

R1  R2  R3  PG0  PG1  Estagiário  Tecnólogo  PIBIC

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Service (sector)

Refractive Surgery

Nº CEP

### **Correlation between Keratoscopy and Refraction post corneal refractive lamellar surgery by excimer laser (Lasik).**

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**Purpose:** The objective of this study is observe and correlate data about the keratoscopic and refractive difference between preoperative and postoperative corneal refractive lamellar surgery performed by Excimer Laser (LASIK). This study can help in the outcome of unexpected results in refractive surgery.

**Methods:** Keratometry and cycloplegic refraction data was obtained either preoperative or postoperative. Thirty eyes submitted to refractive surgery by Lasik method had their pre and postoperative topographic maps performed at 1 month and subtracted using the software included in the EyeSys System. The exams were done in patients from the Refractive Surgery Section of the Department of Ophthalmology of Federal University of São Paulo (UNIFESP). The criteria of inclusion were patients with myopia until  $-8$  D or astigmatism until  $-2.5$  D without prior surgery or corneal pathology.

**Results:** A positive correlation ( $r = 0,90$ ) was found between topographic and refratometric data. The average correction factor between them was 1: 0,68, in other words, it should be expected to have 1D of refractive correction if one observed 0,68D of topographical change.

**Conclusion:** The international literature already presented this data and correlation analysis. In our environment it was performed for the first time, allowing interpolation and better understanding of unexpected result cases, specially when refratometric data pre and postoperative does not match.