Conclusions: The VALERGEN-DP vaccine is an effective treatment and profitable against asthma in our population and guarantee its generalization in the Allergy Services of our health system.

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Safety of Sublingual Immunotherapy with Standardized Vaccines of Domestic Mites

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Background: Allergen-specific immunotherapy consists of administering gradually increasing doses of the allergen, to which the patient is sensitized, aiming at achieving tolerance to it and decreasing clinical symptoms. The sublingual immunotherapy (SLIT) was introduced as an alternative to subcutaneous route. Its use is being increased in the world and in Cuba, using standardized vaccines owing to greater safety. The objective of this study was to determine the safety of sublingual standardized vaccines of 3 domestic mite species (Valergen, Cuba) and its adverse events in allergic patients from the Calixto García University Hospital in Havana, as well as the frequency of its prescription.

Methods: Descriptive and cross sectional study design, which included 130 patients with treatment of SLIT with VALERGEN-DP (Dermatophagoides pteronyssinus), VALERGEN-DS (D. siboney) and VALERGEN-BT (Blomnia tropicalis) (BIOCEN, Cuba), who attended the Allergy Service in the period January-September 2010. Age distribution: mean 19.6 years (range 1-75), 40.7 % was younger than 18 years.

Results: The multiallergen vaccine was the type of vaccine most used (63.8%). The most common allergen was D. pteronyssinus followed by B. tropicalis. 71.55% of administered allergens vaccines were in maintenance phase. We found 4 adverse events (3.1% of patients), all local, mild, and not requiring treatment or change of vaccination dosing schedule.

Conclusions: The Valergen vaccines by sublingual route are safe and well tolerated in Cuban allergic patients.

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The Effect of Specific Immunotherapy on the Clinical Response in Patients with Grass-pollen Induced Rhinoconjunctivitis

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Background: Specific immunotherapy (SIT) has a significant potential in the treatment of allergic rhinitis and allergic conjunctivitis. The aim of the study was to evaluate the effect of specific immunotherapy (SIT) in patients with grass-pollen induced allergic rhinitis and allergic conjunctivitis.

Methods: Twenty-six patients with pollen induced rhinoconjunctivitis and positive history for more than 2 years were included in our study. They had skin prick test of ≥ 5 mm, age range from 18 to 44 years and all underwent conjunctiva provocation tests before and after 1 year of SIT. Clinical severity score of nasal and conjunctiva symptoms during the season was assessed by 4-point arbitrary rating scale from 0 to 3. Conjunctiva provocations were performed out of the season until allergic symptoms occurred, achieving the allergen threshold dose (ATD).

Results: After 1 year of SIT, we have noticed reduction of clinical symptoms present in allergic conjunctivitis: burning, itching, lacrimation and hyperemia (P < 0.05). We have found also reduction in clinical symptoms of allergic rhinitis: secretion, irritation, itching and nasal blockade (P < 0.01). The patients tolerated significantly higher allergen doses in provocation tests after 1 year of SIT, reaching new ATD.

Conclusions: SIT reduces the clinical symptoms of allergic rhinoconjunctivitis and modifies the inflammatory response after specific allergen challenge.

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Does Sublingual Immunotherapy Work with an Immune Deviation Mechanism?

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Background: We aimed at finding out the immunological mechanisms of SLIT by studying the activity of IgE specific for the epitopes of Phleum in patients treated with SLIT for grass allergen and in a control group.

Methods: 30 patients allergic to grass were included in the study:

- 15 patients carried out a pre-seasonal SLIT for 2 years with the 5 grass mix extract from Stallergens
- 15 patients were not treated with SLIT.

Eligible patients: Clear symptoms of seasonal rhinoconjunctivitis during the past year, positivity to Phleum skin prick tests (+ ++ +) and specific IgE (3.5 kU/L). Prick tests were performed with extracts from Stallergens; serum specific IgE for Phleum and rPhlp1, rPhlp2, rPhlp5, rPhlp6, rPhlp7, and rPhlp12 were determined through the Unicap system 100 IgE FEIA (Phadia Usala, Sweden). Wilkoxon and Fischer method were performed. Rast inhibition rPhlp1/rPhlp1p, rPhlp1p/rPhlp2 and rPhlp1p/rPhlp4 were evaluated.

Results: IgE for rPhlp7 and rPhlp12 present only in some patients did not show significant modifications. Most patients treated with SLIT for 2 years, and all those showing improvement in symptoms, showed a less evident increase of specific IgE for rPhlp1 and rPhlp5 if compared with that of minor allergens, ie, rPhlp2, rPhlp4, rPhlp6. This difference was absent in control patients and in patients not showing clinical improvement. In patients showing clinical improvement the IgE ratio rPhlp5/rPhlp6 was significantly decreased (P = 0.02). A RAST inhibition study showed no cross-reactivity between rPhlp1p/rPhlp2 and rPhlp1p/rPhlp4.

