

PO0975

Seven-Year Clinical Outcomes After Implantation Of Eyecryl Phakic Posterior Chamber Intraocular Lenses For High Myopia

G. Yalçinkaya Çakır^{1,*}, I. Çakır², A. Kırgız², A. Ağca³

¹Ophthalmology, Patnos State Hospital, Agri, ²Ophthalmology, University of Health Sciences Beyoglu Eye Training and Research Hospital, ³Ophthalmology, Dünya Eye Hospital, Istanbul, Türkiye

Purpose: To evaluate the long-term (7 years) clinical outcomes, safety and efficacy of Eyecryl Phakic posterior chamber intraocular lens (IOL) (Biotech Vision Care, Ahmedabad, India) implantation in patients with high myopia.

Setting: University of Health Sciences Beyoglu Eye Training and Research Hospital, Istanbul, TURKEY

Methods: Patients treated with Eyecryl Phakic IOL implants with follow-up periods of at least seven years were evaluated retrospectively. Preoperative and postoperative seventh year spherical equivalent (SE) of manifest refraction values, uncorrected and corrected distance visual acuities (UDVA and CVDA, respectively), and endothelial cell density (ECD) values were analyzed. Vault measurements were made in the first and seventh years postoperatively. Complications were evaluated.

Results: Thirty-six eyes of 18 patients were analyzed. Preoperative and the 7th year mean SE was -12.75 ± 3.11 D and -0.86 ± 0.66 D, respectively. Preoperative and the 7th year UDVA was 1.54 ± 0.26 and 0.25 ± 0.31 logMAR ($p < 0.001$), respectively. The safety index (postoperative CDVA / preoperative CDVA) was 1.55 ± 0.54 . The efficacy index (postoperative UDVA / preoperative CDVA) was 1.24 ± 0.53 . The mean postoperative endothelial cell loss at seven-years was 6.96%. None of the patients had a preoperative ECD reduction of more than 25%. The central vault height in the first and the seventh year were 0.52 ± 0.14 and 0.49 ± 0.14 mm, respectively ($p > 0.05$). In two eyes (5.6%), myopic choroidal neovascular membrane appeared after six years.

Conclusions: These findings supported the long-term (7 years) stability, efficacy, and safety of the Eyecryl Phakic IOL implantation for high myopia. ECD and vault height both tended to decrease over time. To ensure safe and effective long-term outcomes following the implantation of an Eyecryl Phakic IOL, routine exams that evaluate visual acuity, refraction, changes in vault height, the presence of lens opacity, and monitoring of endothelial cells are important.

Disclosure of Interest: None declared