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Sir,

The experience of Brian Leatherbarrow's Manchester team shows that, even in the best hands, early dehiscence of the conjunctival wound over a hydroxyapatite implant occurs in up to 11% of cases.¹ Unfortunately, while many re-epithelialise spontaneously, a number do not, either requiring further early intervention, or progressing to further dehiscence and ultimate chronic exposure. We have recently dealt with a case which illustrates a hitherto unrecognised cause of failure of re-epithelialisation following early conjunctival wound dehiscence.

Case Report

A 37-year-old man suffered a penetrating injury to his left eye, resulting in a blind, painful eye which required enucleation and insertion of an orbital implant 2 months following injury. Surgical technique was identical to that described by Ashworth *et al.*¹

It needs to be emphasised that, since the scleral shell is simply fitted round the implant, there is a defect where the cornea has been removed. The wrapped implant is simply turned 'back to front' with the exposed implant facing the orbital apex and, significantly, the optic nerve 'stump', cut flush with the sclera, facing anteriorly.

At first post-operative visit at 5 days, the socket was settling well. The patient was reviewed 1 month later. At that time, a tiny central defect in the wound was apparent, plugged by loose, white tissue. This tissue lifted off easily, revealing the 'optic nerve window' with exposed implant underneath. Closer inspection revealed that the conjunctival wound had in fact dehisced more extensively. The exposed sclera had subsequently re-epithelialised almost entirely but had failed to do so over the optic nerve stump.

Over the following weeks, the defect showed no signs of spontaneous resolution and, in fact, increased slightly to 3 mm in diameter. The patient therefore required repair of the defect, with insertion of an additional scleral patch and mobilisation and suturing of the conjunctiva. This anteriorly placed defect in the scleral covering at the site of the optic nerve is an Achilles heel. It should be covered by an additional patch of sclera – a technique used routinely by the Manchester group now (personal communication) – or the implant should be inserted 'off centre', so that the area of concern is covered by one of the two horizontal recti. Early dehiscence of the conjunctiva is probably a fairly common occurrence but, as long as the implant is fully covered by sclera, re-epithelialisation will occur across the defect spontaneously.

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Sir,

I was interested to read the paper by Hollick, Moosa and Casswell¹ concerning the long-term survival of 11/0 polyester (Mersilene) sutures. Lindsey Smith and I reported a similar study with 10/0 Mersilene corneal sutures in 1994,² and also presented these results at the UKIIS Annual Meeting in Chichester that year.

We recalled and reviewed our patients after a mean of 2½ years following surgery and compared them with a group who had received 10/0 nylon sutures. Of our original group of 25 patients who had the corneal section closed with continuous 10/0 Mersilene, 2 (4%) had required suture removal to control astigmatism and a further 7 (14%) had died in the interim. Hollick and colleagues¹ found at review that 29% of their patients had suture-related problems with interrupted 11/0 Mersilene and had required, or previously undergone, suture removal, while 66% of patients with a loose suture were symptomatic. In contrast, we found no such problems with the 10/0 suture in our patients and all were asymptomatic.²

Our earlier results certainly support Hollick *et al.*'s conclusion that routine removal of corneal sutures is not necessary with Mersilene, but the two studies do demonstrate some differences in the longer-term behaviour of this material. Whether this is related to the suture technique (interrupted versus continuous) or to differences in the suture gauge would require further (and ideally prospective and randomised) investigation. However, given the increasing move towards sutureless small-incision phacoemulsification, this may prove difficult to undertake.

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Sir,

The study by Joshi *et al.* on the assessment of intraocular pressure during fractionated peribulbar anaesthesia (*Eye* 1996;10:565–8) follows a line of studies in which IOP is an end-point but no rationale is given as to why surgeons should be concerned by this parameter. Theoretical complications due to a rise in IOP during the anaesthesia might include acute pain, venous closure or even arterial closure. However, the paucity of such events suggests that any transient IOP elevation is of no consequence.

A characteristic feature of these studies is that the stated use of the ocular compression device (be it a Honan balloon, Buys bag or digital massage) is to lower IOP, as if this had some beneficial effect on the surgical outcome. I would suggest that the eye achieves an IOP of about 0 mmHg relative to the atmosphere with the first 'open' incision and that 'self-sealing' incisions are fairly similar when held open with a blade or cannula.

The point about pre-surgical compression of the globe is that it has been found to have a practical and beneficial effect on the available anterior segment volume. I suspect that this is due to a shift in choroid volume (and perhaps even the vitreous volume) analogous to the effect of hyperventilation during general anaesthesia. These effects are not quite so easy to study.

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Sir,

We thank Mr Redmond for his interest in the paper and for his comments. We stated in our paper¹ that peribulbar anaesthesia requires the injection of a relatively large volume of anaesthetic solution into the peribulbar space which would result in a pressure effect on the globe. A rise in intraocular pressure (IOP) ensues and this has been documented to be associated with increased complication rates including vitreous loss.² External compression has a beneficial effect on surgical outcome by reducing the IOP and vitreous volume, compressing orbital tissues, relaxing the extraocular muscles and stretching the sclera.³ It is not thought to have a direct effect on the aqueous volume itself. The first opening of the