

CONTACT POINT

Beard dermatitis induced by coloration

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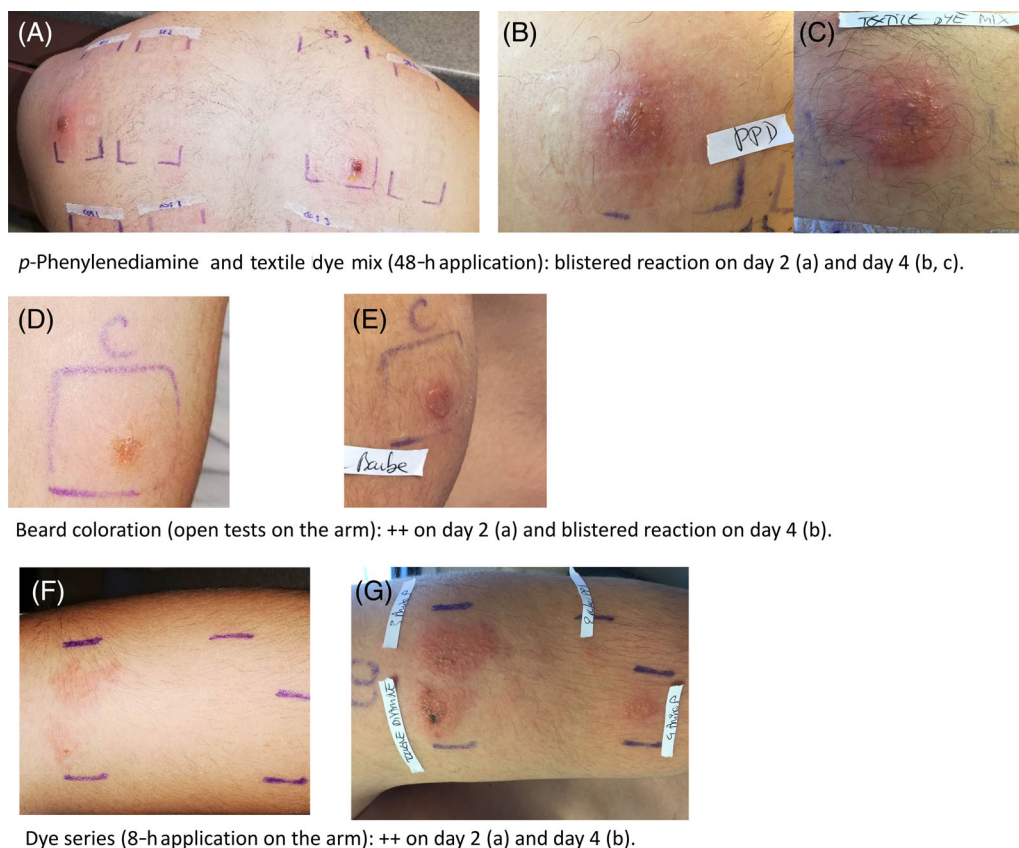
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p-Phenylenediamine (PPD) is a common allergen mainly involved in allergic contact dermatitis (ACD) to hair dyes and temporary henna tattoos. Reports on ACD secondary to dyeing eyelashes and eyebrows are also regularly published. Here we report a case of PPD-induced ACD of the beard region with contact allergy to multiple dyes and discuss the contact time used in the patch test.

CASE REPORT

A 22-year-old man was patch tested because of a well-demarcated, acute face dermatitis induced by beard coloration. To better control the patch test reaction, we put a dye patch test series on one arm asking the patient to remove it if he experienced pruritus. We performed an open test with his beard coloration on the other

**FIGURE 1** Results of the dyes patch tests

arm and tested the European baseline series (Chemotechnique Diagnostics, Vellinge, Sweden) on his back using 2-day exposure time. The patient tolerated the dye series for only 8 h. Readings on day (D) 2 revealed ++ reactions to his beard coloration, *p*- and *m*-aminophenol, and toluene-2,5-diamine and a bullous reaction to PPD and textile dye mix of the baseline series (Figure 1).

DISCUSSION

We report a case of allergic contact dermatitis (ACD) of the beard region induced by a dye, which has been reported only once, in a series of 30 Arabic men.¹ Concentrations of PPD and aromatic amine-based dyes are restricted in hair dyes and forbidden in eyelashes and eyebrow coloration products by European legislation, but there is no legislation concerning coloration for beards, perhaps because of the paucity of reported cases.²

PPD is a strong allergen that may cause severe clinical reactions. The issue of active sensitization by patch testing is discussed controversially, with some countries not including PPD 1% pet. in their baseline series or reducing the 1% recommended concentration, albeit with a risk of missing allergies.^{3,4} The diagnostic workup of ACD to coloring cosmetics requires a series of dyes including PPD and other aromatic amine-based dyes for diagnosis and alternative proposals, but frequent cross-sensitization results in multiple positive patch test reactions.⁵ About half of sensitized patients and nearly 66% of highly sensitized patients have positive test results after a 1-h application.^{6,7} A shorter contact time for PPD and textile dye mix, as used with the dye series, would probably have been sufficient for diagnosis while avoiding the bullous reactions observed. This encourages to minimize, as previously suggested, the contact time to one hour or “until first symptoms” for all the patch tests with dyes when a dye-related ACD is strongly suspected.⁷

CONFLICT OF INTEREST

None to declare.

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