

Long-lasting contact urticaria from petrolatum mimicking dermatitis

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Rare intolerance to petrolatum includes chronic dermatitis and hyperpigmentation of unknown mechanism in an African-American male from white and yellow petrolatum (1), and allergic contact dermatitis from white and yellow petrolatum (2–4). Dooms-Goossens & Degreef (5) studied comparative eliciting effects of various brands of petrolatum in 3 subjects with known sensitivity.

Case Report

A 38-year-old woman presented with disabling hand eczema. On original examination, while she was temporarily off-work, she was clear. Patch testing was performed on the upper back with the standard series of the North America Contact Dermatitis Group, utilizing the Finn Chamber (Epitest, Helsinki, Finland). Results were read at 2 and 4 days, and yielded multiple lesions that did not fit typical patch test reading criteria, in that eczematous and urticarial responses was seen at both readings. These positives did not fit a pattern to account for her exposure.

Because of atypical morphology and the unexpected multiple positives, patch testing was repeated on all positives 3 months later, at which time the patient was still clinically well. The repeat testing resulted in the same morphology, namely, eczema and urticaria at both 2 and 4 days, in a pattern that was, once again, clinically uninterpretable. At that visit, open application of petrolatum to the forearm revealed an urticarial response at 15–30 min. This was repeated with the same result, i.e., urticaria.

Discussion

This case appears unique in that this patient had a reaction to petrolatum that was both eczematous and

urticarial. Furthermore, the occurrence of immediate as well as long-lasting urticaria is highly unusual, only the 2nd such reported case, to our knowledge (6). Kanerva et al. (7) observed a similar case of “long-lasting contact urticaria” in response to castor oil. Since most of the petrolatum sites did not remain positive at 2 days, we seek an explanation for those that remained positive and those that did not. That contact urticaria can transmute into dermatitis has been documented (6, 8); the mechanism by which this happens remains unexplained.

References

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