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A four-year retrospective study on outcomes of iris-claw anterior chamber intraocular

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ABSTRACT

Objective: To evaluate the outcome and complications of ARTISAN (iris-claw anterior chamber intraocular lens) and scleral fixated (SF-IOL) lens implantation. **Method:** A retrospective analysis was done in 29 eyes of 43 patients which had ARTISAN lens implantation (58%) and 21 eyes with SF-IOL (42%), in Melaka Hospital from January 2014 till January 2018. **Results:** The mean operating time with ARTISAN lens implantation (63±26.9 minutes) was shorter compared to SF-IOL (86 ± 38.1 minutes). There were no statistically significant difference in mean operating time between the two groups of secondary implantation [ARTISAN: 55.3±28.2 minutes; SF-IOL: 69.7±17.7 minutes (p = 0.213)]. Conversely in combination surgery, implantation of ARTISAN lens showed a significantly shorter duration compared to SF-IOL. [ARTISAN: 65.1±26.9 minutes; SF-IOL: 104.1±46.8 minutes (p=0.03)]. In addition, ARTISAN lens demonstrated a 65.5% improvement of best corrected visual acuity (BCVA) in ≥ 2 lines as compared to SFIOL (35%). There were no significant differences in post-operative BCVA between the two groups (p= 0.51). Complications in both the groups are comparable: (retinal detachment: 4.7% in SF-IOL and 3.4% in the ARTISAN group, secondary glaucoma: 9.5% in SF-IOL and 6.9% in the ARTISAN group). Also, SF-IOL demonstrated a 14.28% incidence of post-operative epiretinal membrane (ERM) and 4.7% post-operative cystoid macular oedema (CMO). However, this is not present in the ARTISAN group. **Conclusion:** In complicated cataract surgeries without adequate capsular support, both ARTISAN and SF-IOL are both comparatively equal in terms of visual outcomes and complication rates. Nonetheless, ARTISAN lens implantation might shorten the duration of operation.

KEY WORDS:
Iris-claw IOL, scleral fixated IOL, visual acuity, ARTISAN

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A study on treatment outcome of micropulse transcleral cyclophototherapy

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ABSTRACT

Objective: To evaluate the efficacy of MPTCP performed in Hospital Kuala Lumpur. Outcome measured were IOP reduction and number of IOP lowering medications at 1 week, 1 month, 3 months, 6 months and 1 year. **Method:** Prospective interventional case series of glaucoma patients treated with MPTCP between January and June 2017. **Results:** Total of 24 patients (34 eyes) were treated. The mean age was 54.1 years old, with male 67% and female 33%. 15 eyes (44%) underwent prior filtering surgery which failed. 12 eyes were POAG, 8 were PACG, 14 were secondary glaucoma. 79.4% (n=27) of eyes successfully achieved IOP reduction at end of study. Mean pre-treatment IOP were 30.5mmHg. IOP reduction was 36.2% at 1-week post-treatment, 31.9% at 1 month, and 12.2% at 3 months. IOP reduction was observed to be more stable and sustainable in POAG group, while PACG and Secondary glaucoma has lesser reduction. Mean number of IOP lowering medications were reduced by 0.29, from 3.13 before MPTCP to mean of 2.88 at final follow up. Study limitations were non-comparative study, small sample size, heterogeneity in types of glaucoma. **Conclusion:** MPTCP is safe, minimally invasive and repeatable, which short-term results shows effective IOP lowering in treatment of all types of glaucoma. However, there was no significant reduction in number of IOP lowering medications.

KEY WORDS:
Glaucoma, micropulse cyclotherapy, intraocular pressure