

powders at room temperature. He noted urticaria within hours of exposure to them, which evolved into eczema after 1–2 days. Working in a fume cupboard, and wearing gloves and a laboratory coat did not prevent the skin lesions. After several months, he also started to develop mild respiratory symptoms at work. Withdrawal from laboratory work led to complete resolution of the skin lesions. He had no past history of skin disease or atopy, and no other laboratory staff were similarly affected.

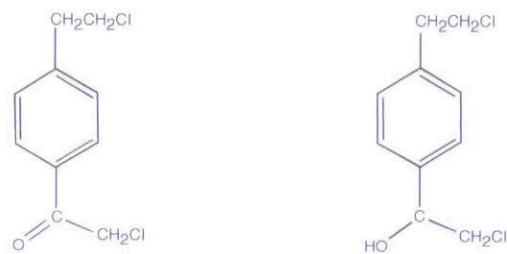
Patch testing to the European standard series showed allergic reactions to paraphenylenediamine (D2 ++, D4 +) and caine mix (D2 +, D4 +), and a series of facial allergens were negative. Patch testing with the organic chemicals showed the following results:

	D2	D4
1-(4-(2-chloroethyl)phenyl)-2-chloroethanol 1% MEK	+++	+
1-(4-(2-chloroethyl)phenyl)-2-chloroethanol 0.1% MEK	+	
1-(4-(2-chloroethyl)phenyl)-2-chloroethanol 0.01% MEK	?+	
4-(2-chloroethyl)phenylchloromethyl ketone 1% in MEK	?+	?+

The purity of both chemicals was confirmed to be greater than 99%. Patch testing was negative in 20 control patients.

Comment

The risk of contact allergy from novel or uncommon organic substances is unknown, and we have been unable to find any previous reports of allergic contact dermatitis from 1-(4-(2-chloroethyl)phenyl)-2-chloroethanol. Our patient had additional symptoms suggestive of immediate-type hypersensitivity, although he was not prick tested. The widespread nature of his eruption could have been due to airborne spread of the fine powder. The rel-



4-(2-chloroethyl)phenylchloromethyl ketone 1-(4-(2-chloroethyl)phenyl)-2-chloroethanol

Fig. 1.

evance of his allergic reactions to caine mix and paraphenylenediamine was undetermined.

Recent advances have taken place in understanding how low molecular weight molecules react with skin proteins to form complete allergens, and the reactive chemical groups of common contact allergens have been identified (2). Computer-based expert systems are being developed in an attempt to predict the sensitization hazard of new compounds, based on the presence of structural alerts for chemical reactions and factors that modulate them. Analysis with the expert system DEREK (3) showed that both chloroalkyl groups in 1-(4-(2-chloroethyl)phenyl)-2-chloroethanol were structural alerts for skin sensitization.

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Rôle of allergic contact dermatitis in rosacea

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Key words: rosacea; allergic contact dermatitis; cosmetics; medicaments; cosmetic intolerance. © Munksgaard, 1997.

Patients and Methods

Over a period of 38 months, 29 consecutive patients (4 male and 25 female), aged 18–75 years (mean age 53 years), with rosacea of the face (1, 2) were enrolled in a study. 15 patients had flushing, erythema and telangiectasia, 12 papulopustular rosacea, and 2 males rhinophyma. All patients described intolerance to cosmetics and/

or topical medicaments, exhibited by worsening of burning sensation and of erythema, scaling and papulopustular lesions. Each patient was patch tested with the GIRDCA standard series, preservatives series, emulsifiers series, perfumes series and their own cosmetics and medicaments. Patch tests were read after 2 and 3 days in accordance with GIRDCA recommendations.

Table 1. Patch test results

Patient no.	GIRDCA	Preservatives	Perfumes	Emulsifiers
1	fragrance mix +/++			
2	PPD -/+++			
	balsam of Peru -/++			
5	nickel +/++			
7	fragrance mix -/++		oak moss oil +/+	
	colophony +/++		peppermint oil +/+	
8	Kathon CG -/+	Kathon CG -/+		
	thimerosal +/++	thimerosal +/++		
15	fragrance mix -/++		oak moss oil -/+	
18	thimerosal +/+++	thimerosal +/+++		
20	balsam of Peru +/+++			
	thimerosal +/+++	thimerosal +/+++		
22	p. dichromate -/+			
23	wool alcohols +/++			Amerchol L-101 +/++
24	thimerosal +/++	thimerosal +/+	eugenol -/+	

Results

11 out of 29 patients showed 1 or more positive reactions to the allergens applied (Table 1). Patients were all negative to their own products except for 1 who showed a strong reaction to Kerastase[®] shampoo (5% aq.) (patient no.23) and 1 to Nizoral[®] cream (patient no.6); both refused further patch testing.

Discussion

"Cosmetic intolerance" may be due to irritation or less frequently to allergy (3, 4). It is well-known that rosacea patients are more susceptible to irritants (2), but little is known about allergy. In rosacea patients, contact dermatitis has been reported from thimerosal and PPD (5) and clindamycin (6). In our series of 29 consecutive patients, a surprisingly high frequency of allergic reactions was observed, 12 (41%) showing 1 or more reactions to standardized allergens or their own products. Nevertheless, history and ROAT confirmed clinical relevance in only 5 patients, allergy to thimerosal, for example, being

judged not relevant in all 5 cases detected. Nor did we observe any relationship between the clinical features of rosacea and the presence of allergy. Patients with rosacea should be patch tested if they give a history of aggravation of symptoms by cosmetics or medicaments.

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Allergic contact dermatitis from oleyl alcohol in lipstick cross-reacting with ricinoleic acid in castor oil and lanolin

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Castor oil is widely used as an emollient in lipsticks, particularly make-up removers and moisturizers. It is also used as a base for some topical medicaments, as well as a purgative (1). Angioedema, rhinitis, asthma

and rashes due to castor oil during its extraction from the seeds of *Ricinus communis* (Euphorbiaceae) and oral administration of the oil have been reported (2). Oleyl alcohol is used as an emulsifier and emollient in lip-

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