Simplified Technique to Remove Posteriorly Dislocated Lens Implants

Keye L. Wong, MD; Harry B. Grabow, MD

Visual loss caused by posterior dislocation of an intraocular lens (IOL) may be managed by placement of a secondary IOL without removal of the dislocated IOL. However, the improved visual acuity may lead to visual disturbances from the mobile, dislocated IOL. Removal of dislocated implants through the pars plana entails risks of a large pars plana incision to include hemorrhage, hypotony, and a greater potential for vitreous traction caused by extraction across the vitreous base. Removal via the corneal limbus lessens these risks but is made more difficult in the presence of a coexisting posterior chamber IOL. The technique reported allows a controlled conversion from posterior to anterior segment surgical techniques that may aid in either the removal or repositioning of posteriorly dislocated lens implants.


Secondary to dislocation of a silicone plate haptic intraocular lens (IOL), an 80-year-old man noted sudden, painless loss of vision in his right eye 9 months following Nd:YAG laser capsulotomy. Despite excellent recovery of visual acuity following subsequent placement of a sulcus-fixated 3-piece IOL, the patient complained of a visual disturbance from the posteriorly dislocated IOL and requested that the mobile IOL be removed. The patient underwent pars plana vitrectomy. A right-angled vitreoretinal pick was passed through the positioning hole in the plate-haptic to elevate the IOL into the anterior vitreous cavity. Using the operating microscope for illumination, vitreoretinal forceps holding a loop of 6-0 nylon suture were then exchanged for the light pipe through the nasal sclerotomy. The loop of nylon was engaged by the vitreoretinal pick (Figure 1) to draw the suture loop out of the temporal sclerotomy. The suture was then externalized and tied loosely (Figure 2). The IOL was thus suspended on this “clothesline” suture between the 10-o’clock and 2-o’clock position sclerotomy sites. Placement of scleral plugs allowed control of intraocular pressure. Viscoelastic was utilized to slightly sublux the sulcus-fixated intraocular lens inferiorly. The opening created between the superior pupillary margin and the superior optic edge was sufficient to allow vitreoretinal forceps to grasp the suture-suspended plate-haptic IOL via the corneal limbus. As the dislocated IOL was removed, the externalized suture was cut. Removal of the posterior chamber viscoelastic allowed recentration of the sulcus-fixated lens. Six months postoperatively, the patient’s visual acuity remained at 20/20 OD.

This technique allows the dislocated IOL to be fixated in the anterior vitreous cavity using common vitreoretinal instrumentation, thereby allowing the surgeon to choose between posterior segment and anterior segment surgical techniques. With a third fixation point, bimanual pars plana techniques can be used with increased ease to rotate the IOL into the ciliary sulcus. Perfluorocarbon liquid can also be used to bring the implant into the anterior vitreous cavity, but this
is an expensive and potentially dangerous modality.\textsuperscript{1-3} Although this technique allows removal of the dislocated IOL with minimal manipulation of a coexisting IOL, the patient should be warned that this manipulation may still dislodge a sulcus-fixated IOL. Even though this case resulted in excellent visual results facilitated by a novel surgical technique, caution should be exercised when placing a secondary IOL in an eye with an existing dislocated IOL.

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Corresponding author and reprints: Keye L. Wong, MD, Sarasota Retina Institute, 3400 Bee Ridge Rd, Sarasota, FL 34239 (e-mail: klwong101@home.com).

\textbf{REFERENCES}

