of public health. Proper diagnosis of latex allergy is important for appropriate preventive measures and treatment. The only etiological and decisive therapy is represented by the specific desensitization. This treatment has a very small incidence of adverse reactions, good patient compliance and especially by a high success rate. Our protocol of rush latex desensitization treatment is performed in 4 days, during which increasing doses of latex extract are administered under patient's tongue until the highest dose of 500 μg of latex. A maintenance therapy is followed at home. Every patient is equipped with an emergency kit and suggested to undergo future specialist visits in latex-safe environment until the latex tolerance is not been acquired. The aim of the study was to verify the clinical efficacy of NRL SLIT in patients that finished the treatment or were treated for at least three years.

Methods: We studied 76 NRL allergic patients, who finished or are still performing a sublingual desensitization treatment according to our protocol.

Primary endpoint was assessed by the changes in the response to challenge tests (cutaneous, sublingual, mucous-oral, conjunctival, nasal), performed before and after at least 3 years of therapy.

The secondary endpoint was to evaluate the possible immunological changes determined by the immunotherapy by means of skin prick tests with latex (Alk-abellò, Milan) and the assay of latex specific IgE.

Results: We detected a significant negativity ($P < 0.01$) of all challenge tests (cutaneous, mucous, nasal and conjunctival) in our patients. Concerning the immunological changes, we found a significant reduction of skin prick test wheal areas ($P = 0.01$), while we observed a reduction of latex specific IgE values but these data didn't seem to be statistically significant. Moreover 25 patients of those who were exposed again to latex (dental and gynecological visits or professional exposure) didn't present adverse reactions after almost three years of desensitization, while 10 patients manifested mild symptoms after latex contact.

Conclusion: Latex sublingual desensitization treatment seem to be safe and can be use as an effective treatment for the NRL allergic patients who have difficulties in applying adequate avoidance measures.

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Deciphering the dose-response effect of peanut Epicutaneous ImmunoTherapy (EPIT) in peanut allergic subjects

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Background: Peanut-specific EPIT proved safe and effective in a multicenter double-blind, placebo-controlled phase IIb trial (VIPES, AAAAI, 2015), using Viaskin® Peanut (VP) loaded with 50, 100 or 250 μg peanut protein (pp) or Viaskin® placebo. Subjects enrolled had an Eliciting Dose (ED) at their entry Double-Blind Placebo-Controlled Food Challenge (DBPCFC) ≤300 mg pp. The study was positive and the highest VP dose met its primary efficacy endpoint (proportion of responders at Month 12 with a pp ED during DBPCFC 10-fold greater than the pp ED at entry or reaching a post-treatment ED ≥1000 mg pp). To evaluate how robust was the desensitizing effect of VP against placebo in peanut-allergic subjects, a post-hoc analysis utilized a more stringent efficacy endpoint criterion.

Method: Data from the VIPES study (221 subjects, 6–55 years including 113 children, 6–11) were re-analyzed based on a more stringent definition of efficacy: subjects with an ED at entry challenge ≤30 mg are responders to treatment only if they reached post-treatment ED ≥300 mg; subjects with entry challenge ED>30 mg are responders if they reached post-treatment ED ≥1000 mg.

Results: Using this new efficacy criterion, a clear treatment dose-response effect was seen for the response rates in the whole population (placebo: 17.9%; VP50: 34.0% $P = 0.0787$; VP100: 39.3% $P = 0.0206$ and VP250: 48.2% $P = 0.0012$ vs placebo) and especially in children (respectively 12.9%, 39.3%, 42.3%, 50.0%, $P < 0.035$ for the 3 doses). A dose-response effect was also observed in the challenge pp Cumulative Reactive Dose (CRD). In children, the median [Min, Max] CRD changes from baseline were: placebo: 0.0 [-400, 1000] mg, VP50: 135.0 [-430, 3300] mg; VP100: 114.5 [-100, 4300] mg and VP250: 400 [-300, 4442] mg. Analyzing children CRD with the Least Square Mean technique (covariates: baseline CRD value and country), the differences [95% CI] vs placebo were: VP50: 120.5 [9.25, 361.65] mg; VP100: 141.1 [17.61, 411.43] mg and VP250: 390.4 [133.64, 947.24] mg. A dose effect was also seen for other secondary efficacy criteria at Month 12 including changes in IgE and IgG4 levels in the whole population and in children.

Conclusion: A post-hoc analysis of VIPES study with a more stringent criterion further supported the efficacy of VP, especially VP250 to desensitize peanut-allergic subjects, particularly children: decreased placebo response, barely any impact on VP responses, clearer dose-response effect.