Sir,
Scleral suture-fixated intraocular lens explantation

Scleral-sutured intraocular lens (IOL) implant is one of the common methods for correction of aphakia in eyes without adequate capsular support.[1] Scleral-sutured IOLs can, however, be associated with a variety of complications that sometimes lead to the need for explantation of the implant.[2]

Although many reports describe insertion techniques for scleral-sutured IOLs,[3] there are no published reports regarding techniques for explanation. We describe a simple technique for explantation of a scleral-fixated IOL to reduce the risk of posterior dislocation of the implant during surgery.

Surgical technique

Localized conjunctival periotomy is performed and scleral fixation sutures are identified after dissection of any previously fashioned scleral flaps. The anterior chamber is filled with a cohesive viscoelastic through a corneal paracentesis. After the pupil is slightly constricted with acetylcholine, a lens manipulator is used to move the optic of the lens forward until the pupil captures it (Figure 1a). Following this step, scleral fixation sutures are cut (Figure 1b) and a scleral or

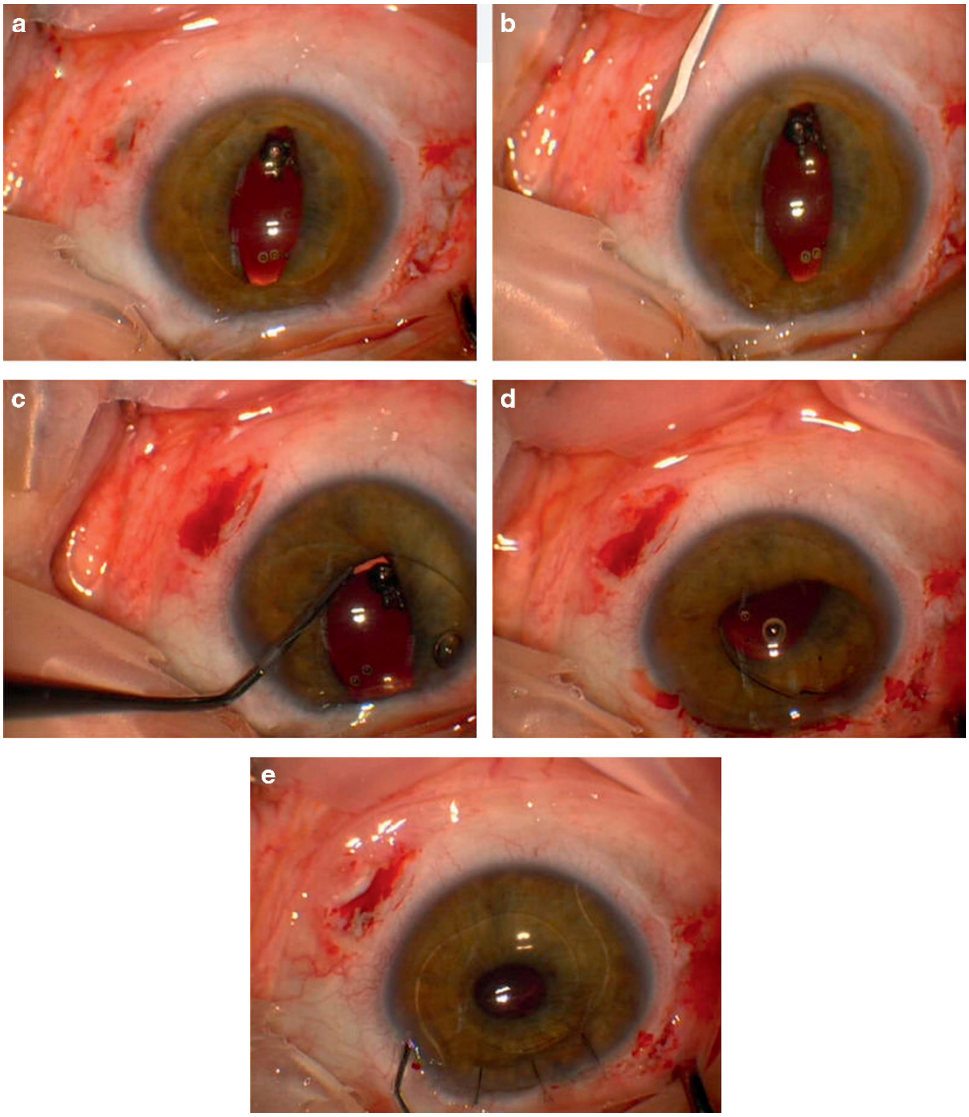

Figure1 (a) Pupillary capture of the optic of the scleral-sutured lens implant. (b) Cutting of the anchoring scleral sutures after dissection of the previously fashioned scleral pockets to identify the sutures. (c) Rotation of the lens implant into the anterior chamber using a lens manipulator. (d) Delivery of one haptic into the anterior chamber before explantation of the lens implant. (e) Scleral suture intraocular implant exchanged for an angle-supported anterior chamber lens.

corneal wound is fashioned to explant the implant. The lens is then carefully rotated to deliver one haptic into the anterior chamber (Figure 1c). This haptic is pulled out of the eye using a forceps to explant the lens (Figure 1d). Implantation of another lens can then be subsequently performed (Figure 1e).

