

Table 1. Result of patch and photopatch testing

		PT	PPT
sunscreen A	as is	-	+
milky lotion B	as is	-	+
Ingredients of sunscreen A and milky lotion B			
2-ethylhexyl- <i>p</i> -methoxycinnamate	5% pet.	-	+
(Parsol® MCX)	1% pet.	-	+
4-tert-butyl-4'-methoxy-dibenzoylmethane			
(Parsol® 1789)	2% pet.	-	-
glyceryl octanoate-2- <i>p</i> -methoxycinnamate	5% pet.	-	-
	1% pet.	-	-
Other sunscreen agents			
2-ethoxyethyl- <i>p</i> -methoxycinnamate			
(Giv-Tan® F)	2% pet.	-	-
<i>p</i> -aminobenzoic acid	2% pet.	-	-
2-ethylhexyl- <i>p</i> -dimethylaminobenzoate			
(Escalol® 507)	5% pet.	-	-
1-(4-isopropylphenyl)-3-phenyl-1,3-propanedione (Eusolex® 8020)	2% pet.	-	?+
3-(4-methylbenzylidene)-camphor			
(Eusolex® 6300)	2% pet.	-	-
oxybenzone	2% pet.	-	-

Ethylhexyl-*p*-methoxycinnamate is a UVB absorber first produced in Germany in 1970. In Japan, since approved as a cosmetic ingredient in 1984, it has become popular owing to its broad absorption spectrum and minor sensitizing effect. About 90–100% of our sunscreen products now contain it.

Although photodermatitis due to cinnamates has been reported, most of these cases were limited to allergy caused by 2-ethoxyethyl-*p*-methoxycinnamate (Giv-Tan®

F) (1–5). There is only 1 case report of contact dermatitis where Parsol MCX, Eusolex 6300 and Eusolex 8020 caused allergy in an atopic boy (6). However, photopatch testing was not carried out.

Eusolex® 8020 is a UVA absorber and has been known as a common contact sensitizer (7). However, this was not an ingredient of either the sunscreen cream or the milky lotion in our case. The weak erythematous reaction that we observed might have been triggered by either irritation or cross-sensitization.

We conclude that this is the 1st case report of photocontact dermatitis caused by ethylhexyl-*p*-methoxycinnamate.

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Anaphylactic intraoperative reaction to latex

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Case Report

A 35-year-old woman underwent pyelolithotomy surgery in January 1994, under combined (epidural plus general) anaesthesia. 1 h after the start, she suddenly developed severe hypotension and tachycardia. Hypovolaemia was excluded. Sympathomimetic and vasopressor drugs were ineffective. Hydrocortisone was also given with no response.

The clinical situation persisted until the end of surgery, when generalized urticaria was found, more se-

vere near the surgical area, together with angioedema. She was then treated with 0.3 ml s.c. adrenaline 1/10,000 with rapid improvement, though the angioedema persisted for over 24 h. Epidural analgesia with local anaesthetics and opioids was established for 48 h with no problems.

When the patient had recovered, her past history revealed that, over the past 2 years, itching, redness and sometimes weals had occurred on the dorsa of the hands 20–30 min after exposure to household rubber gloves. 1 year ago, she also reported lip swelling when blowing

up a rubber balloon. During recent months, itching and swelling occurred when she touched natural latex products.

She also had a history of atopic hand eczema and asthma. There was a family history of asthma. She had been submitted to previous surgery for urinary reflux correction, and 1 cesarean section, without apparent complications.

3 months after the intra-operative complication, the patient was prick tested with latex test fluid, common inhalants, selected food allergens, histamine (positive control) and physiological saline (negative control). Prick tests were read after 20 min and a positive reaction with pseudopodia (bigger than that to histamine) was found to latex test fluid. *Alternaria* and chestnut were also positive. Total IgE (PRIST) was 153.94 IU/ml, and a RAST for latex-specific IgE was negative. Patch testing with the GPEDC standard series and rubber additives was negative.

