



**Fig. 1.** Visual outcomes in reported cases of inadvertent ocular perforations following ocular local anaesthetic injections. (Redrawn from Gray *et al.*<sup>3</sup>)

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Sir,

The two papers by Gillow *et al.*<sup>1,2</sup> and the accompanying editorial<sup>3</sup> suggest that anaesthetists are inflicting more ocular perforations than ophthalmologists. There are some alternative explanations for this assumption, which should have been considered in the editorial if it was intended to be a balanced viewpoint.

In recent years there has been an increase in cataract surgery and an even greater increase in the proportion carried out under local anaesthesia, as the

advantages of day case surgery and rapid turnover have become more apparent. Anaesthetists have been keen to maximise efficiency and safety by assisting this process and have become confident in administering the blocks in ever increasing numbers.

If more blocks are being performed, and more anaesthetists are performing them, then it is hardly surprising that more ocular perforations are both being reported and associated with anaesthetists, rather than with ophthalmologists. The overall rate of perforation may be increasing, although it is clearly inaccurate to use 1990 figures<sup>4</sup> as the denominator for data collected during or after 1994.<sup>2</sup> To determine if the rate is actually different between the two professions, a randomised, prospective, observer-blinded study should be carried out. With a rate of observed perforation between 0.0062%<sup>5</sup> and 0.114%,<sup>3</sup> an extremely large, multi-centre study will be necessary to achieve sufficient power. The current National Survey of Local Anaesthesia for Ocular Surgery may go some way towards addressing this question, but a case series of six patients<sup>1</sup> and a retrospective postal survey<sup>2</sup> does not.

It is well known that both retrospective surveys and postal questionnaires are extremely unreliable in minimising the problem of bias. For example, it is possible that some of the 29% of questionnaires not returned were from surgeons and units with a high perforation rate. It is also possible that quite unintentionally, a reporting ophthalmologist might be inclined to forget, dismiss, or find an alternative explanation for a lesion induced by himself or one of his own speciality, whilst being more eager to report the failings of others.

Nevertheless, these two papers<sup>1,2</sup> and others<sup>6,7</sup> do give some cause for concern and I fully endorse the recommendation for proper training and supervision.

I suspect that if there is a problem, we are seeing the effects of a learning curve as many anaesthetists take up a new challenge simultaneously. Ophthalmologists have to go through this process as well and I strongly suspect that the rate of ocular perforation correlates more with experience than with the speciality. In this respect, ophthalmologists may have more to worry about than anaesthetists because of the reducing opportunities for their juniors. And with regard to training, at a recent course on local anaesthesia for eye surgery there were numerous anaesthetists, but no ophthalmologists present other than the faculty!

Finally, I am extremely concerned that a journal of such repute should associate itself with unsubstantiated and opinionated editorial statements regarding 'the very sketchy' anatomical knowledge assumed of anaesthetists, their 'usually blissful ignorance of the consequences of serious complications such as globe perforation' and their keenness to 'justify their presence in the private setting'.<sup>3</sup> I assure you that these statements are completely untrue of the anaesthetists I know who carry out ophthalmic local anaesthesia and I am sure that they will find such comments as patronising and offensive as I do.

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Sir,

I read with interest the paper by J. T. Gillow *et al.* on ocular perforation during peri-bulbar anaesthesia

and also the following paper on the postal survey of local-anaesthetic-related ocular perforations.

While I agree that the increase in the incidence of globe perforations is cause for concern, I feel the slant of the papers somewhat biased and a proper review of present practice would be more informative.

It is true that the number of cases of perforation of the globe was highest in the group where the local anaesthetic was given by an anaesthetist, but in my experience the vast majority of peribulbar blocks are given by the anaesthetist and not the ophthalmologist. Could it be that the *incidence* of perforation of the globe is higher when peribulbar blocks are given by ophthalmologists?

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Sir,

We read with interest the editorial 'Local anaesthesia revisited'<sup>1</sup> and the two accompanying papers by J. T. Gillow *et al.*<sup>2,3</sup> concerning ocular perforation during local anaesthesia. In recognition of the increasing role of anaesthetists we surveyed, using a postal questionnaire, consultant anaesthetists who regularly attend ophthalmic lists in the Wessex region. This is to be extended to all of England and Wales to determine how and from whom eye local anaesthetic procedures are learned and which complications have been encountered. In our study there was an 84% response rate (31/37). The average number of lists attended was 1.3 per week with an average of 4.4 patients per list, 61% of whom underwent local block. Of those anaesthetic consultants who replied, 61% gave blocks and the majority used a peribulbar technique with a short (25 mm) 25 gauge needle. The importance of axial length measurement appeared to be well appreciated, with 90% considering it when giving a local anaesthetic.

Of those consultants surveyed, 35% reported that their juniors gave blocks, of whom 42% were taught by an anaesthetist and 16% were taught by a consultant ophthalmic surgeon. Only 10% were taught by consultants from both specialities. Interestingly, the majority (45%) felt that there was no need for an ocular local anaesthetic training programme for juniors, although 32% felt that a programme would be worthwhile; only 13% reported that there was an existing teaching programme. None was aware of plans to introduce such a programme.