

Long-Term Complications of Anterior Chamber Iris Claw Lens

Siddhi Goel, Anin Sethi, Pranita Sahay, Prafulla K. Maharana, Jeewan S. Titiyal

Dr. Rajendra Prasad Centre for ophthalmic Sciences, All India Institute of Medical Sciences (AIIMS), New Delhi, India

Summary

Cases of aphakia with no capsular support can be managed with anterior chamber intraocular lens (ACIOL), iris fixated IOL or scleral fixated IOL (SFIOL). The procedure of choice depends on the status of the patient's eye as well as the surgeon's experience. Iris-claw lens implantation is an effective method for correction of aphakia with several advantages such as having fewer complications, with its easy placement and good visual outcomes. Herein, we report a case of a 42-year-old male patient who presented with pseudophakic bullous keratopathy with secondary glaucoma as a complication of anterior chamber iris-claw lens.

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With advances in cataract surgery, a complicated cataract surgery resulting in aphakia is less frequently seen these days. Management of aphakia is critical for visual rehabilitation in such cases. The treatment options include aphakic glasses, contact lens, anterior chamber intraocular lens (ACIOL), iris fixated IOL or scleral fixated IOL (SFIOL).¹⁻³ Aphakic glasses are associated with problems of restricted visual field, prismatic effect and aniseikonia (unilateral aphakia); hence, IOL implantation is the treatment of choice wherever feasible. ACIOLs are associated with risk of glaucoma, uveitis and corneal decompensation; therefore, SFIOL implantation has gained significant popularity.² However, SFIOL implantation has a steep learning curve and is associated with complications like retinal detachment

and IOL decentration. It is also important to note that most of the complications associated with above stated IOLs occur as a result of a complicated primary surgery or excessive manipulation during IOL implantation that causes more damage than the IOL itself. Hence, many surgeons prefer an iris clawed lens which is surgically easy to implant, involves a short operating time and, is associated with fewer complications.² The complications associated with iris clawed IOL include disenclavation of haptic, uveitis, glaucoma, pigment dispersion and rarely corneal decompensation.¹

A 42-year-old male presented with history of painful diminution of vision in left eye for one year. He had undergone both eye cataract surgery in childhood followed by secondary IOL implantation at 20 years of age with good vision gain. At presentation, the best corrected visual acuity was 6/9 and 6/60 in the right and left eye respectively. The intraocular pressure (IOP) was 12 and 40 mmHg in the right and left eye respectively. Slit lamp examination of right eye revealed clear cornea with ACIOL in situ and the left eye showed corneal decompensation, pigment dispersion and an anterior chamber iris clawed IOL. (Figure 1 and 2) Posterior segment evaluation showed a normal fundus in right eye and near total cupping in the left eye. On specular microscopy, the endothelial density was 1814 cells/mm² and 462 cells/mm² in the right eye left eye respectively. Patient was diagnosed with both eye pseudophakia with left eye pseudophakic bullous keratopathy with secondary glaucoma and was advised left eye stage 1 trabeculectomy followed by stage 2 iris claw lens explant with SFIOL followed by endothelial keratoplasty.

Hence, serial evaluation of intra-ocular pressure, fundus and endothelial cell count should be done on follow up of all cases with iris claw lens for optimal outcome.

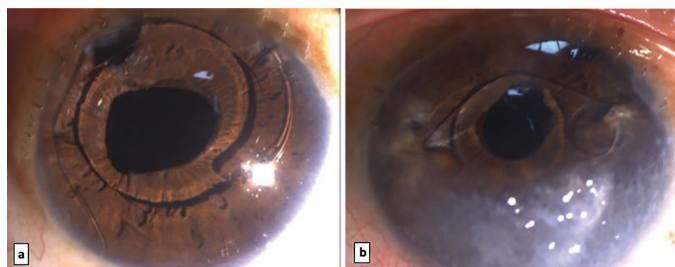


Figure 1: Slit-lamp image in diffuse illumination of a) right eye showing clear cornea with ACIOL, patent peripheral iridectomy and steel sutures in situ; b) left eye showing bullous keratopathy with anterior chamber iris claw lens with pigment dispersion

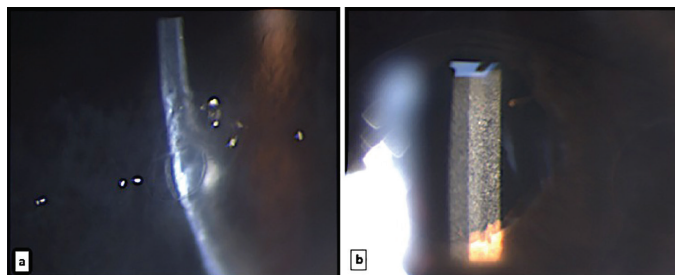


Figure 2: Slit-lamp image of the left eye (magnified view) in slit illumination showing a) corneal decompensation with bullae formation; b) pigment dusting of IOL

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Address for correspondence

Prafulla K. Maharana

Assistant Professor of Ophthalmology, Cornea, Cataract and Refractive Surgery services, Dr. Rajendra Prasad Centre for Ophthalmic Sciences, AIIMS, New Delhi-110029, India
Email id: drpraful13@gmail.com



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