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Sir, Recurrent iris prolapse after laser goniopuncture in an open-angle glaucoma patient treated with non-penetrating trabecular surgery

Laser goniopuncture on the trabeculo-Descemet's membrane may be required to treat a late rise in pressure when non-penetrating trabecular surgery (NPTS) begins to fail.^{1,2} Herein we report a case of recurrent iris prolapse after laser goniopuncture and prophylactic peripheral iridotomy in a patient treated with NPTS.

Case report

A 22-year-old man received uneventful NPTS with reticulated hyaluronic acid implant (SK-GEL) in his left eye for open-angle glaucoma secondary to angle recession. Seven months later, laser goniopuncture was performed due to uncontrolled IOP, which was almost around 30 mm Hg. Twenty days after laser therapy, he complained of blurred vision and de-centred pupil in the operated eye. On biomicroscopy the pupil was found to be pear-shaped and de-centred superiorly. The transparent triangular SK-GEL implant was observed in the inferior anterior chamber. The IOP was 43 mm Hg. Gonioscopy showed that the superior iris root had prolapsed into the intrascleral chamber through the goniopuncture site. Goniosynechialysis was carried out to reposition the iris root through peripheral corneal incision, but the SK-GEL was left in this phakic eye. To prevent reoccurrence of iris prolapse, laser peripheral iridotomy (LPI) was performed at peripheral iris of 12 o'clock.3

The follow-up visits were unremarkable until 1 year postoperatively he complained again of a de-centred pupil in his left eye. On examination, the pupil was pear-shaped and de-centred superiorly, just like the first episode. The IOP OS was 16 mmHg. Gonioscopy revealed that the superior iris root wedged into the laser hole again (Figures 1a–c). Ultrasound biomicroscopy showed that majority of the superior iris prolapsed into the intrascleral chamber (Figure 1d).

Surgical iridectomy was performed after goniosynechialysis through a peripheral corneal incision, in which the superior peripheral iris behind the laser hole was excised and the SK-GEL was removed from AC. The pupil re-centred after the surgery. During the next 3 years of follow-up, the iris prolapse did not recur.

Comment

Theoretically, prophylactic LPI reduces oscillation amplitude of the iris by balancing the pressure between the anterior and posterior chamber. In this patient, however, iris prolapse recurred after prophylactic LPI, which would have eliminated pupil block as a cause of iris prolapse. Therefore, it is likely that the iris remigrated into the sclerotomy site in an attempt to seal the outflow of aqueous fluid. This mechanism is seen after surgery and in perforating injuries when the iris adheres to any defect in the wall of the eye. To prevent iris prolapse, a wide trabeculo-Decemet's window and small anterior goniopunctures may be beneficial, while LPI is sometimes insufficient, as shown in this unusual case.²

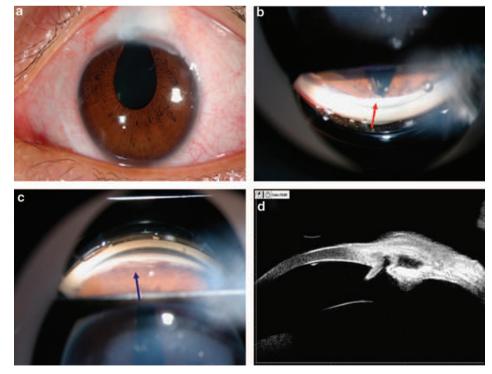


Figure 1 (a) Biomicroscopic view of the left eye: the pupil was pear-shaped and de-centred superiorly. (b) Gonioscopy revealed that the superior iris root prolapsed into the laser hole of the Descement's membrane (red arrow). (c) The SK-GEL lay in the inferior AC (blue arrow) on gonioscopy. (d) Ultrasound biomicroscopy showed that majority of the superior iris prolapsed into the intrascleral chamber.

Conflict of interest

The authors declare no conflict of interest.

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Sir,

British and Eire Association of Vitreoretinal Surgeons (BEAVRS)-based survey on venous thromboembolism (VTE) prophylaxis in vitreoretinal (VR) surgery

Venous thromboembolism (VTE) is an important cause of death in hospital patients. The House of Commons Health Committee¹ reported that around 25000 people die from preventable hospital-acquired VTE every year. A UK survey suggested that 71% of patients at risk of developing deep vein thrombosis (DVT) did not receive any form of VTE prophylaxis.² Recent NICE guidance³ did not specifically address ophthalmology patients, but advised to not routinely offer VTE prophylaxis to patients having surgery under local anaesthesia (LA) without limitation of mobility. Although this could include most cataract patients, VR patients due to prolonged operating time/posturing offer a dilemma.

We conducted an electronic survey of BEAVRS over 2 months (June/July 2010). Twenty-four responses were received (response rate 15%, 22 consultants, 1 VR Fellow, 1 trainee with VR interest). A majority of the respondents felt that intra-operative use of VTE prophylaxis was important in high-risk patients (30% for cases under LA and 56% for those under a general anaesthetic (GA)). None felt that post-operative VTE prophylaxis should be used routinely in all patients who are posturing, with 60% advocating use only in high-risk patients based on NICE guidance. To reduce VTE risk, 57% were advised frequent leg exercise while immobile, 44% good hydration, and 91% a 10-min mobilising break every hour. In all, 17% had, on occasion, sent patients home with anti-embolic stockings, but none had arranged for monitoring of complications; 75% did not have specific departmental guidelines, while 8% did not know if any existed; 33% stated that there were routine checks for indications/contra-indications to anti-embolic stockings in pre-assessment clinics, while 21% did not know; 26% of the respondents' VR procedures were under GA.

Although a longer running survey might have yielded a higher response rate, we felt that time limiting it would indicate the VR community's interest. Guidance which has become available from RCOphth⁴ states that VTE risk assessment should be undertaken on any patient over the age of 60 undergoing a procedure under GA. This will also be required for long procedures under LA, where the patient is required to lie still for the duration of the procedure (eg, major VR procedures). All VR patients will thus need VTE risk assessment. As there are no national exemption criteria, all exemptions will have to be negotiated locally by the VR surgeon and approved by the Trust Medical Director/Strategic Health Authority Medical Director.

Conflict of interest

The authors declare no conflict of interest.

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