

effect of aspirin-like analgesics; and have shown that low doses of aspirin, paracetamol, and ibuprofen are associated with the protective effect. In that study we have used log-linear and logit analysis to show that each of these three drugs is associated independently with the protective effect. Low doses of these drugs were associated with a halving of the risk of cataract.

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References

- 1 van Heyningen R, Harding JJ. A case-control study of cataract in Oxfordshire: some risk factors. *Br J Ophthalmol* 1988; **72**: 804–8.
- 2 Clayton RM, Cuthbert J, Seth J, Phillips CI, Bartholomew RS, Reid JM. Epidemiological and other studies in the assessment of factors contributing to cataractogenesis. *Ciba Foundation Symp* 1984; **106**: 25–47.
- 3 Cuthbert J, Clayton RM, Phillips CI. Cuneiform cataracts: a special case? *Colloq INSERM* 1986; **147**: 387–96.
- 4 Leibowitz HM, Krueger DE, Maunder LR, *et al.* The Framingham eye study monograph. *Surv Ophthalmol* 1980; **24** (suppl): 335–610.
- 5 Harding JJ, Crabbe MJC. The lens: development, proteins, metabolism and cataract. In: Davson H, ed. *The eye*. London: Academic Press, 1984; **1B**: 207–492.
- 6 Harding JJ, van Heyningen R. Drugs, including alcohol, that act as risk factor for cataract, and possible protection against cataract by aspirin-like analgesics and cyclopenthiiazide. *Br J Ophthalmol* 1988; **72**: 809–14.
- 7 Harding JJ, van Heyningen R. Beer, cigarettes and military work as risk factors for cataract. *Dev Ophthalmol* in press.

Perfluoropropane

SIR, We should like to report a case where the intraocular gas, perfluoropropane (C3F8), was used to reform a flat anterior chamber occurring after fistulising surgery. The technique may be of value to others facing this problem.

A 68-year-old man underwent routine trabeculectomy. From the first postoperative day the eye was hypotonous and the anterior chamber shallow. By the fourth day large choroidal effusions were present and cornea-lens contact had developed.

The anterior chamber was reformed with sodium hyaluronate (Healonid) and the sclerostomy sutured tightly shut. Unfortunately by the seventh day after trabeculectomy cornea-lens contact had recurred. The anterior chamber was again reformed with sodium hyaluronate and the choroidal effusions partly drained, but 72 hours later cornea-lens touch was present. On this occasion a bubble of 12% C3F8 was injected through an oblique track in the cornea into the anterior chamber without drainage of the choroidal effusion. This concentration is non-expansile¹ and was used in sufficient volume, approximately 0.5 ml measured in the syringe, to reform the anterior chamber.

The bubble filled the anterior chamber for five days before slowly being absorbed, so that 12 days after injection aqueous filled more than half the chamber. Nineteen days after injection aqueous completely filled the anterior

chamber, the choroidal effusions had disappeared, and intraocular pressure was normal. A single small anterior synechia persisted above.

Axial measurements of corneal thickness taken from the time of insertion of C3F8 showed a gradual thinning, from 0.75 mm to the 0.65 mm of the unoperated eye 12 days after injection. The anterior lens capsule has developed a localised opacity and reduplication of the capsule. This may be related to the episodes of cornea-lens touch or the C3F8.

Choroidal effusions after fistulising surgery are relatively common,² and as most resolve with time treatment can be expectant. When complicated by cornea-lens touch some procedure to reform the anterior chamber is justified. Our experience with this patient demonstrates some of the deficiencies of traditional methods of reformation. The injection of gas may be an approach which will allow sufficient time for the choroidal effusions to resolve.

Since preparing this report we have become aware of the case report by Wilson *et al.*,³ and their experience would seem to agree with ours.

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References

- 1 Peters MA, Abrams GW, Hamilton LH, Burke JM, Schreiber TM. The nonexpansile, equilibrated concentration of perfluoropropane gas in the eye. *Am J Ophthalmol* 1985; **100**: 831–9.
- 2 Migdal C, Hitchings RA. Morbidity following prolonged post-operative hypotony after trabeculectomy. *Ophthalmic Surg* 1988; **19**: 875–67.
- 3 Wilson MR, Yoshizumimo MO, Lee DA, *et al.* Use of intraocular gas in flat anterior chamber after filtration surgery. *Arch Ophthalmol* 1988; **106**: 1345.

