surface of the cornea 'rises,' that is, moves anteriorly as the bubble takes up some space in the central cornea. This bulging is accentuated after the performance of an anterior keratectomy.

The endoscope may certainly be able to contribute proof. This would be particularly important if the surgeon is not yet experienced with this procedure. As point (2) above indicates, however, the endoscope should only be used as a last step, that is, to confirm the presence of a big bubble. As use of an endoscope very likely compromises the outcome of the air injection, it should not be carried out too early. It should never be employed to confirm the impression that a big bubble had not yet formed. (A final consideration is that the insertion of an endoscope could prove risky in phakic eyes unless the anterior chamber first be stabilised with viscoelastic substances.)

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KD Teichmann[1] and M Anwar[2]

[1]King Khaled Eye Specialist Hospital,
Riyadh,
Kingdom of Saudi Arabia

[2]ElMagrabi Eye Hospital,
Jeddah,
Kingdom of Saudi Arabia

Correspondence: KD Teichmann,
King Khaled Eye Specialist Hospital,
PO Box 7191, Riyadh 11462,
Kingdom of Saudi Arabia,
Tel: +996 1 482 1234 x3774;
Fax: +966 1 482 1908.
E-mail: Klaus@teichmann.net

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Sir,

Reply to KD Teichmann and M Anwar

I would like to thank Drs Anwar and Teichman for their useful comments.

A 'big bubble' can be formed in nontrephined corneas and even with their own results there is a chance, although only 10–20% after the second air injection that a 'big bubble' does not form.[1] In our four cadaver eyes we did not see a 'big air bubble'[2] and perhaps with a larger series we would have achieved better results. However, the question remains what to do if a 'big air bubble' does not form. Endoscopic visualisation of the posterior surface of the cornea is a possible aid to confirm or refute the presence of a 'big air bubble', the ideal end point. This information may aid the surgeon on how to proceed. Reinjection into opaque cornea in a different site is difficult and may cause perforation and unnecessary if a 'big air bubble' had formed but not been recognised. Dissection without a 'big air bubble' is time consuming with a higher chance of 'irregular dissection' and less than optimum visual results.

It is the thin ectatic corneas that present a surgical challenge to any lamellar technique, and prior trephination in such eyes is hazardous. Drs Anwar's and Teichman's method states the importance of prior trephination to isolate the central cornea and may aid deeper spread of air towards Descemet's membrane, thus helping formation of the 'big air bubble'.

Excessive air injected into pretrephined eyes escapes from the trephined interface. Air entry into a closed eye would impede air dissection more posteriorly into the cornea as intraocular pressure is raised. However, one could argue that air entry through one of our paracentesis, which we were careful to avoid, would create a softer eye than fluid inside the anterior chamber and possibly aid a 'big air bubble formation'.

Again I would like to emphasise that our experiment was in cadaver eyes and this could explain the differnce between Drs Anwar's and Teichman's results and ours.

Direct endoscopic visualisation remains an alternative to aid visualisation and surgery affecting the posterior corneal surface particularly in situations where the view is compromised. It may also help future developing techniques such as Descemet's transplantation[3–5] as such tissue is difficult to visualize by its transparent nature and delicate to handle. Reorientation of Descemet's membrane[6] may also be aided by direct visualisation with an endoscope.

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A Sharma

Department of Ophthalmology,
Bedford Hospital,
South Wing,
Kempston Road,
Bedford, UK

Correspondence: A Sharma,
Tel: +44 1234 795768;
Fax: +44 1234 795914.
E-mail: asharma263@hotmail.com

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Sir,

Reverse self-sealing sclerostomies

We read with interest the article by Misra and Goble,[1] which evaluated preoperative complications of self-sealing sclerostomies in pars plana vitrectomy. We agree it is advantageous as it allows stable intraocular pressure without the use of scleral plugs, reduces the need for infusion flow manipulation, reduces operating time and suture complications.

We would like to report our results of a modification of the technique, the reverse self-sealing sclerostomies. A total of 80 reverse self-sealing sclerostomies were done on 40 eyes of 40 consecutive patients between January 2002 and December 2003 (single surgeon RAHS). Only primary vitrectomies were included in our study.

The indications for surgery included macular epiretinal membrane (13), macular hole (10), rhegmatogenous retinal detachment (five), uveitis with chronic cystoid macular oedema (six), diabetic vitreous haemorrhage (four), and choroidal nonvascular membrane (two). Intraoperative interventions included epiretinal membrane peel (13), gas injection with or without platelets (15), silicone oil injection (two), and use of endolaser (four).

Our technique was used for the superior sclerostomies that are used for the introduction of the surgical instruments. The inferior temporal sclerotomy for the infusion was a conventional stab incision, which was sutured with 7.0 vicryl.

The technique used was as described by Assi *et al*,[2] with our modification of conjunctival closure with diathermy instead of sutures. A fornix-based conjunctival and tenons flap recessed by 4 mm was performed. A partial thickness (1/2–2/3 depth) scleral incision ∼2–3 mm in length was made 2.0 mm from the limbus (Figure 1a). An angled bevel up crescent blade (Sharpoint) was used to create a 2.0 mm scleral pocket posteriorly (Figure 1b). This approximated the entry into the eye at 4 mm from the limbus. The micro-vitreo retinal (MVR) blade was passed through the scleral pocket, rotated to ∼60° before entering the vitreous cavity (Figure 1c). Conjunctiva was approximated and diathermied at the end of the operation. Follow-up was done on day 1, 2 weeks, and 3 months postoperatively.

Intraoperative scleral flap tear requiring suturing occurred in 2.5% (2/80), both cases involving epiretinal membrane peel. Two patients required conjunctival suturing. Postoperatively, all the sclerostomies healed well (Figure 2). No patients had postoperative hypotony, choroidal detachments, conjunctival blebs or raised intraocular pressure. Intraocular gas tamponade was well maintained in all cases. There were no instances of scleral flap necrosis or infection, late haemorrhage associated with the sclerotomies, vitreal nor retinal incarceration nor endophthalmitis.

The self-sealing sclerostomies and the subsequent modifications offer numerous advantages over the traditional stab sclerostomies. Chen's[3] original technique was technically difficult in eyes with small palpebral fissures. Kwok *et al*[4] modified the technique by rotating the scleral tunnels by 90° (tunnel was parallel to limbus) with its radial entry site away from the surgeon. Further, this technique allowed easier access in eyes with small interpalpebral space.

Van Kuijk *et al*[5] described a technique similar to Kwok *et al*[4] but the entrance of the scleral pocket was towards the surgeon. They claimed that their modification facilitates the entry of instruments and avoids interference with the nose or cannula. Their success rate reported was 90%. However, they noted that there was a higher rate of leakage in patients younger than 40 years. Self-sealing pars plana