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The perception of allergen-specific immunotherapy among italian general practitioners

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Summary

Background: *Allergen specific immunotherapy is the only causal therapy for respiratory allergies, and the only treatment that can modify the natural course of the disease. Information and education of patients is essential to successful treatment and, since the General Practitioner is the primary referral, a cooperation between him and the allergy specialists is crucial. We carried out a survey among Italian GPs to asses their knowledge about immunotherapy and their attitude towards it.* ***Method:*** *A 12-item questionnaire on specific immunotherapy, based on guidelines and literature was prepared by a panel of experts and anonymously e-mailed to 200 GPs of the Italian Society of General Practitioners.* ***Results:*** *Out of 200 questionnaires 156 were returned and 126 could be evaluated. The 126 respondents accounted for a population of about 300,000 patients. The overall knowledge on subcutaneous and sublingual immunotherapy resulted to be satisfactory and the attitude towards immunotherapy was generally favourable. On the other hand, only less than 50% of GPs were aware of the exact placement of immunotherapy in international guidelines, and all considered necessary a more detailed information on the treatment. Conclusion. There is still room for improving the knowledge on specific imunotherapy among general practitioners. This would allow a better synergy between primary care operators and specialists.*

Introduction

Allergy is a public health concern of pandemic proportions, affecting more than 150 million people in Europe. Taking into account the epidemiological trends, it is hypothesized that within 15 years more than half of the European population will suffer from some type of allergy (1).

Allergic patients suffer from a debilitating disease, with a major impact on their quality of life (QoL) and work/school performance and constitute a significant burden on health economics due to lost productivity and absenteeism (2). Given that allergy triggers, including urbanization, pollution and climate, are not expected to change significantly, the only way forward is strengthening and optimizing preventive and treatment strategies. In this

context, the partnership and cooperation among the different medical subjects, including specialists and general practitioners (GPs) remains essential.

Allergen-specific immunotherapy (SIT), is the only causal treatment that induces a profound immunological modification and, therefore, can potentially affect the natural course of allergic diseases (3). Many clinical trials and meta-analyses (4) have convincingly shown that SIT can achieve promising results for patients and the society, improving the quality of life, reducing long-term costs and burden of allergies, and changing the course of the disease. In addition to the short term symptoms' relief, SIT maintains its effects for years after termination, this representing a potential added value in terms of pharmaco-economy (5). Despite this, SIT has not yet received adequate attention from Medical Institutions; as testified by the general underuse of this treatment.

In a previous survey among Italian specialists about the modality of use of SIT (6) we found that: (a) specialists are overall familiar with SIT and most recommendations of the guidelines are observed; (b) the majority of physicians perform SIT in a hospital environment; (c) the availability of resuscitation facilities and/or drugs to treat severe reaction is sometimes not optimal; (d) an informed consent for injection IT is routinely obtained by <70% of the physicians and (e) poor attention was paid to the education of the patients. Since GPs are primarily responsible for education and information, and their cooperation with specialists in managing allergies is highly auspicable, we attempted to assess the level of knowledge about SIT among GPs in Italy.

Methods

A panel of experts, including allergy specialists and GPs prepared a 12-item questionnaire (Tab. 1) based on the guidelines and the current literature (2, 7-10). The questionnaire included Y/N and multiple-choice answers, and was subdivided into five main sections (clinical/general aspects, efficacy perception, pharmaco-economic aspects, sublingual (SLIT) vs. subcutaneous (SCIT) specific immunotherapy, SIT in guidelines). Questionnaires were e-mailed to GPs over the entire Italian territory, randomly selected from the registry "HealthSearch" of the Società Italiana di Medicina Generale (SIMG), and had to be returned anonymously. Only the fully completed questionnaires were considered for the descriptive statistics.

Results

Questionnaires were sent to 200 physicians. Of them, 156 were returned and 126 could be analyzed. Thirty GPs returned an incomplete questionnaire. The population of GPs had a mean age of 44.5 years (range 34–65 years), and 58% were male. They were homogeneously distributed over the Italian territory: Northern Italy 28%, Central Italy 35%, Southern Italy 37%. Of them, only 2 had a specialty degree in Allergy, and 3 in Respiratory Medicine. The physicians were also homogeneously distributed among the regions with SIT totally or partially reimbursed by the Healthcare National System. The 126 respondents accounted for a population of about 300.000 adult and adolescent patients. The results of the survey are summarized in Table 1.

