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Importance of patient's education in favouring compliance with sublingual immunotherapy

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Allergen immunotherapy is clinically effective (1), but must face, as any other treatment, the problem of compliance. Studies on compliance with subcutaneous immunotherapy (SCIT) in the 1990s gave unsatisfactory results, because the rate of compliant patients was about 50% (2). The major factor associated to noncompliance was the inconvenience – that is the need to go to the physician's office for the injection – accounting for 55% of cases of discontinuation (2). The development of less demanding schedules of injections

Patient's education regarding sublingual immunotherapy.

improved the compliance, but inconvenience remained a major cause of non-compliance, followed by adverse reactions to treatment (3).

Results with sublingual immunotherapy (SLIT) were more favourable, with higher compliance (4) and adherence (5). However, there is room for improvement, and patient's education is likely to represent a critical factor.

We compared the compliance with SLIT in patients receiving standard instructions or a complete education programme. Fifty-two adult patients with allergic rhinitis (AR) of comparable severity according to Allergic Rhinitis and its Impact on Asthma (ARIA) criteria (6) were randomly assigned to receive two different degrees of information: 26 (Group A, 12 males, 14 females, mean age 29.2 years) had the educational programme, with 3-h duration and including information on AR, on the scope, practical performance, optimal length of treatment and possible side-effects of SLIT and had written instructions on such aspects; 26 (Group B, 11 males, 15 females, mean age 33.4 years) received the standard verbal instructions on SLIT.

Sublingual immunotherapy was performed with Staloral 300 (Stallergenes, Milan, Italy) by the up dosing schedule suggested by the manufacturer and

maintenance treatment with daily assumption of the allergen extract. The allergens used were grass pollen (12 pts group A and 10 group B), tree pollens (6 pts group A, 5 group B), ragweed pollen (3 pts group A, 4 group B), *Parietaria* pollen (1 pt group A, 1 group B) and house dust mites (4 pts group A, 6 group B).

All patients reported in diary cards the side-effects of the treatment and had a control visit after 3 and 6 months of SLIT. Treatment withdrawal was used as the major criterion of noncompliance.

The Table 1 shows the side-effects in relation to the allergens used and treatments withdrawal in the two groups. In group A, only one patient had stopped the treatment at the 6 months control because of the inconvenience to assume the allergen extract all days. In group B, 22 reached the maintenance phase, while four stopped the treatment because of side-effects, other two patients had discontinued the treatment at the 6 months control because of persisting oral reactions (one case) and because of improvement of AR during the pollen season and the belief that SLIT was no more needed (one case).

The overall rate of compliance was 86.5%, but it was 96.2% in patients receiving the education programme on

Table 1 Side-effects to sublingual immunotherapy according to allergens used and treatment withdrawals

Group	Oral reactions	Gastrointestinal reactions	Withdrawal during up dosing	Withdrawal at the 3 months control	Withdrawal at the 6 months control
A	4 (1 grass pollen, 2 ragweed pollen, 1 house dust mite)	2 (1 grass pollen, 1 <i>Parietaria</i> pollen)	0	0	1
B	5 (1 grass pollen, 1 tree pollen, 1 <i>Parietaria</i> pollen, 1 ragweed pollen, 1 house dust mite)	3 (2 ragweed pollen, 1 house dust mite)	4	0	2

SLIT compared with 77% in patients receiving only standard instructions.

This stresses the importance of patient's education that in the ARIA document is suggested at any grade of severity of rhinitis (6) and warrants a guiding role for the specialists. In particular, of the six patients withdrawing SLIT in the group receiving standard instructions, five did it because of side-effects. It is known that SLIT has a much better safety profile than SCIT, but local reactions in the mouth or in the gastrointestinal tract are quite common and can be managed by simple actions such as halving the dose. The other withdrawal in this group was because the patient felt that once the allergic symptoms improve, SLIT is no more needed, and this erroneous belief may be corrected by adequate information.

In conclusion, most patients undergoing SLIT are compliant, but receiving detailed information by an educational

programme seems able to improve the compliance. In particular, in patients not enough trained, trivial side-effects to SLIT, such as oral and gastrointestinal local reactions, may lead to unnecessary withdrawal.

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