

15. Madsen MT, Andersen F, Paulsen E. Concomitant immediate and delayed sensitization by philodendron (*Philodendron scandens*) in a plant keeper. *Contact Dermatitis*. 2017;77(5):326-328.
16. Lovell CR. Plants. In: John SM, Johansen JD, Rustemeyer T, Elsner P, Maibach HI, eds. *Kanerva's Occupational Dermatology*. Vol 2, Chapter 70. 3rd ed. Cham, Switzerland: Springer; 2020:1059-1074.
17. Paulsen E, Christensen LP, Andersen KE. Dermatitis from common ivy (*Hedera helix* L. subsp. *helix*) in Europe: past, present, and future. *Contact Dermatitis*. 2010;62(4):201-209.

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The versatile UV absorber drometrizole: Expanding from the realm of cosmetics to feminine sanitary products

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Drometrizole is an ultraviolet absorber that is used in cosmetics and occasional plastic and rubber items, which is associated with allergic contact dermatitis (ACD). In patients presenting with genital dermatitis and contact allergy to sanitary pads, drometrizole should be considered as a versatile, inconspicuous allergen with the potential to be embedded in assorted plastics.

CASE REPORT

A 55-year-old woman presented with a 3- to 4-month history of diffuse pruritic papulovesicular genital dermatitis, extending from the proximal leg and mons throughout the outer labia onto the buttocks, without involvement of the vaginal mucosa or anorectal tissue. She had a history of stress urinary incontinence, managed with daily sanitary pads (exclusively Poise daily liners) used over the past 1 to 2 years. All undergarments worn were of a pure cotton fabric and she washed with Dove Sensitive Skin bar soap. She was post-menopausal and amenorrheic. Neither triamcinolone 0.1% ointment (used twice weekly) nor a brief trial of over the counter (OTC) clotrimazole relieved her symptoms. She reported a historical sensitivity to adhesives.

Patch testing was performed to the 2019-2020 North American Contact Dermatitis Group Screening series and several supplemental series including preservatives, emulsifiers, fragrances, personal care products, adhesive acrylates, antifungals, and select home products including her pads. Final (day 7) patch test results demonstrated strong

(++) reactions to bacitracin 20% pet., drometrizole 1% pet., and adhesive portion of the Poise daily pad, as well as weak positive (+) reactions to beta hydroxy acid 2% pet. and the skin-side/fabric-side of the Poise daily pad (Figure 1). Given the strength of her reaction to drometrizole, it was hypothesized that this allergen was embedded in the plastic portion of her sanitary pad, thereby triggering her dermatitis.

To further investigate the potential presence of drometrizole in our patient's sanitary pads, the manufacturer (Kimberly-Clark Corporation, Neenah, Wisconsin) was contacted for verification of the materials used in this product. Given the proprietary status of their supplier's ingredients, we requested that specifically our patient's allergens be evaluated given the clinical significance, and the

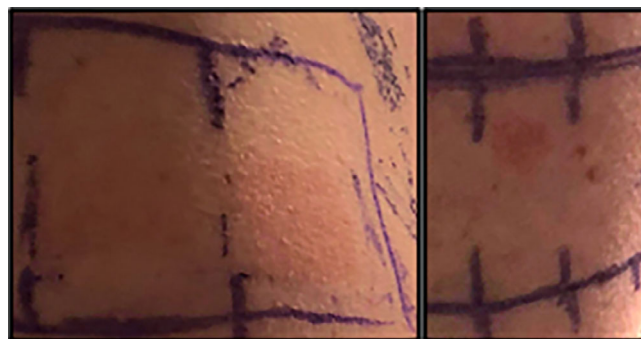


FIGURE 1 From left to right, final patch test reading for: (A) skin-side/fabric-side of the poise daily pad, (B) adhesive portion of the poise daily pad, and (C) drometrizole (1% pet.)

manufacturer arranged for this. After following up with their supplier for ingredient listings, the manufacturer indicated that “drometrizole may be present in their liners” and that all of the other patient allergens were not present in this product. We followed up with our patient as well, and her dermatitis resolved with specific pad avoidance.

DISCUSSION

Drometrizole (Tinuvin P; CAS no. 2440-22-4) is an ultraviolet absorber that has led to rare cases of ACD in response to cosmetics (sunscreens, face creams, and nail varnish), various plastic and rubber items (nose support pads in glasses, wristwatch straps, rubber sandal straps, spandex tape in underwear, and ostomy bags), and dental restorative materials.¹⁻⁵ To the author’s knowledge, drometrizole has never before been found in a sanitary pad. Taking into account the strength of our patient’s reaction to both drometrizole and her own sanitary pads as well as the follow-up information from our patient and her product supplier, we believe it is very likely that drometrizole caused her dermatitis.

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AUTHOR CONTRIBUTIONS

Sara Kullberg: Conceptualization; data curation; investigation; project administration; resources; writing-original draft; writing-review and editing. **Sara Hylwa:** Conceptualization; data curation; investigation;

project administration; writing-original draft; writing-review and editing.

CONFLICT OF INTEREST

The authors have no relevant conflicts of interest to disclose.

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REFERENCES

1. Hughes TM, Martin JA, Lewis VJ, Stone NM. Allergic contact dermatitis to drometrizole trisiloxane in a sunscreen with concomitant sensitivities to other sun screens. *Contact Dermatitis*. 2005;52(4):226-227.
2. de Groot AC, Liem DH. Contact allergy to Tinuvin P. *Contact Dermatitis*. 1983;9(4):324-325.
3. Hald M, Bergendorff O, Isaksson M, Johansen JD. Allergic contact dermatitis caused by plastic items containing the ultraviolet absorber drometrizole. *Contact Dermatitis*. 2018;79(2):110-112.
4. Arisu K, Hayakawa R, Ogino Y, Matsunaga K, Kaniwa M. Tinuvin P in a spandex tape as a cause of clothing dermatitis. *Contact Dermatitis*. 1992;26(5):311-316.
5. Björkner B, Niklasson B. Contact allergy to the UV absorber Tinuvin P in a dental restorative material. *Am J Contact Dermat*. 1997;8(1):6-7.

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