Key Tenets of the La Crosse Method™ Practice Protocol

April 2015
Onalaska, Wisconsin U.S.

The La Crosse Method™ Practice Protocol: The comprehensive choice for you and your patients

In recent years, the acceptance and understanding of sublingual immunotherapy (SLIT) has continued to gain momentum and has been recognized as a viable alternative to subcutaneous injection for allergy in both adults and children. More physicians from around the country are now referring or offering sublingual immunotherapy for their patients. However, not all forms of sublingual immunotherapy are alike. At Allergychoices, we have chosen to advocate exclusively the La Crosse Method Practice Protocol because it provides you with a comprehensive, safe and effective approach to treat a wide variety of allergic patients. What sets us apart is our vast clinical experience in providing sublingual immunotherapy and our understanding of the available literature. To date, we have helped train more than 1000 practices from around the country in sublingual immunotherapy using the La Crosse Method and more than 185,000 patients have benefited from its use.

One of the biggest hurdles to wide-spread adoption is the variability of sublingual immunotherapy dosing reported. Clinical trials report doses ranging from two to 375 times the amount given in subcutaneous immunotherapy - yet both positive and negative results have been reported. This matter is further complicated by extract variability from different manufacturers.

With the La Crosse Method, these issues have been addressed. There is no universal optimal dose that applies to all patients, rather, sublingual immunotherapy treatment should be patient-tailored, reactivity-adjusted, and should be monitored over the course of treatment by a physician.

How Sublingual Immunotherapy Works: Understanding the Mechanism

Sublingual immunotherapy involves more than the gradual increasing doses of allergen placed under the tongue. Tolerance is the most accurate term used to describe the permanent modification of the immune response to allergen(s) induced by sublingual immunotherapy.

Key Tenets of the La Crosse Method

Sublingual Administration

The area under the tongue is often referred to as a privileged domain due to its dual properties: the area is rich in T-cells and other antigen presenting cells that help induce tolerance while being poor in mast and other effector cells such as basophils and eosinophils which can trigger reactions. The sublingual area also exhibits the highest permeability compared to any other easily accessible mucosal surface - a feature that has been exploited for longer than a century now in the delivery of fast-acting medication and highly effective vaccines. Given the large numbers of dendritic cells in the mucosa area, especially upon entry of where foreign protein is first encountered, antigen presentation of such wide caliber and diverse consequences establishes the pivotal role of the dendritic cell in the development of tolerance versus sensitization. In addition to antigen presentation, the dendritic cell is also capable of producing an unusually wide array of cytokines which affect all aspects of cytotoxic and cellular immunity.

Titrated Dosing

Incremental dosing for sublingual immunotherapy is determined by intradermal five-fold dilutional testing in order to define a level of tolerance. The initiation of sublingual immunotherapy begins at the highest dilution that produced a near-negative skin test. Upward titration of immunotherapy doses against declining skin reactivity is used for safe build-up and to avoid systemic and local reactions. Titrated dosing addresses the fact that not all patients with a given allergy are equally reactive to the allergen(s) in question, nor are allergen batches produced by the same manufacturer equal to each other. Likewise, the La Crosse Method minimizes risks of unnecessarily high doses without incremental benefit or adverse events, while simultaneously avoiding a dosing scenario that becomes cost-prohibitive for patients.

Frequent Administration

"Allergen persistence in the oral mucosa may be a far more relevant factor for gaining efficacy than allergen concentration." A number of studies have shown that allergen administered to the sublingual area is retained for a period of up to 48 hours. However, multiple daily doses are needed to provide continuous, uninterrupted allergen exposure to mast cells and other effector cells in order to minimize peak and trough effects. Frequency of administration may prove conducive to effector cell conditioning and may be the reason SLIT, titrated against skin test reactivity, is devoid of the side effects of SCIT and the associated failures.

The La Crosse Method also offers the simplicity of consistent patient dose administration throughout the duration of treatment, without a complex dosing schedule or multiple bottles. Patients are prescribed one vial at a time that contains a 90-day supply.

Glycerin as a Diluent

Glycerin has remarkable preservative qualities and can be found in numerous commercial products such as soaps, beverages and foods among others. With sublingual immunotherapy, using glycerin as a 50% diluent allows for long-term storage of formulated extracts and for the ability to treat multiple allergies at the same time without the allergens degrading or interacting with one another as they can with multi-allergen shot therapy.
Summary
"Effector cell activation in the course of immunotherapy may adversely affect the efficacy of immunotherapy. It may be prevented by the following means: i) titrating each new dose against skin test reactivity and late phase responses; ii) maintaining allergen activity by keeping allergens in high glycerin solutions; iii) administering immunotherapy in such a schedule that would keep dendritic cells continuously exposed to allergen." The La Crosse Method Practice Protocol is the only established method to-date that fits these criteria.

Bibliography
A complete copy of the La Crosse Method Practice Protocol and an updated sublingual immunotherapy research bibliography can be obtained from Allergychoices, Inc. 2731 National Drive, Onalaska, WI 54650. Phone: 866-793-1680; Email: mmontet@allergychoices.com or visit our Website at www.allergychoices.com.

References