RESULTS: Setup time for PA was 4.2 min. A total of 24 lesions were removed. PA group had a significantly shorter total procedure time (STD vs. PA = median 43.8 min vs. 11.5, \( p < 0.001 \)) and fewer muscular injuries (3 vs. 0, \( p < 0.001 \)) than the STD group. Closure time was 3.2 min, and no leakage was noted up to 60 mmHg. In the clinical case, a 6x4cm sessile polyp at the posterior wall of the Cucum was removed in the same manner, illustrated with this short video. She was discharged on POD 1 without complications.

CONCLUSION: In preclinical trials, PA for tumor excision appears to be feasible, safe, and faster than ESD. Although results are preliminary, PA has the potential for clinical applications.

Outcomes of Inadequate Examined Lymph Node Yield on Pathologic T3N0M0 Colon Cancer Cases Undergoing Surgical Resection with Clear Margins: A National Cancer Database Study

Thais Reif de Paula, MD, Elizabeth R Raskin, MD, FACS, Deborah S Keller, MD, MS, FACS
College of Medicine, University of Houston, Houston, TX
Houston Colon PLLC, Houston, TX
Division of Colorectal Surgery, Department of Surgery, The University of California at Davis Medical Center, Sacramento, CA

INTRODUCTION: The T3N0M0 has typically good prognosis when clear margins and an adequate examined lymph node (ELN) yield are achieved. An inadequate ELN yield (<12) is known to be associated with worse overall survival (OS). It is unclear how ELN count affects OS. The national rates of inadequate ELN and its impact on OS in T3N0M0 cases are not well-defined. We aimed to determine the incidence, impact, and factors associated with <12ELN in T3N0M0 colon cancer.

METHODS: The NCDB (2010-2017) was reviewed for pathologic T3N0M0 adenocarcinomas undergoing R0 resection. Cases were stratified by <12 and \( \geq 12 \)ELN. Multivariate analysis evaluated factors associated with <12ELN. Propensity-score matching balanced the groups across demographic, disease, and provider factors. Kaplan Meier curves and multivariate Cox analysis assessed OS. The main outcomes were the incidence, factors associated with <12ELN, and impact on OS.

RESULTS: Of 53,185 cases, 6.8% (n=3,616) had <12ELN. Older age, black race, comorbidity burden, left-sided resections, and open approach were associated with <12ELN. Female sex, high-grade, and treatment at high-volume facilities (>500 cancer cases/year) were associated with \( \geq 12 \)ELN. In the matched cohort, the <12ELN arm had worse 1-, 3-, and 5-year OS (94.8%, 79%, 64.9%) compared to \( \geq 12 \)ELN arm (95.9%, 83.7%, 71%) (\( p < 0.001 \)). In the Cox analysis, <12ELN was associated with worse OS (HR1.282, 95%CI1.203-1.366; \( p < 0.001 \)). Female sex, private payers, adjuvant chemotherapy, and treatment at high-volume facilities were associated with improved OS.

CONCLUSION: Inadequate lymph node yield is an independent predictor of worse OS in T3N0M0 colon cancer. Modifiable factors associated with inadequate ELN yield were identified, supporting centralization of care to improve long-term OS.

Pre-National Comprehensive Cancer Network Guideline Inclusion Trends in Receipt of Total Neoadjuvant Chemoradiation for Locally Advanced Rectal Cancer

Maria C. Unuvar, MD, Christopher J Buzas, DO FACS, Sasha Slipak, MD, Kevin C Long, MD, FACS, Rebecca Hoffman, MD
Geisinger Medical Center, Danville, PA

INTRODUCTION: Studies reflecting the advantages of total neoadjuvant chemoradiation (TNT) for locally advanced rectal cancer (LARC) have been increasingly described, culminating in the inclusion of TNT as an option in the 2018 NCCN guidelines. This study aims to describe baseline trends in the receipt of TNT, as well as factors associated with its use in years preceding guideline inclusion.

METHODS: A retrospective cohort study using the National Cancer Database (NCDB 2012-2017) of adult patients with clinical stage II/III LARC was performed. TNT status was assigned if patients had received both chemoradiation and chemotherapy prior to surgical intervention. Patient clinodemographic data and hospital information were collected. Univariate and multivariate analyses were performed.

RESULTS: There were 35,212 patients with stage II (14,159; 40.2%) or stage III (21,053; 59.8%) LARC identified; 19,709 (56%) received TNT. Rates of receipt of TNT ranged from 53.6% (2016) to 58.7% (2013); there was no linear trend identified. The highest rates of TNT were observed in integrated network cancer centers (59.9%; OR 1.29, 95%CI 1.16-1.44) and academic/research programs (57.9%; OR 1.29, 95%CI 1.16-1.44), and in patients with a Charlson score >1. There was a trend towards significantly decreased rates of TNT in Stage II and increased use in Stage III disease during the study time.

CONCLUSION: Rates of TNT use pre-guideline inclusion were consistently above 50% with no clear trend in use over the 6 years. As expected, treatment in academic or integrated facilities demonstrated increased rates of use. Future post-guideline studies may refer to this information as an informative baseline.

Prognostic Impact of Lymphovascular Invasion in Stage 1 Colon Cancer: A National Cancer Database Study

Thais Reif de Paula, MD, Elizabeth R Raskin, MD, FACS, Deborah S Keller, MD, MS, FACS
College of Medicine, University of Houston, Houston, TX