CONTACT DERMATITIS TO TEMPORARY BLACK HENNA TATTOO

Temporary ‘black henna’ tattoos are an increasingly popular body decoration with a growing incidence of associated adverse events. There are numerous case reports of black henna contact dermatitis, the majority of which have occurred at popular Mediterranean holiday destinations. The accompanying images (Figs 1-4) are of two such reactions in children recently seen at our clinic.

Black henna-induced contact dermatitis reactions vary in severity with a typical macroscopic appearance of vesicles, erythema and blistering. Histology of the lesions reveals spongiotic dermatitis with lymphohistiocytic infiltrates. The reactions are generally idiosyncratic, with no pattern identifiable with regard to previous history of atopy. Host factors are clearly important for the development of reactions, as not all individuals tattooed with the same pigment will develop adverse reactions. Most reactions occur in ‘henna-naïve’ subjects as opposed to individuals from ethnic groups who routinely apply traditional henna tattoos. Although the natural history is for spontaneous resolution over some weeks, lesions may heal with permanent hyper- or hypopigmentation.

Henna is an extract of the plant Lawsonia. A dye, P-phenylenediamine (PPD) is commonly added in order to produce a darker black henna pigment. Patch testing to PPD is frequently positive, suggesting that this is the most likely causative agent. Sensitisation to PPD and its derivatives by way of temporary tattoos may result in more severe generalised reactions in the future. It is therefore important that patients are made aware of the PPD dye as it is a common ingredient in hair and textile dyes. In addition, it has also been proposed that the natural rubber latex which is present in the tacky transfer applied prior to henna application may sensitise patients who develop a black henna dermatitis to latex and/or thiuram.

As a prophylactic measure health care practitioners may wish to advise patients planning a holiday to avoid tattoo application with black henna pigment.

Fig. 1. Patient 1 – 4 days after black henna tattoo application.  Fig. 2. Patient 1 – 8 weeks after black henna tattoo application.

Figs 3 & 4. Patient 2 – 10 days after black henna tattoo application.

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