



**Fig. 3.** Case 2. Presentation and removal of cavernous haemangioma with a cryoprobe.

post-operative week in all patients, and long-lasting mydriasis, probably as a result of damage to the ciliary ganglion, in four patients. If, in a difficult situation, this technique proves inadequate, it is always possible to revert to lateral orbitotomy.

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Sir,

**Expulsive Haemorrhage During Phacoemulsification**  
Phacoemulsification, already a commonly performed procedure in the United States, is attracting considerable interest in the United Kingdom. Although according to a recent survey only 2% of surgeons currently use it routinely, this percentage will very probably increase.<sup>1</sup> I wish

to report a complication which highlights an advantage of the procedure compared with the conventional extracapsular operation.

### Case Report

An 86-year-old woman was admitted for overnight-stay cataract surgery. She had bilateral cataract worse in the right eye which could see 6/60 aided and 6/18 pinhole. Local anaesthesia was achieved with retrobulbar 2% plain lignocaine and a facial nerve block, and no sedation was used.

The approach was through a scleral tunnel incision made with a 3 mm keratome approximately 3–4 mm from the superior limbus, with a paracentesis for a second instrument. A wide can-opener capsulotomy was followed by phacoemulsification in the pupillary plane. Removal of cortical lens matter was completed using automated irrigation–aspiration. Haelon was injected into the anterior chamber to prepare for intraocular lens insertion; however, serious problems became apparent as the chamber could not be deepened and the viscoelastic extruded from the tunnel as fast as it was injected. The eye was stone hard to palpation. Nevertheless the tunnel incision remained self-sealing and did not allow fluid out of the eye unless an instrument was introduced along it. There was no iris prolapse. Indirect ophthalmoscopy revealed a shallow choroidal haemorrhage inferotemporally. No attempt was made to insert an intraocular lens and the wound was closed with a single horizontal 8/0 vicryl suture. Intravenous acetazolamide and topical timolol were given to moderate the intraocular pressure.

The post-operative acuity was 6/6 with an aphakic correction. A diagnosis of bilateral open angle glaucoma was made 3 months after the operation.

### Discussion

It seems likely that an acute suprachoroidal ‘expulsive’ haemorrhage had occurred which was limited fortuitously by the watertight valve-like properties of the narrow incision. Iris prolapse and extrusion of intraocular contents would have been almost inevitable through a full-sized incision.

Expulsive haemorrhage, a much feared complication of intraocular surgery, is thankfully rare after cataract surgery and, for example, occurred in 0.15% of extracapsular and phacoemulsification cataract operations in one large series at the New York Eye and Ear Infirmary.<sup>2</sup> The incidence of acute suprachoroidal haemorrhage is apparently not higher during phacoemulsification than in conventional extracapsular surgery.<sup>3</sup> Actual extrusion of intraocular contents may not occur through a small incision; nevertheless the wound should be rapidly and securely sutured as soon as the complication is suspected.<sup>4</sup> The greater intrinsic security of a small wound as exemplified here will be reassuring to surgeons learning phacoemulsification, who will feel vulnerable during a prolonged procedure to a variety of operative complications.

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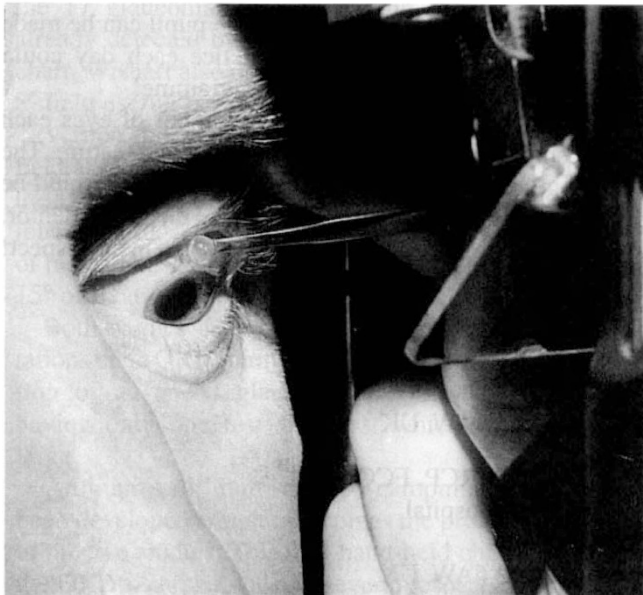
Sir,

### Use of a Glass Rod in Argon Laser Suture Cutting after Trabeculectomy

Poor bleb formation and raised intraocular pressure in the early post-operative period after trabeculectomy are often due to tight closure of the scleral flap. The argon laser can be used to lyse the flap sutures through intact conjunctiva to improve the drainage of aqueous humour.<sup>1</sup> This is especially easy if 10/0 or 9/0 black nylon suture has been used to close the scleral flap.

The scleral flap can be more tightly sutured at the time of surgery reducing the risk of overdrainage and then sutures can be cut sequentially with the laser, titrating the degree of aqueous humour drainage.<sup>2</sup>

Various lenses have been used in this procedure,<sup>1,3</sup> with Hoskins and Migliazzo even designing a lens for the purpose.<sup>4</sup> Having heard of the idea whilst a Fellow in the Department of Ophthalmology in Madison, Wisconsin, I



**Fig. 1.** Use of the glass rod to flatten the conjunctiva and magnify the trabeculectomy suture for cutting with the argon laser.

have found that a simple glass rod, as found in most ophthalmic departments, provides an effective and inexpensive 'lens' for argon laser suture cutting. I have used a glass rod in this way in many patients and have encountered no complications.

Topical anaesthesia is used and the bulbous tip of the glass rod pressed over the suture to flatten the tissues and blanch any blood vessels (Fig. 1). A magnified image of the suture is seen within the tip of the rod with the slit lamp. I have found one or two shots of 300-500 mW at 50 µm spot size for 100 ms will usually cut the suture. Light pressure on the globe will open the flap and encourage outflow.

Sutures can be cut with useful effect up to 2 weeks after surgery when healing of the scleral flap seems to be too advanced. If antimetabolites are used sutures can be cut with good effect for a much longer period.

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Sir,

### A Model Eye To Practice Indentation During Indirect Ophthalmoscopy

Indirect ophthalmoscopy with indentation is an important skill to learn when examining the peripheral retina, and the dynamic aspects of indentation movement are particularly important when a retinal tear is being localised prior to scleral buckling. However, during the early learning stages excessive indentation pressure may be applied with resulting unnecessary discomfort on the part of the conscious patient.

We have developed a model eye which can be used to practice the technique of indentation. The eyes are sold as cheap toys and have a 'scleral' rigidity that closely simulates that of the human eye. Partial thickness cuts in the inner aspect of the model eye serve as retinal tears, and their behaviour during indentation is remarkably realistic. 'Dialyses' can be created in the same way.

### Materials and Methods

The model eye is shown in Fig. 1. It is somewhat larger than the human eye, having a diameter of approximately