

Connubial Dermatitis Revisited: Mother-to-Child Contact Dermatitis

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Précis Connubial dermatitis may include mother-to-infant contact dermatitis, as illustrated by three infants with dermatitis most likely due to contact with their mothers' fragrances.

Discussion The term "connubial dermatitis" has been used to describe dermatitis caused by secondary exposure to substances used by spouses.¹

Three infants (aged 8, 11, and 13 months) were brought by their respective mothers to our clinic for severe flares of atopic dermatitis. Physical examination of each revealed widely dispersed eczematous plaques with facial predominance (Fig 1). Histories revealed that the mothers frequently used perfumes and scented products on the children as well as on themselves. Furthermore, they rested their babies' faces directly near their necklines, where fragrances had been applied. We speculated that fragrances worn on the necks of the mothers were transferred to the faces of the infants.

Fragrance-free regimens were instituted (for both mothers and children) to improve the dermatitis. At 8 weeks, all three children were significantly improved. Patch testing on the 11-month-old toddler showed positive reactions to balsam of Peru (+), amylcinnamaldehyde (+) and fragrance mix I (+), fragrance mix II (+), Lyrall (+) (International Flavors & Fragrances, Inc., New York, NY), and the mother's perfume (+). Notably, this child's dermatitis flared during patch testing and again later when the mother resumed her fragrance use; however, the mother declined further repeat application testing. Patch testing was deferred in the other two children as they were much improved with fragrance avoidance.

The North American Contact Dermatitis Group reported a sensitivity to fragrance mix in 10.4% of 4,913 patients patch-tested between 2001 and 2002.² Hogeling and Pratt noted that 7% of their pediatric population had reactions to

PEARLS provide insight into understanding disease pathogenesis or improving treatment. ZEBRAS inform about previously unrecognized conditions or atypical variants of known disorders.

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fragrance mix.³ Spousal connubial contact dermatitis from fragrances has also been frequently reported.^{2,4}

Pearl

When Wilkinson originally described connubial dermatitis, he recommended "not to neglect the spouses" when



Figure 1. Infant with eczematous plaques on bilateral cheeks and perioral dermatitis secondary to mother's fragrance.

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the etiology of the patient's dermatitis was contemplated.¹ Expanding on this, our recommendation to clinicians is "not to neglect the parents."

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Contact Leukoderma from para-Phenylenediamine

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Précis Contact leukoderma is a common reaction to monobenzyl ether of hydroquinone, alkyl phenols, hydroquinone, and several para-substituted phenols, but it is only rarely due to para-phenylenediamine (PPD).

Discussion A 77-year-old African American man had a 5-month history of depigmentation of the scalp. He regularly colored his hair without problems; 6 months earlier, however, he had experienced a pruritic dermatitis 2 days after applying a hair dye. The dermatitis spread to his trunk and extremities and required topical and systemic corticosteroids for resolution. Normal skin coloration and appearance followed the resolution of the generalized dermatitis. However, 3 weeks after the dermatitis cleared, the patient developed depigmentation of the scalp. Physical examination revealed a complete loss of pigment on 30% of the scalp (Fig 1) and no involvement on the rest of the body.



Figure 1. Scalp depigmentation seen on physical examination.

Patch testing with the North American Contact Dermatitis Group standard series revealed a +++ reaction to PPD at 48 and 96 hours but did not induce depigmentation. The remainder of the patch-test results were negative, with the exception of a +++ reaction to nickel, which was not considered relevant.

Contact leukoderma from PPD in hair dye is uncommon. The first report was presented by Taylor and colleagues in 1993¹; few cases have been reported since then.²⁻⁴ The individuals afflicted by PPD-induced contact leukoderma from hair dye in those cases had relatively dark skin: five were African American, one was a black Yemenite, one was Hispanic, and one was Indian.¹⁻⁴ Seven of these patients were male.

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