Discussion

One of the surgical challenges of explanting a scleral-sutured implant is following the cutting of the sutures; the lens is likely to become loose with the possibility of posterior dislocation of the lens into the vitreous cavity particularly in vitrectomized eyes. Previous literature suggested that the main factor for scleral-fixated IOL stability is the intact trans-scleral sutures.[4]

Pupillary capture of the IOL optic technique has been described before with IOL iris suturing to facilitate the step of suturing the haptic to the iris[5] and for explanting a dislocated iris-fixated IOL into the anterior vitreous.[6] As demonstrated above, we used the same technique in securing the lens optic before cutting the anchoring scleral sutures of the IOL.

This technique is practical and should be easily performed; however, there is a possibility that the pupillary capture would be lost while manipulating the haptic into the anterior chamber particularly in case of a fragile iris or the lack of sufficient miosis. Additional steps that can be incorporated to enhance the safety of this explantation technique may include passing two sutures across the pars plana behind the IOL to serve as a 'sling' or using perfluorocarbon liquid in the vitreous cavity up to the posterior chamber to support the IOL in a vitrectomized eye for those familiar with vitreoretinal surgery.[7]

Conflict of interest

The authors declare no conflict of interest.

References

1 Wagoner MD, Cox TA, Ariyasu RG, Jacobs DS, Karp CL, American Academy of Ophthalmology. Intraocular lens implantation in the absence of capsular support; a report by the American Academy of Ophthalmology. (Ophthalmic Technology Assessment). *Ophthalmology* 2003; **110**: 840–859.

2 Chang JH, Lee JH. Long-term results of implantation of posterior chamber intraocular lens by sulcus fixation. *Korean J Ophthalmol* 1991; **5**: 42–46.

3 Por YM, Lavin MJ. Techniques of intraocular lens suspension in the absence of capsular/zonular support. *Surv Ophthalmol* 2005; **50**: 429–462.

4 Lubniewski AJ, Holland EJ, Van Meter WS, Gussler D, Parelman J, Smith ME. Histologic study of eyes with transsclerally sutured posterior chamber intraocular lenses. *Am J Ophthalmol* 1990; *15* **110**(3): 237–243.

5 Chang DF. Siepser slipknot for McCannel iris-suture fixation of subluxated intraocular lenses. *J Cataract Refract Surg* 2004; **30**: 1170–1176.

6 Osher RH, Cionni RJ, Snyder ME, Riemann CD, Da Mata AP. Surgical repositioning and explantation of the intraocular lens. *Cataract Surgery*. WB Saunders: Philadelphia, 2004.

7 Lewis H, Sanchez G. The use of perfluorocarbon liquids in the repositioning of posteriorly dislocated intraocular lenses. *Ophthalmology* 1993; **100**: 1055–1059.

M Mikhail[1] and A Sallam[2]

[1]Ophthalmology Department, Royal Victoria Hospital, Belfast Health and Social Care Trust, Belfast, UK
[2]Ophthalmology Department, Gloucestershire Hospitals NHS Foundation Trust, Gloucester, UK
E-mail: drmok@hotmail.co.uk

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Sir,

'Double occlusion': black Artisan iris claw intraocular lens insertion following failed occlusion treatment for intractable diplopia

Black occlusive intraocular lenses (IOLs) are an effective and reversible surgical treatment for intractable diplopia unresponsive to conventional therapy.[1]

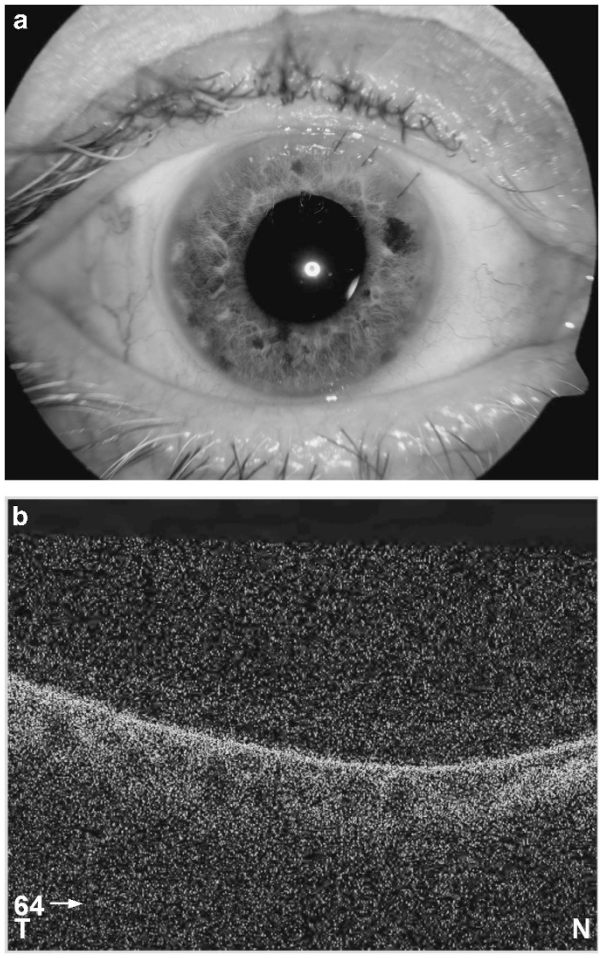

Figure 1 (a) Black Morcher IOL *in situ*. (b) OCT through black Morcher IOL.