

‘Poppers’ dermatitis

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Various dermatoses are more common in certain populations, such as men who have sex with men (MSM). We report two cases of toxic contact dermatitis to ‘poppers’.

Patient 1 was a 42-year-old man (MSM), who presented with a lesion on his thigh, which had reportedly appeared ‘overnight’. He reported no other symptoms apart from a burning and stinging feeling in

this area. He recalled having stored a broken vial that had contained ‘poppers’ in the pocket of his jeans on the previous night. On physical examination, a single vesicular erythematous plaque was seen on the patient’s right thigh (Fig. 1a).

Patient 2, a 56-year-old man (MSM, human immunodeficiency virus-positive), presented a few weeks later with a lesion on his ankle. This patient had used

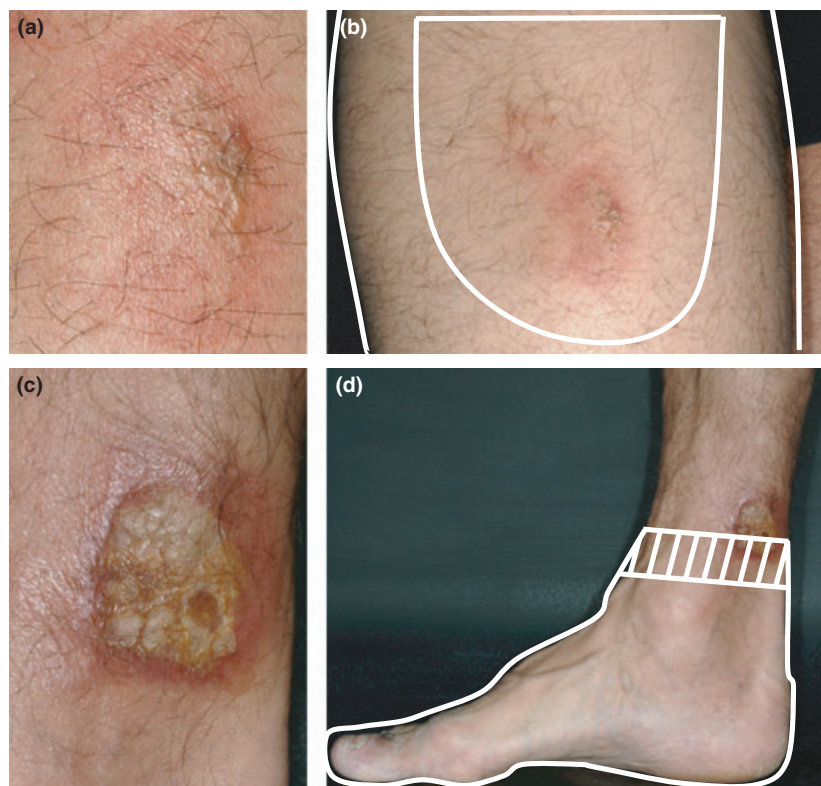


Figure 1 Contact dermatitis on (a,b) the right thigh of patient 1, and (c,d) above the inner ankle of patient 2. Both lesions were caused by ‘poppers’.

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'poppers' while attending a 'naked party' and because of the lack of pockets, he had stored the vial in the cuff of his sock. On physical examination, an ulcerated lesion with an erythematous margin was seen above the patient's inner ankle (Fig. 1b). No further skin lesions were seen.

'Poppers' is a slang term for various volatile alkyl nitrites which are inhaled for recreational purposes. Originally sold in small glass vials, these drugs received the name 'poppers' as a result of the popping sound that was generated when the vials were crushed. Initially, these drugs were used in the treatment of angina pectoris until more potent substances were available. Alkyl nitrites relax smooth muscles, including those of vessels and the anal and vaginal sphincters. Other effects include euphoria and sexual arousal.^{1,2} As 'poppers' are outlawed in many countries, they are often marketed online under concealing labels such as 'video-head cleaner', 'polish remover' or 'air freshener'.

Adverse effects of 'poppers' include nausea, hypotension and headaches. A recent study found 'poppers' to be the third least harmful of 20 popular recreational drugs;³ however, serious side-effects such as cardiac arrhythmia or permanent eye damage have been reported.⁴

Direct skin contact causes irritant dermatitis, which usually resolves without scarring.^{5,6} As the volatile alkyl nitrite vapours are inhaled, irritant dermatitis caused by 'poppers' is mostly reported in the face or upper thoracic region.⁶ Reports on 'poppers'-induced irritant dermatitis in other areas of the skin are rare. In

addition, reports on true contact allergic reactions to nitrites or 'poppers' preparations are rare.⁷ Nevertheless, both contact allergic and toxic contact dermatitis could have been present in our two patients; unfortunately, neither was available for further testing.

In conclusion, we report two cases of 'poppers'-induced dermatitis. These highlight the importance of thorough history-taking, which eventually pinpointed the causative agent in two patients with contact dermatitis in unusual locations.

References

- 1 Israelstam S, Lambert S, Oki G. Poppers: a new recreational drug craze. *Can Psychiatr Assoc J* 1978; **23**: 493–5.
- 2 Benotsch EG, Koester S, Luckman D *et al.* Non-medical use of prescription drugs and sexual risk behavior in young adults. *Addict Behav* 2011; **36**: 152–5.
- 3 Nutt D, King LA, Saulsbury W, Blakemore C. Development of a rational scale to assess the harm of drugs of potential misuse. *Lancet* 2007; **369**: 1047–53.
- 4 Vignal-Clermont C, Audo I, Sahel JA, Paques M. Poppers-associated retinal toxicity. *N Engl J Med* 2010; **363**: 1583–5.
- 5 Fisher AA. 'Poppers' or 'snappers' dermatitis in homosexual men. *Cutis* 1984; **34**: 118–22.
- 6 Foroozan M, Studer M, Splingard B *et al.* [Facial dermatitis due to inhalation of poppers] (in French). *Ann Dermatol Venereol* 2009; **136**: 298–9.
- 7 Bos JD, Jansen FC, Timmer JG. Allergic contact dermatitis to amyl nitrite ('poppers'). *Contact Dermatitis* 1985; **12**: 109.