

Sir,

We were surprised to see a letter¹ referring to the National Survey of Local Anaesthesia for Ocular Surgery, as peer-reviewed papers from the Survey have yet to be published.

We cannot agree with Kamath *et al.*'s assertion that 'the survey has been able to show . . . that 'routine' pre-operative investigations before local anaesthesia are unnecessary . . .'. Our observational study showed that many patients who had local anaesthesia did not have any pre-operative investigations, and that the incidence of serious adverse events was low. A study of this kind cannot attempt to address the question of whether or not pre-operative investigations are actually necessary.

As regards Kamath *et al.*'s criticisms of the limitations of the Survey methodology, we took these and other factors into account when designing the Survey. Any large audit of this type is by necessity a compromise between pure scientific method and what is acceptable to the clinicians who are asked to complete the survey forms. The limitations of the Survey are discussed at length in our forthcoming papers, as is the significance of the results. The Early Report cited by Kamath has not been formally published, and was never intended to be anything more than a brief overview, and should be considered as such.

We are concerned that some readers may be tempted to discontinue pre-operative investigations on the basis of Kamath *et al.*'s erroneous interpretation of the Early Report. It is our personal opinion that the 1993 Guidelines² are in general an appropriate 'gold standard', though in certain circumstances modifications could be made without compromising safety.

We wish to reassure Kamath *et al.* that the Colleges will be considering evidence from all sources when the safety Guidelines are reviewed, and thank them for their interest in the Survey.

References

1. Kamath G, Prasad S, Clearkin L. [The National Survey of Local Anaesthesia for Ocular Surgery.] (letter) *Eye* 1998;12:489.
2. Report of the joint working party on anaesthesia in ophthalmic surgery. London: Royal College of Anaesthetists and College of Ophthalmologists, 1993.

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Sir,

As the Royal College of Ophthalmologists launches its national audit of the results of retinal reattachment repair, the recent article by Sullivan and colleagues¹ examining the results of primary retinal reattachment surgery is timely, and attracted our attention. Although the figures for final reattachment have been improved it is perhaps disappointing that this is not reflected in the primary repairs. The increased final success rate after subsequent procedures is largely attributed to recent technical improvements. The question arises as to why, over the 23 year interval between the two studies, the primary repair rate has not also improved in the light of these advances and remains static at 75–80%.

The data presented do not show any significant pre-operative risk factors other than highly elevated breaks. Although the grade of surgeon did not significantly affect the primary outcome, since the majority of primary failures were found to be due to avoidable factors (missed breaks/inadequate buckle) it would be surprising if they were not influenced by the presence or otherwise of a consultant assistant. It would also be interesting to compare the success rates of conventional and vitrectomy procedures and likewise the influence of risk factors thought to affect the incidence of proliferative vitreoretinopathy (PVR).

Two recent independent multicentre audits within our own region^{1,2} (195 eyes, 193 patients (1989–90) and 245 eyes, 237 patients (1995–7) respectively) clearly showed the grade of surgeon and, in the case of trainees, grade of assistant, to be significant factors in the outcome of primary surgery. In the more recent analysis, juniors were able to improve their results for a consecutive series of primary repairs from 78% operating alone to 94% with consultant supervision.² As a result of these findings no patient in our unit now

undergoes any form of retinal surgery without the supervision of a consultant specialising in vitreo-retinal surgery.

We would not support the final conclusion that a 75% primary success rate is either a reasonable goal or a suitable standard for future audit. The results of several independent studies^{2,4} would suggest that a reasonable primary repair success rate for present day standards ought to approach 90% for both conventional and 'non-conventional' retinal detachment repairs. The goal should always be a 100% success rate and we should continue to ask ourselves why we have yet to achieve it.

References

1. Sullivan PM, Luff AJ, Aylward GW. Results of primary retinal detachment surgery: a prospective audit. *Eye* 1997;11:869–71.
2. George ND, Callar AB, Halkias A, Ruigrok A, Moore AT. Should all primary retinal detachments be referred to a vitreoretinal unit? Free paper presentation, Annual Congress of the Royal College of Ophthalmologists, 1993.
3. Comer MB, George ND, Callar AB, Martin K, Halkias A, Ruigrok A, Moore AT. Who should manage primary retinal detachments? Resource implications of closing the audit loop. Free paper presentation, Annual Congress of the Royal College of Ophthalmologists, 1998.
4. Wong D, McGalliard J. Are we getting better at treating retinal detachment? Technology, referral pattern or primary care? [editorial]. *Eye* 1997;11:763–70.

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Sir,

We are grateful to Snead and Scott for their comments. Firstly may we be the first to congratulate them on their remarkable results. A primary success rate of 94% in a large unselected group of patients with rhegmatogenous retinal

detachments is unparalleled in the literature. Among patients undergoing conventional retinal detachment repair in the pneumatic retinopathy study, for example, the success rate was only 84%.¹ All the patients in that study were operated on by vitreo-retinal specialists and the inclusion criteria were such that a better-than-average result would have been expected.

