

Allergy shots: Are they right for you or not?

If you're an allergy sufferer and have not been able to achieve effective symptom control through medications, experience unpleasant side effects when taking allergy medications, are unable to avoid exposure to a particular allergy trigger, or would simply prefer to avoid the cost and inconvenience of long-term medication use, allergy immunotherapy—better known as allergy shots—may offer the relief you seek.

According to Dr. Ronald Negrich of Personalized Allergy & Asthma Care, allergy immunotherapy involves the injection of a particular allergen in progressively increasing doses until the patient's immune system develops a tolerance to it and no longer overreacts when the substance is present.

"The injections, which contain a highly purified form of the protein or proteins that cause the patient's allergic reaction, are administered one or two times a week until a maintenance dose is achieved. Then, the interval in between shots can be gradually increased to once every two weeks, once every three weeks, and, finally, once a month. As the dose builds up, we're usually able to reduce any allergy medications that the patient is taking so we can get a sense of how they feel and function without them," Dr. Negrich observes.

Allergy immunotherapy is not "one-size-fits-all." Instead, each patient's vaccine is customized to include only the specific proteins that he or she reacts to, which are identified through skin testing with a battery of allergens. To help determine whether a patient is a good candidate for the shots, the allergist will also look closely at his or her history. For example, if the person is suffering with seasonal rather than perennial allergies and is able to achieve effective symptom control with a single medication, allergy shots may be unnecessary. On the other hand, if the allergy season is particularly severe, persists for many months, or symptoms are not effectively controlled through medication, shots might be a good choice.

In addition to evaluating the severity and duration of allergy symptoms and the effectiveness of any medications being taken, the allergist will also want to know whether the patient is experiencing problems like chronic sinusitis, recurrent ear infections, or asthma symptoms, all of which are commonly associated with allergies and can often be reduced or eliminated through immunotherapy shots. In fact, allergy shots in children have been shown not only to reduce the symptoms of asthma, but also to reduce the likelihood that they will develop asthma in the first place.

"Furthermore," states Dr. Negrich, "it was recently reported in the *Annals of Allergy, Asthma & Immunology* that shots in children save money over time compared to medications, emergency room visits, and doctor visits. They also save patients the hassle of remembering to take medications. That's not such a big issue when you're taking only one antihistamine, but if you're taking more than one oral medication along with a nasal spray, inhaler, and eye drops, it's easy to forget something."

Dr. Negrich also notes that the shots are very safe overall. "Some people experience local swelling at the injection site, but that typically goes away within a day. Rarely, there are systemic reactions, but we have the medications and expertise to treat them. That's why patients are required to wait for 30 minutes—the time frame in which a systemic reaction is likely to occur—after receiving the shots," he says.

Allergy sufferers who have a fear of injections can be assured that the needles used are very fine and cause no pain. Even children, who tend to be highly fearful of shots, start to do well with them after the second or third injection.

A sublingual form of allergy immunotherapy is currently being investigated in the United States. Sublingual Immunotherapy, or SLIT, involves the administration of increasing amounts of allergen(s) in a liquid form under the tongue. Dr. Negrich points out that

sublingual drops are not yet FDA approved in the U.S. and, thus, this therapy is not recommended outside of the research domain in the United States.

The effectiveness of sublingual immunotherapy has been studied in both adults and children, and studies report at least one to two years of treatment before improvement in symptoms is noted. Additionally, a considerable review of over 100 studies showed mixed results, with one-third showing improvement and one-third showing no improvement. This variation in effectiveness is attributed to the differences in the dose of allergen used in the various studies.

Although research studies with sublingual immunotherapy show promise, several questions regarding optimal dosage, effectiveness, and safety need to be answered before sublingual immunotherapy can be used outside of the research environment. "Allergy shots certainly aren't perfect, but they're the best we've got to offer right now and they have a great success rate when you treat the right person for the right allergies for the right amount of time," Dr. Negrich says.

Dr. Ronald Negrich
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