Sir,

**Spontaneous hyphaema and intra-bleb subconjunctival haemorrhage in a patient with previous trabeculectomy**

I present a patient on aspirin prophylaxis that developed an atraumatic subconjunctival bleb haemorrhage with a resultant hyphaema. To our knowledge, this is a first report of such a cause for hyphaema.

### *Case report*

A 63-year-old gentleman presented with a sudden painless loss of vision for 5 days duration. In his past ocular history, he had left ametropic amblyopia, left Fuchs' heterochromic cyclitis (FHC) complicated with secondary open-angle glaucomatous optic neuropathy and presenile cataract. He had a failed trabeculectomy in 1987, followed by a successful combined phaco-trabeculectomy with mitomycin-C in 1997.

In his medical history, he was a Type 2 diabetic on insulin since 1997; controlled essential hypertension; and suffered a myocardial infarction in 1999. He was controlled on antihypertensive agents, simvastatin, and aspirin 150 mg.

He presented to the eye casualty 5 days after he became symptomatic; the visual acuity of RE 6/4 and LE perception of light. On examination, there was a subconjunctival intrableb haemorrhage with inferior tracking (Figure 1a) and a 2.5 mm hyphaema (Figure 1b). Siedel's test was negative. The intraocular pressures were RE 16 mmHg and LE 12 mmHg. Fundoscopy was normal in the right eye; however the left fundus was indistinct due to the hyphaema. There was an old left relative afferent defect as a result of the left glaucomatous optic neuropathy. He was started on prednisolone 0.5% and cyclopentolate 1%, both three times daily to the left eye and was followed weekly thereafter.

On his fourth visit, the visual acuity and intraocular pressures had returned to baseline, that is, RE 6/4 and LE 6/18; RE 16 mmHg and LE 8 mmHg. The hyphaema had resolved and the bleb haemorrhage was clearing. His anterior segment examination with gonioscopy was normal; dilated funduscopy showed no neovascularisation or background diabetic retinopathy. Neither his bleb nor intraocular pressure was compromised following presentation.

### Comment

Subconjunctival haemorrhages are common but usually inconsequential causes of a red eye. Patients on antiplatelet or anticoagulation therapy are prone to an increased incidence and severity of these haemorrhages be it a spontaneous or a traumatic event as described by Carter *et al*.[1] The specific interest in our patient was that the subconjunctival haemorrhage was in context of previous filtration surgery, that is, an intrableb haemorrhage. Additionally, intrableb haemorrhage in association with spontaneous hyphaema rarely occurs simultaneously. To the authors' knowledge, this is the first description of a cause of hyphaema in the context of FHC, intrableb haemorrhage and antiplatelet therapy.

Treatment options for postoperative hypotony include autologous blood injection into the bleb. The authors demonstrate hyphaema as a recognised complication in this technique, which clearly demonstrates bidirectional flow across the scleral flap.[2,3] It would appear that our patient had retrograde flow as a result of the intrableb haemorrhage resulting in a clinically significant hyphaema. The prolonged bleeding time could well have been a contributing factor. Noda and Hayasaka[4] reported two cases of FHC associated with recurrent spontaneous

