( ) R1 ( ) R2 ( ) R3 ( ) PG0 ( ) PG1 ( ) Estagiário ( ) Tecnólogo ( ) PIBIC

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EVALUATION OF CLINICAL SECURITY AND VISUAL ACUITY OUTCOME OF THE FOLDABLE ACRYLIC MINIFLEX INTRAOCULAR LENS

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Purpose:
To evaluate the efficacy, predictability and safety of implanting a new foldable acrylic posterior chamber intraocular (PCIOL) lens (MiniflexÒ, Mediphacos, Brazil) under 2.0-mm corneal incision.

Methods:
This prospective noncomparative study included 50 patients who underwent phacoemulsification with a PCIOL implanted in the capsular bag. All surgeries were performed by the same surgeon. Intraoperative data were colected. Uncorrected visual acuity (UCVA), best corrected visual acuity (BCVA), slitlamp biomicroscopy, tonometry, fundus exam, topography and endothelial specular microscopy were performed preoperatively and 1, 3, and 6 months after surgery.
The achieved refractive error one month after surgery was compared to the predicted postoperative refractive error by SRK/T formula. Surgically induced astigmatism (SIA) was evaluated using vector analysis based on corneal topography. Mean preoperative corneal central power was 43.63 diopter (D) +/- 1.34 (SD).

Results: The results are still in progress. So far the mean UCVA and BCVA is -0.020 +/- 0.036 logMAR and -0.016 +/- 0.037 logMAR, respectively. There were no statistically significant differences between UCVA and BCVA after the IOL implantation. The mean predicted refraction is – 0.431 ± 0.181 D and the mean achieved postoperative spherical equivalent was – 0.220 ± 0.732 D.

Conclusions: Our topographic analysis clearly demonstrated that a smaller wound in phacoemulsification surgery produced almost no surgically induced alteration of the cornea and stabilized rapidly