

CONTACT POINT

Sofa dermatitis again? A case report of allergic contact dermatitis to octylisothiazolinone from a leather reclining chair

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KEYWORDS: case report, octylisothiazolinone, sofa dermatitis

Octylisothiazolinone—OIT, 2-octyl-3(2H)-isothiazolinone—is a preservative used in the leather industry, with both fungicidal and bactericidal properties. It has been piloted as an additional allergen in the extended British Society of Cutaneous Allergy (BSCA) baseline series alongside methylisothiazolinone (MI) and methylchloroisothiazolinone (MCI).

CASE REPORT

An 87-year-old gentleman was referred with a 3-month history of a pruritic, eczematous eruption. This predominantly affected his back, the posterior aspects of his legs, and forearms. He was not atopic. It was suspected that

the eruption related to a new suede leather reclining chair he had had for 8 months. He spent significant time in the chair and would sleep in it. Since replacing the leather recliner with a fabric model his eczema had resolved.

Patch testing was undertaken, according to ESCD guidelines, using IQ Ultra chambers (Chemotechnique Diagnostics, Vellinge, Sweden) and commercially available standardized allergens (Chemotechnique Diagnostics). He was patch tested to the extended BSCA baseline series, dimethyl fumarate (0.01%, 0.1%, pet.), and a piece of the leather chair (soaked in water). He had positive reactions to OIT 0.1% pet., + on day (D) 2 and D4, and the leather sample (D2+, D4+) (Figure 1). Importantly he did not react to MI, MCI, or dimethyl fumarate.

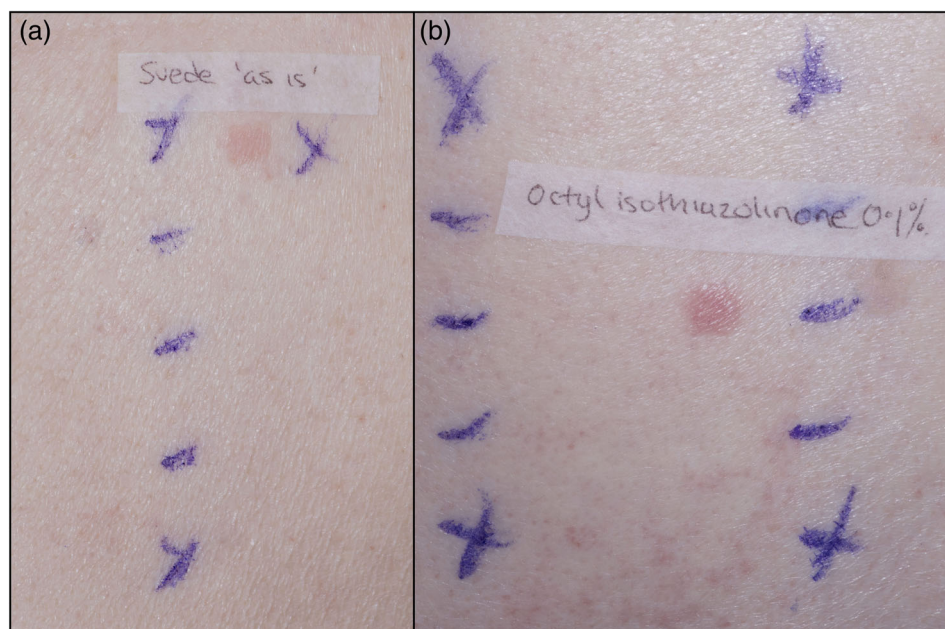


FIGURE 1 (A) Day (D) 4 positive reaction to suede from leather recliner. (B) D4 positive reaction to octylisothiazolinone 0.1% pet

DISCUSSION

Dimethyl fumarate, a fungicidal agent used in leather products was the cause of a major outbreak of allergic contact dermatitis >10 years ago. This was termed “sofa dermatitis” and led to recall of leather furniture from implicated suppliers.^{1,2}

Non-occupational contact allergy to OIT has not yet been reported in the UK to the best of our knowledge. By contrast, occupational allergic contact dermatitis is described: Young et al reported a PhD student developing hand dermatitis when working with OIT as a biocide³; a further report described three workers experiencing hand dermatitis due to OIT used as a preservative in an adhesive factory.⁴

Non-occupational allergic contact dermatitis to OIT is described internationally, principally to leather products such as belts, shoes, watch straps, and pertinent leather upholstery on sofas.^{5,6} A recent review has highlighted the presence of OIT in textiles, household detergents, metalworking fluids, and plastic cleaning towels.⁷ Cross reactivity between MI and OIT is reportedly common,^{5,8} although our patient did not react to MI or MCI. Isothiazolinones are used as preservatives in a wide variety of settings and cross reactions do not necessarily occur. This case highlights the importance of testing to a range of isothiazolinones and the importance of recognizing the changing landscape of allergen exposure.

CONFLICT OF INTEREST

None to declare.

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How to cite this article: Hunt WTN, Dunnill MG, Sansom JE. Sofa dermatitis again? A case report of allergic contact dermatitis to octylisothiazolinone from a leather reclining chair. *Contact Dermatitis*. 2019;1-2. <https://doi.org/10.1111/cod.13380>