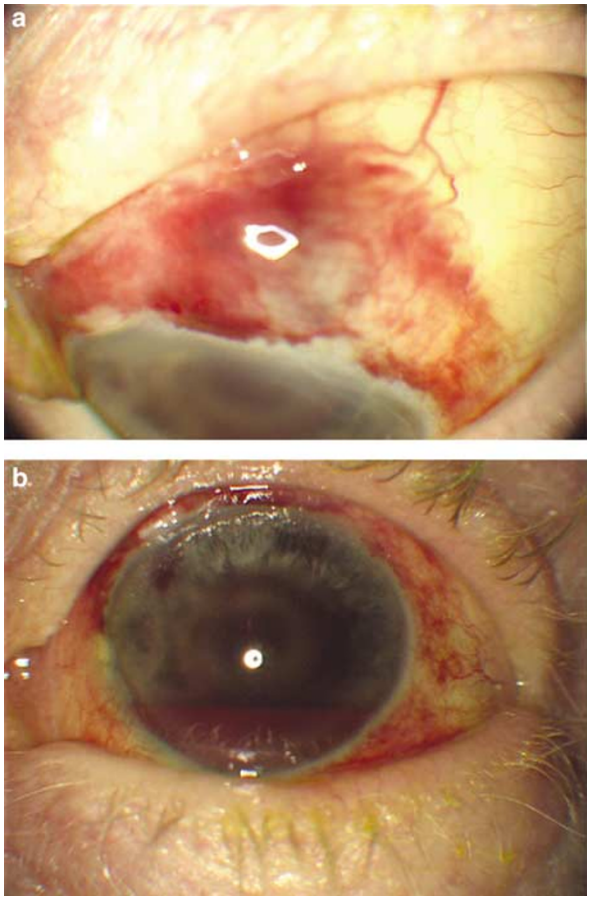


**Figure 1** (a, b) Intrableb haemorrhage and associated hyphaema in Fuchs' heterochromic cyclitis.

subconjunctival haemorrhages; however, the exact relationship was unclear. The specific concerns regarding resolution of this usually inconsequential event were pressure spikes and/or an associated dysfunctional bleb. Fortunately, neither complication occurred while the patient was being monitored.

FHC has a well-recognised association with hyphaema first described by Amsler.[5] Bloch *et al*[6] attempted to quantify Amlser's sign and found 60% FHC developed a hyphaema after parecentesis. Additionally, hyphaema can occur in these patients following minor trauma such as gonioscopy, applanation tonometry, and myadrasis.[7] Spontaneous hyphaema has been described; Liesegang reported 6.8% and Jones' 4% rates in FHC.[8,9] Given the association of FHC and hyphaema, it is plausible for the patient to have had a spontaneous hyphaema which tracked back into the bleb. However, this seems unlikely given the severity and simultaneous appearance of both the bleb haemorrhage and hyphaema.

Whatever the mechanism, spontaneity remains speculative as we cannot quantify the relationship between minor trauma (rubbing/wiping the eye), FHC and hyphaema, and in this case intrableb haemorrhage with antiplatelet therapy. The authors agree that it may in fact be a combination of all of the above.

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Sir,

## Suprachoroidal silicone oil: recognition and possible mechanisms

Silicone oil (SO) was first used in the early 1960s by Cibis *et al*[1] and its use as a surgical tool since has increased surgical success rates. Suprachoroidal SO is a recognised complication of surgery.[2] We report two cases with suprachoroidal SO noted postoperatively following uneventful retinal reattachment surgery.

### Case reports

#### *Case 1*

A 78-year-old myopic man presented with a superotemporal rhegmatogenous retinal detachment (RD) in his left eye. Visual acuities were 6/18 in the right eye and 6/9 in the left. The patient underwent pars plana vitrectomy (PPV), fluid–gas exchange using 20% sulphur hexafluoride and cryotherapy to the retinal break. The postoperative course was complicated by inferior RD and proliferative vitreoretinopathy (PVR), which were managed by PPV, membrane peel, and SO/air exchange.

At 10 days postoperatively, a localised choroidal elevation was noted inferotemporally. Anterior segment examination and intraocular pressures were normal and the retina was attached. An ultrasound scan (Figure 1a) showed that the elevated lesion had similar echogenicity to the SO in the vitreous cavity. After 3 months, the patient underwent 360° prophylactic laser, cataract extraction, and removal of SO. A repeat B scan (Figure 1b) showed a 'staphylomatous' profile in the corresponding area of choroidal elevation (Figure 2a). This artefact demonstrates the aqueous/SO interface as the velocity of ultrasound drops from approximately 1480 m/s in aqueous to 986 m/s in SO.[2]

#### *Case 2*

A 34-year-old man presented following blunt trauma to his right eye. He had undergone a penetrating keratoplasty in this eye 2 years previously for keratoconus. Visual acuities were hand movements (HM)