Treatment of a retinal embolus by photocoagulation

SIR, Occlusion of the retinal arterial tree by an embolus commonly results in permanent visual dysfunction despite early immediate treatment. This is in part due to failure in displacing the embolus. We report a case in which long-duration, low-intensity argon laser photocoagulation was successful in melting a presumed cholesterol embolus and restoring vascular perfusion of the retina.

Case report

A 52-year-old woman presented with a seven-hour history of sudden-onset, inferior, altitudinal visual field loss and blurring of vision in the right eye. Clinical examination revealed a visual acuity of 6/9, confirmed the visual field loss, and demonstrated an embolus at a bifurcation of the superior retinal arteriole. Ocular massage, rebreathing, and intravenous acetazolamide failed to dislodge the embolus. Argon laser photocoagulation was then applied directly to the embolus. Argon blue-green light was used with a 50 µm spot size set at 0.1 watt and continuous. During the laser



Fig. 1 Fluorescein angiogram in the late venous phase showing leakage of dye and surrounding choroidal hypofluorescence at the sites of photocoagulation.

application the embolus was noted initially to pulsate and then it melted, disappeared, and reappeared at the next bifurcation where treatment was reapplied, and the embolic material was seen to disappear into the peripheral retinal vascular tree. Unfortunately in this case there was no recovery of visual function. Fig. 1 shows the appearance of a fluorescein angiogram taken 24 hours after treatment. A further angiogram taken one week later demonstrated no vascular leak.

To our knowledge treatment of retinal emboli by long-duration, low-intensity argon laser photocoagulation has not hitherto been reported. Although in this case no visual function was restored, consideration could perhaps be given to this treatment in cases in which 'traditional' treatment has been unsuccessful.

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Needle holder with gap joints

SIR, Although very fine suturing usually requires suture tying forceps, there are many circumstances when time can be saved by the use of the needle holder, especially, for example, in tying sutures used for closure of conjunctival or skin wounds and in operations for squint and retinal detachments. Sometimes the suture material is entrapped in, or even cut by, the joints of the standard needle holder.

Fig. 1 shows the modification of the joints which avoids this entrapment. There is a generous gap between the shoulders, which are also rounded off to prevent snagging (which may occur even when entrapment has been avoided). Box joints have also been incorporated, partly to reduce the height of the shoulders on each side but mainly to improve

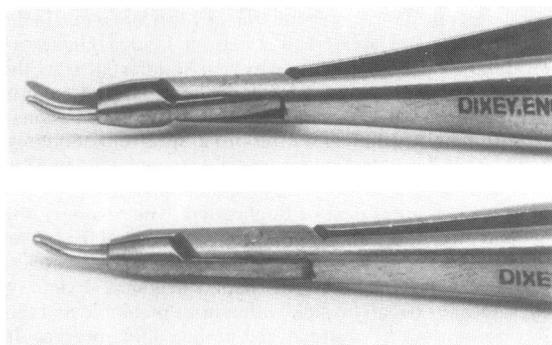


Fig. 1 Note the gap in the joints and round shoulders (upper) which prevent entrapment of sutures when the needle holder is used for suture tying. The box joints (lower) improve stability.

stability of the joints: box joints are not essential to the principle.

The basic needle holder we have chosen for this modification is the Barraquer pattern with curved jaws which has been such a fundamentally original contribution to ophthalmic and other surgery.¹⁻³ Other needle holders could be adapted in the same way. We have used this modified needle holder successfully in many operations, particularly for squint, eyelid surgery, and dacryocystorhinostomy.

The needle holder has been specially made by Dixey Instruments Ltd, 19 Wigmore Street, London W1A 4DU.

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References

- 1 Roper-Hall M J, ed. *Stallard's eye surgery*. 6th ed. 1980: 23-5.
- 2 Arruga H. *Ocular surgery*. 1st ed. New York: McGraw-Hill, 1952: 20.
- 3 Harms H, Mackensen G. *Ocular surgery under the microscope*. 1st ed. Chicago: Year Book Medical Publishers, 1966: 40.

Book reviews

Eye Movement Disorders. Eds. E A C M SANDERS, R J W DE KEIZER, AND D S ZEE. Pp. 280. £79.95. Kluwer: Dordrecht, Netherlands. 1987.

This book constitutes the proceedings of a symposium held in the Netherlands in 1986. There are sections on anatomy and physiology, clinical and paraclinical (whatever that is) examination, ophthalmic causes of diplopia, myogenic disorders, neurology, and treatment. The various contributors are either ophthalmologists, neurologists, neurosurgeons, orthoptists, or basic scientists.