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Sir,

Exudative retinal detachment following deep sclerectomy in Sturge–Weber syndrome

Trabeculectomy for Sturge–Weber (SW) syndrome is associated with a risk of choroidal effusions and haemorrhage.[1] To minimise these complications, a two-staged Baervedlt implant combined with prophylactic posterior sclerotomies[2] has been suggested. Deep sclerectomy (DS) has been reported as a successful treatment modality in one case of glaucoma associated with SW syndrome.[3] We present two patients with SW syndrome and glaucoma who underwent non-penetrating DS with mitomycin-C (MMC) augmentation by an experienced surgeon (NA) and were complicated with exudative retinal detachments (RD).

Case report 1

A 17-year-old male with SW syndrome, diffuse choroidal haemangioma, and intraocular pressures (IOP) in the 40 mm Hg range on maximal treatment, including oral acetazolamide, underwent DS and intraoperative MMC application. The anterior chamber (AC) was noticed to shallow as soon as the Schlemm's canal was de-roofed. Attempts to deepen the AC by injecting air and balanced salt solution through a paracentesis were unsuccessful. Two inferior V-shaped sclerotomies beginning 7 mm from the limbus were performed in the inferior quadrants and a moderate amount of straw-coloured fluid was drained. The AC deepened and a large air bubble was left to prevent contact between the iris and the trabeculo-descemet's membrane (TDM). The next day, the IOP was 34 mm Hg and a superior exudative RD involving the macula was observed even though no RD had been found on screening intraoperatively. Three days later, the detachment had resolved (the patient had been prescribed oral prednisolone 30 mg daily) and the visual acuity improved to 6/12 unaided (preoperatively 6/5). IOP remained high as the TDM was completely obstructed by iris tissue. A trabeculectomy with adjunctive MMC was performed 3 months later with prophylactic choroidotomies. Once again the eye developed a superior exudative RD. This resolved after photodynamic laser therapy (PDT) of the choroidal feeder vessels. On the last visit, the IOP was 18 mm Hg, but the visual acuity was 6/36 due to sub-retinal pigment deposition under the fovea following PDT (Figure 1).

Case report 2

DS with intraoperative MMC was performed on a 24-year-old male with SW syndrome and two previous failed trabeculectomies. The preoperative visual acuity was 6/12 and IOP was 29 mm Hg on Timolol and dorzolamide combination (Cosopt) eye drops. Three days later, a circumferential exudative RD was confirmed by our vitreo-retinal surgeon, who observed anterior proliferative vitreoretinopathy and early funnelling. B scan showed no choroidal detachment and total RD. Phacoemulsification and internal repair of RD was performed. No retinal break was found. Silicone oil was left for internal tamponade. Six months later, the silicone oil was removed and repeat trabeculectomy with intraoperative MMC was performed. Postoperatively he developed a posterior RD, which did not extend peripherally. It resolved spontaneously within a month. Final VA was 6/12. The trabeculectomy failed shortly after and the IOP was 22 mm Hg on maximal topical medical therapy on last follow-up.

Comment

Rebolleda *et al*[3] proposed 'non-perforation' of the AC in DS as a potential advantage over trabeculectomy as there

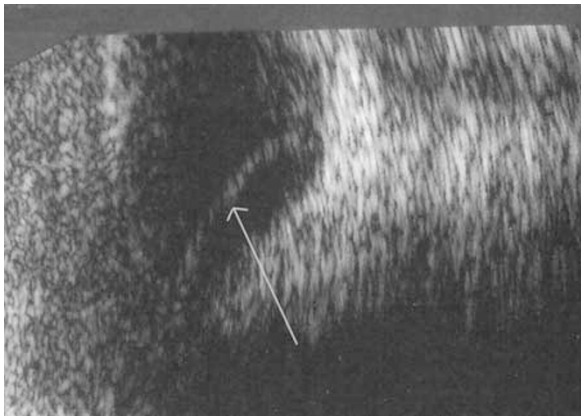

Figure 1 Low-frequency B scan ultrasonographic appearance of patient 1 showing an exudative retinal detachment (white arrow).

is no sudden decompression of the globe but failed to mention whether their patient had an associated choroidal haemangioma. The debate on the need for posterior sclerotomy at the time of filtering surgery remains unresolved[4] although pre-operative screening for choroidal haemangiomas in SW syndrome has been advocated.[5]

We are unaware of previous reports of exudative RD as a complication of DS in SW syndrome and could not find reference to it in a computerised search utilising MEDLINE. Although further experience is required before making definitive judgements on the safety and efficacy of DS in patients with SW syndrome, our experience with these cases does not appear promising.

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Sir,

Aspergillus fumigatus keratitis after laser _in situ_ keratomileusis: a case report and review of post-LASIK fungal keratitis

Laser *in situ* keratomileusis (LASIK) is the most commonly performed refractive surgery procedure. Microbial keratitis after LASIK has become an increasingly recognized, sight-threatening complication of refractive surgery.[1] Predisposing factors include a history of corneal surgery, break in the epithelial barrier, excessive surgical manipulation, intraoperative contamination, delayed postoperative reepithelialization of the cornea, and use of topical steroids.[1–3]

Here, we describe a case of post-LASIK corneal infection with fungi, which finally resulted in enucleation.

Case report

A healthy 39-year-old man underwent uncomplicated bilateral simultaneous LASIK to correct mild myopic astigmatism on 4 February 2001. The right eye was operated on first, and the same set of instruments was used for the left eye. On the third post-operative day, an intensive course of topical steroids (prednisolone acetate 1% hourly) was started with a clinical diagnosis of diffuse lamellar keratitis (DLK) by his ophthalmologist. Over the next week, he complained of marked worsening of vision, redness, pain, photophobia, and tearing in the left eye. He was then referred to Cornea Service, Farabi Eye Hospital, Tehran, Iran, by his surgeon. At the time of referral, his visual acuity was 20/40 in the right eye and hand motion in the left eye. Slit-lamp examination of the right eye revealed blepharitis and white granular dots in the interface of the flap–stroma, which extended from the periphery of the flap to the pupillary border and was compatible with the diagnosis of DLK. In the left eye, the eyelids were oedematous, the conjunctiva was diffusely injected, and the LASIK flap was necrotic and loosely attached to the underlying stroma (Figure 1a). There was a 1.8-mm height hypopyon in the anterior chamber. Fundus examination was not possible in the left eye; however, B scan ultrasonography showed an echo-free vitreous cavity.