CONCLUSION: More than half of VTE readmission are not captured by current 30-day benchmarking. One-in-3 patients who develop VTE experience RtDH. Reducing VTE readmissions by just 1% would result in USD $10.7 million of yearly savings.

Assessment of Diagnostic Value of Fluorescence Imaging-Guided Lymphadenectomy for Gastric Cancer: Pooled Analysis from Two Randomized, Controlled Trials Using Individual Patient Data
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INTRODUCTION: Indocyanine green (ICG) fluorescence lymphography helps visualize the lymphatic drainage pattern in gastric cancer; however, it is unknown whether fluorescence lymphography visualizes all metastatic lymph nodes (LN). This study aimed to evaluate the sensitivity of fluorescent lymphography to detect metastatic LN.

METHODS: Patients with clinical tumor stage T1-4a, N0+, M0 gastric cancer from 2 prospective trials (ClinicalTrials.gov Identifier: NCT03050879 and NCT04219332), between November 2018 and October 2020, were analyzed. Patients were injected with ICG by either intraoperative subserosal approach or submucosal approach 1 day before surgery and underwent ICG fluorescence imaging-guided lymphadenectomy. Stations and LNs were retrieved at the back-table using near-infrared imaging and classified as “fluorescent” or “non-fluorescent” and were later matched with histopathologic findings.

RESULTS: Among 385 patients who underwent ICG fluorescence imaging-guided lymphadenectomy, LN metastases were present in 221. The sensitivity of fluorescent lymphography in detecting all metastatic LN stations was 86.8% (591/681 stations). The negative predictive value was 92.2% for nonfluorescent stations. For detecting all metastatic stations, subgroup analysis revealed 97.7% sensitivity for pT1, 91.7% for pT2, 86.2% for pT3, and 84.3% for pT4a tumors. Regardless of whether distal gastrectomy or total gastrectomy was performed, for patients with cT1-cT2 disease, the diagnostic accuracy of fluorescent lymphography-guided lymphadenectomy appears to be a reasonable alternative to conventional systematic lymphadenectomy for gastric cancer.

Comparison of Submucosal and Subserosal Approaches Toward Optimized Indocyanine Green Tracer-Guided Laparoscopic Lymphadenectomy for Patients with Gastric Cancer: The Fuges-019 Randomized Clinical Trial
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INTRODUCTION: Clostridium difficile infection (CDI) can be a significant complication in surgical patients. The purpose of this study was to describe the incidence and impact on outcomes of CDI in adult patients after appendectomy.

METHODS: The American College of Surgeons National Surgical Quality Improvement Program dataset (ACS-NSQIP) was used to identify all patients with the primary procedure code of appendectomy between 2016-2018. Patient demographics and clinical characteristics were extracted from the database and descriptive statistics were performed. A multivariate logistic regression was created to identify predictors of CDI after appendectomy.

RESULTS: A total of 135,272 patients who underwent appendectomy were identified, and of those, 469 (0.35%) developed CDI. Patients with CDI were more likely to be older (51.23 vs 40.47 years; p<0.0001), female (p=0.0044), American Society of Anesthesiology (ASA) score >2 (p<0.0001), present with septic shock (p<0.0001), lack functional independence (p<0.0001). Patients with CDI were more likely to have increased operative time (62.9 vs 50.4 minutes; p<0.0001), have perforated appendicitis (p<0.0001), and open surgery (7.0% vs 4.0%; p=0.0006). Postoperatively, patients with CDI required a longer length of stay (4.8 vs 1.8 days; p<0.0001), had increased mortality (p<0.0001), and had higher incidences of postoperative abscess (p<0.0001), postoperative sepsis (p<0.0001) and readmission (p<0.0001), Older age (p<0.0001), female sex (p=0.0043), septic shock (p=0.0002), open surgery (p=0.037), and dirty wound class (p=0.0147) were all significant predictive factors of CDI after appendectomy.

CONCLUSION: CDI is an uncommon postoperative complication of appendectomy and is associated with worse outcomes and higher mortality. Older patients, female sex, those with sepsis, and those undergoing open surgery are at higher risk for developing CDI.
INTRODUCTION: Application of indocyanine green (ICG) fluorescence imaging is effective in guiding laparoscopic lymphadenectomy for gastric cancer (GC). However, the optimal approach for ICG injection is controversial. This study was conducted to compare the efficacy and cost-effectiveness of ICG injection between the preoperative submucosal and intraoperative subserosal approaches for lymph node (LN) tracing during laparoscopic gastrectomy.

METHODS: Patients with resectable GC (clinical tumor stage cT1-cT4a, N0/+, M0) were enrolled in a randomized clinical trial (ClinicalTrials.gov, NCT04219332) at a tertiary hospital between December 2019 and October 2020. The number of retrieved LNs, and postoperative complications were compared between the groups.

RESULTS: In total, 259 patients (n=130 and n=129 in the submucosal and subserosal groups, respectively) were included in the modified intention-to-treat analysis. The mean (SD) total numbers of retrieved LNs were 49.8 (14.6) and 49.2 (14.0) in the submucosal and subserosal groups, respectively, with no significant difference (p=0.71). No significant difference was found between the submucosal and subserosal groups in terms of the incidence (17.7% vs 16.3%; p=0.76) or severity of postoperative complications. The mean cost of fluorescence in the submucosal group was higher than that in the subserosal group ($335.3 vs $182.4; p<0.001). The overall treatment satisfaction score was lower in the submucosal group than in the subserosal group (70.5 vs 76.1%, p=0.048).

CONCLUSION: ICG administered by subserosal injection was comparable to that administered by submucosal injection for LN tracing in GC. However, the former approach imposed a lower economic and mental burden on patients undergoing laparoscopic D2 lymphadenectomy.

Coverage of Fertility Preservation and Treatment among US General Surgery Residents: The First Nationwide Survey

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INTRODUCTION: Surgery trainees spend their prime fertility years in training, which leads to delays in childbearing and accompanying infertility challenges and high-risk pregnancies. Literature reports of institutional support for fertility preservation (egg/sperm freezing) and treatment are lacking. Cost tends to be prohibitive while in residency. This study aimed to assess availability of fertility resources to US general surgery (GS) residents and fellows as well as institutional coverage of fertility services.

METHODS: We composed and distributed a 26-question survey to all GS residency and fellowship program directors nationwide to survey residents and fellows. Summary and descriptive statistics were tabulated, and categorical variables were analyzed using Pearson’s chi-square test.

RESULTS: A total of 234 US GS residents (male n=75, female n=155, unreported n=4) completed the survey. We found that 12.0% of respondents reported having been counseled on fertility preservation during training, and only 5.1% were counseled on fertility preservation. Perceived lack of support from program (p=0.027) and counseling of fertility preservation (p=0.009) was significantly associated with female gender. Only