

Allergic symptoms from spices are infrequent despite their widespread use; however, these symptoms are occasionally severe. A few cases of occupational asthma caused by inhaled spices have been reported (6–8). A recent report described two cases of allergy to fenugreek; one caused by inhalation of the spice powder and the other by cutaneous absorption (9). However, bronchospasm caused by ingestion of spices commonly used for curry has never been documented. The history of symptoms and the results of oral challenge tests and ELISA indicated the presence of IgE-mediated hypersensitivity to cardamom and fenugreek in our patient.

Curry powder is widely used in various dishes. It is a mixture of 20–50 kinds of natural spices made from the leaves and seeds of plants. Accordingly, we have abundant opportunities to ingest those spices, leading to unrecognized sensitization to them. Our case again draws attention to the fact that curry powder may be a rare cause of allergic symptoms.

Key words: bronchospasm; cardamom; curry powder; fenugreek.

N. OHNUMA, E. YAMAGUCHI*, Y. KAWAKAMI

*First Department of Medicine, School of Medicine

Hokkaido University

N-15, W-7, Kita-ku

Sapporo 060

Japan

Tel. +81-1-716-1161 (ext.) 5911

Fax: +81-11-727-6724

E-mail: etsuro@med.hokudai.ac.jp

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REFERENCES

1. Stäger J, Wüthrich B, Johansson SGO. Spice allergy in celery-sensitive patients. *Allergy* 1991;46:475–8.
2. Niinimäki A, Björkstén F, Puukka M, et al. Spice allergy: results of skin prick tests and RAST with spice extracts. *Allergy* 1989;44:60–5.
3. Futrell JM, Rietschel RL. Spice allergy evaluated by results of patch tests. *Cutis* 1993;52:288–90.
4. Takishima T, Hida W, Sasaki S, et al. Direct writing recorder of the dose-response curves of the airway to methacholine. *Chest* 1981;80:600–6.
5. Bock SA, Lee W, Remigio LK, et al. Studies of hypersensitivity reactions to foods in infants and children. *J Allergy Clin Immunol* 1978;62:327–34.
6. Suhonen R, Keskinen H, Björkstén F, Vaheri E, Zitting A. Allergy to coriander. *Allergy* 1979;34:327–30.
7. van Toorenbergen AW, Dieges PH. Immunoglobulin E antibodies against coriander and other spices. *J Allergy Clin Immunol* 1985;76:477–81.
8. Sastre J, Olmo M, Novalvos A, Ibañez D, Lahoz C. Occupational asthma due to different spices. *Allergy* 1996;51:117–20.
9. Pantil SP, Niphadkar PV, Bapat MM. Allergy to fenugreek (*Trigonella foenumgraecum*). *Ann Allergy Asthma Immunol* 1997;78:297–300.

Latex allergy among nurses in an operating unit

IMMEDIATE hypersensitivity reactions to latex, a natural rubber, a disorder of current interest, has been diagnosed often during the past 15 years (1). Manufactured products, such as surgical and household gloves, surgical catheters, toy balloons, and condoms, may sensitize exposed atopic subjects. Nurses in hospitals are often exposed to latex, especially those in operating units.

The present investigation aimed to assess the prevalence of latex allergy among nurses with high occupational exposure to latex and determine the risk groups in our hospital.

■ All nurses in the operating units of the Central Hospital in Skövde, Sweden, participated in the study. There were 32 women and one man, aged 27–62 years (mean 42 years). They had been working in operating units for a mean of 17 years (3–39 years).

A standardized interview and a survey were designed to identify subjects with atopy and clinical allergy to common allergens, natural rubber products, banana, and avocado. A skin prick test for latex (Alyostal ST-IR 0903, Stallergènes, Fresnes Cedex, France) was performed, and blood samples were taken for specific IgE, including latex and banana (Pharmacia CAP System, Uppsala, Sweden). The nurses were also questioned about the glove material used.

■ Four of the nurses (12%) had obvious symptoms of allergic rhinitis/conjunctivitis from pollen and furs, and 15% were smokers. Latex gloves were not used by 18% of the nurses, and 9% wore plastic gloves under them. Symptoms related to use of latex gloves, diagnosed as contact dermatitis, were reported by 36% of the nurses, and an equal number had symp-

Immediate rubber latex hypersensitivity is an increasing problem for health-care workers.

toms such as rhinitis, conjunctivitis, and sneezing; 9% reported sensitivity to banana and 3% to avocado. Only one of the nurses, positive to the skin prick test, showed a high titer of specific IgE to latex (class 2; 1.19 kU/l). None had high IgE titers for banana.

