Letter to the editor Henna contact dermatitis

Letter to the editor: Allergic contact dermatitis to black henna

N. Najem, V. B. Zadeh

black-henna, temporary tatoo, naphthoquinone, paraphenylenedia mine, allergic contact dermatitis Henna is a flowering plant used to dye skin, hair, and fingernails. It has been used to make temporary tattoos in the Middle East and southern Asia since medieval times. It is extensively used in the Gulf area as a temporary tattoo on the skin as well as a hair dye. Henna leaves contain the active substance naphtho-

quinone, which is relatively harmless (1). However, using henna alone requires a long contact time to produce the dyeing effect and the resulting color is light. This means that delicate drawings and figures are not possible and the coloring effect is short-lived, and so people add various substances to overcome these



Figure 1. Vesicles and bullae along the dark henna lines but sparing the areas of regular henna (light brown) application on the wrist and dorsum of the hand.



Figure 2. Bullous contact dermatitis on the palm of the hand. Note again that areas of regular henna (light brown) application are totally spared.

Henna contact dermatitis Letter to the editor

disadvantages. Black henna, or what some people colloquially refer to as *doj* locally, is actually a mixture of henna with various other substances including paraphenylenediamine (PPD). The addition of PPD, a widely recognized sensitizer, increases the risk of allergic contact dermatitis from henna tattoo mixtures, and a number of cases have been reported (2).

A 20-year-old female had henna applied to the palm and dorsal surface of her left hand one week before presenting to our outpatient clinic. She had mainly black henna but ordinary henna was also applied. Twenty-four hours after application she developed swelling of the affected hand as well as painful

vesicles and bullae along the black henna drawings, but the areas of ordinary henna were totally spared (Figs. 1 and 2). She showed a positive reaction to PPD on patch-testing to standard antigens.

Henna has been used for cosmetic purposes in Kuwait for a long time. We rarely encountered reactions to henna in the old days. However, in recent years increasingly more cases of contact dermatitis to henna have been encountered. We think that the reason for this is that traditionally pure natural henna was used but nowadays it is mixed with other substances (e.g., PPD). Our patient demonstrates this issue very clearly and so we would like to share her case with other colleagues.

REFERENCES

- Neri I, Guareschi E, Savoia F, Patrizi A. Childhood allergic contact dermatitis from henna tattoo. Pediatr Dermatol. 2002;19:503–5.
- 2. Kang IJ, Lee MH. Quantification of para-phenylenediamine and heavy metals in henna dye. Contact Dermatitis. 2006 Jul;55(1):26–9.

A U T H O R S ' Nabeel Najem, MD, HOD, Department of Dermatology, Adan Hospital, A D D R E S S E S Kuwait

Valid Bagher Zadeh, MD, Department of Dermatology, email: walid_md2000@hotmail.com, corresponding author