ABSTRACT

Aim:

To assess the efficacy and visual outcome of posterior chamber phakic intra-ocular lens in patients with high myopia.

Study Design: Prospective interventional case series.

Study Centre:

RIOGOH, Chennai.

Participants:

50 eyes of 34 patients with myopia ranging from -6.00 D to -21.00 D were included in this study.

Main outcome measured:

Uncorrected Visual Acuity (UCVA), retinoscopic refraction, Best corrected visual acuity (BCVA), Anterior chamber depth, Central corneal thickness (CCT), Endothelial count, Intra-ocular pressure(IOP), vault of phakic IOL.

Results:

The mean follow-up was 6 ± 3(SD) months. Mean post operative spherical equivalent power was -0.50 D ±1.00 D. Post operative BCVA of 92 % eyes were better than pre operative UCVA and 8% had same as post operative BCVA. There was no incidence of cataract in our study. Only one eye (2%) had increased IOP during the early post operative period. There was no significant change in endothelial count among these patients. Around 3.5% reduction in endothelial cells was observed in our study. In our study, mean pre- op AC depth was 3.06 mm and post- op AC depth was 2.57 mm. There was significant reduction in AC depth in

all patients, but it was not < 2.4 mm. Pupillary block, Pigment dispersion, iritis and retinal detachment were not observed in our study.

Conclusion:

Implantation of posterior chamber phakic IOL for the correction of high myopia was a safe procedure with good visual and refractive results from the early postoperative period to 1 year. However Long-term follow-up is required to confirm the long-term safety of this lens.

Keywords:

High myopia, phakic IOL, Posterior chamber phakic IOL