone (cured), but that they are less than they were prior to the immunotherapy program. The main disadvantage of allergy immunotherapy is the effort involved in the immunotherapy program. This program is outlined below.

## The Allergy Immunotherapy Program

Your immunotherapy is based on the results of your allergy skin testing and your evaluation by your allergist. Allergy injections consist of extracts of the actual allergens discovered on your skin testing, for instance pollens, molds, dust allergens, and animal dander. There is therefore risk of allergic reactions to allergy shots, necessitating a number of precautions. First, your allergy shots will initially be very dilute, and will slowly build up in volume and concentration. Second, allergy shots must be given in a medically supervised setting, which generally means a physician's office (preferably your allergist's office), where serious reactions can be appropriately and immediately treated. Third, you must *always* wait 20 to 30 minutes in the office after each allergy injection, since serious reactions, which can be very serious, usually occur in this time period.

Initially, in the "build-up" period, injections will be given one or two times per week. This build-up period usually continues for about six to nine months. Injections can then be "spread out," usually at first to every other week, then every three weeks, then sometimes monthly. This build up period can be shortened significantly with rapid desensitization, also known as rush immunotherapy. Usually the patient will begin to notice benefit from injections at about the end of the third vial, sometimes a little earlier and sometimes later. About 80 to 90% of patients who undertake an allergy immunotherapy program will experience benefit.

Allergy immunotherapy is a long-term undertaking, usually 3 to 5 years. If a patient took shots for, say, 6 months and stopped, he would tend to lose any benefit of the program over the ensuing months. On the other hand, most patients who undertake the full program (3 to 5 years) will enjoy a long-term remission (years) after stopping allergy shots.

Allergy immunotherapy may safely be continued in pregnancy. Let us know, however, if you are pregnant, because this may affect your immunotherapy dose or schedule.

## Risks of Allergy Immunotherapy

As noted above, an allergy shot consists of the *allergens to which you are sensitive*. There is therefore always a risk to taking allergy shots, no matter how many months or years you have been taking them. This is why allergy injections must always be administered in a medically supervised setting and why we *never* allow a patient to administer his or her own injections.

Reactions to allergy shots are of two types, local and systemic. *Local* reactions consist of redness, swelling, warmth, or itching at the site of the allergy shot (the arm). Generally these reactions are not serious, and should not concern the patient unless they are large (larger than a half-dollar coin) or uncomfortable. Do, however, tell your allergist or the nurse about the size of local reactions either at your appointment or before your next shot. *Systemic* reactions are more serious and, in rare cases, *can be life-threatening*. Symptoms of a systemic reaction include itching (other than on the arm where the shot was given), swelling of the lips, eyes, or tongue, tightness in the throat or chest, shortness of breath, dizziness, or loss of consciousness. Again, this is why you must wait in the office after the allergy injection, so early symptoms such as itching can be treated and the reaction does not progress. If systemic reactions occur, your allergist will adjust the dose or schedule of immunotherapy to minimize the chance of future reactions.

Risk factors for serious systemic reactions include *active asthma* or wheezing at the time of an immunotherapy injection. Therefore if your asthma is "acting up" or you are experiencing wheezing, tight chest, or other asthma symptoms, you should wait until you are feeling better before getting an allergy shot. Another risk factor for a more serious reaction to an allergy injection is being on a heart medication known as a *beta-blocker* or a kind of antidepressant known as an *MAO inhibitor*. Always let us know about changes in your medications, particular heart or blood pressure medications.

Your allergy immunotherapy program can be very effective and risks can be minimized, but it requires a partnership between you and us to undertake it safely.

### St. Peters Office Hours

Monday 9:00 a.m - 4:00 p.m.  
Wednesday 9:00 a.m - 5:30 p.m.

### Creve Coeur Office Hours

Monday 9:00 a.m.-4:00 p.m.  
Tuesday 8:00 a.m.-4:30 p.m.  
Thursday 9:00a.m.-4:30p.m.  
Friday 8:00a.m.-4:00p.m.  
Saturday 9:00a.m.-12:00p.m.