

ARTISAN IRIS CLAW POSTERIOR CHAMBER LENS IMPLANTATION IN PATIENTS WITHOUT CAPSULAR SUPPORT

Purpose: To present our data for a consecutive series of 31 patients who had vitrectomy and implantation of Artisan lens either as a primary operation or as a secondary operation due to IOL subluxation. **Methods:** Analysis of 31 patients who underwent 23 gauge 3-port pars plana vitrectomy and posterior iris clipped Artisan lens implantation. The primary outcome of our study was final best corrected visual acuity. Secondary outcomes included final postoperative refraction and the incidence of complications such as postoperative cystoid macular oedema and ocular hypertension. All lenses were placed using a superior 6mm clear corneal incision which was always sutured closed with 5 10-0 nylon sutures.

Results: Mean pre-operative visual acuity was 6/120 Snellen (range 1/200 - 6/24) and intraocular pressure (IOP) was 16.8 7.7 mmHg. At the end of the follow-up period (13.5 8.7 months), visual acuity had improved to an average of 6/6 Snellen (range 6/12 -6/4) LogMAR and intraocular pressure was 15.8 4.4 mmHg. The average postoperative spherical equivalent was -0.16 0.24. The average postoperative cylinder was -2.25 (0.57). 2 patients developed postoperative cystoid macular oedema which resolved with topical therapy.

Conclusions: Posterior Artisan lens implantation in combination with 23 gauge pars plana vitrectomy provides reliable and durable visual improvement for patients with poor capsular support unable to receive in-the bag or sulcus placed intraocular lenses. A different surgical approach, such as scleral tunnel lens implantation, may result in less surgically induced astigmatism as that found in our study.