

Sir,
'Poppers maculopathy'—an emerging ophthalmic reaction to recreational substance abuse

'Poppers' (alkyl nitrite class of compounds) are inhaled for recreational purposes and may provide a brief rush of euphoria and sexual arousal. In the United Kingdom, poppers are legal to purchase but illegal to sell for human consumption. Poppers are widely used in the gay and 'nightclubbing' communities. They are regarded as low health risk. In 2008 (due to legislative changes), the most commonly used poppers compound changed from isobutyl nitrite to isopropyl nitrite.¹ We report a patient who developed maculopathy following isopropyl nitrite inhalation.

Case report

A 53-year-old HIV-negative gay male reported blurred vision in both eyes for 18 months. The patient admitted to regular use (at least daily) of isopropyl nitrite poppers (brand 'Liquid Gold') for the previous 18 months. He did not smoke, had low alcohol intake, and denied any other substance abuse. He had no significant past medical, ophthalmic or family history. Best-corrected visual acuity was 6/18 OU, 6/9 with pinhole. Optometric report stated 6/5 OU 2 years earlier. Central visual field testing was normal (Humphrey 10–2). Mild central distortion was reported on Amsler grid testing. Colour vision; 16/17 Ishihara plates correctly seen each eye, and slight tritan defect on Farnsworth D-15 test. Bilateral discrete vitelliform foveal lesions were present. Spectral domain optical coherence tomography revealed disruption of the photoreceptor inner segment/outer segment junction confined to the area below the foveal pit in both eyes (Figure 1). No other retinal abnormalities were found. Fundus fluorescein angiography was unremarkable.

Comment

This is the first UK report of 'poppers maculopathy'. Our case resembles the clinical description in recent

reports from France among patients inhaling poppers.^{2,3} Recent changes to poppers compounds in use may be responsible for the recent recognition of this maculopathy despite decades of popular poppers use. It is possible that failure to enquire about recreational substance inhalation in patients with maculopathy may have led to this condition being missed. Ophthalmologists should ask patients with unexplained foveal yellow spots or outer lamellar macular changes on OCT imaging about inhalation of poppers.⁴ Surveillance for this matter in the United Kingdom may be of merit.

Conflict of interest

The authors declare no conflict of interest.

References

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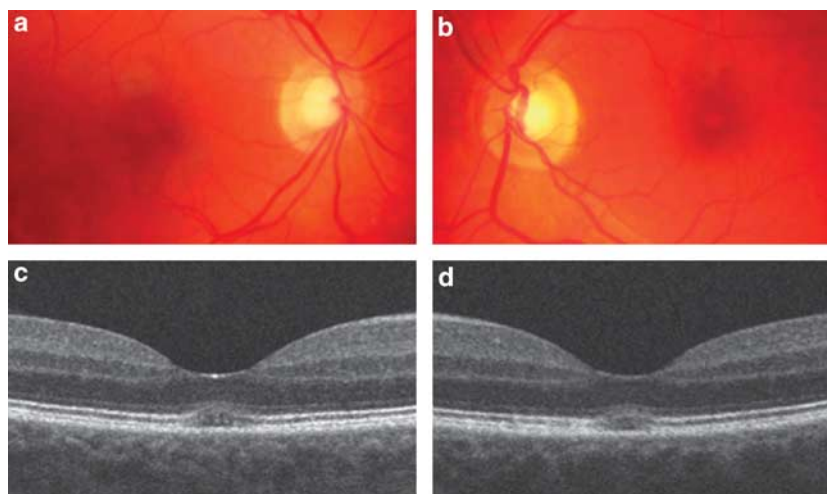


Figure 1 (a, b) Fundus photography (oculus dexter, OD and oculus sinister, OS) showing discrete vitelliform (yellow) lesions at both fovea. (c, d) Spectral domain optical coherence tomography (SD-OCT) scan (OD and OS) showing disruption of the inner segment/outer segment photoreceptor junction at both fovea.