

**Evaluation of Iris Claw Intraocular Lens
Implantation
For Aphakia**

Thesis

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In Ophthalmology

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Summary

Aphakia is a condition characterized by absence of the crystalline lens. Most common cause is after cataract removal. It can also be caused by traumatic dislocation or 2^{ry} to lens subluxation as Marfan syndrome or congenital causes.

Correction of Aphakia is mandatory to ensure visual rehabilitation, as aphakia renders the eye high hypermetropic if was previously emmetrope.

There are many options for correction of aphakia as optical correction with glasses or contact lens which could be inconvenient in unilateral aphakia or contact lens intolerance or complications. Surgical correction entails IOL implantation in the capsule bag if available or in cases of insufficient capsule support other options as angle supported ACIOL, Scleral fixated IOL, Iris sutured IOL, or Iris Claw IOL should be considered.

Iris claw IOL can be fixated in the AC or retropupillary with easy technique and short procedure, with good visual outcome but there are concerns about the effect on corneal endothelium.

In our study, we implanted the Artisan iris claw IOL in the AC of 16 eyes of 12 patients, and they were followed for 9 months as regards BCVA, IOP, ECC and AC angle by OCT.

At the end of our study we found that the BCVA was significantly improved postoperatively as compared with the preoperative value. IOP was not affected by the presence of the IOL throughout the 9 months.

ECC was reduced significantly postoperatively as compared to the preoperative values, but was mostly affected by surgical trauma.

AC angle assessment was non-significantly changed between pre and postoperative measures.

Our results was comparable to many others as Català-Mora et al, Faria et al, Gawdat et al. and Anbari and Lake in their studies as regards BCVA, IOP and ECC. And comparable to Koss and Kohnen as regards AC angle assessment.

However was not consistent with Gicquel et al as regards the ECC as they recommend implanting the IOL retropupillary.

In conclusion, we found that the Artisan iris claw IOL is a good option in correcting aphakia with insufficient capsule support.