



Figure 1 Orbital computed tomography scan after the primary corneal wound closure and placing an encircling buckle: A splinter of 25 mm length is seen at the posterior pole sticking through the sclera. The location of the cerclage is seen as a dark black area perpendicular to the vitreous base.

hypotonic globe with a Y-shaped scleral rupture at the posterior pole remained. The size of the wound, 3 mm by 4 mm superotemporal to the optic nerve at the posterior pole, prevented suturing from outside or sufficient silicone oil endotamponade.

To avoid an enucleation of the globe, the scleral perforation had to be closed so that 5000 cst silicone oil would remain in the vitreous cavity. We decided to close the large scleral perforation from inside. After lowering the infusion pressure, incarcerated choroidal and retinal tissue was removed from the laceration site with the vitrectomy. A light pipe was introduced via a fourth sclerotomy and fixed with tape,⁴ thus freeing the surgeon's second hand for bimanual intraocular vitreo-retinal manoeuvres. A 10/0 nylon suture with an attached needle was introduced with an intraocular forceps via a sclerotomy into the vitreous cavity. A second intraocular forceps was used to hold scleral tissue, while the needle was passed through the rigid sclera from inside. The knots sealed the scleral wound and a waterproof closure was achieved, completing the vitrectomy. The posterior hyaloid was now engaged at the optic disc and progressively removed up to the vitreous base.

Remaining retina reattached after drainage of the subretinal liquid, endotamponade with silicone oil and endolaser at the edges of the

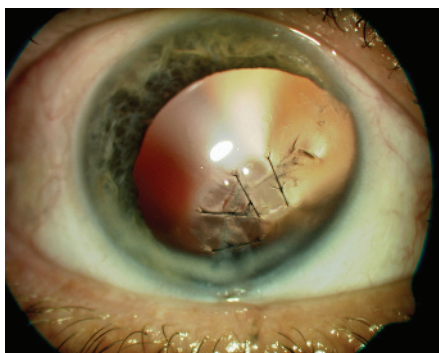


Figure 2 3 months after the initial trauma: The cornea presents a crescent-shaped wound in the infero-temporal quadrant.

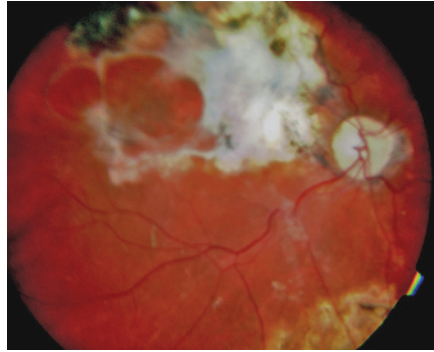


Figure 3 Postoperative finding 6 months after the initial trauma and following silicone oil removal. The globe had a normal shape, normal intraocular pressure and an attached peripheral retina.

retinectomy. The vitreous cutter evacuated subretinal haemorrhages as well as all incarcerated tissues and debris in a ring of 2 mm around the exit wound. This prophylactic 360-degree "chorioretinectomy", combined with three rows of deep endolaser retinopexy around the exit, may reduce the incidence of proliferative vitreoretinopathy significantly.³

Three months after the initial surgery, the cornea section showed an unremarkable peripheral scar (fig 2), the retina remained attached and the intraocular pressure (IOP) was 14 mm Hg, so that silicone oil was removed (fig 3). Visual acuity was limited to hand movements due to a large retinal defect at the posterior pole; however, the patient appreciated the regained peripheral visual field for orientation during 15 months' follow-up.

Comment

Eyes with double perforation are encountered through injuries. Individuals frequently become blind due to retinal detachment, hypotony, endophthalmitis or phthisis. The surgical goal is to maintain limited function and integrity of the globe. Although ocular hypotony secondary to scleral rupture of a choroidal coloboma is treatable by scleral silicone buckling,⁵ we sutured the sclera 'ab interno'.

It is known that the primary wound closure should be performed as early as possible. However, in complex ocular trauma, we prefer a staged approach with an immediate wound closure and a delayed comprehensive globe reconstruction. A delay may diminish the threat of intraoperative haemorrhage and increase the chance of a spontaneous posterior vitreous detachment (*Relja Zivojnovic*, personal communication).

