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Allergic contact dermatitis from the fragrance ingredient Lyrall in underarm deodorant

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Case Report

A 20-year-old woman presented with a 5-month history of severe dermatitis in both axillae, related to the use of her underarm deodorant, especially a particular brand. She had had no atopic dermatitis. Both repeated open application test and patch test with this deodorant were positive, whereas the European standard series was negative. Subsequently, patch testing with all the ingredi-

ents of the deodorant, as supplied in appropriate concentrations by the manufacturer, was positive to Lyrall (3- and 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-aldehyde) and the fragrance of the deodorant, including Lyrall (10% pet.). Switching to a fragrance-free deodorant resolved the axillary dermatitis completely.

Discussion

Lyrall (Fig. 1) is a synthetic fragrance component, the use of which in the cosmetics industry seems to have increased in the last few years. 4 cases of sensitization have previously been published (1). This particular fragrance sensitization is not detected by the fragrance mix of the European standard series, the clinical sensitivity of which is no higher than 70% (2). Regrettably, the INCI declaration of cosmetic ingredients does not yet include individual fragrance chemicals. Thus, the patient had to resort to a fragrance-free deodorant or trial-and-error.

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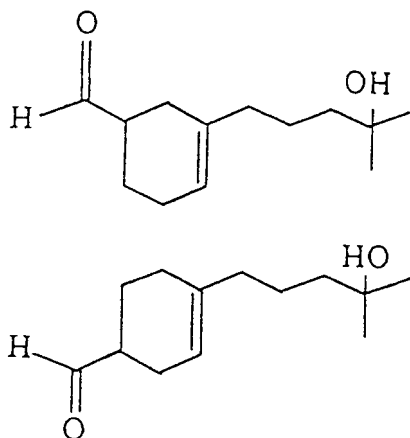


Fig. 1. Lyrall (3- and 4-(4-hydroxy-4-methylpentyl)-3-cyclohexene-1-aldehyde), CAS no: 31906-04-4, EINECS no: 250-863-4.