Purpose: Although rare, bariatric surgery can be associated with significant gastrointestinal complications such as leaks at the anastomotic site, strictures, ulcers and fistulas. Due to the distorted anatomy and associated morbidities, surgical re-intervention is associated with a high morbidity. Thus, for these patients, endoscopic procedures may be a more suitable and perhaps the first attempted therapeutic option. As endoscopic techniques expand, such complications are more readily being treated with devices including self-expanding metal stents, endoscuring device and the OTSC(over-the-scope-clip) system. We aim to evaluate the success, safety and complications rates of endoscopy for the management of bariatric surgery complications.

Methods: A retrospective, observational cohort study at a single academic institution during an 18-months period evaluating patients with complex post-bariatric surgery complications. Anastomotic stenosis were excluded from this study.

Results: During the study period we treated a total of 14 patients (mean age 52 years; 7 male, 7 female). The complications were laparoscopic band migration into the stomach, fistulas, abscess, leaks, stenosis, sleeve perforation and GI bleeding. The surgeries included: Roux-en-Y gastric bypass surgery (RYGB)(n=3), gastric sleeve(n=5), lap band or mesh migration (n=4),(n=1), bile leak after liver transplant in RYGB(n=1), gastro-gastric fistula(n=1). The mean follow-up was 20 weeks. The most common device used to treat complications was the OTSC, which was used in several cases including fistula repair(n=6) or bleeding ulcers(n=2). Treatment with hemoclips was also used for ulcer(n=1) and fistula(n=1). Two patients underwent stent placement for sleeve fistula and stenosis. Four patients underwent placement of a direct endoscopic jejunostomy (DPEJ) using double balloon enteroscopy. Most patients required repeated endoscopies (range 1-7, mean 3.8 procedures) to treat their complication. Endoscopy led to a full resolution of the primary problem in 50% of patients, partial resolution in 25% and no resolution in 25%.

