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PIBIC Last Name - Ciola First Name - Fabiano Middle - Bojikian

Service (sector) Cataract N° CEP

## **SURGICAL COMPLICATIONS OF THE USE OF FOLDABLE AND NON FOLDABLE INTRAOCULAR LENSES IN CATARACT SURGERY**

Ciola, F.B.; Shu I, Y.; Hirashima,D.; Soriano, E.

**Purpose:** To compare the surgical complications of the use of foldable and non-foldable intraocular lenses in cataract surgery by phacoemulsification at a University Hospital.

**Methods:** Analysis of all phacoemulsifications performed by residents, fellows and staff, at the surgical suite of the Ophthalmology Department of the Federal University of São Paulo between August 1st and October 23. At the end of each surgery, the main surgeon filled out a complete questionnaire about the procedure, including surgical experience, presence of teacher during the surgery, technique of implantation of the intraocular lens (IOL) and respective complications, surgery general complications. The Alcon® IOLs: Crystal (single piece - non-foldable PMMA), HydroSof (single piece - foldable Hydrogel) and AcrySof Multi-Piece (foldable PMMA) were used.

**Results:** 621 phacoemulsifications were performed during the study period. HydroSof was used in 267 surgeries (43%), AcrySof in 210 surgeries (34%), Crystal in 115 surgeries (19%), other lens in 27 surgeries (4%) and two patients were left aphakic (<1%). 52% of the IOLs were implanted using the Monarch II injector, 25% using a forceps (unfolded), 22% using a folder and a forceps (folded); the IOLs were fixed at the iris in 1% and at the sclera in < 1%. There was a total of 19% of complications in the IOLs implants such as lens rupture, inverted implant and posterior capsular rupture during implant. HydroSof was responsible for 66% of all the complications, followed by AcrySof (23%), Crystal (10%) and others (<2%).

**Conclusion:** The foldable IOLs were responsible for most of the implants complications during cataract extraction by phacoemulsification.