Yoga in the form of breathing exercises: a bane for some

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DESCRIPTION
A 28-year-old man presented with painless defective vision in the left eye of 4-day duration. He gave a history of performing yoga in the form of breathing exercises prior to this. There were no other ocular/systemic problems. On examination, vision in the right eye was 6/6. Anterior segment/fundus was normal. His vision in the left eye was 2/60, not improving with pinhole. The anterior segment was normal. Fundus examination revealed a large subhyaloid haemorrhage involving the macula (figure 1). His systemic examination was normal. Blood pressure, full blood count, coagulation profile and blood sugars were normal. A diagnosis of valsalva retinopathy was made. The patient was subjected to argon green laser hyaloidotomy, with power 200 mw; spot size 50; duration 200 ms. There was rapid resolution of a premacular, subhyaloid haemorrhage with restoration of visual function (figures 2–5). Valsalva retinopathy develops when a rise in intrathoracic, abdominal pressure is transmitted to the eye that causes a sudden increase in the intraocular venous pressure, ruptures the superficial retinal capillaries.1 A subhyaloid/preretinal haemorrhage is a collection of blood between the internal limiting membrane of the retina and the posterior hyaloid phase. It often occurs in healthy young adults as a result of heavy lifting, straining, vomiting, pregnancy and bleeding disorders. Cases

Figure 1 Fundus picture of the left eye showing large premacular subhyaloid haemorrhage.

Figure 2 Fundus picture showing drainage of blood into the vitreous immediately following YAG laser hyaloidotomy.

Figure 3 Fundus picture taken 45 min after laser hyaloidotomy.

Figure 4 Fundus picture taken 24 h after laser hyaloidotomy.
following yoga have not been reported so far. Haemorrhage in
the macula normally resolves over a period of 3 months. When
dislodged with the help of laser, it gets absorbed faster than
when left alone. Possible complications of YAG laser hyaloidot-
omy include inadvertent damage to the macula, epiretinal mem-
brane formation, internal limiting membrane wrinkling, macular
hole formation and retinal detachment.

**Learning points**

- Valsalva retinopathy is a unilateral or bilateral condition that
  occurs when increased intrathoracic or intra-abdominal pressure
  transmitted to the eye following coughing and straining. Cases
  following yoga therapy have not been reported frequently.
- Some patients may develop a poor visual outcome due to
  the presumed toxic effects of blood on the retinal pigment
  epithelium and/or epiretinal membrane formation.
- Nd:YAG laser hyaloidotomy is a safe and effective
  procedure. It achieves rapid resolution of premacular
  subhyaloid haemorrhage with restoration of visual function,
  preventing the need for vitreoretinal surgery.

**Contributors**

AH was involved in acquiring the data and analysis. SRJG was
involved in drafting, formatting and editing the data. Both were involved in the final
approval of the manuscript.

**Competing interests**

None.

**Patient consent**

Obtained.

**Provenance and peer review**

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