Discussion

Currently, SIT is the only treatment that addresses the cause of IgE-mediated immunopathology and modulates the natural course of the disease (2). Furthermore, SIT has been shown to prevent further progress of the disease and the onset of new sensitizations and asthma long after it is discontinued, thus representing a highly valuable therapeutic approach. The present survey, was specifically designed for GPs, in order to assess their knowledge on SIT and their attitude towards it. This was done because GPs are primarily responsible for the information of patients (11), usually they have to give advices on treatments prescribed by specialists. This is expecially true in the case of allergen immunotherapy which, in Italy is always prescribed by allergists (12). According to the results, it seems that the general knowledge on SIT is overall satisfactory among GPs, and they are well aware that SIT is recommended in the most diffused guidelines (item 12). Nevertheless, a relevant proportion of physicians (40%) believe that SIT is only an adjunct to pharmacotherapy, to be used only when this latter is not totally effective. This maybe the result of the statements reported in previous guidelines such as the GINA. Also, GPs are well aware that SIT has a disease-modifying effect in addition to the short term clinical efficacy (items 5-7), and the favorable cost to benefit ratio is also acknowledged. The main differences between SLIT and SCIT, expecially concerning the safety aspects are known as well, despite SLIT has been introduced in a relatively recent time (13). Importantly, the majority of GPs agree on the need to improve

Table 1 - Results of the 126 completed questionnaires

ITEM	N	%
1 In your opinion, SIT is (multiple answers allowed)		
a symptomatic treatment for respiratory allergy	57	45
an organ-specific treatment	17	13.5
alternative to drugs	1	0.8
to be used when drugs do not work	51	40.5
2. Is SIT useful to treat allergic rhinitis		
always	10	8.5
in the majority of patients	65	51.5
in a minority of patients	40	31
never	11	9
3. Is SIT useful to treat allergic asthma		
always	18	14
in the majority of patients	69	55
in a minority of patients	34	27
never	5	4
4 In your opinion is SIT cost/effective?		
Always	42	33
Only in some cases	59	47
Never	8	6.3
Don't know	17	13.7
5. SIT adds benefits to medications		
Always	57	45
Only in some cases	56	44
Never	4	3.2
Don't know	9	7.8
6. Can SIT prevent the onset of new sensitizations?		
Always	30	24
Only in some cases	50	39
Never	25	20
Don't know	21	17
7. Can SIT modify the natural history of the disease?		
Always	37	29
Only in some cases	67	53
Never	11	11
Don't know	11	11
8. According to your experience, are SLIT and SCIT equally safe?		
yes	15	12
SCIT is safer than SLIT	9	7
SLIT is safer than SCIT	83	66
Don't know	19	15
9. When the allergist prescribes SIT to a patient, and the patient asks for your advice, your attitude is		
Agree	108	85.5
Sceptic	11	9
Disagree	0	
Indifferent	7	5.5
10. According to your experience, are SLIT and SCIT equally effective?		
yes	46	36
SCIT is better than SLIT	29	23
SLIT is better than SCIT	8	6
Don't know	43	34
11. Would you like to receive more information on SIT (meetings/journals)?		
Yes	122	96.8
No	4	3.2
12. Is SIT mentioned in asthma/rhinitis guidelines?		
Yes in both	64	50
No	37	30
Only in ARIA guidelines	14	11
Only in GINA guidelines	11	9

the cooperation with specialists, and express the auspice to get more information and education on the specific aspect of SIT, for instance in scientific meetings. This is indirectly confirmed by the fact that 50% of the GPs are not aware of the exact placement of SIT in current international guidelines.

In conclusion our survey about the perception of IT among Italian GPs evidenced a satisfactory overall knowledge of IT and only few weak points. These results would allow to take appropriate educational actions and this questionnaire could be used to monitor over time the possible effects of divulgation and educational initiatives.

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