Spontaneous Repositioning of a Subluxated Posterior Chamber Intraocular Lens

Dear Editor,

Malpositioning of a posterior chamber intraocular lens (PCIOL) is a potential complication following cataract surgery. To our knowledge, only 2 cases of spontaneous repositioning of an anteriorly dislocated PCIOL have been reported in literature.^{1,2} We describe a case of late anterior subluxation of a PCIOL followed by spontaneous repositioning 1 month after presentation.

Case Report

A 60-year-old Chinese male, with no significant medical history, underwent uncomplicated right phacoemulsification surgery with a 5.5 mm capsulorrhexis and implantation of a single piece 4-loop aspheric acrylic PCIOL (Bausch & Lomb Akreos® Adapt AO,+20.0D, Rochester, NY, USA) into the capsular bag in March 2009. There was no zonular dialysis intraoperatively and no significant capsular phimosis postoperatively. Preoperative axial length was 24.09 mm.

Two years later, he presented with a 4-day history of right monocular diplopia. There was no history of trauma. His best corrected visual acuity (BCVA) was 6/9 in the right eye (refraction of -2.00DS/-3.25 DCx136°). An anteriorly subluxated and partially tilted in-the-bag PCIOL with a prolapsed superior haptic overlying the pupillary margin was noted (Fig. 1A). There was no PCIOL-cornea contact and no vitreous in the anterior chamber. The rest of the ocular examination was unremarkable.

He was advised surgical repositioning of the subluxated PCIOL, but he chose to defer surgery. One month later, he reported spontaneous resolution of the diplopia. On examination, the PCIOL had spontaneously repositioned back into the posterior chamber (Fig. 1B). Mild pseudophacodonesis was noted. The BCVA was 6/6 (refraction of +0.25DS/-1.50DCx115°).

Two years later, the PCIOL remained stable in the posterior chamber. No additional measures were taken to prevent dislocation.

Discussion

In the absence of other coexisting ocular pathologies or trauma, we believe that spontaneous anterior dislocation

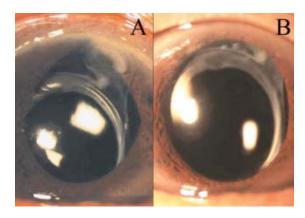


Fig. 1. (A) Anteriorly subluxated in-the-bag posterior chamber intraocular lens with a prolapsed superior haptic seen over the pupillary margin. (B) Spontaneous repositioning of the anteriorly subluxated intraocular lens into the posterior chamber.

of PCIOL in our patient is likely secondary to instability of the capsular bag-IOL complex. Subtle capsular contraction forces with resulting zonular weakness³ may have contributed to the decentration of the single piece acrylic PCIOL.

Management of an anteriorly dislocated PCIOL can be conservative or surgical. Conservative management with observation is a valid option if the dislocation is minimal and if there is no progression on short-term follow-up.⁴ In our patient, physiologic dilatation of the pupil in scotopic conditions associated with the effect of gravity in supine position while resting may have allowed the in-the-bag PCIOL to spontaneously reposition itself.

Conclusion

Spontaneous repositioning of an anteriorly subluxated PCIOL is possible, albeit rarely. It may be worthwhile to consider a conservative approach for minimal anterior dislocation of a PCIOL before proceeding with surgery.

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