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E Pringle¹, S Chen², A Rubinstein³, CK Patel³ and S Downes³

¹Department of Ophthalmology, Mayday University Hospital, UK

²The Eye Institute, Sydney, Australia

³Department of Ophthalmology, Oxford Radcliffe NHS Trust, UK

E-mail: edwardpringle@doctors.org.uk

Eye (2009) **23**, 1242–1243; doi:10.1038/eye.2008.156; published online 6 June 2008

Sir,
Spontaneous hyphaema following Valsalva-like manoeuvre

Valsalva manoeuvre can lead to various ocular manifestations. We report a case who presented with spontaneous hyphaema.

Case report

A 32-year-old woman presented to the casualty with a history of sudden onset clouding of vision. Just before this, she had taken a deep inhalation of salbutamol and held her breath as she rushed to a meeting. Examination revealed vision of 6/9 OD and 6/6 OS, hyphaema (Figure 1) and bleeding from pupillary margin in the right eye. The IOP was 30 mmHg OD and 16 mmHg OS, and the fundi were normal. Her full blood count, electrolytes, liver function tests, and clotting profile were normal. The hyphaema and the ocular hypertension resolved with a short course of g.cyclopentolate 1% tds and g.dorzolamide 2% tds. Thorough examination did not reveal any rubeosis, iris tufts, or neovascularisation of the angle. The patient refused a fluorescein angiogram of the iris after discussion of the risks and benefits.

Comment

Spontaneous hyphaema is known to occur in the presence of vascular iris tufts, rubeosis, chronic uveitis, uveal melanomas, retinoblastoma, juvenile xanthogranuloma, leukaemia, and immune thrombocytopenia.¹ In our patient, no other ocular pathology was seen and her blood test results were normal. Iris fluorescein angiography would have shown any occult vascular tufts but she refused this investigation.

The Valsalva manoeuvre comprises a forcible exhalation against a closed glottis, causing a sudden increase in the abdominal and intrathoracic pressures, elevating the venous pressure of the head and neck, which in turn can cause a rapid rise in intraocular venous

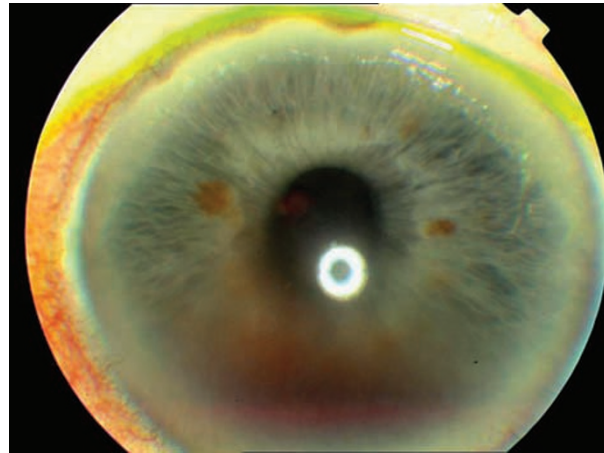


Figure 1 Anterior segment photo of right eye showing hyphaema.

pressure. A Valsalva manoeuvre can cause reduced vision from retinal haemorrhages, with a predilection for preretinal macular location, retinal vein occlusion,² ciliochoroidal detachments,³ bleeding in the sheaths of the optic nerve,⁴ and angle closure glaucoma.⁵ Our patient's action of deep inhalation and breath holding and rushing amounts to Valsalva manoeuvre. In the absence of any comorbidity, the temporal association makes Valsalva manoeuvre the most likely cause of hyphaema in this patient. To our knowledge, Valsalva-associated hyphaema has not been reported before.

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V Sharma and M Vishwanath

Department of Ophthalmology, Manchester Royal Eye Hospital, Manchester, UK
 E-mail: vinod1042@yahoo.co.uk

Eye (2009) **23**, 1243; doi:10.1038/eye.2008.150; published online 6 June 2008