Introduction

Surgical treatment of Keratoconus includes intracorneal ring segments implantation to correct irregular astigmatism and corneal aberrometry. High refractive errors can be treated with a phakic IOL implantation. A pIOL is a reversible and additive procedure, does not modify or weaken the corneal tissue. Our purpose is to analyze effectiveness, predictability and safety of phakic posterior chamber intraocular lens (IOL) as refractive procedure for myopia correction secondary to Ferrara® rings implantation in keratoconus patients.

Material and Methods

Retrospective study of patients submitted to ICL V4C® model IOL implantation for myopia correction secondary to Ferrara® rings used in keratoconus correction. Minimum follow-up time after ICRS implantation and before ICL implantation was 6 months. Minimal follow-up time after ICL implantation was 3 months.

Evaluation parameters included Best-Corrected Visual Acuity (BCVA), manifest refraction, endothelial cell count and biomicroscopy. Spheric IOL power was calculated based on subjective refraction, anterior chamber distance (ACD) and keratometric measurements obtained with Scheimpflug tomography. IOL diameter was calculated by OCT Visante Omni® according to horizontal and vertical angle-to-angle distance.

All surgeries were performed under general anesthesia using temporal meridian 3.2 mm corneal incision, no iridectomy and intracameral 0.1 mL cefuroxime injection.

Results

3 eyes of 3 patients were analyzed.

No complications were described.

Conclusions

V4C ICL implantation is an effective and safe technique to correct myopia in patients with keratoconus previously treated with corneal rings showing an improved and satisfactory BCVA.

REFERENCES: