LETTERS TO THE EDITOR

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Reference

 Ashworth J, Rhatigan M, Sampath R, Brammar R, Sunderland S, Leatherbarrow B. The hydroxyapatite orbital implant: a prospective study. Eye 1996;10:29–37.

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 $2\frac{1}{2}$ 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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References

1. Hollick EJ, Moosa M, Casswell AG. Do Mersilene sutures need to be removed after cataract surgery? Eye 1996;10:555–7.

 Smith LFF, Hugkulstone CE. Long-term survival of corneal sutures: Mersilene vs Nylon. Eur J Implant Ref Surg 1994;6:348–50.

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