'Ab interno' suturing is feasible for achieving a waterproof closure of large scleral perforation at the posterior pole, leaving an eye with good cosmetic appearance, normal IOP and maintained peripheral visual function.

Acknowledgements

This case was presented in parts at the annual Vitreous Society Meeting in New York, NY, USA, and achieved the First prize of the Video award 2004. This video may be seen at the BJO online video collection at <http://bjophthalmol.com/supplemental>.

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The supplemental video is available at <http://bjophthalmol.com/supplemental>

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Photodynamic therapy in non-subfoveal choroidal neovascularization secondary to pathological myopia: 1-year outcome

This prospective, open-label, non-comparative, interventional case series evaluates the results of photodynamic therapy (PDT) in juxtafoveal and extrafoveal choroidal neovascularization (CNV) secondary to pathologic myopia in 27 eyes of 27 patients.

The average visual acuity dropped from 58.5 letters to 49.19. The visual acuity remained stable in 13 patients (48.1%), whereas 14 patients (51.9%) lost more than 8 letters due to the extension of the lesion to subfoveal space. A strong association was found between advanced age and a worse visual prognosis ($p = 0.001$).

PDT may stabilise visual acuity in young patients with non-subfoveal CNV secondary to pathologic myopia.

The long-term visual prognosis of myopic CNV is poor;¹ however, favourable prognostic factors such as young age, good initial visual acuity and the extrafoveal location of the lesion have been described.²

The present study aims to analyse the results of PDT in juxtafoveal and extrafoveal CNV secondary to pathologic myopia.

Case report

The study included 27 eyes of 27 patients (21 women and 6 men), with non-subfoveal CNV secondary to pathologic myopia, with a follow-up period of 1 year.

The mean best corrected visual acuity (BCVA; see table 1) dropped nine letters.

Table 1 Demographics and initial and final CNV characteristics

	Mean (SD)	Range
Age (years)	56.41 (12.33)	38–73
Initial VA (letters)	58.56 (10.79)	37–76
Final VA (letters)	49.19 (19.90)	12–78
Initial GLD (microns)	1210.78 (396.88)	650–2425
Final GLD (microns)	1706.15 (847.90)	310–3800
Initial distance to fovea (microns)	387.05 (225.40)	102–975
Final distance to fovea (microns)	194.93 (284.26)	0–1080
No. of treatments	2.11 (0.75)	1–3

VA, visual acuity; GLD, greatest linear dimension

PDT has stabilised the BCVA in 13 patients (48.1%). In 14 patients (51.9%), a visual loss of more than 8 letters was found.

A highly significant correlation exists between the change in visual acuity and the patients' age ($p < 0.001$, < 0.05), the diminution of visual acuity being more probable in older patients.

An increase in the average size of the lesion was observed and the distance of the lesion from the fovea was reduced. Involvement of the fovea was observed in 15 patients (55%) after a 1-year follow-up. A total of 93% of these patients showed a visual loss of more than 8 letters.

No statistically significant relationship was found between the change in visual acuity and the initial size ($p = 0.212$) or the initial distance to fovea ($p = 0.626$).

Patients with poorer visual acuity were treated more times (2.43 vs 1.77).

Comment

A strong statistical relationship was found between the patients' age and the visual

prognosis. Patients who did not experience a moderate or severe visual loss (fig 1A and 1B) were younger (average age: 47.5 years), did not have extension of the lesion towards the fovea and needed less treatment sessions.

On the contrary, patients with moderate or severe visual loss (fig 1C and 1D) were older (average age: 64.6 years), had extension of the lesion towards the fovea and required more treatment sessions.

These findings are similar to those found in the series evaluating PDT in subfoveal CNV secondary to myopia, in which an elderly age is associated with a worse visual prognosis.³ In comparison with the study carried out by Lam *et al.*,⁴ the higher average age in our study can explain why these authors have better results.

