Contact allergy to hair dyes (P-Phenylenediame): a preliminary report
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Introduction
Hair dye is a popular cosmetic product nowadays. Many strong and extreme sensitizing chemicals, such as para-phenylenediamine (PPD), toluene-2,5-diamine (TDA) and other aromatic amines or cross-reacting substances, are ingredients in hair dye products. The objective is to study the clinical patterns and PPD contact sensitivity in patients with hair-dye dermatitis.

Methods
Ninety five (M:F 56:39) consecutive patients aged between 18 and 70 years suspected to have contact allergy from hair dye were studied by patch testing standard patch test series including p-phenylenediamine (PPD, 1.0% pet).

Results
75 seventy-six (M:F 39:36) patients showed positive patch tests from PPD. Twenty one of these patients also showed positive patch test reaction from fragrance mix, thiuram mix, paraben mix, or colophony. Fifty-six (74%) patients affected were aged older than 40 years. The duration of dermatitis varied from < 1 month to > 1 year with exacerbation following hair coloring. Fifty three (70%) patients had dermatitis of scalp and/or scalp margins and 22 patients (30%) had face and neck dermatitis. Periorbital dermatitis, chronic actinic dermatitis, and erythema multiforme-like lesions were seen in 6, 3, and 2 patients, respectively.

Conclusion
Hair dyes and PPD constitute a significant cause of contact dermatitis. There is an urgent need for creating consumer awareness regarding hair-dyes contact sensitivity and the significance of performing sensitivity testing prior to actual use.