■ The present study revealed only one subject with immediate latex allergy among 33 nurses, as confirmed by a positive history and skin prick test. This corresponded to a prevalence of 3%. A previous study from Finland (2) found an overall prevalence of latex allergy of 3% among hospital personnel. In that study, 2.2% of nurses in operating units were allergic to latex. However, symptoms related to latex glove use are reported more frequently than could be verified as an allergy by immunologic tests. In our study, as many as 36% of subjects had latex-related symptoms. Similar results were found among personnel working in an emergency department (3). According to the experience of the nurses in our study, symptoms of allergy declined after the introduction of latex gloves with less powder. Is the high incidence of symptoms of importance in the future development of IgE-mediated latex allergy?

In conclusion, the present study clearly shows that latex-related symptoms are common, and that latex allergy occurs in 3% of nurses with high occupational exposure. A correct diagnosis is important for occupational and allergologic reasons.

Key words: epidemiology; latex allergy; occupation.

M. BENDE*, U. SÖDERLUND, E. MILLOVIST

*Allergy Centre
Central Hospital
S-541 85 Skövde
Sweden
Tel. +500 431000
Fax: +500 431658

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REFERENCES

1. Levy DA, Charpin D, Pecquet C, Leynadier F, Vervloet D. Allergy to latex. *Allergy* 1992;47:579-87.
2. Turjanmaa K. Incidence of immediate allergy to latex gloves in hospital personnel. *Contact Dermatitis* 1987;17:270-5.
3. Fein JA, Selbst SM, Pawlowski NA. Latex allergy in pediatric emergency department personnel. *Pediatr Emerg Care* 1996;12:6-9.

Latex/chlorhexidine-induced anaphylaxis in pregnancy

A 26-YEAR-OLD atopic woman, para 1+0, developed anaphylactic shock in hospital at 39+3 weeks gestation shortly after a vaginal examination

performed by a midwife wearing latex examination gloves and using Hibitane Obstetric® cream containing chlorhexidine 1% w/w. She responded well to standard treatment including intravenous adrenaline. Neither mother nor unborn child suffered any sequelae from this incident. Latex and chlorhexidine were considered as possible precipitants, and all further vaginal examinations were performed with vinyl gloves and lubricating jelly (K-Y®). At 39+5 weeks, a healthy infant was delivered by elective Caesarean section. The operators scrubbed with iodine and used Regent Sensor™ hypoallergenic gloves containing latex at a concentration of <2 µg/g (compared with 40 µg/g for standard nonhypoallergenic gloves).

Subsequent enquiries revealed that the patient had complained of an intense, local burning sensation during the admission vaginal examination. Her obstetric record noted that she had experienced similar symptoms after examinations during her previous pregnancy and that she was "possibly allergic to latex gloves or obstetric cream". No further investigation had been undertaken at that time. When specifically questioned, she reported no obvious symptoms during day-to-day contact with domestic sources of latex.

Mucosal exposure of highly sensitized patients to a combination of latex and chlorhexidine during vaginal examination can precipitate anaphylaxis.

Current investigations showed a raised total serum IgE of 700 IU/ml with a positive class 3 (protein reference units) specific IgE CAP result (Pharmacia Ltd) to latex allergen. In addition, positive specific IgE results were found to banana (class 2) and avocado (class 2).

In vivo latex sensitivity was demonstrated with a 1 cm² piece of latex glove, moistened with phosphate-buffered saline (PBS), applied to the forearm by a method similar to that recently described by De Swert et al. (1). This produced a 1.5 cm×1 cm wheal with surrounding flare reaction within 10 min of application. PBS alone produced no such contact urticarial reaction. Hibitane Obstetric® cream was diluted 1:10, 1000 with distilled water and used for skin prick testing with appropriate positive (histamine 1 mg/ml) and negative (PBS) controls. Within 3 min, the test site developed an 0.8-cm diameter, pruritic wheal with pseudopodia and surrounding erythema. After the results of these tests, she was advised to avoid contact with latex and chlorhexidine

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