In conclusion, PDT may stabilise the visual acuity in non-subfoveal CNV secondary to myopia. However, in a high percentage of elderly patients, this does not prevent the progression of the lesion towards the centre of the fovea, with a significant visual loss. Our study has several limitations; future studies are required.

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Preseptal cellulitis caused by community acquired methicillin resistant *Staphylococcus aureus* (CAMRSA)

Infections with methicillin resistant *Staphylococcus aureus* (MRSA) usually occur in individuals with well established risk factors such as a recent hospital admission, multiple antibiotic treatment, or chronic illness. We report on repeated ocular presentations of preseptal community acquired MRSA cellulitis in a previously healthy 20 year old male student.

Case report

A 20 year old student presented to the eye department with a five day history of left periorbital swelling associated with a crusted lesion on the temporal border of his left eyebrow and preseptal cellulitis. Past medical history was remarkable for the appearance of similar skin lesions six weeks previously on the right calf, and mild eczema. Similar lesions were found on the patient's neck, back, and right calf. The latter lesion was discharging and swabbed for culture and sensitivities (fig 1). Initial treatment with oral flucloxacillin failed to resolve the cellulitis and he was admitted 36 hours later. Examination revealed a tense swelling of his left upper lid, with periorbital erythema and oedema (fig 2). Formal Snellen visual acuity was 6/5. There were no post-septal signs. The patient was apyrexial and had a moderate neutrophil leucocytosis. He was started on intravenous benzyl penicillin and flucloxacillin with little clinical improvement. Two days after admission, conjunctival and calf swabs cultured MRSA, resistant only to fucidic acid and flucloxacillin, suggestive of a community acquired (CAMRSA) strain. He volunteered that a member of his football team had

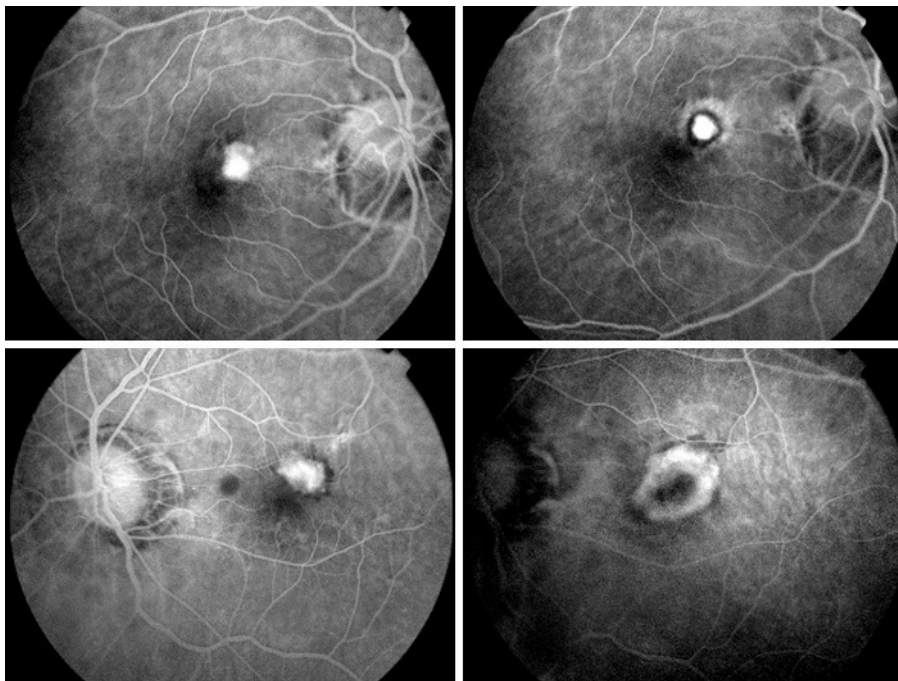


Figure 1 (top left) Case 1, a 37-year-old female before treatment; BCVA, 62 letters. (top right) Case 1, after 1 year and one PDT treatment; closure of CNV; BCVA, 74 letters. (bottom left) Case 2, a 73-year-old female before treatment; BCVA, 60 letters. (bottom right) Case 2, after 1 year and three PDT treatments; enlargement of CNV; BCVA, 42 letters.