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Editorial

An adjunct to local anaesthesia

The subject of local and in particular retrobulbar anaesthesia for ophthalmic surgery has cropped up several times recently in the pages of the *BJO*. A general discussion on the relative merits of local (LA) and general (GA) anaesthesia for ophthalmic surgery would probably reveal large differences in routine practice from surgeon to surgeon and even from hospital to hospital, differences which would not be too easy to justify to an inquisitive lay administrator who had worked out that one or the other was the cheaper without apparently being any less effective. To such an observer the puzzling difference in LA/GA rates from surgeon to surgeon might appear to be based on little more than idiosyncratic personal preferences without obvious scientific justification. But nevertheless there is no doubt that preferences are strongly held and are based to some extent on previous training but also on other factors.

Many such factors influence surgeons in their choice of LA or GA: fear of eye movements during surgery, 'positive vitreous pressure' due to extraocular muscle spasm or concealed retrobulbar haemorrhage, and overt retrobulbar haemorrhage, are examples of worries about LA. As well as these possibilities there is the underlying anxiety that the anaesthesia will be incomplete, causing distress to both patient and surgeon, or that it will not last long enough, adding further to the surgeon's unease. (It should perhaps be noted in passing that the fear of retrobulbar haemorrhage can easily be avoided by not giving a retrobulbar injection, as reported recently.^{1,2})

The most obvious objection to GA is that it involves another highly trained individual, the anaesthetist, who might be better employed elsewhere in the hospital for forms of surgery where GA is thought to be essential. In times of financial stringency in medicine in virtually all parts of the world this aspect needs to be taken seriously, and the time might well come in the UK, and may have already have arrived in other parts of the world, when the insurers or

government agencies funding medicine start asking awkward questions as to the absolute necessity for GA in ophthalmic surgery, and not only for day surgery but for inpatient surgery as well.

Clinical disadvantages of GA concern its possible effect on the general well-being of the patient. In spite of improvements in technique whereby anaesthesia is confidently given to patients with the frailest of constitutions and at practically any age, nevertheless a lingering doubt remains in the minds of some surgeons that GA may not always be quite safe, though others clearly have complete confidence.³

An adverse influence on the conduct of an operation by GA rarely occurs, though there is always the outside possibility of something going wrong with the depth of anaesthesia, so that the patient coughs, gags, or even wakes up. Another minor disadvantage of GA is that it involves more preoperative organisation and more equipment, but these points are really part of the administrative implications mentioned above.

If a trend towards more widespread use of local anaesthesia does develop, then it follows that better techniques will also be sought. One such improvement is noted in this issue in a paper by Dr P Sunderraj and colleagues. A technique is described whereby the initial discomfort of the needle puncture of the retrobulbar injection and hence the injection itself may be reduced. (The same would presumably apply to percutaneous peribulbar injections.) Any step in this direction is to be welcomed, and the authors are to be congratulated on a useful contribution.

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1 Redmond RM, Dallas NL. Extracapsular cataract extraction under local anaesthesia without retrobulbar injection. *Br J Ophthalmol* 1990; 74: 203-4.

2 Smith RJH. Cataract extraction without retrobulbar anaesthetic injection. *Br J Ophthalmol* 1990; 74: 205-7.

3 Steele A. Local anaesthesia for cataract surgery. (Editorial.) *Br J Ophthalmol* 1990; 74: 195.