

Houston Colon PLLC, Houston, TX
Division of Colorectal Surgery, Department of Surgery, The
University of California at Davis Medical Center, Sacramento,
CA

INTRODUCTION: Biomarkers and histopathological features, such as lymphovascular invasion (LVI) are used to assess prognosis and guide therapy in high-risk colon cancers. However, few studies to date have investigated the impact of these features in early-stage disease. Our goal was to quantify the impact of LVI on overall survival (OS) in Stage I colon cancer.

METHODS: The NCDB(2010-2017) was reviewed for pathological Stage I colon adenocarcinomas that underwent resection with clear margins. Multivariate analysis identified factors associated with LVI. Cases were propensity-score matched, then OS compared across LVI and no LVI groups with Kaplan-Meier curves. Multivariate Cox regression established factors associated with OS. The main outcome measures were the impact of LVI on OS and factors associated with the presence of LVI.

RESULTS: Of 65,642 cases, 7.2%(n=4,726) had LVI. Propensity-score matching resulted in 3,024 cases/arm. The 1-, 3-, and 5-year OS was significantly worse with LVI compared to no LVI-97.5%, 89.7% and 80% vs 98.1%, 91.6%, and 84%, respectively(p=0.002). In the adjusted Cox model, LVI was significantly associated with worse OS(HR 1.193; 95%CI 1.060-1.350;p=0.005). Factors associated with LVI were left-sided cancers(OR 1.286; 1.204-1.374;p<0.001), pT2(OR 1.103; 95%CI 1.037-1.174;p=0.002), perineural invasion(OR 5.791 95%CI 5.051-6.639;p<0.001), and high-grade(OR 3.062 95%CI 2.822-3.323;p<0.001). Black race was protective against LVI(OR 0.799;95%CI 0.720-0.888;p<0.001).

CONCLUSION: LVI is a poor prognostic marker in Stage I colon cancer; there is a small, but significant reduction in OS. These results warrant further study on the heterogeneity in assumed low-risk disease, as well as consideration of adjuvant chemotherapy and longer-term surveillance when LVI is present.

Racial and Ethnic Disparity in the Surgical Management of Colorectal Cancer in the Non-Elective Setting



Heather M Grant, MD, Angie Mae Rodday, PhD, MS,
Janis L Breeze, MPH, Michael V Tirabassi, MD, FACS, FAAP,
Mihaela S Stefan, MD, PhD, FACP

UMass Medical School - Baystate, Springfield, MA
Institute for Healthcare Delivery and Population Science,
Springfield, MA
Tufts Clinical and Translational Science Institute, Boston, MA
Institute for Clinical Research and Health Policy Studies, Tufts
Medical Center, Boston, MA
Baystate Children's Hospital, Springfield, MA

INTRODUCTION: The purpose of this study was to determine if there are racial and ethnic differences in the surgical approach or postoperative outcomes in a limited cohort of individuals undergoing non-elective surgeries.

METHODS: We performed a retrospective cohort study of adult patients with colorectal cancer undergoing non-elective colorectal surgery using the NSQIP database for the years 2005-2018. Patients with missing race/ethnicity were excluded. We performed logistic regression to compare surgical approach and 30-day postoperative outcomes between four racial and ethnic groups. Multivariable analyses adjusted for patient characteristics and the urgency of the operation. Analyses of postoperative outcomes also adjusted for surgical approach.

RESULTS: 12,572 patients met inclusion criteria: 71% were non-Hispanic white(NHW), 15% non-Hispanic black(NHB), 9% Hispanic, and 6% other. Compared to NHW, NHB race was associated with higher odds of an open approach after adjustment(OR=1.11, 95% CI=1.00-1.25), while Hispanic ethnicity was associated with lower odds(OR=0.85, 95% CI=0.74-0.98). Prior to adjustment, NHB race was also associated with increased odds of a morbidity(OR=1.13, 95% CI=1.02-1.26) or reoperation(OR=1.22, 95% CI=1.00-1.49) within 30 days, but this was non-significant after adjustment. There were no racial or ethnic differences in the odds of 30-day morbidity, mortality, reoperation, or readmission after adjustment. Sensitivity analysis revealed that individuals with missing race/ethnicity were 30% less likely to have an open surgery(OR=0.70, 95% CI=0.63-0.79) and 35% more likely to have a complication(OR=1.35, 95% CI=1.11-1.63).

CONCLUSION: Although NHB individuals were more likely to undergo an open procedure in the non-elective setting, we did not observe worse postoperative outcomes after adjustment.

Rectal Stump Leaks in Patients Undergoing Subtotal Colectomy for Ulcerative Colitis: Inflammatory Bowel Disease Center Experience



Hans Huber, MD, Alexander J Greenstein, MD, FACS,
Maia Kayal, MD, Michael C Plietz, MD

Icahn School of Medicine at Mount Sinai, New York, NY

INTRODUCTION: A restorative proctocolectomy with ileal pouch-anal anastomosis (IPAA) or J-pouch is the most common staged procedure performed to treat ulcerative colitis (UC). Often, a subtotal colectomy (STC) with end ileostomy is performed as a first stage procedure prior to J-pouch creation. This study examines a subset of patients whose course was complicated by rectal stump leaks after initial subtotal colectomy.

METHODS: This retrospective chart review was conducted at a tertiary care inflammatory bowel disease (IBD) center. All UC or