ARQUIVOS DE ASMA, ALERGIA E IMUNOLOGIA

Brazilian Guidelines to Allergen Immunotherapy for Patients with Allergic Rhinitis: Position Statement of the Brazilian Association of Allergy and Immunology (ASBAI)

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Dear Editor,

Allergen immunotherapy (AIT) is one of the cornerstones in the treatment of allergic diseases and the only therapeutic strategy with curative potential. It promotes the reduction of medication use and symptom control even after the end of treatment.[1]

AIT is one of the procedures that define Allergy and Clinical Immunology as a specialty. Although it has been performed for over 100 years, doubts about its effectiveness and the actual benefits it provides to patients persist, particularly among non-specialists in the field.

Recently, the Brazilian Association of Allergy and Immunology (ASBAI) elaborated the "Good clinical practice recommendations in allergen immunotherapy: Position paper of the Brazilian Association of Allergy and Immunology", which were published in a prestigious international journal in the field.[1] In this position statement, recommendations adapted to the Brazilian reality were established based on documents from the most prominent organizations in Allergy and Immunology in the world, always supported by evidence-based and precision medicine.[1] Nonetheless, the effectiveness and safety of subcutaneous (SCIT) and sublingual (SLIT) allergen immunotherapy, as well as their adverse events, indications, and relative and absolute contraindications in patients with allergic rhinitis still needed to be confirmed.

Therefore, ASBAI conducted a new systematic review evaluating the efficacy and safety of SLIT and SCIT in patients (adults and children) with allergic rhinitis (house dust mites and/or pollen). The initial database search yielded approximately 1,200 articles, of which only 47 met the inclusion criteria.[2] Twenty-five of them were double-blind, randomized, placebo-controlled trials, including a total of 4,518 patients with perennial allergic rhinitis, with or without associated asthma, and 3,887 placebo-treated control patients. The data obtained were assessed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) system to assign levels of evidence (high, moderate, low, and very low) and rate the strength of the recommendations (weak or strong).[3] The effectiveness and safety of SCIT and SLIT in children and adults with allergic rhinitis (house dust mites and pollens) were evaluated (Table 1).

The criteria for indication and contraindication of SCIT and SLIT were also defined (Table 2).

Table 3 describes the criteria for monitoring the effectiveness and discontinuation of AIT.

The results of the systematic review showed that both SCIT and SLIT are effective and safe in the treatment of patients (children and adults) with allergic rhinitis (house dust mites and pollens) and that, whenever indicated, they should be part of the treatment regimen for these patients.

Table 1
Subcutaneous (SCIT)* and sublingual (SLIT) allergen immunotherapy according to the GRADE recommendations[3]

	Level of evidence	Grade of recommendation
Is SCIT effective in children and adults with allergic rhinitis?		
	House dust mites – High	Strong
	Pollen – Moderate	Strong
Is SCIT safe in children and adults with allergic rhinitis?		
	House dust mites – High	Strong
	Pollen – Moderate	Strong
Is SLIT effective in children and adults with allergic rhinitis?		
	House dust mites – High	Strong
	Pollen – Moderate	Strong
Is SLIT safe in children and adults with allergic rhinitis?		
	House dust mites – High	Strong
	Pollen – Moderate	Strong

* It is recommended that SCIT be performed by the prescribing physician or under other medical supervision.

Table 2
Criteria for indication and contraindication of subcutaneous (SCIT) and sublingual (SLIT) allergen immunotherapy (AIT) in patients with allergic rhinitis

Criteria for indication
1 - Moderate-to-severe uncontrolled disease despite adequate environmental control and drug treatment; or if the patient does not wish to use medication.
2 - Confirmed diagnosis of immunoglobulin E (IgE)-mediated sensitization through skin prick test and/or serum-specific IgE.
3 - Correlation between allergic sensitization and symptom trigger. In practice, this correlation is clinical and, if possible, nasal and/or conjunctival provocation tests can be performed as well, although these procedures are typically reserved for studies.
4 - Patients aged 2 to 4 years for SLIT and over 5 years for SCIT, and patients aged up to 65 years with favorable clinical conditions for both therapies.
Relative (RCI) and absolute (ACI) contraindications
1 - Poorly controlled asthma and severe active disease (immunological, infectious, or neoplastic) – ACI.
2 - Eosinophilic esophagitis - ACI for SLIT .
3 - Controlled cardiovascular disease (use of ACE inhibitors, beta-blockers), controlled chronic disease, and mild psychiatric disease – RCI.
4 - Pregnancy and lactation – ACI for the initiation but not continuation of AIT. If in the induction phase, increasing concentration is contraindicated.
5 - Nonadherence – ACI for the initiation and continuation of AIT.

ACE = Angiotensin-converting enzyme.

Table 3
Criteria for monitoring the effectiveness and discontinuation of allergen immunotherapy (AIT) in patients with allergic rhinitis

Criteria for AIT monitoring
1 - Currently, the criteria for AIT monitoring are clinical, involving the evaluation of symptom and medication scores using consensus-based scales. This evaluation can be complemented by quality-of-life questionnaires.
2 - Assessment of adverse effects should be performed.
3 - There are no immunological markers available to monitor AIT.
4 - Skin prick testing should not be performed as a means of monitoring the efficacy or duration of AIT.
Recommendations for discontinuation of AIT
1 - Optimal AIT duration is 3–5 years after the beginning of the maintenance phase. AIT should be maintained for at least 3 years to achieve long-lasting efficacy.
2 - In case of pollinosis, AIT should be performed only for a few months before and during the pollen season.
3 - The skin prick test is not a good parameter for discontinuation of AIT, and there are currently no laboratory biomarkers to guide the duration of treatment.
4 - Clinical evaluation is always the best parameter to assess AIT efficacy. In case of lack of clinical results after reaching the maintenance dose, AIT should be discontinued.

References

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Dirceu Solé
Fernando M. Aarestrup
Ekaterini S. Goudouris
Fábio C. Kuschnir
Brazilian Association of Allergy and Immunology (ASBAI)