

Contact allergy to PVP/eicosene copolymer

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Key words: allergic contact dermatitis; cosmetics; sunscreens; polyvinylpyrrolidone (PVP)/eicosene copolymer. © Munksgaard, 1999.

Case Report

A 32-year-old woman presented with 3 episodes of facial eczema, closely related to the use of a particular sunblock. Patch testing to the standard and a facial series, as well as her own sunblock, showed a ++ reaction to sunblock alone at 2 and 4 days. Photopatch testing was negative. Ingredient testing of the sunblock showed a ++ reaction to polyvinylpyrrolidone (PVP)/eicosene copolymer (10% pet.). 20 control patients tested to this ingredient were negative.

Discussion

The inventory of cosmetic ingredients (1) assigns INCI (international nomenclature cosmetic ingredient) names to 11 PVP copolymers. These have a number of func-

tions in cosmetics: antimicrobial; antistatic; binding; emulsion stabilizing; film forming; hair fixing; viscosity controlling; skin conditioning and protecting. PVP itself is regarded as non-sensitizing (2). However, sensitivity to another copolymer (PVP/hexadecene) has been reported (3). We report the 1st case of sensitivity to PVP/eicosene copolymer.

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Occupational allergic contact dermatitis from a glue, containing isothiazolinones and N-methylol-chloroacetamide, in a carpenter

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Key words: allergic contact dermatitis; occupational; isothiazolinones; chloromethylisothiazolinone; methylisothiazolinone; n-methylol-chloroacetamide; glue; carpenter; formaldehyde; vinyl gloves; preservatives. © Munksgaard, 1999.

Case Report

A 36-year-old non-atopic carpenter presented in February 1998 with an 8-year history of dermatitis on the palms and fingertips, more severe on the right hand. He also said that, when he worked with white glue and woods, he developed urticarial wheals on the upper extremities and trunk, and erythema on the face, that persisted until the following morning. 3 months earlier, he had begun using vinyl gloves, which led to the dermatitis worsening on his hands with whealing and itching, and then stopped using the gloves.

Patch tests were carried out to the Portuguese standard series, paints, plants and woods, a plastics and glues series, and his own white glue, woods and vinyl gloves, with the following positive results:

	D2	D4
cobalt chloride 1% pet.	++	++
formaldehyde 1% aq.	++	++
Kathon CG 0.01% aq.	++	++
chloroacetamide 0.2% pet.	++	++

chlorohydroxymethylacetamide 0.2% pet.	++	++
white glue (open test) as is	+++	++
vinyl gloves	+++	++

Although the reactions to the white glue and vinyl gloves were most accentuated at D2, results after 30 min were negative. The components of the white glue were supplied to us by the manufacturer. The patient was patch tested with them and the results were as follows:

	D2	D4
anti-foaming agents 2% pet.	-	-
plasticizers 2% pet.	-	-
preservative 0.02% aq.	+++	++
dispersing agents 2% pet.	-	-
phosphoric acid 0.5% aq.	++	+
polymers 10% pet.	-	-

7 normal controls were negative. The manufacturer informed us that the preservative was a mixture of N-methylol-chloroacetamide and chloromethylisothiazolinone/methylisothiazolinone.

Biopsy of the positive open test to white glue at D4 showed spongiosis and perivascular lymphocytes with eosinophils. Total IgE was 64.7 IU/ml.

Discussion

Isothiazolinones, n-methylol-chloroacetamide and chloroacetamide are biocides used in industrial and cosmetic products. Allergic contact dermatitis due to cosmetics, toiletries and domestic cleaners, containing these biocides, and less frequently occupational allergic contact dermatitis, has been reported (1–10). Our patient was sensitized to the preservative of the white glue that he sometimes used in his workplace. The preservative was a mixture of N-methylol-chloroacetamide and chloromethylisothiazolinone/methylisothiazolinone.

N-methylol-chloroacetamide is the result of the reaction of 2-chloroacetamide with formaldehyde. Our patient was sensitized to chloroacetamide and also to formaldehyde. Farli et al. (9) reported a patient working in a factory producing modelling plasticine, who was sensitized to chloroacetamide and to a preservative containing n-methylolchloroacetamide and isothiazolinones used during production, but who was not sensitized to the isothiazolinones. Our patient also had urticarial lesions, although the open test to the white glue at 30 min was negative. Gebhardt et al. (11) reported urticaria caused by Type-IV sensitization to isothiazolinones.

Allergy to vinyl gloves is rare (12): it did not prove possible to patch test with their constituents.

Acknowledgement

We thank the manufacturer Colas Casanova for supplying us with the components of the glue for patch testing.

Chloroacetamide as a cause of contact dermatitis in hairdressing

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Key words: allergic contact dermatitis; chloroacetamide; hairdressing; hairdressers' clients; preservatives. © Munksgaard, 1999.

Chloroacetamide is a familiar sensitizer in paints, other sources being cosmetic creams and lotions, in which it is extensively used as preservative.

Case Report

A 58-year-old woman presented with a history of suspected contact dermatitis from hair dyes, 2× complaining of erythema, pruritus and scaling on the neck after hair dyeing. She was patch tested with a hair-

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dressers' screening series and a preservatives series (Trolab). A ++ reaction was noted at D2 and D4 to chloroacetamide and also to propyl gallate. Chloroacetamide was confirmed to be the causative agent, as it was found to be included in the oxidant compound.

Discussion

Chloroacetamide is a cause of occupational dermatitis in paints (1, 2). It is also used as a preservative in cosmetics