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CAN IMMUNOTHERAPY HELP WITH THE TREATMENT OF ALLERGIC ASTHMA?

ASTHMA

WHAT IS IMMUNOTHERAPY?

Immunotherapy is a medical treatment that can make your body less sensitive to substances that trigger allergic reactions (allergens). A health care provider gives you small doses of substances that you are allergic to, such as pet dander or ragweed pollen, and increases them gradually, over time. The goal is to build your ability to be exposed to these substances without having allergic symptoms, such as a runny nose, watery eyes, sneezing, wheezing, or asthma. By reducing your body's sensitivity, immunotherapy may reduce the chance that exposure to these substances will trigger an asthma attack.

Immunotherapy can be given as an injection, known as an allergy shot (subcutaneous immunotherapy or SCIT), or orally as a liquid or a pill that dissolves under the tongue (sublingual

immunotherapy or SLIT). Immunotherapy begins with testing you for sensitivity to specific allergens before beginning treatment, to make sure the immunotherapy targets substances that trigger your allergies.

Along with your current treatment, your health care provider may recommend immunotherapy if you have allergic asthma and your asthma isn't easily controlled by traditional asthma medicine or by avoiding certain allergens, such as ragweed or dust mites, that trigger your asthma attacks.

Research suggests that immunotherapy has the potential to reduce asthma symptoms and the severity of disease gradually, through long-term treatment.



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For more information and resources on asthma, visit nhlbi.nih.gov/BreatheBetter.



WILL IMMUNOTHERAPY RELIEVE MY ASTHMA?

If you have allergic asthma and symptoms worsen after exposure to certain allergens, you may be a candidate for allergy shots. Research suggests that allergy shots may offer a small improvement in quality of life, symptom control, and could reduce the amount of asthma medication you take.

Allergy shots are recommended as an additional asthma treatment for those age 5 and older who have been proven to be allergic and whose asthma symptoms worsen after exposure to allergens such as pet dander, dust mites, or pollen.

Oral immunotherapy, which may be given in tablet or liquid form, is not recommended for treating allergic asthma. While tablets have been approved by the U.S. Food and Drug Administration (FDA) for treating some allergies in people who have allergic rhinitis with or without conjunctivitis, neither tablet nor liquid immunotherapy has been approved for treating asthma. The FDA approval is limited to individuals ages 5 years and older who are sensitive to northern grass, and to individuals 18 and older who are sensitive to a mix of ragweed and dust mites. There isn't sufficient evidence to show that oral immunotherapy will help your asthma.

IS IMMUNOTHERAPY RIGHT FOR ME?

You may be a candidate for immunotherapy, most likely delivered as allergy shots, if you have mild to moderate asthma that is not well controlled by your current medical therapy.

If your asthma is well controlled, immunotherapy may reduce the amount of asthma medication you need. Immunotherapy is not recommended if your asthma is severe.

Your health care provider will want to assess your sensitivity to allergens. He or she can do this by skin testing, which can be done in the office or clinic, or by ordering a blood test.

You should consider your personal treatment goals when considering immunotherapy. You may choose immunotherapy if you place a high value on possible small improvements in quality of life, symptom control, and reducing your need for medication. You must also be willing to accept the risk that exposure to allergens might trigger an allergic reaction, which in rare cases may be life-threatening.

HOW SAFE IS IMMUNOTHERAPY?

Allergy shots may produce mild local reactions or more serious reactions in other parts of your body. Local reactions such as redness and swelling at the injection site are common.

Reactions in other parts of the body can occur in about 12 percent of those who receive allergy shots. These reactions may include hives and itching; nasal congestion, coughing, wheezing and asthma; nausea, vomiting and diarrhea; or abnormal heart rhythms and a drop in blood pressure.

Allergy shots can produce life-threatening allergic reactions, but these are extremely rare, occurring at most following one of every 20,000 shots. Poorly controlled asthma is a major risk factor for a life-threatening event.

Because of these risks, your health care provider should help you control your asthma as much as possible before beginning allergy shots. If you are having asthma symptoms, your provider should not start allergy shots, increase their dose, or give you maintenance doses.

If you have asthma, you should never give yourself allergy shots at home. You'll be asked to travel to and from the clinic or office for every shot. As a precaution, your health care provider may ask you to stay for at least 30 minutes after each injection.

Your provider will also caution you that missed appointments—and, consequently, missed treatments—can boost your odds of suffering an allergic reaction. That's because only gradual repeated administration will build your tolerance to the allergens in your allergy shots. If you miss an appointment, you risk losing the gains that you've made—and, when that occurs, allergy shots can cause allergic symptoms.

Missing appointments can also make it more difficult to reach a maintenance dose schedule that will achieve the best results.

About 15 percent of people have serious allergic reactions more than 30 minutes after their allergy shots. If you have had a significant reaction to immunotherapy, you should carry injectable epinephrine (such as EpiPen®*) with you to and from your allergy shot appointments.



**Mention of brand names is to aid in identification and does not imply endorsement.*

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