Iris-fixated posterior chamber intraocular lenses: A must know for all anterior segment surgeons

Dear Editor,

We read with great interest, the article reviewing the technique of retrofixated iris-claw lenses, its safety and efficacy in aphakic patients without capsular support, by Rao and Sasidharan[1] and congratulate them on the same. We have done this procedure in 32 eyes and agree with the authors, that this is a good procedure. However, we would like to highlight a few important aspects to understand this surgery better.

1. The original lens used in this technique was the Artisan iris-claw intraocular lenses (IOL) (Ophthece BV, Groningen, The Netherlands). Like the authors, we used the lens by Excel optics, Chennai, which has three models. We prefer model no: PIC 4272, as we found it the easiest to enclave

2. IOL power calculation is usually calculated using the SRK-T formula aiming for a 0.5-1 diopter residual myopia. There is a need to individualize the surgeon factor dependent A constant after a few surgeries

3. Regarding the surgical technique, either superior or temporal approach can be used. The surgery can be done using an anterior chamber maintainer, pars plana infusion canula, or by liberal use of viscoelastics; since the eye is soft following vitrectomy. Though the surgical technique using only viscoelastics is easier, there is a greater incidence of postoperative IOP spikes as it is difficult to remove the entire viscoelastic agent from the posterior segment after the iris-claw lens is inserted. Once the first haptic is enclaved, great care must be taken while positioning the second haptic behind the iris as excessive manipulation can lead to iridodialysis. In case the iris is torn, for example following trauma or if there is excessive mydriasis, this procedure can be combined with a Siepser pupilloplasty

4. Ovalization of pupil is the most common complication of this surgery and is caused by enclaving too close to the pupillary margin. Also, enclavation should not be done too close to the root to prevent interference with iris movement. Postoperative dilatation is unaffected if the technique is correct. The role of an iridectomy is debatable with some studies showing that it is not required and they did not see secondary pupillary block glaucoma.[3] We do it in all cases

5. Postoperative inflammation is usually due to excessive intraoperative manipulation. There is also concern about pigment epithelial loss and dispersion, though studies have shown that progressive pigment dispersion and glaucoma are not common late complications[3,4] probably due to the vaulted design of these lenses

6. In the future, there also may be multifocal and toric retrofixated lenses, thereby offering these patients even better postoperative vision.

In conclusion, implantation of the iris-claw IOL behind the iris better preserves the anatomy of the anterior segment with respect to iridocorneal angle.[2] This is a technique that every anterior segment surgeon must have in their armamentarium.

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References