BRITISH JOURNAL OF OPHTHALMOLOGY

Editorial

Prospects for day-case vitreoretinal surgery

In the United Kingdom management of patients undergoing eye surgery as outpatients or day-cases has, until recently, been largely restricted to minor extraocular procedures, while the use of local anaesthesia, even for inpatients, has been similarly limited. Ready availability of highly trained anaesthetic personnel and easy access to high quality inpatient facilities fostered by four decades of socialised medicine has encouraged British ophthalmologists to rely on general anaesthesia for a disproportionately large number of cases compared with their counterparts in other countries. While it can be argued that general anaesthesia is no barrier to the practice of day-case surgery most ophthalmic procedures lend themselves so well to the use of local anaesthesia that, in ophthalmology, the great majority of day-cases are performed under local anaesthesia.

In parts of the world with a lower standard of living shortages of trained personnel, drugs, and other medical facilities encourage surgical practices to utilise the minimum of resources for the maximum results, including rapid surgical turnover, optimum use of beds, and rapid return to the community for aftercare. In the more affluent capitalist societies the high costs of hospital care similarly discourage inpatient treatment.

Surgery under local anaesthesia administered by the surgeon not only reduces the need for other highly trained medical personnel during surgery but also the need for expensive hospital facilities pre- and postoperatively. The use of day-case surgery, usually carried out under local anaesthesia, is thus a logical outcome of market orientated medical care whether the patients are affluent but facilities expensive or resources scarce and the consumers impoverished.

The rapid expansion of day-case surgery in ophthalmology in the United Kingdom is a direct consequence of market forces, hitherto suppressed by the pre-Thatcherite superabundance of the old style NHS. No longer can ophthalmologists afford to ignore opportunities for undertaking most types of eye surgery under local anaesthesia and the increasing provision of day-case facilities in our hospitals is evidence of this.

The question of whether or not it is safe to perform surgery, particularly in elderly, frail, and/or sick patients, without the help of an anaesthetist has not as yet been properly addressed let alone answered. Many surgeons believe that an anaesthetist should always be close at hand and will not undertake an operating list even under local anaesthesia unless such help is available. Even if our

anaesthetic colleagues are happy to administer or at least 'cover' local anaesthesia, however, anaesthetic staffing levels particularly for ophthalmic surgery are likely to decline sharply during the next decade as day-case surgery under local anaesthesia becomes the rule rather than the exception. Even vitreoretinal surgeons hitherto sheltering comfortably behind the complexities of their art may then come to feel the heat.

The paper by Cannon *et al* in this issue highlights the growing awareness among retinal surgeons, that even complicated vitreoretinal operations can be performed with safety and are tolerated well with local anaesthesia and that a proportion can be done as outpatient procedures.¹ Recent reports from the United States² and by our own group at Moorfields³ have clearly demonstrated that advances in local anaesthetic techniques enable prolonged and complicated vitreoretinal surgery to be undertaken without undue stress to either the patient or the surgeon.

The complexities of preoperative work-up and post-operative management, however, frequently obviate the practice of day-case vitreoretinal surgery even when local anaesthesia is used,⁴ while in regional centres for such specialist services where tertiary referrals form a high proportion of cases geographical, transportation, and other social considerations can render outpatient management impracticable. Nevertheless the facility to undertake surgery at short notice in patients who may not be fit for general anaesthesia is an obvious benefit of local anaesthesia especially when highly-skilled medical back-up is in limited supply, for instance at night or at week-ends, while the provision of hostel accommodation and improvements in local community nursing and other services may come to surmount such difficulties.

While the use of local anaesthesia for vitreoretinal surgery may not have such important financial implications as it does for less complicated forms of eye surgery the prospect of managing even a small proportion of our cases as outpatients must have an important bearing on the planning and provision of services in the future.

PETER LEAVER

- 1 Wilson D, Barr CC. Outpatient and abbreviated hospitalization for vitreoretinal surgery. *Ophthalmic Surg* 1990; 21: 119-22.
- 2 Mein CV, Woodcock MG. Local anaesthesia for vitreoretinal surgery. *Retina* 1990; 10: 47-9.
- 3 Stevens JD, Franks WA, Orr GM, Leaver PK, Cooling RJ. Four quadrant local anaesthesia technique for vitreoretinal surgery. *Eye* 1991; (submitted).
- 4 Isernhagen RD, Michels RG, Glaser BM, de Bustros S, Enger C. Hospitalisation requirements after vitreoretinal surgery. *Arch Ophthalmol* 1988; 106: 767-70.