

Clinical outcomes of retropupillary fixated iris claw IOLs in pediatric age group

Dear Editor,

I am writing this letter to share our experience with retrofixated iris claw intraocular lens (RFICIOL) in pediatric aphakia with insufficient capsular support. We studied the use of RFICIOL in pediatric aphakia with insufficient capsular support. Our short-term follow-up results contribute to the existing literature, most of which are retrospective studies.^[1,2] We followed 50 eyes of 28 patients aged 5–15 who underwent endocapsular lens aspiration and RFICIOL for ectopia lentis.^[3] The mean age was 8.32 years, consistent with the typical age of presentation for ectopia lentis.

After 12 months, the best corrected visual acuity improved significantly in 96% of the eyes. Postoperative complications were minimal, with one patient experiencing an immediate postoperative intraocular pressure (IOP) spike and 4% having postoperative hypotony and choroidal detachment due to a leaking wound, managed with wound resuturing. Disenclavation of iris claw intraocular lens (IOL) occurred in 4% of our cases. Most of them were posttraumatic [Fig. 1a–d]. Literature reports a lower incidence.^[2]

We used a manufacturer-recommended A constant of 117 and the modified SRK II formula with age-appropriate undercorrection.^[4] The final mean refractive spherical equivalent (MRSE) was +1.12 D at the last follow-up. The median prediction error was 0.5 D, and the median absolute prediction error was 1 D.

Pupil ovalization was seen in 44% of patients on post-op day 1, which normalized by 2 weeks post-op [Fig. 1e and 1f].

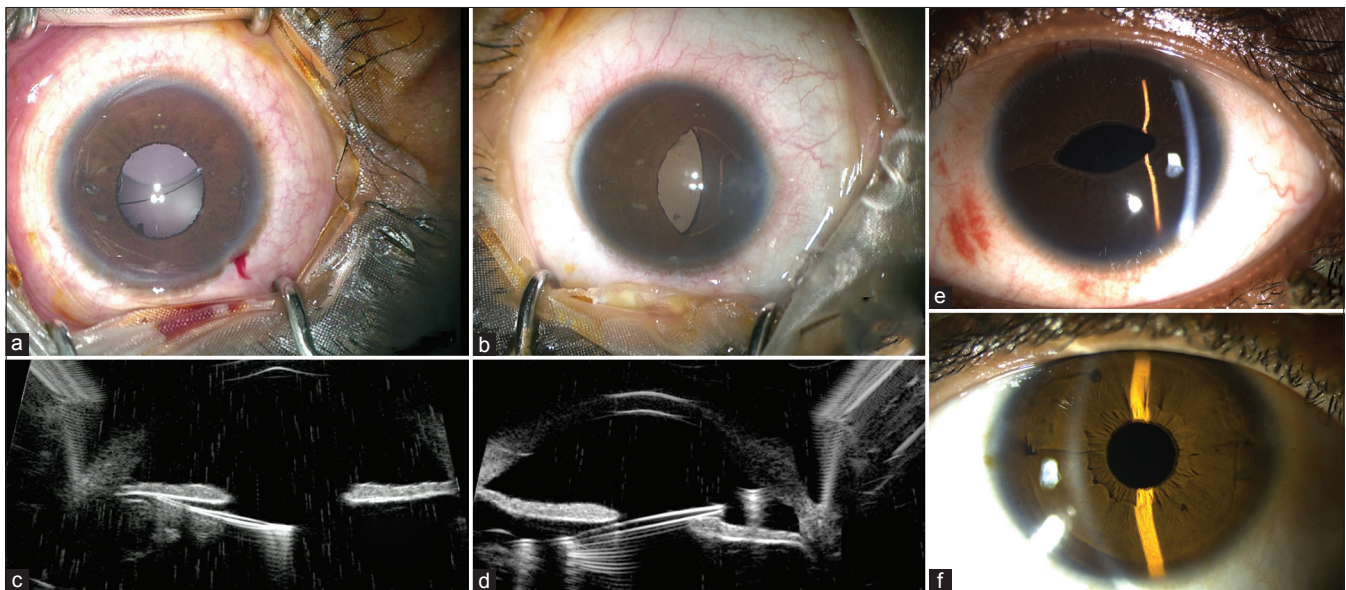


Figure 1: Clinical pictures of various patients and corresponding UBMs. (a) Nasal haptic disenclaved with inferiorly decentered IOL. (b) Disenclaved haptic with haptic in the anterior chamber. (c) UBM of the patient with the clinical picture in Figure 1a showing disenclaved iris claw lens. (d) UBM of the patient with the clinical picture in Figure 1b showing disenclaved haptic of the IOL anterior to the iris. Figure showing pupil ovalization (e) on post-op day 1 and subsequent normalization (f) of the pupil shape on follow-up. IOL = intraocular lens

There was no significant change in postoperative maximum pupil dilatation, no hindrance to peripheral retina examination, and no evidence of macular edema.

The mean endothelial cell count (ECC) dropped by 2.8% from the preoperative value to 3150/mm² at the last follow-up. The effective lens position measured postoperatively on ultrasound biomicroscopy varied from 3.23 to 5.20 mm. A similar value has been reported in the literature.^[5]

In conclusion, our study supports the use of RFICIOL in pediatric aphakia with insufficient capsular support, demonstrating promising short-term outcomes. We hope our findings contribute to the ongoing discussions in this field.

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