

Effects of Coronary Atherosclerosis on Postoperative Outcomes of Patients Undergoing Knee Arthroscopy: Analysis with Two-Year Minimum Surveillance

Introduction: Coronary atherosclerosis (CA) and knee arthroscopy (KA) are highly prevalent in the western elderly population. Long-term outcomes in patients undergoing KA are poorly characterized. This study aims to identify the impact of CA on two-year postoperative outcomes following KA surgery.

Methods: The New York Statewide Planning and Research Cooperative System (SPARCS) was queried to identify patients who underwent KA with two-year follow-up. Controlling for variables such as age, sex, and obesity designation, differences in postoperative outcomes in a cohort diagnosed with CA were compared to a control. Univariate and multivariate analyses were utilized to compare demographics and rates of postoperative outcomes, surgical and medical complications, reoperation, readmission, and in-hospital mortality between the two groups.

Results: A cohort of 150 CA and 150 non-CA patients were identified. CA and non-CA patients had comparable ages and sex distributions. From the analyses, it was revealed that CA patients when compared to non-CA patients, had experienced higher rates of medical complications such as pneumonia ($p = 0.043$), acute renal failure ($p = 0.044$), and sepsis ($p = 0.028$) in addition to higher rates of in-hospital mortality ($p = 0.050$) (Table 1).

Conclusions: CA patients who underwent KA surgery experienced higher rates of medical complications such as pneumonia, acute renal failure, sepsis, and higher likelihood of mortality within 2 years post-operation compared to a control cohort. These findings should be taken into consideration to optimize outcomes in CA patients prior to KA surgery.