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ALLERGIC CONTACT DERMATITIS TO PURE HENNA

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ABSTRACT
Henna is also known as hina. It is dark green powder prepared from the leaves of Lawsonia inermis. Allergic contact dermatitis to pure henna is very rare. In this article we present a case of allergic contact dermatitis to pure henna used for decorating hands.

INTRODUCTION

Henna is widely used for coloring hair and nail, and also for decorating hands and feet [1]. It is a traditional custom especially in hindus and muslims for events such as wedding, public celebrations and religious ceremonies [2].

Henna is not only used for cosmetic purpose, but also used as ayurvedic medicine with health benefit such as hypoglycemic, hypolipidemic, antibacterial, antifungal, antioxidant, antitumor, immunomodulatory, and for jaundice, leprosy, small pox, head lice, dandruff etc [3-5]. Pure henna alone is relatively safe with very low incidence of allergic reaction [6-7]. In this article we report a case of allergic contact dermatitis to pure henna.

Case report

We here present a case of 16 year old girl who came with complaints of itching and fluid filled lesions over the left hand since 3 days. She gives history of applying henna paste 3 days ago which was prepared at her home from the leaves of a henna plant, after which she developed lesions along the pattern of the henna design, associated with pain. She denied using neither chemical nor natural substances as additives to henna. Patient has been applying henna occasionally since 2 years. Twice she had history of mild itching and redness, but no fluid filled lesions in the recent past. Her medical history was unremarkable.

On cutaneous examination pale yellow colored vesicles and bullae on an erythematous base in a figurative pattern on the left palm was present. (Fig. 1) Tenderness was present over the blisters.

It was diagnosed as allergic contact dermatitis to pure henna for which she was treated with topical steroid and antibiotic for 2 weeks. On follow up the lesions resolved with mild hypopigmentation.

DISCUSSION

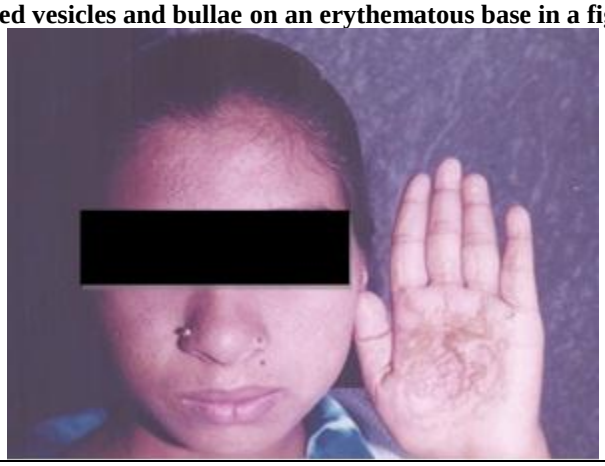
Henna is a member of family Lythraceae [8]. The active ingredient in henna is lawsone (2-hydroxy-1, 4-naphthoquinone). The plant is grey white with spines and grows to a height of 6m have intense sweet scent. It is cultivated in India, North Africa and Srilanka [3, 9].

Pure henna is a relatively safe product that has a religious and social significance [1]. Contact dermatitis to pure henna is very rare, despite of its frequent use. To achieve the dark color of tattoo which is in fashion these days Para- Phenylenediamine is added which is known as

black henna [8].

The first case report of contact dermatitis to pure henna was in the year 1980 by Pasricha JS *et al*. Since then around 20 cases of contact dermatitis to pure henna has been reported [8]. Henna is applied with a cone shaped container. It is prepared from dried leaves, when mixed with water gives cream like consistency. It is left overnight for drying. The longer the henna is in contact, darker is the color [6, 7]. The color lasts for several weeks and then fades gradually [10]. When applied to the skin, hair, or nails, the pigment lawsone interacts with the keratin which gives a reddish-brown color, therefore, it is known as red henna [8]. Other side effects of henna are type 1 hypersensitivity reaction, keloid formation, leukoderma, bullous eruption, lichenoid eruption, erythema multiforme like and hypo or hyperpigmentation [6, 11]. It may also cause life threatening hemolysis in children with glucose 6 phosphate dehydrogenase deficiency [8, 12].

Fig 1. Showing pale yellow colored vesicles and bullae on an erythematous base in a figurative pattern



CONCLUSION

The majority of the cases of allergic contact dermatitis are associated with coloring agents like Para-Phenylenediamine. The paucity of literature on contact dermatitis to pure henna suggests that its allergic potential is low.

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CONFLICT OF INTEREST:

The authors declare that they have no conflict of interest.

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