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## SUBLINGUAL immunotherapy (SLIT)

One out of five Americans suffer from allergies. For some, allergies are simply a short-lived nuisance; however for millions it's a life altering disease. The only treatment that reprograms the overreacting immune system is immunotherapy; this actually involves administering the substances that trigger allergies to the patient on a regular basis. This slowly allows the patient to acclimate to his or her environment. I began offering patients allergy drops in 2004.

Currently in the U.S. an estimated 3 million people are in immunotherapy treatment. Almost all of these patients are treated with injection immunotherapy. We're all familiar with allergy shots...a series of injections with gradually increasing doses that, over time, can build the body's tolerance to an antigen thus reducing symptoms and medication needs. Allergy drop treatment follows this same pattern and uses the same FDA approved antigens. The difference is that the drops are placed under the tongue and affect the immune system of the mouth. Where as allergy shots are typically given once or twice a week in the doctor's office, allergy drops are taken once a day at home. They taste sweet and only take a few seconds to administer.

Overall, immunotherapy is an underutilized treatment. Shots are definitely effective and drops are not meant to replace them, however there are limits to which patients can be treated with shots. The benefit of allergy drops is that antigens are delivered to cells through a much friendlier route, the mouth (oral mucosa). Evidence has shown that the dendritic cells in the oral mucosa actually serve to "down regulate" the immune system when they are stimulated with the antigen (allergy drops). This provides another option for patients who are not candidates for or refuse injection therapy. Allowing the treatment of young children is perhaps the most important benefit of sublingual immunotherapy. This is important as there is mounting evidence that treating allergy triggers early in life can decrease the risk of developing asthma in later years.

Two childhood allergic conditions, atopic dermatitis and recurrent otitis media, may also benefit from sublingual therapy. In the case of food allergens, the sublingual method is the only viable type of immunotherapy. For food allergy treatment, the drops are administered three times daily before meals. It is important to note that a significant portion of children with untreated atopic dermatitis eventually go on to develop asthma. In addition, SLIT can be used to treat multiple allergies simultaneously.

Another advantage is the ability to treat some difficult patients who do not respond well to shots. Food and mold allergies, in particular, have proven to be difficult to treat well with conventional therapies. Chronic sinusitis patients may also achieve long-term relief with sublingual immunotherapy. Medical research has revealed that fungi are significant contributors to chronic sinusitis. Anti-fungals and SLIT mold therapy can be an effective combination in treating these difficult patients.

Although it has not been widely used in the United States, the track record for sublingual immunotherapy spans more than 60 years. It's relatively common in Europe, particularly in Italy, France and Spain where sublingual therapy account for 75% of all immunotherapy treatments. It has a proven safety record which allows it to be administered at home. This added convenience and cost effectiveness encourages better patient compliance. In conclusion, sublingual is a viable and sometimes more desirable alternative for the administration of immunotherapy. SLIT allows patients who are not candidates for injection immunotherapy...children, highly reactive patients, severe asthmatics, and those with food allergies... to receive the benefits of immunotherapy. Proven efficacy, increased safety, ease of use, higher compliance and lower cost are all advantages of SLIT. Ask your physician if SLIT might be right for you.

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