

Short Communications

Allergic contact dermatitis from colour developers used in automated photographic processing

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Almost fully automated developing and printing processes in photographic laboratories have considerably reduced both irritant and allergic risks due to photographic chemicals (1–6).

Case Report

A 30-year-old woman, working for 13 years in a small photographic laboratory equipped with entirely automated developing and printing procedures, presented with recurrent dermatitis, dating back 2 months. This was mostly on her face, particularly the periocular areas; the arms were only slightly affected, while the hands were spared. Symptoms cleared with topical corticosteroids and a break from her job, but whenever she returned to work, they reappeared within 2 days.

There had been no significant change either in the technological procedure or in the chemical products used in the laboratory during the 13-year period. The patient's main duty was to operate the paper-printing machine, and she would occasionally go, for a short time only, to the dark room where the paper was developed. There, she would hang the reels, later removing the dry spools outside the dark room. She did not use gloves, since direct skin contact with developers was not supposed to occur. Patch tests with the European standard series were negative, including PPD, while a photographic chemical series (Bracco, Italy) proved positive for colour developers CD2, CD3 and CD4 after 2 days (++). Patch testing with some of the substances used at work gave positive reactions to the film developer CD3 1% pet. (+) and the paper developer CD4 1% pet. (++) after 2 days.

Since the patient has avoided any paper developing, her activity being restricted to the operation of the printer, any sign of dermatitis has disappeared. Furthermore, following this case, the photographic laboratory

has improved its ventilation and air-conditioning system.

Discussion

Our case report is of interest concerning the following points.

(i) Full automation of colour processing has neither entirely ensured protection against sensitization, nor consequential symptoms in subjects not in direct contact with chemicals, because of their volatility;

(ii) Symptoms appeared following exposure times longer than those previously reported: e.g., a few months only (2);

(iii) Dermatitis was mainly restricted to the face, demonstrating airborne contact;

(iv) Conditions were less critical than previously reported cases, no evidence of lichenoid eruption was noted and the disease cleared up easily with simple precautions; there was no need to leave the job;

(v) Absence of cross-sensitivity to PPD (4).

References

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