

Allergic contact dermatitis to iodopropynyl butylcarbamate found in a cosmetic cleansing wipe

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A 20-year-old Caucasian woman presented with a 9-month history of recurrent itchy facial dermatitis with associated periorbital swelling. She had been using a Tea Tree oil cleansing wipe (Superdrug, London, UK) to remove her make-up. She was patch tested to the British Contact Dermatitis Society Standard and Facial and Cosmetic series together with her own cosmetics and the cleansing wipe. Allergens supplied by Trolab and Crawfords were placed in Finn Chambers[®] and applied to the back using Scanpor[®] tape. Patch testing showed a 2+ reaction to the

Superdrug Tea Tree oil cleansing wipe at D2 and D4 together with a 3+ reaction to 0.1% iodopropynyl butylcarbamate (IPBC) at D2 and D4. The cosmetic cleansing wipe was the only product used by the patient to declare that it contained IPBC. Her facial dermatitis resolved after discontinuing the use of the cosmetic cleansing wipe.

Discussion

IPBC is a biocide, which is a biologically reactive chemical with expected irritant and allergenic potential, originally used for wood preservation (1, 2). The EU Cosmetic Directive permitted the use of IPBC for the preservation of cosmetic products with the maximum concentration being 0.1% (3). The risk of sensitization at this concentration is deemed to be low based on animal studies (4). IPBC is currently used in shampoos, lotions, powders, make-up, creams, and baby products (2). IPBC is a small lipophilic molecule that can lead to sensitization after extensive and prolonged exposure (5, 6). However, there are only a few reported cases of allergic contact dermatitis from IPBC in cosmetics despite its widespread use (2, 7, 8). Allergic contact dermatitis to IPBC has been previously reported with cleansing wipes and is an emerging phenomenon (9). Therefore, we must patch test to cleansing wipes where indicated, to confirm the clinical diagnosis and increase awareness of this contact allergy.

References

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