LETTERS TO THE EDITOR

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 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'.³ 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.

S. Q. M. Tighe, FRCA

Anaesthetic Department The Countess of Chester Hospital NHS Trust Liverpool Road Chester CH2 1UL UK

References

- Gillow JT, Aggarwal RK, Kirkby GR. Ocular perforation during peribulbar anaesthesia. Eye 1996;10:533–6.
 Gillow JT, Aggarwal RK, Kirkby GR. A survey of
- Gillow JT, Aggarwal RK, Kirkby GR. A survey of ocular perforation during ophthalmic local anaesthesia in the United Kingdom. Eye 1996;10:537–8.
- 3. Boase DL. Local anaesthesia revisited [editorial]. Eye 1996;10:531-2.
- 4. Courtney P. The National Cataract Surgery Survey. I. Method and descriptive features. Eye 1992;6:487–92.
- Davis DB, Mandel MR. Efficacy and complication rate of 16 224 consecutive peribulbar blocks: a prospective multicentre study. J Cataract Refract Surg 1994;20: 327–37.
- Grizzard WS, Kirk NM, Pavan PR, Antworth MV, Hammer ME, Roseman RL. Perforating ocular injuries caused by anaesthesia personnel. Ophthalmology 1991;98:1011–6.
- 7. Hay A, Flynn HW, Hoffman JI, Rivera AH. Needle penetration of the globe during retrobulbar and peribulbar injections. Ophthalmology 1991;98:1017–24.

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?

N. J. Bywater, FRCA

'Sunnyside' Halesend Lane Storridge nr Malvern Worcs. WR13 5EW UK

Sir,

We read with interest the editorial 'Local anaesthesia revisited^{'1} and the two accompanying papers by J. T. Gillow et al.^{2,3} 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. The editorial and both papers highlight the need for training to minimise the risk of complications, in particular globe perforation. Significantly, this complication had not been encountered by those surveyed, although perforation during local block was known to have occurred in the region during the preceding year. This may represent a lack of communication between anaesthetic and ophthalmology colleagues.

In the United States the lack of formal ocular local anaesthetic training has been clearly identified⁴ and anaesthetists have been previously implicated as having a higher complication rate.⁵ Mr Boase suggests resisting 'the help offered by junior anaesthetists keen to fill their training log books'. In light of the joint report from the Royal College of Anaesthetists and College of Ophthalmologists,⁶ surely these juniors are precisely those who would benefit from a structured teaching programme with responsibilities and input from both specialities.

A. G. A. Coombes, FRCOphth Mayday University Hospital Mayday Road Thornton Heath Surrey CR7 7YE UK

R. J. Mawer, FRCA Great Ormond Street Children's Hospital Great Ormond Street London WC1N 3JH UK

References

- 1. Boase DL. Local anaesthesia revisited [editorial]. Eye 1996;10:531–2.
- Gillow JT, Aggarwal RK, Kirkby GR. Ocular perforation during peribulbar anaesthesia. Eye 1996;10:533–6.
- 3. Gillow JT, Aggarwal RK, Kirkby GR. A survey of ocular perforation during ophthalmic local anaesthesia in the United Kingdom. Eye 1996;10:537–8.
- Miller-Meeks MJ, Bergstrom T, Karp KO. Prevalent attitudes regarding residency training in ocular anaesthesia. Ophthalmology 1994;101:1353–6.
 Grizzard WS, Kirk NM, Pavan PR, Antworth MV,
- 5. Grizzard WS, Kirk NM, Pavan PR, Antworth MV, Hammer ME, Roseman RL. Perforating ocular injuries caused by anaesthesia personnel. Ophthalmology 1991;98:1011–6.
- 6. Report of the joint working party on anaesthesia in ophthalmic surgery. London: Royal College of Anaesthetists and College of Ophthalmologists, 1992.

Sir,

We read with interest the correspondence and confine our response to answering comments made about our papers rather than the editorial.

The papers were presented with two main aims. The first was to demonstrate the serious morbidity which may follow local anaesthetic (LA)-associated ocular perforation. We welcome the confirmation from Gray's study. The second was to alert clinicians to the scale of the problem. Unfortunately, far from being a transient epidemic in 1994–5 LA-associated ocular perforation remains depressingly common. Fresh prospective data collected by the British and Eire Association of Vitreoretinal Surgeons found 39 perforations referred to members in the year to October 1996 (G. R. Kirkby, unpublished data).

We agree with Tighe and Bywater that there may be several explanations why 'anaesthetists are inflicting more ocular perforations than ophthalmologists' and this is the reason why on this issue our paper presented the result without conjecture. The importance of structured training in ophthalmic local anaesthesia is rightly stressed in this correspondence, although the key issue of whether all anaesthetists should be trained in the sub-speciality is not addressed.

We are pleased that the correspondents share our concerns. If these papers have stimulated debate and focused attention on the problems of ophthalmic local anaesthesia then they have achieved their aims. Ophthalmic anaesthesia can only benefit when the problems in current practice are widely recognised.

J. T. Gillow

Birmingham and Midland Eye Centre Dudley Road Birmingham B18 7QH UK

Sir,

Considerable concern has been voiced^{1,2} regarding the addition of CS gas spray to the equipment carried by police officers, with fears of severe and/or permanent ocular damage resulting from its use. CS gas was due to be introduced on a trial basis in July 1995, but was delayed until March 1996 by further investigation into its safety after a police officer suffered (temporary) ocular injury while in training. Subsequently, the spray has been in use nation-wide, including six centres in the London area, and provisional data report its use on 600 occasions during the 6 month trial period (personal communication, New Scotland Yard). It has been interesting, therefore, to review the records of the accident and emergency department at this hospital, a busy 'walk-in' 24-hour unit: since CS gas was introduced we have treated no cases of ocular injury resulting from either police or (illegal) personal use. The Metropolitan Police have no records of referral to eve units in London during the trial period (personal communication, New Scotland Yard).

Despite the potential dangers it appears that use of CS gas by the police, which was approved for long-