Discussion

Nutter reported the 1st case of Type I allergy to latex. Since then, many reports have demonstrated IgE-mediated hypersensitivity to latex (2–10). Latex is extracted from the *Hevea brasiliensis* tree. The sensitizers appear to be water-soluble proteins and to have distinct peaks at MW 2000, 5000 and 30,000 Daltons (5, 8).

The contact urticaria syndrome includes a broad spectrum of cutaneous and extracutaneous reactions (11). In addition to contact urticaria, latex allergy can cause distant, usually mild symptoms, such as facial edema, rhinitis, conjunctivitis, and more severe systemic reactions, such as generalized urticaria, asthma and even anaphylactic reactions (12).

Cases of IgE-mediated anaphylactic reactions to latex gloves, occurring during gynaecologic examination, urological catheterization and surgical procedures have been described (10, 12–21). During surgical procedures, gloves are in intimate and repeated contact not only with mucous membranes, but also with other tissues and blood vessels, favouring elution and absorption of the allergenic proteins (13). The patient developed generalized urticaria combined with a systemic anaphylactoid reaction while undergoing surgery, due to contact with the surgeon's latex gloves. Risk factors for latex sensitization seem to be atopic disease, defective skin barrier, previous irritant contact dermatitis, female sex, and medical and nursing work (7, 12, 19, 22–24). This patient had a personal history of atopy with asthma and hand eczema. She had a previous history of adverse reactions to rubber gloves and to balloons.

The prick test seems at present to be the most sensitive and reliable diagnostic tool for confirming rubber latex allergy. With the RAST, there is a slight risk of false negatives, especially in patients with low total IgE values. Serum tests for latex-specific IgE may confirm a suspected diagnosis, but lack the sensitivity to identify all patients (17, 18, 22, 25, 26). Our patient had a positive prick test, a negative RAST and a slightly increased serum IgE value. Cross-reactions between latex and other allergens have been reported (27, 28), this patient also having a positive prick test to chestnut.

Preoperative identification of latex-sensitive individuals can be life saving and patients must be asked about any prior symptoms involving contact with latex (29). Latex surgical gloves must be avoided in these patients, and vinyl gloves considered when patients are submitted to surgery or other interventions. Our patient was later submitted to gynaecological examination with vinyl gloves without any problem. Latex-sensitive patients should be informed of their allergy and must be warned against close contact with the full range of natural latex products (30).

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Occupational allergic contact dermatitis from nitrofurazone

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Key words: occupational; nitrofurazone; Sobrigen®; cattle breeder; occupational; allergic contact dermatitis. © Munksgaard, 1995.

Case Report

A 34-year-old man, who had been a cattle breeder for 10 years, gave a 3-year history of erythematous vesicular lesions on the sides of the fingers of both hands, forearms and face. The lesions cleared when not working with cattle, when he also handled medicaments and feeds. Patch tests with the GEIDC standard series were negative.

6 months later, he consulted us again, with a recurrence on restarting work, and was patch tested with the Chemotechnique cosmetics and medicaments series, and with products that he provided from his work. He was positive (++D2, ++D4) to Sobrigen® and to nitrofurazone 1% pet., which was present in the composition of these uterine ovules for animal use (Table 1). Subsequent avoidance of nitrofurazone-containing products prevented further recurrence.

Discussion

Nitrofurazone is widely used for its broad antibacterial spectrum in the topical treatment of ulcers, burns and skin infections, its usual concentration being 0.2%. In Spain there are 2 frequently used topical preparations containing it: Furacin® and Dextrase®. Veterinary use is mainly in the treatment and prophylaxis of coccidiosis in poultry and necrotic enteritis in pigs.

The 1st cases of sensitization to nitrofurazone were described from topical treatment with Furacin (1, 2).

Table 1. Composition of Sobrigen® uterine ovules

gentamycin sulfate	75 mg
nitrofurazone	150 mg
clioquinol	300 mg
ethinyloestradiol	0.5 mg
excipients	10 g

Sensitization from the use of such ointments is frequent (3-6) as they are in common use in first-aid kits for burns and superficial cutaneous lesions. Cases described occupationally are few and related to farmers or cattle breeders, as nitrofurazone and its derivatives are found in animal feeds (7-10).

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