

Sir,
Severe allergic blepharoconjunctivitis after eyelash colouring

2-chloro-p-phenylenediamine sulphate (chloro-PPD) is used for semi-permanent colouring of the eyelashes and the eyebrows. Although chloro-PPD has been reported earlier to cause allergic contact dermatitis, but blepharoconjunctivitis is very rare and only one case has so far been reported in literature.^{1,2} This may be due to either rarity of allergic reaction or due to underreporting.

Case report

A 30-year-old Caucasian male presented with swollen eyelids, watering, itchiness, and redness in both eyes for 1 day. He had eyelash colouring (black) 2 days earlier by a hairdresser for the first time and developed these symptoms a day later. The visual acuity was 6/6 in both eyes. The lids were inflamed with severe conjunctival hyperaemia, chemosis with papillary reactive changes and whitish ropy, and mucus discharge (Figures 1a and b). The patient gave no history of earlier atopy or contact dermatitis. He was managed with a short course of oral prednisolone (30 mg) for 5 days and G-chloramphenicol for 1 week. After 1 week, there was complete resolution of lid swelling, conjunctival hyperaemia, and chemosis.

Comments

We believe that the acute ocular surface inflammation in this patient was because of exposure to chloro-PPD dye and its contact with the periocular skin and conjunctiva. The underlying mechanism is likely to be allergic contact dermatitis and conjunctivitis. The patient had positive patch test to chloro-PPD. It is unlikely to be irritant reaction because of chloro-PPD or other ingredients as the patient was asymptomatic after colouring and developed the reaction only after 24 h. The patient had the reaction on first exposure and did not recall any earlier exposure to similar compounds. On account of the severe involvement of the lids, surrounding skin, and conjunctiva we elected to treat the patient with oral prednisolone, which led to speedy recovery.

This report highlights the hypersensitivity reaction to hair dye cream and it reemphasizes extra caution in using hair colour products while applying over eyelashes and eyebrows. A short course of oral steroids can provide quick rehabilitation.

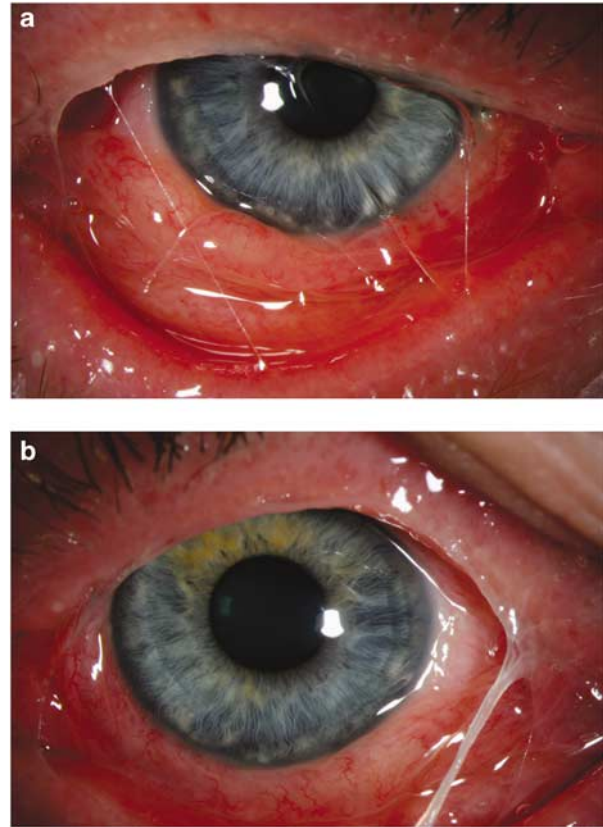


Figure 1 (a) and (b) Anterior segment photographs of right and left eye showing lid swelling, conjunctival chemosis, and congestion with ropy discharge.

References

- 1 Hansson C, Thorneby-Andersson K. Allergic contact dermatitis from 2-chloro-p phenylenediamine in a cream dye for eyelashes and eyebrows. *Contact Dermatitis* 2001; **45**: 235–236.
- 2 Kaiserman I. Severe allergic blepharoconjunctivitis induced by a dye for eyelashes and eyebrows. *Ocul Immunol Inflamm* 2003; **11**: 149–151.

MA Awan, D Lockington and K Ramaesh
Tennent Institute of Ophthalmology, Gartnavel
General Hospital, Glasgow, Scotland
E-mail: dramer_awan@yahoo.co.uk

None of authors has a financial or proprietary interest in any material or method used

Eye advance online publication, 20 March 2009;
doi:10.1038/eye.2009.50