

# Acute dermatitis to beard coloration

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Sir,

Allergic reactions to p-Paraphenylenediamine (PPD) are very common. They are mainly seen after hair dyes and temporary henna tattoos. Allergic contact dermatitis to PPD on the beard area has rarely been described in the literature. We report a particular case of acute beard contact dermatitis after beard coloration.

A 21 year-old patient with a history of allergy to a temporary black Henna tattoo two years ago presented to the emergency room with an acute reaction after beard coloration. The patient reported that he had his beard dyed in black with a hair coloration that has p-phenylenediamine sulfate as one of the main components. Few hours later he experienced intense itching. The next day he had a pruritic facial eruption in the exact same areas where the coloration was applied.

Physical examination revealed a very well-defined erythematous and infiltrated skin reaction on the jaws, mustache and chin (Fig. 1). An allergic contact dermatitis to p-Phenylenediamine (PPD) was highly suspected and the patient was treated with topical corticosteroids.

PPD is a strong allergen that may cause severe clinical reactions. It's usually involved in allergic contact dermatitis (ACD) [1]. Immediate-type hypersensitivity reactions to PPD and even fatal anaphylaxis have also been described [2]. Those reactions are mostly induced by hair dyes and temporary henna tattoos. ACD reactions to eyebrows and eyelashes dye are also frequently reported. Reactions to beard dye are a lot less common and only few cases have been described in the literature mainly in Arab men [1,3].



**Figure 1:** Well-defined erythematous skin reaction on the beard area.

Dark beard coloration is a very common practice in Arab culture, as dark hair and perfectly shaped beard are very important to many young men to reach a certain beauty standard. This makes them a lot more susceptible to present this kind of allergy.

PPD concentrations are normally restricted in hair dyes. It's completely forbidden in eyebrows and eyelashes products. The use of hair dyes on the beard area is strongly discouraged and should be prohibited as the skin on the face is way thinner than the scalp which can lead to more serious complications. Therefore, awareness should be raised among patients and also professionals (barbers and hairdressers) to avoid deadly consequences.

## Consent

The examination of the patient was conducted according to the Declaration of Helsinki principles.

The authors certify that they have obtained all appropriate patient consent forms. In the form the

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patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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