Correspondence: T Oluleye,
Department of Ophthalmology,
University of Ibadan, c7b, Shomade Estate,
Bashorun, Ibadan, Oyo pmb5116, Nigeria
Tel: +234 02 2410088 ext 3132;
Fax: +234 02 2413545.
E-mail: t_oluleye@yahoo.co.uk

Eye (2006) **20,** 1461–1463. doi:10.1038/sj.eye.6702343;
published online 21 April 2006

Sir,

Bilateral big-bag intraocular lens implant for highly myopic eyes

Cataract surgery in highly myopic eyes presents several challenges to the surgeon, ranging from choosing an appropriate intraocular lens, potentially complicated surgery, to possible postoperative complications. We here report the results of phacoemulsification with implantation of a negative power Big Bag™ posterior chamber intraocular lens (IOL) implant in both eyes of a patient.

Case report

A 65-year-old Asian lady with high myopia and best-corrected visual acuities of OD 1/60 (−18.0 DSph) and OS 6/60 (−19.0 DSph) was seen in our clinic. She was noted to have bilateral posterior subcapsular cataracts and fundii showed posterior staphyloma, which was confirmed by ultrasound examination. Biometry revealed an axial length of 31.50 and 31.72 mm in right and left eyes, respectively, and predicted IOL power (SRK/T formula) −12 D to achieve postoperative emmetropia. The unusual IOL power prompted us to use the Big Bag™ IOL (SD Ophthalmics), a single-piece foldable acrylic lens (overall diameter 10.35 mm) with a meniscus optic of 6.5 mm diameter and three windowed flat haptics available in 0.5 D steps from −10 to +13 D (Figure 1). The extended Tri-Haptic configuration offers 240° contact arc supporting the zonules (Figure 1).

Phacoemulsification was performed (right eye followed by the left eye) through a 2.8 mm clear corneal incision. IOL (−10 D) was implanted in the capsular bag after enlarging the incision to 3.2 mm. The capsulorrhexis was 5 mm in diameter and viscoelastic was aspirated with simcoe cannula through the sideport. Lens folding and implantation were difficult owing to the thick edge, and forceps was used instead of the injector. The surgery and the postoperative course remained uneventful. The patient was followed for a year and the IOL maintained excellent centration with good coverage of the pupillary area (Figure 2). The best-corrected postoperative visual acuities were OD 6/12 and OS 6/18. The final refractive error was within 1 D of the predicted refractive error.

Figure 1 Single-piece foldable acrylic lens with three windowed flat haptics.

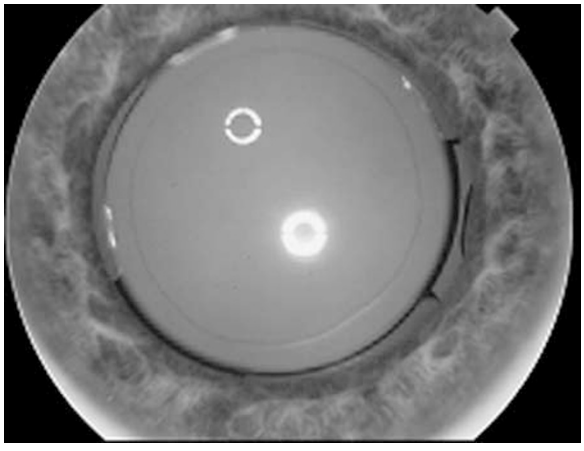

Figure 2 Well-centred IOL with excellent coverage of the pupillary area.

Comment

Negative power IOL implants following cataract surgery have been reported using the conventional two-haptic IOL design.[1–4] The larger diameter of the capsular bag seen in highly myopic eyes[5] led us to believe that the three-haptic design would prevent lateral displacement of the IOL and a larger optic diameter would minimise

the likelihood of symptoms related to the IOL edge. Postoperative result as shown in Figure 2 appears to confirm this belief in this patient.

Negative power lens implants have a thick edge, which makes folding with conventional forceps difficult and the manufacturer recommends a special injector. Our case demonstrates that there is potential for use of this device as a refractive technique for highly myopic patients.

