

forced duction test and impeding access to the extraocular muscles.^{2,3} In a recent survey carried out in the Southwest of England, neuromuscular blocking agents were used in only 45% of children and 34% of adults undergoing strabismus surgery.⁴ The authors point out that conditions for forced duction test and ocular access may be less than ideal in a large proportion of patients undergoing strabismus surgery.

In paediatric ptosis surgery, it is necessary to set the height of the eyelid relative to the pupil under general anaesthetic.⁵ For this, the patient must be paralysed to abolish Bell's reflex at least until the levator muscle has been sutured into place.

References

- 1 Rossiter JD, Wood M, Lockwood A, Lewis K. Operating conditions for ocular surgery under general anaesthesia: an eccentric problem. *Eye* 2006; **20**(1): 55–58.
- 2 Castanera de Molina A, Giner Munoz ML. Ocular alignment under general anaesthesia in congenital esotropia. *J Pediatr Ophthalmol Strab* 1991; **28**(5): 278–282.
- 3 Harrad R. Strabismus Surgery. In: Easty D, Sparrow J (eds). *Oxford Textbook of Ophthalmology*. Oxford University Press: Oxford, 1999, p 1242.
- 4 Dell R, Williams B. Anaesthesia for strabismus surgery: a regional survey. *Br J Anaesth* 1999; **82**(5): 761–763.
- 5 Tyers A, Collin J. *Colour Atlas of Ophthalmic Plastic Surgery*, 2nd edn. Butterworth Heinemann: London, 2001, p 161.

RA Harrad and P Stoddart

Bristol Eye Hospital, Lower Maudlin Street,
Bristol BS1 2LX, UK

Correspondence: RA Harrad,
Tel: +44 117 9284689;
Fax: +44 117 928 4891.
E-mail: r.a.harrad@bristol.ac.uk

Eye (2007) **21**, 256–257. doi:10.1038/sj.eye.6702487;
published online 16 June 2006

Sir,
Eye positions during ocular surgery

We read with interest the solutions proposed by Rossiter *et al*¹ for eccentric eye positions that develop during general anaesthesia. Ideally, the physician should recognize the abnormal eye position before starting surgery. Allowing a few minutes to elapse between

placement of a superior rectus bridle suture and the first incision should permit the intraocular pressure to normalize so that surgery can be performed safely.

As the authors indicate, a peribulbar or subtenons infiltrate of anaesthesia limited to the region around the superior rectus muscle may resolve the problem. Perilimbal traction sutures can also be helpful in providing the surgeon with more complete control of ocular movements. These are useful not only when general anaesthesia leads to eccentric eye positions but also when local anaesthesia does so.

Although the authors recommend the use of nondepolarizing muscle relaxants (NDMRs) to manage this intraoperative hurdle, we note that their use carries significant risks, as these drugs are implicated as the most common causative agents of anaphylactic reactions in anaesthetic patient populations.² Therefore, we believe that NDMRs should be considered only as a last resort after failure of local anaesthetics, traction sutures, and the tincture of time to stabilize the globe.

References

- 1 Rossiter JD, Wood M, Lockwood A, Lewis K. Operating conditions for ocular surgery under general anaesthesia: an eccentric problem. *Eye* 2006; **20**: 55–58.
- 2 Mertes PM, Laxenaire MC, Alla F, Groupe d'Etudes des Réactions Anaphylactoides Peranesthésiques. Anaphylactic and anaphylactoid reactions occurring during anaesthesia in France in 1999–2000. *Anesthesiology* 2003; **99**: 536–545.

A Singh and JM Stewart

Department of Ophthalmology, University of
California, 10 Koret Way, K301, San Francisco,
CA 94143-0730, USA

Correspondence: JM Stewart,
Tel: +1 415 476 0496;
Fax: +1 415 476 0336.
E-mail: stewartj@vision.ucsf.edu

Eye (2007) **21**, 257. doi:10.1038/sj.eye.6702488;
published online 16 June 2006

Sir,
Reply to Harrad and Stoddart

We are grateful to Harrad and Stoddart for their valuable observations made on the points raised in our paper.