

Contact Dermatitis To Henna Tattoo

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Citation

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Abstract

An 11-year-girl presented to the Allergy department with a severe bullous, erythema and edema reaction accompanied by pruritus on the day following the application of a temporary tattoo. These symptoms were partly responsive to treatment with oral corticosteroids but there was persistent hyperpigmentation at the tattoo site several months after the application. An allergic contact dermatitis study was carried out with epicutaneous tests, with the standard European panel, and with henna (1% and 10%). The tests with the two henna dilutions were negative. Patch testing revealed a 3+positive reaction to para-phenylenediamine (PPD).

CASE REPORT

An 11-year-girl presented to the Allergy department with a severe bullous, erythema and edema reaction accompanied by pruritus on the day following the application of a temporary tattoo. These symptoms were partly responsive to treatment with oral corticosteroids but there was persistent hyperpigmentation at the tattoo site several months after the application.

An allergic contact dermatitis study was carried out with epicutaneous tests, with the standard European panel, and with henna (1% and 10%). The tests with the two henna dilutions were negative. Patch testing revealed a 3+positive reaction to para-phenylenediamine (PPD).

Henna is a plant dye derived from the shrub *Lawsonia*, which grows primarily in North America and the Middle East. In Islamic and Indian cultures, it has been used for centuries in hair dyes and for skin decoration, and has recently been increasingly used in western countries.

Black henna is obtained by adding PPD to the natural occurring henna. The stain PPD, which is mixed with henna in order to shorten the time required for skin impregnation, is a powerful sensitising agent commonly used in hair dyes, but its use on skin is prohibited by the US Food and Drug Administration (FDA) (1). There are many cases described of contact dermatitis to PPD in temporary henna tattoos (2,3)

Allergic contact dermatitis to PPD contained in temporary henna tattoos is an increasing problem worldwide, with cross-reaction to related compounds and permanent skin changes (4,5) a frequent consequence of sensitization to this significant allergen.

Figure 1



References

1. US Food and Drug Administration, Center for Food Safety and Applied Nutrition. Office of Cosmetics and Colors fact sheet. Temporary tattoos and henna/mehndi.
2. Sidbury R, Storrs FJ. Pruritic eruption at the site of a temporary tattoo. *Am J Contact Dermat*. 2000 Sep;11(3):182-3.
3. Rubegni P, Fimiani M, de Aloe G, Andreassi L. Lichenoid reaction to temporary tattoo. *Contact Dermatitis*. 2000

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Feb;42(2):117-8.

4. Valsecchi R, Leghissa P, Di Landro A, Bartolozzi F, Riva M, Bancone C. Persistent leukoderma after henna tattoo.

Contact Dermatitis. 2007 Feb;56(2):108-9.

5. Onder M. Temporary holiday "tattoos" may cause lifelong allergic contact dermatitis when henna is mixed with PPD. J Cosmet Dermatol. 2003 Jul;2(3-4):126-30.

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