

Session/Poster#

Presenter

C20

Joshua Harounian

College of Medicine Student

Advisor(s): Dr. Carl Paulino, Orthopaedic Surgery & Rehabilitation Medicine

Effect of Having Crohn's Disease on Postoperative Outcomes of Adult Laminectomy Patients

Introduction: Crohn's disease (CD) is an inflammatory bowel disease that can affect the gastrointestinal tract. The impact of CD on postoperative outcomes of patients undergoing laminectomy surgery is poorly understood.

Methods: The National Inpatient Sample was queried to identify patients who underwent laminectomy surgery (ICD-9 03.09, 03.02) from the years 2005-2012. Patient demographics and incidence rates of patients that have had CD were reported. 1:1 propensity score match controlling for age, sex, and obesity status was performed. A univariate analysis was used to compare differences in postoperative complications and in-hospital mortality between the CD and control cohorts. A multivariate logistic regression analysis controlling for age, sex, and obesity status was performed to determine CD status as an independent risk factor for postoperative outcomes between the two cohorts.

Results: A cohort of 535 CD patients and 535 non-CD patients were identified. Both cohorts had similar sex (55.7% vs. 53.1% female), age (61.3 vs. 60.7 years), and obesity (11.4% vs. 12.3%) distributions. The average incidence rate of patients who had CD from 2005-2012 was 2.7 per 1,000,000 people (95% CI=2.5-2.9). CD patients who underwent laminectomy experienced higher rates of wound complications, sepsis, and deep vein thrombosis compared to control patients (all, $p < 0.05$). When controlling for demographics, patients with a diagnosis of CD who underwent laminectomy were at increased risk for postoperative wound complications (OR=1.8, 95% CI=1.0-3.0, $p=0.039$), and sepsis (OR=2.8, 95% CI=1.0-8.0, $p=0.046$) compared to control patients.

Conclusion: Adult patients with CD who underwent laminectomy experienced higher rates of postoperative wound complications, sepsis, and deep vein thrombosis. These findings should be taken into consideration for CD patients prior to laminectomy surgery to prepare patients and providers for potential postoperative complications.