References

1 Kohnen S, Brauweiler P. First results of cataract surgery and implantation of negative power intraocular lenses in highly myopic eyes. *J Cataract Refract Surg* 1996; **22**(4): 416–420.
2 Jimenez-Alfaro I, Miguelez S, Bueno JL, Puy P. lens extraction and implantation of negative-power posterior chamber intraocular lenses to correct extreme myopia. *J Cataract Refract Surg* 1998; **24**(10): 1310–1316.
3 Pucci V, Morselli S, Romanelli F, Pignatto S, Scandellari F, Bellucci R. Clear lens phacoemulsification for correction of high myopia. *J Cataract Refract Surg* 2001; **27**(6): 896–900.
4 Guell JL, Rodriguez-Arenas AF, Gris O, Malecaze F, Velasco F. Phacoemulsification of the crystalline lens and implantation of an intraocular lens for the correction of moderate and high myopia: four-year follow-up. *J Cataract Refract Surg* 2003; **29**(1): 34–38.
5 Vass C, Menapace R, Schemetterer K *et al*. Prediction of pseudophakic capsular bag diameter based on biometric variables. *J Cataract Refract Surg* 1999; **25**(10): 1376–1381.

A Bhatnagar, S Somanathan and RAH Scott

Department of Ophthalmology, Birmingham Midland Eye Centre, Dudley road, Birmingham B18 7QU, UK

Correspondence: S Somanathan,
Tel: +44 121 5076806;
Fax: +44 121 5076791.
E-mail: sudha_121@hotmail.com

Financial interest: nil

Eye (2006) **20,** 1463–1464. doi:10.1038/sj.eye.6702346; published online 21 April 2006

Sir,

Aberrant congenital macular vessel crossing the fovea: evaluation with optical coherence tomography

Large, isolated, congenital retinal vessels crossing the central macula are referred to as retinal macrovessels.[1] Anomalous macrovessels may cause visual impairment when crossing the fovea.[1,2] Some may be considered as arteriovenous anastomoses.

Case report

A 19-year-old white man had a history of long-lasting reduction of vision in his right eye. Visual acuity was

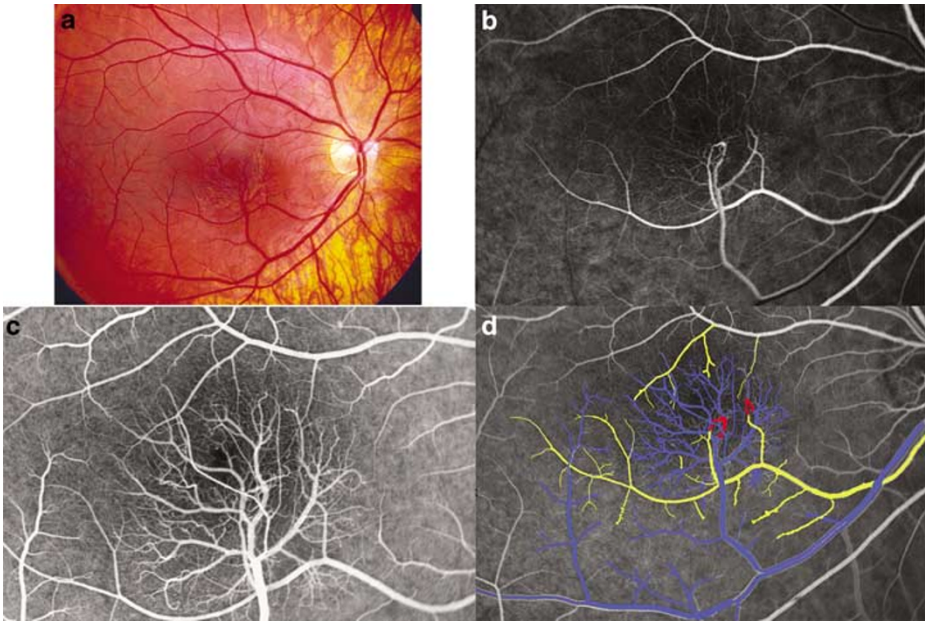

Figure 1 (a) Colour image of the fundus and fluorescein angiographic (b) early and (c) late phases. (d) Digital elaboration showing the relations among arteriolar vessels (yellow), venous vessels (blue), arteriovenous anastomoses (red), and capillary free zone.