

Case Report

A 21-year-old woman presented with a history of eczematous eruptions which she attributed to use of a number of cosmetic products. She was patch tested (International Contact Dermatitis Research Group criteria; Trolab[®] allergens, Hermal, Reinbek, Germany, on Scanpor[™] tape, Epitest Oy, Tuusula, Finland) to an extended European baseline series, fragrances, hair dyes, and a local cosmetics series. She was also patch tested to her own cosmetics.

1+ reactions to nickel sulfate and cobalt chloride on D2 and D4 were not of current clinical relevance.

Two weeks after testing, a strongly positive reaction developed in an area on her back on which the local cosmetics series had been applied. Retesting produced a 3+ reaction to chloracetamide (0.2% pet.) on D2 and D4.

Discussion

The initial late reaction followed by a reaction in the normal time frame on re-patch testing strongly suggests active sensitization; i.e. the patient was sensitized to chloracetamide due to the patch test procedure.

Active sensitization is an unusual occurrence (3). It is defined as negative patch test reaction followed by positivity after 10–20 days. A positive reaction subsequently develops within the typical time-frame (e.g. 2–4 days) at retesting. (4). This is the first reported case of active sensitization to chloracetamide. Certain allergens are considered more likely to cause active sensitization than others, e.g. *p*-phenylenediamine (5), although the overall incidence is extremely low.

The sensitizing potential of chloracetamide is unknown. One estimate of the rate sensitization to it in a patch test population was 1.4% (6).

This case raises the question of whether discussion of the (very low) risk of active sensitization should be routinely discussed while obtaining informed consent for patch testing. Chloracetamide was not an ingredient of any of our patient's cosmetics and active sensitization in this case was not, therefore, of immediate relevance as there was no exposure. It is also unknown whether her chloracetamide contact allergy will persist, although this seems likely. It is also unknown to what extent active sensitization is persistent and to what extent it may become clinically relevant.

Active sensitization to chloracetamide

Contact Dermatitis 2009; 60: 58–59

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Key words: active sensitization; chloracetamide.

Chloracetamide (CAS number 79-07-2) is an uncommonly used preservative that may be found in some cosmetic preparations. It has been used as a biocide in agriculture, glues, paints and coatings (1). It is a known contact allergen (2).

We report the first case of active sensitization to chloracetamide.

References

1. GDCh-Advisory Committee on Existing Chemicals. 2-Chloracetamide (BUA Report 225). (available from www.hirzel.de/buareport/PDF/Summary_Report225.pdf) (accessed on 23 June 2008).
2. Assier-Bonnet H, Revuz J. Chloracetamide as a cause of contact dermatitis in hairdressing. *Contact Dermatitis* 1999; 40: 284–285.
3. Jensen C D, Paulsen E, Andersen K E. Retrospective evaluation of the consequence of alleged patch test sensitization. *Contact Dermatitis* 2006; 55: 30–35.
4. Frosch P J, Menné T, Lepoittevin J -P. *Contact Dermatitis*, 4th edition, Springer, Berlin, 2006.
5. Dawe S A, White I R, Rycroft R J, Basketter D A, McFadden J P. Active sensitisation to para-phenylenediamine and its relevance: a 10-year review. *Contact Dermatitis* 2004; 51: 96–97.
6. Schnuch A, Geier J, Uter W, Frosch P J. Patch testing with preservatives, antimicrobials, and industrial biocides. Results from a multicentre study. *Br J Dermatol* 1998; 138: 467–476.

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