

Engerix-BTM reverted to negative and the oral allergy syndrome disappeared. The hepatitis vaccine was split in two doses (one-fifth of the total dose was followed by the remaining four-fifths of the dose 3 h later) and was administered without side-effects. Two booster doses were safely administered with this same procedure 1 and 5 months later.

After 13 months of latex immunotherapy, the latex glove use test, initially positive (1), turned negative and specific IgE diminished from fourth to third radioallergosorbent test (RAST) class.

The experience on latex immunotherapy is currently still quite limited and it is not well established when it would be convenient to stop this treatment (2, 3). However, on the basis of this report we conclude that the protocol we followed was safe and that it could be extremely useful in children severely allergic to latex who have to undergo vaccinations which are not stored in strictly latex-free vials.

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Accepted for publication 5 February 2004
Allergy 2004; 59:1014–1015
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Pilot study assessing the impact of smoking on nasal-specific quality of life

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Key words: cross-sectional study; nasal; quality of life; rhinitis; smoking.

Tobacco smoking is thought to induce nasal symptoms

(1) which may impair quality-of-life (QOL) but there is no study which has analyzed the impact of tobacco smoking in normal subjects or patients with allergic rhinitis.

In order to assess the impact of tobacco smoking on nasal QOL, a cross-sectional pilot study was carried out on 185 sales representatives from all regions of France during their yearly seminar. All subjects attending the seminars were included. Thirty-eight subjects had a previous diagnosis of allergy made by a physician with skin tests and/or serum-specific IgE. Validated questionnaires were used for the epidemiologic diagnosis of rhinitis [Score for Allergic Rhinitis (SFAR)] (2), nasal-specific QOL [Rhino-Conjunctivitis QOL Questionnaire (RQLQ)] (3) and tobacco smoking (European Community Respiratory Health Survey) (4). The 21 subjects who stopped smoking within 1 year were excluded from the analysis. Patients with allergic rhinitis but who did not present current symptoms were also excluded as RQLQ is likely to differ in symptomatic and asymptomatic subjects.

We used non-parametric tests (Kruskal–Wallis test with Bonferroni–Dunn's *post hoc* analysis). Results are given in medians and 25th to 75th percentiles. The present study was a pilot study to assess the number of patients with allergic rhinitis who will need to be tested in order to find a significant difference at a significance level of <0.05 by Mann–Whitney *U*-test.

Median tobacco smoking consumption was 7.75 annual packs (3.14–16.75) in the group of current smokers and 0 annual packs in the group of non-smokers.

Among the 38 subjects with a previous diagnosis of allergy, four had a SFAR <7 . All subjects with a SFAR >7 had a diagnosis of allergic rhinitis. The SFAR was non-significantly increased in smokers in comparison with non-smokers (2, 0–4 for non-smokers; 4, 2–8 for smokers). A total number of 708 subjects should be tested to find a significant difference in SFAR between smokers and non-smokers with a power of 0.80.

Subjects with allergic rhinitis had significantly increased global and individual RQLQ scores in comparison with non-rhinitis subjects (Table 1). Smoking did not affect RQLQ scores in allergic rhinitis, but the numbers are too low to make any comparison. A total number of 1432 subjects with rhinitis should be tested to find a RQLQ difference between smokers and non-smokers with a power of 0.80.

Smoking reportedly impairs nasal function for those who smoke. In the present study, we found that smokers tended to have a greater SFAR than non-smokers but the difference did not reach significance. However, this study was of insufficient size to answer the question, and, objective tests for nasal patency may be needed to find differences (1).

Patients with allergic rhinitis have an impaired QOL assessed by generic or disease-specific instruments. There are very few studies which have evaluated RQLQ in subjects not suffering from allergic rhinitis. In a nationwide survey of 15 000 households representative of the US population, RQLQ was filled-in by 312 subjects with rhinitis and 96 subjects without rhinitis (5). RQLQ was impaired in rhinitis subjects but the mean global RQLQ values were not very different between controls and patients (3.81 in patients and 3.55 in controls). In the present study, we found large differences between subjects with nasal symptoms and controls, but the median global RQLQ score was very low in controls (0.07) and significantly higher in patients (1.62).

This study shows that a large number of subjects should be tested to assess whether tobacco smoking has an impact on nasal symptoms or on nasal-specific QOL in subjects with allergic rhinitis.

