

Achieving the Goal of Opioid-Free Surgery: Lessons Learned from More than One Hundred Narcotic-Free Enhanced Recovery After Surgery Colectomies

Sophia A Horattas, MD, Kelly J Babr, RN, James Reissig, PharmD, Mark C Horattas, MD

Cleveland Clinic Akron General, Akron, OH



INTRODUCTION: Our institution-specific Enhanced Recovery After Surgery (ERAS) protocol was adopted by all of our general surgeons in 2016. This protocol emphasized a multimodal analgesic approach, and included preoperative patient education, pre-emptive analgesia, ketamine-based nonopioid general anesthesia, modified liposomal bupivacaine nerve blocks, and postoperative programmed non-narcotic analgesics.

METHODS: We undertook a prospective investigation of all patients who underwent elective colon resections with anastomosis after ERAS implementation. Between 2016 and 2018, 155 patients were studied and outcomes compared.

RESULTS: Of 155 patients, 128 (83%) required no narcotic medications postoperatively. Preoperative opioid use was a significant predictor of postoperative narcotic requirements, with 9 of 15 patients requiring postoperative narcotic analgesics (56%). Of 140 patients without preoperative opioid exposure, 119 patients (85%) did not require postoperative narcotics. ERAS patients receiving postoperative narcotic medications had an average length of stay of 2.7 days, compared with 2.3 days in the non-narcotic group. Eight general surgeons participated, enrolling an average of 21 cases per surgeon (range 6 to 43 cases). Postoperative narcotic administration ranged from 8% to 33% per surgeon. We observed an increase in protocol compliance across the study duration, which correlated with a 20% increase in narcotic avoidance during the study period.

CONCLUSIONS: This study demonstrates the feasibility of opiate-free surgery in the midst of a growing opioid epidemic. ERAS patients had decreased postoperative narcotic analgesic requirements without sacrificing patient satisfaction or perceived pain control. The many significant benefits associated with complete avoidance of opiate analgesics postoperatively are readily achievable with a coordinated multimodal and interdisciplinary approach.

Adjuvant Chemotherapy Improves Survival in Patients with T4N0 Colon Adenocarcinoma

Reza Fazl Alizadeh, MD, Shiri Li, MD, PhD, Haris H Chaudhry, MD, Mehraneh D Jafari, MD, Steven D Mills, MD, FACS, Joseph C Carmichael, MD, FACS, Michael J Stamos, MD, FACS, FASCRS, Alessio Pigazzi, MD, FACS

University of California, Irvine School of Medicine, Orange, CA



INTRODUCTION: Patients with stage IIB/C (T4N0) colon cancer have poorer survival than those with stage IIIA cancers. This

paradox may be explained by a low use of adjuvant chemotherapy (ACT) for T4N0 tumors or because ACT has little efficacy in this subgroup of patients. We hypothesized that adjuvant chemotherapy may significantly improve overall survival (OS) in patients with T4N0 colon adenocarcinoma.

METHODS: Using the National Cancer Database, patients with American Joint Committee on Cancer pathologic T4N0M0 colon adenocarcinoma who underwent surgery from 2006 to 2015 were identified. ACT recipients were compared with nonrecipients. Kaplan-Meier survival analysis was used to calculate OS. Cox proportional hazards regression model was performed to evaluate factors associated with OS.

RESULTS: Of the 19,815 patients studied, 39.3% underwent ACT. Mean OS of ACT recipients was significantly longer compared with those who underwent surgical resection alone (50 vs 36 months, $p < 0.05$). In multivariate survival regression analysis, low medical comorbidities (total Charlson-Deyo score of 1) (adjusted hazard ratio [AHR] 0.55; 95% CI 0.48–0.63; $p < 0.01$), receiving ACT (AHR 0.57, 95% CI 0.53–0.61; $p < 0.01$), and treatment at academic/research program (AHR 0.85, 95% CI 0.78–0.93; $p < 0.01$) were associated with improved OS. However, treatment at community cancer program (AHR 1.10, 95% CI 1.01–1.21; $p < 0.01$), male sex (AHR 1.07, 95% CI 1.02–1.12; $p < 0.01$), and increased age (AHR 1.03, 95% CI 1.034–1.039; $p < 0.01$) were significantly associated with increased risk of death.

CONCLUSIONS: Our study suggests that ACT for T4N0 colon cancer is associated with a significantly improved survival, but the majority of these patients do not receive postoperative chemotherapy.

Adoption of Laparoscopic Techniques in Colorectal Surgery: Are There Gaps in Utilization?

Paul Cavallaro, MD, Caitlin Stafford, Liliana G Bordeianou, MD, MPH, FACS, FASCRS, Hiroko Kunitake, MD, Todd D Francone, MD, MPH, Rocco Ricciardi, MD
Massachusetts General Hospital, Boston, MA



INTRODUCTION: The adoption of laparoscopic (Lap) techniques has led to improvements in overall outcomes as well as reductions in cost. In this analysis, we evaluate adoption of Lap techniques at the national and state level in order to investigate issues related to access and quality of care.

METHODS: Data from the AHRQ were used to create weighted national and state estimates for open and Lap right colectomy, left colectomy, proctectomy, and appendectomy. We then used Joinpoint regression analyses to determine rates of adoption (annual percentage change [APC]) of Lap techniques by procedure. All statistical tests were confirmed with nonparametric Kendall correlation analyses.