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Reference

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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

eye does achieve '0' mmHg, i.e. reaches equilibrium with atmospheric pressure, but the significance is the differential drop from the preoperative IOP value to zero. We are all aware of the surgical complications in operating on eyes with higher IOPs, i.e. uveal prolapse, flat anterior chamber, vitreous loss. Our study shows that IOP is raised with peribulbar anaesthesia and that external compression reduces it. We believe that a lower IOP is beneficial at the commencement of intraocular surgery.

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3. Bolling JP, Kurrle RW, O'Day DM. Effect of ocular compression on intraocular pressure. *Ophthalmic Surg* 1985;16:563-5.

Sir,

I was particularly interested to read Mr McKibbin's article on the pre-operative assessment and investigations of ophthalmic patients.¹ It was interesting to find that despite the presence of systemic diseases in patients undergoing ophthalmic surgery most of the pre-operative investigations were inappropriate.

In this particular series, the number of patients undergoing surgery under local anaesthetic was quoted as 43%. One year previously in the same hospital I had sent a questionnaire to SHOs in the other surgical departments which included ENT, Plastic Surgery, General Surgery, Orthopaedics and Trauma, Obstetrics and Gynaecology, Urology and Vascular Surgery. The questionnaire simply asked whether or not the following pre-operative tests were performed on patients about to undergo an operation under local anaesthetic: FBC, U&Es, random blood glucose, ECG. All the forms were returned indicating that none of these tests were routinely performed in the departments mentioned above. However, these tests were performed in the Ophthalmology department.

These and Mr McKibbin's findings should make us seriously reconsider whether such investigations are really necessary. If other departments are not undertaking such tests for patients undergoing procedures under local anaesthetic then why are we doing so in the Ophthalmology department? I fully agree that tests should only be undertaken if clinically indicated and likely to affect management. This makes more sense clinically and financially. Certainly, in my experience, abnormal results whether unexpected or not have not altered the decision to operate under a local anaesthetic. It would be interesting to find out if other units share similar views.

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