Conclusions: After 1 and 2 years of SLIT, the data show the following results:

- a significant increase of specific IgE for minor allergens and a less evident increase of specific IgE for major allergens in patients showing a clinical response to SLIT
- a drastic decrease in IgE ratio for rPhlp5/rPhlp2. These results suggest that SLIT not only induces a TH2-TH1 isotypic switch, but also can act with a mechanism of immunological replacement. In fact, the production of specific IgE for minor allergens (rPhlp2, rPhlp4, rPhlp6) tends to replace the production of specific IgE for major allergens (rPhlp1, rPhlp5).

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IMMUNOTHERAPY TRAINING

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Immunotherapy (IT) Training in Canada: Perspectives of Fellows-in-training on the First Immunotherapy Training Manual

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Background: Allergen immunotherapy (IT) is a key component of allergy practice, however fellows state that there is inadequate IT exposure during their training. In response, the Canadian Society of Allergy and Clinical Immunology (CSACI) unveiled the first ever IT Training Manual for fellows-in-training at the annual 2010 CSACI meeting. The manual was distributed during a faculty-led teaching session. This was a pilot investigation to determine the perspectives of fellows in training about the IT training manual.

Methods: Canadian fellows-in-training in Allergy and Clinical Immunology (list derived from CSACI) were contacted via email to complete a survey (using survey monkey), both quantitative (Likert scales) and qualitative, to assess their opinion on the faculty-led session on IT and the IT Training Manual.

Results: Sixty-nine Canadian fellows-in-training were invited to complete the survey and 16 (23%). Fifty-four percent of 13 respondents were in their first year of fellowship. Seven respondents (58% of 12 respondents) attended the 2010 CSACI fellow-in-training session and received the IT Training Manual. One respondent commented that it was “more information than we’ve had in all of our fellowship!” The same 7 respondents “somewhat liked” or “liked” the large group format, but felt that the experience could be improved in the future with the addition of case-based learning in smaller groups. One respondent commented that “as in intro, it was good in a larger setting.” All 7 respondents felt that their understanding of IT was positively impacted by the faculty-led session. Eighty-six percent of 7 respondents indicated that the Training Manual “somewhat impacted” to “very much impacted” their understanding of IT. One commenter stated that “it is the basis of my knowledge thus far.” Most respondents (86%) preferred the current paper booklet format of the IT Training Manual.

Conclusions: The results of this pilot survey demonstrate that some fellows-in-training found the faculty-led session on IT and the IT Training Manual useful. Future studies will help to further elucidate the utility of these educational interventions.

INCIDENCE AND PREVALENCE OF FOOD ALLERGY

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Nationwide Survey of Immediate Type Food Allergy in Japan
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Background: The food labeling system for food allergens was introduced from April 2002 in Japan. To confirm the effectiveness of the system, we regularly conduct a nationwide food allergy survey every 3 years.

Methods: The survey was conducted in cooperation with over 1000 volunteer allergists in Japan at 2001, 2002, 2005 and 2008. We sent questionnaire to contributing doctors every 3 months based on the past survey system, and contributing doctors were asked to report immediate type food allergy cases seen by those doctors. In this survey, immediate type food allergy was defined as the patients who had developed symptoms due to food allergic reaction within 60 minutes after intake of offending food. The details of questionnaire consisted of age, sex, cause of food allergy, symptoms, CAP system, and type of onset.

Results: A total of 8581 immediate type food allergy cases were reported by the doctors. The most common offending foods were hen’s egg (39.0%), milk products (18.0%), wheat (9.4%), fruit (5.3%), crustacean (4.6%), peanuts (3.7%), fish egg, buckwheat and fish (3.6%). The most common clinical symptom was observed on skin (89.7%) followed by respiratory system (29.6%). Interestingly, the causes of food allergy were completely different from infancy (egg, milk, and wheat) to adulthood (wheat, crustacean and fruits). Anaphylactic shock was observed in 10.9% of the total reported cases. The cases of anaphylactic shock were due to hen’s egg (27.1%), milk products (21.4%) and wheat (18.1%). Eleven percentages of patients had been hospitalized.

Conclusions: We revealed the current condition of the immediate type food allergy cases seen in Japan recent decade. Based on these data, countermeasures against food allergy are ongoing in collaboration with the Ministry of Health, Labour, and Welfare in Japan in order to improve quality of life of patients.