

Short Communications

Contact dermatitis in a chimney sweep

H. A. JENKINSON

Department of Dermatology, Whiteabbey Hospital, Newtownabbey, N. Ireland BT37 9RH, UK

Key words: allergic contact dermatitis; chimney sweep; soot; fragrance mix; coal tar; occupational. © Munksgaard, 1997.

Case Report

A 51-year-old man presented with a 1-year history of eczema of the web spaces of both hands and flexural aspects of the wrists. He had worked as a chimney sweep for more than 20 years and was not aware of any changes in the materials that he handled. Patch testing to the European standard series was positive (++) to fragrance mix. He was also positive (++) to soot at 2 and 3 days, and to coal tar 5% pet. (+) at 3 days. The patient observed that soot from smokeless fuel had a worse effect on his skin. He was patch tested to soot

from both smokeless fuel and other fuel, and no differences were detected in the allergic reactions to both soots. 20 controls were tested to the soot samples with negative results. He has been able to continue in his occupation with the help of cotton and rubber gloves.

Comment

Modern chimney-sweeping methods do not result in widespread skin contact with soot; the hands and forearms are the sites mainly contaminated. Contact dermatitis from soot has not previously been reported.

Contact sensitization to preservatives in children

ANDREA CONTI, ALBERICO MOTOLESE, BIANCA MARIA MANZINI AND STEFANIA SEIDENARI

Department of Dermatology, University of Modena, Via del Pozzo 71, 41100 Modena, Italy

Key words: preservatives; allergic contact dermatitis; children; patch tests. © Munksgaard, 1997.

We have assessed in a pediatric population the frequency of contact sensitization to the following preservatives: imidazolidinyl urea, diazolidinyl urea, parabens, formaldehyde, quaternium-15, Kathon CG, Euxyl K 400 and butylated hydroxyanisole (only the last not included in the GIRDCA standard series).

Patients and Methods

811 patients aged from 6 months to 12 years, admitted to our Allergological Service, underwent patch tests with the augmented GIRDCA standard series (Trolab, Germany and FIRMA, Italy). Test substances were applied to the healthy skin of the back with Finn Chambers (Epi-test, Finland) on Scanpor tape (Norgesplaster, Norway), removed 3 days after application (1), and read at 3 and 4 days, the 3-day reading being performed 3 h after removal. Owing to the small surface area of a child's back, for evaluating all substances, patch tests were performed in 2 separate sessions with a reduced number of allergens. 566 children had atopic dermatitis, while the remaining patients had unclassified eczema.

Results and Discussion

59 patients showed sensitization to at least 1 of the 8 preservatives: of these, 56% showed positive responses to other haptens of the series. 20 patients (33.9%) were monosensitized to the preservatives. The results are summarised in Table 1. Kathon CG gave the greatest number of positive responses, whereas no sensitizations to quaternium-15 were observed. No correlation between the frequency of specific skin site involvement and results of the allergological examination was found.

Our results confirm the high % of contact sensitization (2-5) to preservatives (6) in children with eczema. The 8 substances in our test series elicited positive results in 7.3% of the tested children, compared to 41.8% of positive results to any patch test substance in our children undergoing patch tests during the past 5 years. As far as Kathon CG is concerned, several positive results proved clinically relevant, and allergen avoidance produced improvement in the dermatitis.

44% of the preservative-sensitive children had atopic dermatitis. This high sensitization rate is at least partly

Table 1. Patch test results in 59 preservative-positive children

Hapten	No. tested subjects	No. positive reactions	Monosensitized subjects	% positive reactions (in the tested population)
Kathon CG	811	40	15	4.9
imidazolidinyl urea	811	7	2	0.9
formaldehyde	811	4	0	0.5
Euxyl K 400	482	4	1	0.8
butylated hydroxyanisole	376	4	0	1.1
paraben mix	811	3	2	0.4
diazolidinyl urea	376	3	0	0.8
quaternium-15	811	0	0	0

explained by the frequent use of topical products containing these preservatives.

In conclusion, our results stress the importance of patch testing children with suspected contact dermatitis or atopic dermatitis, particularly with preservatives, which are widely used on diseased skin in subjects with eczema.

References

1. Motolese A, Seidenari S. Patch test reading: a comparison between 2 application methods. *Contact Dermatitis* 1994; 30: 49.
2. Seidenari S, Manzini B M, Motolese A. Contact sensitization in infants: report of 3 cases. *Contact Dermatitis* 1992; 27: 319–320.
3. Pevny I, Brennenstuhl M, Razinkas G. Patch testing in children (II). Results and case reports. *Contact Dermatitis* 1984; 11: 302–310.
4. Gonçalo S, Gonçalo M, Azenha A, Barros M A, Sousa Bastos A, Brandão F M, Faria A, Marques M S J, Peçegueiro M, Rodrigues J B, Salgueiro E, Torres V. Allergic contact dermatitis in children. *Contact Dermatitis* 1992; 26: 112–115.
5. Pamber M, Winkler S, Bloch Y. Allergic contact dermatitis in children. *Contact Dermatitis* 1992; 24: 72–74.
6. Motolese A, Manzini B M, Donini M. Patch testing in infants. *Am J Contact Dermatitis* 1995; 3: 153–155.

Sensitization to pepper (*Capsicum annuum*) in a latex-allergic patient

R. GALLO, E. COZZANI AND M. GUARRERA

¹Department of Dermatology, University of Genoa, Viale Benedetto XV, 16132 Genoa, Italy

Key words: contact urticaria; natural rubber latex; hand eczema; nurse; hospital workers; healthcare worker; cross-sensitivity; chestnut; pepper; *Capsicum annuum*. © Munksgaard, 1997.

Case Report

A 23-year-old surgical nurse had had hand eczema for 1 month. She reported intense itching and burning within minutes of donning latex gloves, and 1 recent episode of paroxysmal cough and bronchospasm at work. She had a family history of atopy but no personal history of allergy. Shortly after the onset of her symptoms, she had undergone RASTs to latex and to a broad panel of aeroallergens and food allergens, with negative results.

Patch tests with the GIRDCA standard series were positive to nickel sulfate and ethylenediamine dihydrochloride. Patch tests with rubber additives and a 1 cm² piece of latex glove were negative.

Prick tests with a commercial latex extract (Lofarma, Italy) and a freshly prepared latex glove extract both yielded strong positive reactions (wheal 2× histamine control). Prick-by-prick tests with fresh banana and kiwi elicited mild positive reactions without clinical relevance. The patient was advised to avoid latex exposure and potentially allergenic fruits. She changed her job to ward

nursing and began wearing vinyl gloves. Her hand eczema cleared.

Over the following weeks, however, her cough and asthma worsened and, 5 months later, she experienced 2 severe episodes of Quinke's and glottal oedema: one a few minutes after ingesting a fresh chestnut, the other after eating a piece of pickled pepper. Prick-by-prick tests with fresh yellow pepper (*Capsicum annuum*) and chestnut yielded strong positive reactions (wheal greater than histamine control). Tests for serum-specific IgE antibodies to pepper and chestnut were not available.

Discussion

Our data suggest that the patient first developed IgE-mediated allergy to latex and subsequently an oral allergy syndrome to chestnut and pepper. Sensitization to latex was favoured by 3 well-known risk factors: occupational exposure, atopic diathesis and hand eczema (1, 2). Despite the patient's attempt to avoid exposure to

This document is a scanned copy of a printed document. No warranty is given about the accuracy of the copy. Users should refer to the original published version of the material.