Late Dislocation of Iris-Claw Phakic Intraocular Lens after Natural Childbirth

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Dear Editor,

Although, implantation of phakic intraocular lens in the anterior or posterior chamber correct high refractive errors, this modality has few complications that should be considered. This case report describes a woman who had dislocation of iris-claw phakic after natural childbirth resulting in complications that require re-enclavating the lens.

A 35-year-old woman presented to eye clinic with a two weeks history of red eye, pain, and blurred vision in left eye after normal vaginal delivery. The patient did not receive epidural anaesthesia during labor. The patient was in good health and had no previous medical history such as hypertension, diabetes mellitus, and trauma. She has a history of high myopia (-14.0 D in right eye and –13.50 D in left eye) and underwent iris-claw phakic intraocular lens implantation surgery 6 years ago. On ocular examination, her best corrected visual acuity (BCVA) was 20/70 in right eye and 20/400 in left eye and increased by pinhole 20/100. Her refractive errors were +0.75 D/-0.25@10 D in right eye and unmeasurable in left eye. Slit lamp assessment showed left acute anterior uveitis (anterior chamber cells and flare) and inferior dislocation of the iris-claw phakic IOL into the iridocorneal angle. (Figure 1) Her cornea was clear without pigmentary deposits, and the IOL had no contact with the corneal endothelium. Intraocular pressure (IOP) was recorded as 15 mm Hg in right eye and 20 mm Hg in left eye. Steroid drops (betamethasone 0.1%) and IOP-lowering drops (dorzolamide 2%/timolol 0.5%) was prescribed to control inflammation and IOP. Her conjunctival injection and anterior chamber reaction improved in subsequent examinations and IOP reached to 15 mm Hg. She has been advised to re- enclavation of iris-claw IOL. After 1 month had no symptoms and AC-IOL was clear and fixed horizontally. (Figure 1) In follow up examination, the patient had -0.75 D refractive error with 20/40 visual acuity postoperatively.

In recent years, phakic intraocular lenses in the anterior or posterior chamber in patients with high refractive errors have provided excellent visual results and predictable refractive outcomes. One type of phakic intraocular lenses is the iris-claw IOLs, which are fixated with haptics to the iris with clips. Iris-claw IOLs have demonstrated satisfactory results in insufficient capsule support, the surgical correction of an aphakic eye, phakic dislocation, or dislocation of an IOL [1]. A low rate of complications of these lenses have been reported in patients including slight pupil distortion, early postoperative raised IOP, hemorrhage in AC, chronic uveitis, cystoid macular edema, and endophthalmitis [2]. Traumatic or spontaneous dislocation of the iris-claw IOLs in AC is a rare event and has been reported in some studies [3]. The exact cause of iris-claw IOLs dislocation is not known, but factors such as the surgical factors (inadequate amounts of iris tissue for enclavation, and excessive manipulation of the iris tissue during enclavation) and late iris atrophy predispose the patient to further problems [4]. Another possible reason for dislocation of IOL in this patient was the Valsalva maneuver during normal vaginal delivery. During the Valsalva maneuver, squeezing the eyelid and subsequently opening the eyelid can temporarily increase and then decrease IOP. These changes in IOP induce a pressure gradient across the pupil and can lead to iris-claw phakic IOL dislocation. [5] Therefore, it is recommended that pregnant women with phakic intraocular lenses...
undergo ophthalmologic examination before birth delivery. Also, these patients may be an indication for an elective cesarean section.

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References:

**Figure Legend**

**Figure 1.** **A:** Slit lamp image of inferior dislocation of the anteriorly iris-claw lens after NVD. **B:** 1 month postoperative image of this eye, with the lens being re-enclavated.