Smoking does not impact nasal quality-of-life.

Table 1. Results of the Rhinitis Quality of Life Questionnaire (RQLQ)

	R-S-	R-S+	R+S-	R+S+	KW (P-value)	R-S- vs R+S- (P-value)	R-S+ vs R+S+ (P-value)	All others
Number of subjects	49	46	13	13				
Age (years)	31.2	27.8	32.6	32.5	NS			
Global RQLQ score (0–6)	0.00 (0.00–0.61)	0.17 (0.00–0.49)	1.59 (0.89–2.92)	1.64 (0.99–1.86)	<0.0001	<0.0001	<0.0001	NS
Sleep (0–6)	0.00 (0.00–0.33)	0.00 (0.00–0.00)	0.33 (0.00–2.00)	1.00 (0.00–2.67)	0.0001	0.003	0.0007	NS
Non-hay fever symptoms (0–6)	0.00 (0.00–0.43)	0.00 (0.00–0.43)	1.29 (0.29–1.86)	1.42 (0.28–2.43)	0.0002	0.0027	0.0012	NS
Practical problems (0–6)	0.00 (0.00–1.00)	0.00 (0.00–1.00)	2.67 (1.33–4.67)	1.33 (1.00–3.67)	<0.0001	0.0002	0.0002	NS
Nasal symptoms (0–6)	0.00 (0.00–1.25)	0.00 (0.00–0.50)	2.50 (1.25–3.75)	2.25 (1.50–2.75)	<0.0001	<0.0001	<0.0001	NS
Eye symptoms (0–6)	0.00 (0.00–0.00)	0.00 (0.00–0.00)	1.25 (0.00–3.50)	1.00 (0.00–2.00)	<0.0001	<0.0001	0.0003	NS
Emotions (0–6)	0.00 (0.00–0.00)	0.00 (0.00–0.25)	1.25 (0.00–2.75)	0.50 (0.25–0.75)	0.0002	0.0013	0.0018	NS

Results are expressed in medians and 25th to 75th percentiles.

KW, Kruskal–Wallis test.

R–S–, no allergic rhinitis, non-smoker; R+S–, allergic rhinitis, non-smoker; R–S+, no allergic rhinitis, smoker; R+S+, allergic rhinitis, smoker.

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Accepted for publication 28 January 2004
Allergy 2004; 59:1015–1016
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Allergic rhinoconjunctivitis and asthma due to sensitization to Siberian hamster

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Key words: hamster allergy; indoor allergens; pet allergy; *Phodopus sungorus*; rodent allergy; Siberian hamster.

The presence of exotic pets in dwellings is steadily increasing and new 'domestic' allergens able to induce sensitization are appearing.

We report the case of a 41-year-old man with naso-ocular pruritus, nasal obstruction, conjunctival reddening, serial sneezing, dry cough and dyspnea in the last 4 months. He was diagnosed of intrinsic asthma. A year ago he had bought two Siberian hamsters (*Phodopus sungorus*) as household pets. Siberian hamster hair (SH) and bed (cotton impregnated with urine, feces and diverse materials of the cage) extract was prepared. The patient

and 10 control individuals were skin-prick tested with this extract. A battery of commercially available common inhalant allergens including common hamster and golden hamster extract were also tested.

Specific IgE antibodies were determined against SH, common and golden hamsters. IgE immunoblotting with SH extract was performed. Specific bronchial provocation test (BPT) was carried out to the patient with the SH extract according to a previously described method (1). Positive skin prick tests (SPT) with the SH extract and specific IgE antibodies against SH were found in our patient: radioallergosorbent test class 3 (15 kU/l) against hair extract and class 4 (> 17.5 kU/l) against bed extract. These tests were negative in control individuals. Specific IgE antibodies against common and golden hamster were not found in neither the patient nor the control subjects. Three binding fractions (MW 14–20 kDa) were found in the IgE immunoblotting assay (Fig. 1).

An immediate asthmatic response was shown in the patient to the BPT (extract concentration of 1 : 32 w/v). No late asthmatic response was detected. We report a patient with RC and respiratory symptoms after response to Siberian hamster. Positive SPT as well as presence of specific IgE antibodies and an immediate positive BPT with SH extract, strongly suggest an IgE-mediated