



TEXAS LUNG ASSOCIATES

Allergy Clinic

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Sublingual Immunotherapy

Purpose – The purpose of sublingual immunotherapy (allergy drops) is to decrease your sensitivity to allergy-causing substances, so that exposure to the offending allergen (pollen, mold, mites, animal dander, etc.) will result in fewer and less severe symptoms. This does not mean that immunotherapy is a substitute for avoidance of known allergens or for the use of allergy medications, but rather is a supplement to those treatment measures. Allergy drops have been shown to lead to an alteration of your immune system's response to naturally occurring allergens. These alterations may permit you to tolerate exposure to the allergen with fewer symptoms. You, in effect, become “immune” to the allergen. The amount of this immunization is different for each person and is, therefore, somewhat unpredictable.

Efficacy - Improvement in your symptoms will not be immediate. It usually requires three to six months before any relief of allergy symptoms is noted. About 85-90% of allergic patients on immunotherapy note significant improvement of their symptoms. This means that symptoms are reduced, although not always completely eliminated.

Procedure – Allergy drops are usually begun at a very low dose. This dose is gradually increased on a regular basis (usually every week) until a therapeutic dose (often called the “maintenance dose”) is reached. The maintenance dose will differ from person to person. Drops are administered at home daily. The first dose will be administered in our office.

Duration of Treatment – It usually takes several months to reach a maintenance dose. The time may be longer if there are reactions or if the drops are not administered on a regular basis. For this reason, it is important that the recommended schedule be followed. If you anticipate that regular use of the drops cannot be maintained, immunotherapy should not be started. Immunotherapy may be discontinued at the discretion of your doctor. Most immunotherapy patients continue treatment for three to five years.

Background on SLIT (Sublingual Immunotherapy) - The substances that trigger a patient's allergies are called allergens. Immunotherapy is a treatment where small amounts of these allergens are delivered by injection (needle) or sublingually (under tongue via allergy drops) to alter the patient's immunity. The goal is to develop tolerance to the allergens that cause your symptoms.

The allergens used for allergy drops are the same as those used for injections. However, the FDA has specifically approved the allergens for injection use. Using them for SLIT is considered an “off-label” use. Off-label use in the US healthcare delivery system is a legitimate, legal and common practice. The protocol we follow has been used in the United States for over 35 years.

Dozens of research studies show that allergy drops are a safe, effective form of immunotherapy. Allergy drop treatment takes three to five years for most patients to complete, however, some patients may respond differently based upon the severity of their allergies. Like injection immunotherapy, a small percentage of patients may not respond well or at all to allergy drop treatment, or the allergy drop treatment may even worsen symptoms or cause a reaction.

In order of increasing severity, the following brief descriptions explain the nature of these potential reactions:

Adverse Reactions – Immunotherapy is associated with some widely recognized risks. Risk is present because a substance to which you are known to be allergic is being absorbed under your tongue. Some adverse reactions may be life threatening and may require immediate medical attention. In order of increasing severity, the following brief descriptions explain the nature of these potential reactions:

- **Local Reactions:** Local reactions for SLIT are uncommon and are usually restricted to mouth itching or stomach upset. These reactions are more likely to occur at the very beginning of treatment or as you reach the higher concentrations of antigens in your drops. The reactions usually occur immediately after taking a dose, but can occur hours after. Most of the time these reactions resolve themselves, or with simple dose adjustments. An antihistamine can be used as normally directed. You should notify your doctor immediately if you have these reactions.
- **Generalized Reactions:** Generalized reactions occur very rarely but are the most important because of the potential danger of progression to more severe conditions. These reactions may include:
 - Urticaria reactions (hives) include varying degrees of rash, swelling, and/or itching of more than one part of their body. There may be mild to moderate discomfort, primarily from the itching. This uncommon reaction typically occurs within minutes of taking a dose.
 - Angioedema has not been reported using our protocol, but has been reported with other protocols. It is extremely rare, characterized by swelling of any part of the body, inside or out, such as the ears, tongue, lips, throat, intestine, hands or feet, alone or in any combination. This may occasionally be accompanied by asthma symptom onset and may progress to the most severe reaction, anaphylactic shock. In the absence of shock, the principle danger lies in suffocation due to swelling of the airway. Angioedema may occur within minutes after the allergy drop is taken and requires immediate medical attention.
 - Anaphylactic shock is the rarest complication and has not been reported with our protocol and has only been reported a small number of times using other SLIT protocols, but it is a serious event characterized by acute asthma, vascular collapse (low blood pressure), unconsciousness, and potentially death and the possibility of it happening does exist.

The above reactions are unpredictable and may occur with the first sublingual dose administration or after a longer time of taking the drops, with no previous warning. All generalized reactions require immediate evaluation and medical intervention. If a localized or generalized reaction occurs, the drop dosage will be adjusted for subsequent treatment.

A prescription for an EpiPen will be prescribed along with instructions on how and when to use it.

Additional information:

Missed doses and resuming treatment - If more than one day of doses is missed, do not try to “catch up” by taking more than the daily-prescribed dose.

Pregnancy - Females of child-bearing potential: If you become pregnant while on immunotherapy, notify the office staff immediately, so that your doctor can determine an appropriate dosage schedule for the drops during pregnancy. Immunotherapy doses will not be advanced during pregnancy, but may be maintained at a constant level.

New Medications - Please notify the office staff if you start any new prescription medication, particularly medication for high blood pressure, migraine headaches, and glaucoma. Beta-blocker medications are contraindicated while on immunotherapy and your drops will need to be discontinued while you are taking a beta-blocker.

Appropriate advice and treatment will always be available from our office at the time of any adverse reaction. Call our office immediately if any adverse actions occur or if you decide to discontinue treatment for any reason.