

Do indications to sublingual immunotherapy need to be revised?

To the Editor:

The report by Cochard and Eigenmann¹ highlights an important aspect of sublingual immunotherapy (SLIT): its safety in patients with previous reactions to subcutaneous immunotherapy. They describe 2 patients who withdrew from SLIT for repeated side effects with bronchial and nasal reactions, respectively.¹ In both of them, previous subcutaneous immunotherapy treatment had to be discontinued for adverse reactions. This confirms a recent report on 2 patients with similar characteristics who had stopped subcutaneous immunotherapy because of adverse reactions and also had severe, anaphylactic reactions to SLIT.² To complicate the issue, in all these patients, SLIT was not performed by conventional schedules: in the first case, an ultrarush schedule using the product Staloral 300 (Stallergenes, Antony, France) was used,¹ whereas in the other report, the patients reacted at the very first dose of the product Grazax (ALK-Abelló, Horsholm, Denmark), which has no updosing phase.²

However, in studies conducted on patients without previous reactions to subcutaneous immunotherapy, both the ultrarush schedule with Staloral 300³ and the no-updosing schedule with Grazax⁴ were generally well tolerated. This indicates that patient-related more than schedule-related factors are likely to be linked to the development of systemic reactions to SLIT.

In official documents on allergen immunotherapy, indications to SLIT include "Patients with systemic reactions after subcutaneous immunotherapy."⁵

The current observations on the development of systemic, and even anaphylactic, reactions to SLIT in such patients should encourage reconsideration of the issue.

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Case reports by Cochard and Eigenmann

To the Editor:

Drs Cochard and Eigenmann¹ are to be applauded for bringing these case reports to light. They show the risk of starting sublingual immunotherapy at a high dose in sensitive patients. In defense of high-dose sublingual immunotherapy, the 14-year-old girl was also sensitive to tree pollens, and the ultrarush therapy

for grass was in the context of tree pollen season, which may have primed an immunologic reaction. Further, the 13-year-old boy was sensitized to dust mite, grass, animal danders, and molds, whereas only grass and dust mite therapy were addressed.

In the case of sensitive patients, it is appropriate to tailor the treatment to the sensitivity of that patient. Bordignon and Burastero² demonstrated that dosing 2 or 3 times a day allowed lower antigen doses to be used effectively. The frequency of dosing has a greater effect than the amount of the antigen. A lower dose of antigen in sensitive patients allows fewer side effects. Beginning low-dose treatment of the major sensitivities establishes immunologic tolerance so that subsequent high-dose treatment produces fewer adverse events.

It is not necessary to start a highly sensitive patient on a high dose of antigen. A review by Wilcock et al³ showed a mechanism for uptake by antigen-presenting cells that is IgE-dependent, allowing capture of low concentrations of allergens in presence of IgE. Antigen-presenting cells in the sublingual mucosa are the gateway for sublingual immunotherapy. Highly sensitive patients, with higher specific IgE, react to a smaller amount of antigen exposed to the respiratory mucosa, and by extension, the same patient may be effectively treated by sublingual immunotherapy with a smaller amount of that antigen exposed to the sublingual mucosa.

Although sublingual immunotherapy is considered to be a safe procedure,⁴ systemic reactions are recognized.⁵ There is the potential for an adverse reaction when an allergen is administered to a sensitized patient. We advocate customizing immunotherapy on the basis of the degree of sensitization, concomitant allergies, environmental exposures, and risk factors.

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Reply

To the Editor:

We thank Drs Incorvaia and Mauro¹ as well as Drs Thompson and Morris² for their comments on the 2 patients with systemic side effects to sublingual immunotherapy (SLIT) about whom we reported in a recent Letter to the Editor.³

We agree with their comments highlighting the following aspects. Incorvaia and Mauro¹ mentioned another report by de