2023 Annual Research Day Poster Sessions – April 19th, 2023

| Session/Poster# | Presenter |
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**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 in the large intestines. The impact of this disease and its potential effects on postoperative outcomes in patients undergoing total knee arthroplasty surgery (TKA) is poorly characterized. This study aims 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 2005 - 2012. Patient demographics and incidence rates of patients with UC were reported from 2005 - 2012. 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 controlling for age, sex, and obesity status was performed to determine rates and risks of postoperative complications between the two cohorts.
Results: A cohort of 1,488 UC patients and 1,467 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 patients with UC from 2005 - 2012 was 7.53 (95%CI: 6.29 - 8.76) per 1,000,000 person-year. Incidence rates of UC increased by 113.85% from 2005 - 2012. There were no notable differences in postoperative surgical outcomes between the UC cohort and control cohort (all, $p>0.05$).
Discussion: Patients with ulcerative colitis were not at increased risk for postoperative medical or surgical complications following total knee arthroplasty. These findings should be considered when considering treatment with TKA surgery in UC patients.