

R1 R2 R3 PG0 PG1 Estagiário Tecnólogo
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Service (sector) Cataract N° CEP

Cataract in Long Term Contact Lens Adapted Keratoconus Patients

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PURPOSE: To evaluate the management of cataract in Keratoconus patients well adapted to contact lens, featuring phacoemulsification results, IOL power calculations, and time to final visual recovery.

METHODS: Case-series of keratoconic eyes well adapted to rigid contact lenses that developed visual significant lens opacity and underwent cataract extraction (phacoemulsification). We emphasize: IOL calculation method, intraoperative complications, time to readapt contact lenses, uncorrected and contact lenses- corrected visual acuity postoperatively, and subjective satisfaction.

RESULTS: Twelve eyes of seven patients were operated on using phacoemulsification. Mean age was 52 years (52 –73). Patients have been followed for a mean 21,8 years due to keratoconus prior to cataract diagnosis, and wearing rigid contact lenses for a mean 34 years (20 – 40). Mean contact lens power was –12.25 D (-6 to –16.5 D) before surgery, and –2.75 D (+1.25 to – 7 D) after readaptation following the surgery. There was no significant difference between keratometric values pre and postoperatively. Mean IOL power was 5.8 D. All patients were extremely satisfied with immediate uncorrected visual result due to a major miopic error reduction, and achieved contact lenses corrected visual acuity better than 20/40 - except for one patient with advanced ARMD. Rigid contact lens refit was achieved within an average 40 days period after surgery (17 – 123 days). Deep anterior chamber (miopic eyes), cornea instability (apical thinning) and some degree of corneal opacity cause this surgeries to be more difficult than regular phacoemulsification. One eye had posterior capsule rupture and vitreous loss during phacoemulsification (8.3%).

CONCLUSION: Phacoemulsification allowed a fast uncorrected and best corrected visual acuity recovery, with high subjective patient satisfaction. IOL calculation based on the same keratometric values used for contact lens fitting, lead to a final overrefraction of low miopia in most cases, as desired. This serie shows this to be a reasonable approach for cataract treatment in keratoconus patients well adapted to contact lenses, avoiding the odds of a triple procedure.