

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.

P.M. Sullivan ✉
G.W. Aylward
Moorfields Eye Hospital
City Road
London EC1V 2PD, UK

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.

D.A.H. Laidlaw
B. Clark
R.H.B. Grey
R.H.C. Markham
Bristol Eye Hospital
Bristol BS1 2LX, UK
Mr D.A.H. Laidlaw ✉
St Thomas' Hospital
Lambeth Palace Road
London SE1 7EH, UK

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.

P.M. Sullivan ✉
G.W. Aylward

Moorfields Eye Hospital
City Road
London EC1V 2PD, UK

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