



# Refractive surgery in a public hospital during Covid era

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#### **Purpose:**

To present the results of the preoperative studies of the A' Ophthalmology Clinic's Refractive Department

#### **Method:**

- The preoperative studies conducted at A' Ophthalmology clinic during the period 03/2020-12/2023 were collected and analyzed.
- Due to urgent sanitary measures, the department was not operational or operated with a maximum of five appointments per week, for an extended period.
- Studies with insufficient data were excluded from the research.
- Patients' age, refraction, clinical findings, reasons for exclusion, type of operation (PRK / LASIK), post-op refractive outcome and complications were collected.

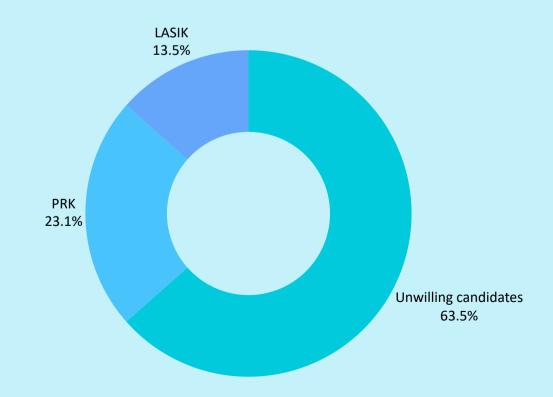
#### Each patient underwent the following exams:

- Complete refractive work-up (subjective, objective and best corrected visual acuity, cycloplegic refraction)
- Pupil diameter measurement under mesopic and scotopic conditions
- Dominant eye evaluation
- Schirmer's Test
- Corneal Tomography (Pentacam)
- Slit lamp examination
- Pachymetry
- Fundoscopy
- Applanation tonometry

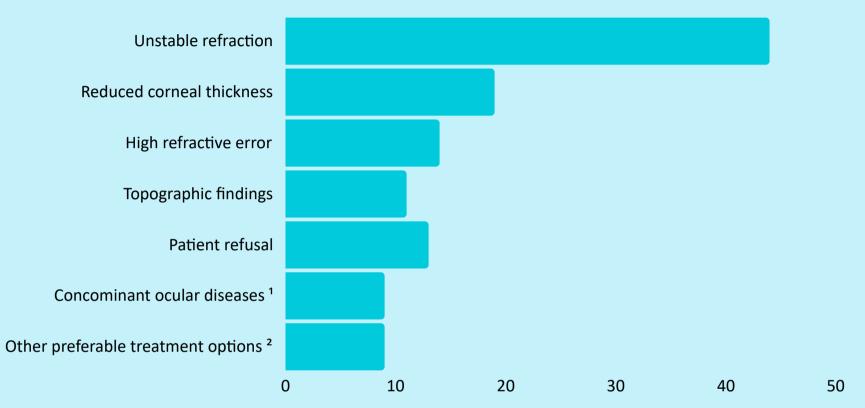
### **Results:**

- A total of 223 studies were performed
- Mean patient age was: 31.32 years old
- 119 patients were deemed unsuitable for refractive surgery
- Alternative solutions were offered, if applicable.

# 36.5% of suitable candidates proceeded to refractive surgery



## The most common reasons for unsuitability of the candidates



- Discussion was made with each patient about the desired outcome, laser procedure and potential risks
- Out of 104 deemed suitable for refractive surgery, only 38 eventually were willing to proceed to the operation after the preoperative discussion
- 24 PRK and 14 LASIK were performed
- No intraoperative or postoperative complications were reported

<sup>&</sup>lt;sup>1</sup> Amblyopia (n=3), Dry eye (n=2), Glaucoma (n=1), Cataract (n=1), Sjogren (n=1), Keratoconus (n=1)

<sup>&</sup>lt;sup>2</sup> Clear lens extraction (n=7), ICL (n=2)

## **Conclusion:**

- Refractive surgery in a public hospital remains a feasible option for spectacle independence
- Despite the urgent sanitary conditions, the patients' interest in being independent from spectacles has remained undiminished.
- The primary factor leading to candidates' unsuitability was unstable refraction, accounting for 37% of cases
- It was observed that only 17% of the preoperative studies eventually proceeded to refractive surgery. To the best of our knowledge, this occured because of the strict preoperative criteria applied, the lack of patients' information regarding the risks/benefits of the surgery and alternative treatment options given.