

Effect of Ulcerative Colitis on Postoperative Outcomes of Total Knee Arthroplasty Patients

Introduction: Ulcerative colitis (UC) is an inflammatory bowel disease that causes inflammation and ulcers to develop in the large intestines. The impact of this disease on postoperative outcomes in patients undergoing total knee arthroplasty (TKA) surgery is poorly characterized. The objective of this study was to characterize incidence rates and postoperative outcomes between ulcerative colitis patients and a control cohort undergoing TKA surgery.

Methods: The National Inpatient Sample was queried to identify patients who underwent TKA surgery from the years 2005 – 2012. Patient demographics and incidence rates of patients with UC were reported. Controlling for variables such as age, sex and obesity status, differences in postoperative outcomes in the cohort with UC and a control cohort were compared. Multivariate logistic regression analysis was performed to determine rates and risks of postoperative complications between the two cohorts.

Results: A cohort of 1488 UC patients and 1467 non-UC patients were identified. Both cohorts had similar sex (62.5% vs 63.6% female), and age (65.89 +/- 10.011 vs 65.91 +/- 10.007 years) distributions. The average incidence rate of TKA patients with UC from 2005 – 2012 was 7.53(95%CI: 6.29 – 8.76) per 1,000,000 person-year. There were no notable differences in postoperative surgical outcomes or risks of postoperative medical or surgical complications between the UC cohort and control cohort (all, $p > 0.05$).

Conclusion: UC patients were not at any increased risk for postoperative medical or surgical complications following TKA surgery. These findings should be taken into consideration when considering treatment with TKA surgery in UC patients.