

Traumatic dislocation of an implantable phakic contact lens

*Ravi K Kanaradi, Namrata Bhuta, Naren Shetty,
Rohit Shetty, Chaitra Jayadev*

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Department of Ophthalmology, Narayana Nethralaya Eye Institute, Bangalore, Karnataka, India

Correspondence to: Dr. Chaitra Jayadev, Narayana Nethralaya Eye Institute, 121/C, Chord Road, Rajajinagar, Bangalore - 560 010, Karnataka, India. E-mail: drchaitra@hotmail.com

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Ocular trauma can range from trivial to significant, with varying implications on the visual acuity and prognosis. A 32-year-old woman presented with complaints of blurring of vision following blunt ocular trauma with a previous history of having undergone implantable phakic contact lens (IPCL V2.0) implantation 2 years back. The corrected distance visual acuity (CDVA)

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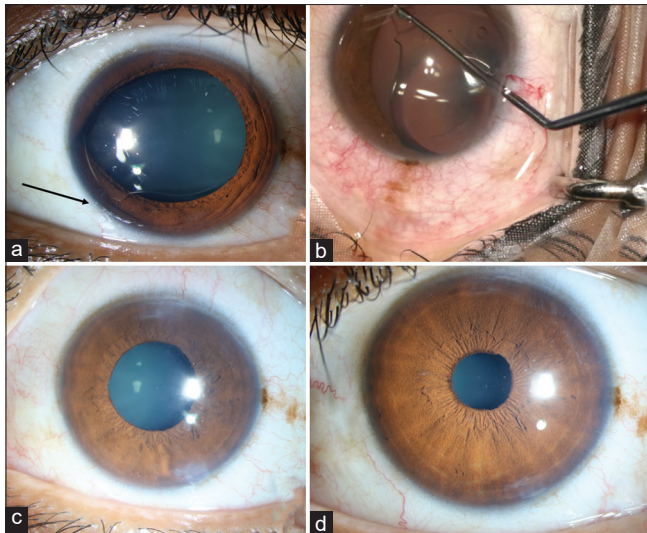


Figure 1: (a): Slit-lamp photograph of inferonasal implantable phakic contact lens footplate dislocation into the anterior chamber following blunt trauma. (b): Repositioning of the dislocated implantable phakic contact lens footplate using a manipulator. (c): Immediate postoperative slit-lamp photograph after repositioning of the dislodged implantable phakic contact lens footplate. (d): Postoperative slit-lamp photograph at one-month follow-up

was 20/20 in the right eye and 20/30 in the left eye. Slit-lamp examination revealed a prolapse of inferonasal IPCL footplate into the anterior chamber with pupillary entrapment. No corneal endothelial touch was noted. Immediate repositioning of the IPCL was performed and the patient regained a CDVA of 20/20 in the left eye, postoperatively. Traumatic dislocation of IPCL is a rare occurrence, which can be successfully managed by prompt surgery, thus avoiding further complications like corneal endothelial decompensation.

Key words: Blunt trauma, implantable phakic contact lens, IPCL dislocation

Phakic intraocular lenses (IOL) are implantable lenses that are surgically placed either in the anterior chamber or posterior chamber in a phakic eye to correct ametropia. Over the past few years, the posterior chamber phakic IOL has proven to be an acceptable alternative for those who are not eligible for corneal based laser vision correction procedures.^[1] While the Visian implantable collamer lens (ICL; Staar Surgical AG, Nidau, Switzerland) has produced excellent long term outcomes in patients with moderate and high ametropia,^[2] the implantable phakic contact lens (IPCL; Caregroup Sight Solutions, India) has a clear economic edge over the ICL for refractive error correction.^[3] Though dislocation of an ICL secondary to ocular trauma has been reported in the past, a literature search did not reveal any case of trauma associated dislocation of an IPCL. We hereby report a unique case of traumatic dislocation of IPCL after blunt trauma and its successful management.

Case Report

A 32-year-old woman presented to our emergency department with blurring of vision in the left eye after accidentally slamming into a wall while walking in the dark. The patient gave a history of having undergone a bilateral IPCL

implantation two years ago. Her uncorrected distance visual acuity (CDVA) was 20/30 in the left eye, with an intraocular pressure of 10 mmHg in both eyes. Slit-lamp examination of the left eye showed that the inferonasal footplate of the IPCL V2.0 had prolapsed into the anterior chamber and was entrapped in the pupillary margin [Fig. 1a]. No corneal endothelial touch of the dislodged IPCL was noted. Fundus examination was normal in both eyes. The right eye examination revealed no abnormalities with an uncorrected distance visual acuity of 20/20. The IPCL was repositioned the same day. Under topical anesthesia, the anterior chamber with injected with viscoelastic material. An IPCL manipulator was inserted from the side port created at 9 'o' clock position to reposition the IPCL behind the iris [Fig. 1b]. Postoperatively, the visual acuity was restored to unaided 20/20, with a well-formed anterior chamber and normal vault on the same day [Fig. 1c]. The patient came for a follow up after a month and her condition was stable [Fig. 1d].

Discussion

The IPCL V2.0 is a hydrophilic hybrid acrylic implant with six haptic pads for better stability in the ciliary sulcus. Increased stability of the IPCL could explain the lower incidence of dislocation in comparison to ICL.^[4-9] The timeline of presentation post ICL dislocation ranged between 4 months to 6 years after implantation. Our patient presented with traumatic dislocation 2 years postimplantation with no adhesions to the surrounding tissues, which could be attributed to the high biocompatibility of IPCLs. Takagi *et al.* observed that an increased pupil diameter and large postoperative vaults could be predisposing risk factors for traumatic dislocation.^[9] However, none of these risk factors were observed in our case.

Most such cases have had good visual outcomes with no significant complications following ICL repositioning surgery. One patient with severe corneal endothelial cell damage necessitating Descemet stripping endothelial keratoplasty has been reported.^[8] Repositioning was done in most cases within a week, highlighting the importance of early repositioning for good outcomes.^[5-7]

Conclusion

The present case demonstrates that despite dislocation of phakic IOLs being rare, it is a vision-threatening complication and can be easily rectified with timely intervention. It is important to do a good examination to recognize and diagnose the dislocation at the earliest to avert any untoward complications like endothelial damage and corneal decompensation.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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