

3 de Dezembro

08h30 | 10h00 – Sala 2

Catarata | Cataract

Moderadores | Chairs: João Feijão (CHULC), Conceição Lobo (CHUC), João Paulo Macedo (CHUSJ)

CO 107

REDUCED CARDIOVASCULAR RISK SCORE FOLLOWING BILATERAL CATARACT PHACOEMULSIFICATION SURGERY: A RETROSPECTIVE STUDY

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Introduction and Objective: Cataract surgery is one of the most common surgical procedures performed worldwide, highly effective in reducing visual impairment, while having a major positive impact in patients' daily activities and quality of life. In this study we aim to assess how CV risk changes following bilateral cataract surgery.

Methods: We retrospectively selected 112 patients who underwent uncomplicated bilateral cataract surgery at Centro Hospitalar de Entre o Douro e Vouga (CHEDV) between 2018 and 2019. This patient cohort was further subdivided in 2 different groups: group 1 – no to mild visual impairment, ≤ 0.48 LogMAR; group 2 – moderate to severe visual impairment, > 0.48 LogMAR. We accessed peripheral blood levels of total cholesterol (TC), high density lipoproteins (HDL), low density lipoproteins (LDL), triglycerides (Tg), as well as systolic arterial blood pressure (SAP) and diastolic arterial blood pressure (DAP), one month prior to surgery and six months following surgery. We compared the changes in the CV risk score components in our patient cohort and between subgroups 1 and 2, before and after surgery, using paired samples Student's T test or Wilcoxon rank, and repeated measures ANOVA with Tukey post-hoc tests, respectively. Furthermore, we correlated visual acuity before and after surgery with the patients' CV risk score.

Results and Discussion: Cataract surgery resulted in improved visual acuity (VA). Notably, following surgery our patient cohort showed reduced LDL levels after surgery, from 111.17 ± 36.26 mg/dL to 104.22 ± 37.53 mg/dL, and reduced systolic arterial pressure (SAP), from 139.1 ± 15.0 mmHg to 133.7 ± 12.0 mmHg. Ultimately, this translated to an improved CV risk score within 6 months of cataract surgery, from $17.39 \pm 11.44\%$ to $16.51 \pm 11.27\%$. Of note, these improvements were mostly present in group 2 of patients, where baseline VA and incidence of dyslipidemia were worse. We speculate that these results emerge following a better VA which can lead to increased physical activity and improved psychological well-being, restoring social activity and interactions after surgery.

Conclusion: Our results suggest that phacoemulsification cataract surgery is associated to an improvement of CV risk.