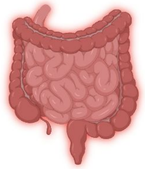
Venous Thromboembolism After Intra-Abdominal Surgery for Inflammatory Bowel Disease: a Retrospective Cohort Study

Heather Perks BMSc; Tyler McKechnie MD, MSc, PhD; Dennis Hong MD, MSc, FRCSC, FACS; Cagla Eskicioglu MD, MSc, FRCSC, FACS

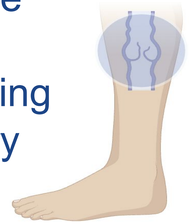
McMaster University

McMaster University, Hamilton, ON

Background



1,800 per 100,000 is the mortality rate for postoperative VTE following surgery for inflammatory bowel disease (IBD)



Updating the literature on risk factors for this devastating complication would provide benefit

AIM: Explore the frequency of 30-day postoperative VTE and identify pre- and peri-operative risk factors for patients undergoing intra-abdominal surgery for IBD

Methods

National Surgical Quality Improvement Program (NSQIP) 2016-2022

Inclusion Criteria:

- 18+ years with a diagnosis of IBD
- Underwent small bowel resection, colectomy, proctectomy, proctocolectomy

1. 30-day VTE
2. Deep Vein Thrombosis (DVT) and Pulmonary Embolism (PE)

Multivariable regression models were fit

Results

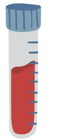
n = 48,649 patients

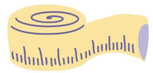
- **2.3%** had VTE

- 55.5% with Crohn's colitis
- 41.0% with Ulcerative colitis
- 3.6% with indeterminate colitis

Modifiable risk factors identified:

- Anemia (95%CI 1.01-1.41, p=0.039)
- Hypoalbuminemia (95%CI 1.16-1.61, p<0.001)
- Immunosuppression (95%CI 1.17-1.58, p<0.001)
- Body mass index (BMI) (95%CI 1.02-1.05, p<0.001)





Conclusions

1 in 50 patients undergoing surgery for IBD experience postoperative VTE within 30 days of their index operation

Preoperative optimization should be investigated for the identified risk factors to aid postoperative VTE risk

Future research should focus on targeting these risk factors and exploring the use of extended VTE prophylaxis