Before altering the standard for success in retinal reattachment surgery or adopting universal consultant supervision, however, we would suggest that such a unique result should be backed up by well-presented data that allows at least objective analysis of case-mix (for example, were certain categories of patients excluded?) and methods (for example, was silicone oil used in any patients and, if so, was it retained in any?).

We await with interest the results of the Royal College of Ophthalmologists audit which should clarify some of these issues.

Reference

1. Tornambe PE, Hilton GF and the Retinal Detachment Study Group. Pneumatic retinopathy: a multicenter randomised control trial comparing pneumatic retinopathy with scleral buckling. *Ophthalmology* 1989;96:772-83.

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Sir,

We read with interest the report of the Moorfields prospective audit of primary retinal reattachment surgery¹ and noted from Wong's accompanying editorial that there was a paucity of similar published outcome data from Vitreo-retinal units in the UK.

A 15 month prospective audit was performed at the Bristol Eye Hospital of the anatomical and visual outcome of primary conventional scleral buckling (rather than vitrectomy) retinal reattachment procedures. We believe that the results of this audit contribute to the literature as they specifically relate to the group of patients whose surgery might be undertaken by a general ophthalmologist rather than being referred to a specialist vitreo-retinal unit.

Included were 77 eyes in which retinal visualisation was not significantly impeded by media opacities and where the causative breaks were both identifiable and situated either at or anterior to the equator. Patients with proliferative

vitreo-retinopathy (PVR) of grade C or worse were excluded. Follow-up was for at least 4 months.

All cases were assessed pre-operatively by either a vitreo-retinal fellow or a consultant vitreo-retinal surgeon and this assessment resulted in the prescription of an appropriate surgical plan. Eighty-eight per cent of eyes were phakic, 35% had myopia of 3 dioptres or more, the fovea was fully attached in 42%, and 22% of eyes had breaks in the inferior quadrant. Fifty-three per cent of detachments resulted from retinal tears, 19% from atrophic holes and 13% from retinal dialyses. The remainder had mixed breaks. Fifty-seven per cent of procedures involved drainage of subretinal fluid and 30% injection of air or gas.

Seventy-six per cent of retinas remained reattached 4 months after the primary procedure. Eighty-three per cent (15/18) of the primary reattachment failures in this series were due either to new or missed breaks (8/18) or to inadequate buckling or inadequate retinopathy (7/18). It is notable that these same causes were implicated in a similarly high proportion (93%) of the primary reattachment failure in the Moorfields series.¹ Only 3 of the 18 primary failures (17% of failures and 4% of all eyes) in our series were due to the formation of PVR.

Seventy-four per cent of the procedures in the Bristol series were performed by registrar or senior registrar grade trainees and among this group the failure rate was 26% (15/57) compared with 15% (3/20) when the surgery was performed by a second-year vitreo-retinal fellow or a consultant. As in the Moorfields series these differences due to surgeon grade did not achieve statistical significance. This may be due to a lack of power to detect a real difference of this magnitude. The observed differences may, however, have arisen purely by chance and the groups may not have been comparable in respects other than surgeon grade. It is nevertheless tempting to speculate that the proportion of missed and/or inadequately supported or treated breaks might be reduced if the primary surgery were performed by a more experienced surgeon.

In Bristol the majority of primary procedures are now performed or directly supervised by a vitreo-retinal fellow or consultant. Specialist registrars, when performing such surgery, are also much more closely supervised. The effect of this change in the experience of surgeons performing the primary procedures will be addressed in a follow-up audit.

The importance to the patient of early detection and primary success in retinal detachment surgery is

emphasised by the acuity outcomes of this audit. Ninety-two per cent (24/26) of patients with an attached fovea at presentation and primary success retained an acuity of 6/12 or better. With first procedure failure only 1 of 5 such patients retained this level of vision. Where the fovea was detached at presentation the corresponding proportions were 28% (9/32) and 0 (0/10).

Retinal detachments arise sporadically and the surgery is both urgent and time-consuming. It goes without saying that the provision of an experienced vitreo-retinal surgeon to perform every primary detachment repair would have considerable local and regional logistical and financial implications.

Reference

1. Sullivan PM, Luff AJ, Aylward GW. Results of primary retinal detachment surgery: a prospective audit. *Eye* 1997;11:869-71.

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Sir,

We are grateful to Laidlaw *et al.* for their comments. We would certainly agree that an experienced vitreo-retinal surgeon should be present at every retinal reattachment operation. The current practice at Moorfields is that a vitreo-retinal consultant or fellow must be present at every case. We would point out that 'the provision of an experienced vitreo-retinal surgeon to perform every detachment repair' could have adverse training implications as well logistical and financial ones.

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Sir,

We read with interest the paper entitled 'Relationship of diabetic microvascular complications to outcome in panretinal photocoagulation treatment of proliferative diabetic retinopathy' by M.F. Cordeiro *et al.*¹ They studied the resolution of diabetic neovascularisation in relation to the number of laser burns