Conclusion: Although uncommon, gastrointestinal complications associated with bariatric surgery tend to be very complex. These endoluminal conditions often require specialized endoscopic treatment, which results in resolution of the problem in about 50% of patients, therefore representing a valid alternative for treatment. However, some luminal defects associated with these types of surgery are recalcitrant to endoscopic approaches and require definitive surgical intervention to solve the problem; Nevertheless, endoscopy can serve as a bridge to surgery, to provide enteral feeding, thus decreasing the size of GI defect and improving the patient's general status.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036512
AVERAGE SCORE: 5.5
PRESENTER: Shabnam Sarker
PRESENTER (INSTITUTION ONLY): University of Alabama
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Shabnam Sarker : ACG Non-Member
Jacobo Velazquez-Avina : ACG Non-Member
Matthew Skinner : ACG Non-Member
Shajjan Peter : ACG Member
Klaus Mönkemüller : ACG Member
TITLE: Utility of double balloon enteroscopy in patients with surgically altered bowel anatomy after bariatric surgery
AWARDS: ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To evaluate the diagnostic yield, success and complications rates of double-balloon enteroscopy (DBE) in consecutive patients with GI disorders necessitating endoscopic evaluation.
Methods: Single-center, observational, cohort study of consecutive patients with post-obesity surgery undergoing DBE during a 14-month period. Patients' demographics, procedure indications, findings, endoscopic interventions, and post-procedural recovery data were recorded.
Results: A total of 270 DBE were performed at our institution during the study period. Thirty-eight patients (13.3%) with post-obesity surgery were evaluated using DBE. The indications for DBE was obscure GI bleeding (OGIB) (n=12), followed by DBE-ERCP (n=14), and evaluation of and abdominal pain (n=8) and placement of direct feeding jejunostomy (n=3). The excluded stomach was successfully reached in 85% of patients with Roux-en Y gastric bypass. The overall diagnostic yield of DBE-ERCP was 70% (stones n=4, sphincter stenosis n=2, bile leak n=2, bile duct stricture n=2, failed ERCP n=4). The yield of DBE for abdominal pain was 20% (n=2: gastric erosions, gastrogastrostomy fistula) and DBE for OGIB 75%. Of the 14 patients with OGIB, 10 had active or a source of bleeding at the time of DBE. In all but one case, the bleeding was occurring at the site of the anastomosis, whether that is hepaticojejunostomy, jejunojejunostomy, or gastrojejunostomy. Of these patients, 4 patients had arteriovenous malformations at the anastomotic site, 4 had ulcers or erosions, and 2 were bleeding secondary to Dieulafoy’s lesion. A total of one complication (3%) was observed (small bowel perforation after application of argon plasma coagulation to the jejunojejunostomy anastomosis).
Conclusion: DBE is a feasible and relatively safe technique to evaluate the small intestines, stomach and biliary tract and is associated with reasonably high diagnostic and therapeutic yield in patients with surgically altered bowel anatomy in the setting of bariatric surgery.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037748
AVERAGE SCORE: 5
PRESENTER: Sadra Azizi
PRESENTER (INSTITUTION ONLY): Albany Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Sadra Azizi : ACG Member
Pete Vismas : ACG Non-Member
Zachary Feinberg : ACG Member
Shawn Chaudhary : ACG Member
Peter Ells : ACG Member
TITLE: A Comparison of CT imaging to endoscopic findings
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: Computed tomography (CT) is widely used diagnostic study for patient’s presenting to our emergency department for various complaints from abdominal pain(AP), diarrhea, to gastrointestinal (GI)bleeding. Based on CT scan, GI consultations are often placed to further evaluate abnormalities found on this imaging modality.
Methods: We performed a computer search of our endoscopy center’s procedure logs, from 1/1/2007 to 12/31/2013 for any colonoscopy performed with an indication “Abnormal CT”. A total of 1090 patients were found with this indication. The CT scan and a colonoscopy report of each patient was reviewed. We included any patient who had abnormal findings of “thickened colonic wall” or “colitis”, and excluded if there was a mass. In the end, we had a total of 511 patients who had an abnormal CT scan and a colonoscopy.
Results: Of the 511 patients, 45.6% of them were male, ranging from 18 to 94 years old. 78 (15.2%) of patients had multiple areas read as abnormal on CT scan. Of the 589 “abnormal” areas, 344 (58.3%) of them were normal endoscopically. The most common indication to get a CT scan was AP (86.3%) followed by diarrhea (51.02%) and then GI bleeding (26.3%). The abnormal findings were broken down into left, right, transverse, terminal ileum and pancolitis. The majority of abnormal findings were found in the left side of the colon, 36.2%, and the least common location of abnormality was in the transverse colon, 6.5%. The most common correct correlation between CT and endoscopic findings was with pancolitis, 64.3% were abnormal on colonoscopy. When more than one area on CT was noted to be affected, the endoscopic findings correlated greater than 50% of the time. But when just one area of the colon was abnormal on CT scan, less than 40% of the time an abnormality was found on colonoscopy. Additionally when GI bleeding was part of the patient’s complaint, there would be a strong relationship between CT and endoscopic findings. Also, it was noted that women presented more often, but were found to have abnormal endoscopic findings less often (39%).
Conclusion: In conclusion, abnormal CT findings are a common reason for GI consultation and more often than not are normal on colonoscopy. Endoscopic findings were more likely to reflect CT findings when multiple regions of the colon were involved. When GI bleeding was the primary indication for obtaining the CT scan, there is a stronger association between the CT and endoscopic findings. Further investigation is still needed to see which patients can forgo endoscopic evaluation when there is an “abnormal CT” finding.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036119
AVERAGE SCORE: 4.75
PRESENTER: Kinesh Changela
PRESENTER (INSTITUTION ONLY): The Brooklyn Hospital Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Taruna Bhatia : ACG Member
Kinesh Changela : ACG Member
Monica Kaminski : ACG Non-Member
Sury Anand : ACG Non-Member
TITLE: AIMS 65 scoring to predict clinical outcomes in Upper Gastrointestinal Bleeding
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Upper Gastrointestinal bleeding (UGIB) accounts for nearly 500,000 in-patient admissions annually in the United States and is associated with significant mortality and morbidity. Several risk stratification scores have been developed and validated to identify high risk patients. AIMS 65 is a simple bedside risk score used to predict in-hospital mortality in subjects with UGIB. The aim of this study was to assess if AIMS65 score can predict other clinical outcomes like transfusion requirements, re-bleeding and re-admission rates and length of stay.
Methods: This is a retrospective study using data collected from a predominantly minority population. Subjects admitted with diagnosis of UGIB from January 2010 to January 2013 were identified by ICD-9 codes and subjects on anticoagulation were excluded. AIMS 65 score (includes albumin<3.0 g/dl, INR>1.5, mental status, systolic blood pressure 90mmHg or lower, age>65) and outcome data were studied using retrospective chart review. High risk was defined as AIMS 65 score > 3 and low risk was defined as AIMS 65 score < 2.
Results: 201 patients met the inclusion criteria with a mean age of 68.5 years. 54.7 % males and 45.9 % females. 187 had AIMS 65 score of <2 while 14 had a score of 3 or more. The average length of stay was 8.1 days for the entire study population. Subjects with score < 2 had a length of stay of 7.9 days versus 10.7 days for >3(p = 0.361). 110 (60%) patients in AIMS < 2 required blood transfusion versus 12 (86%) patients in AIMS 65 > 3 (p = 0.05). Rates of re bleeding were 18% and 7% in low risk and high risk group respectively (p = 0.3). Readmission rate within 30 days was 24% in low risk group and 23% in the high risk group (p = 0.98)
Conclusion: AIMS 65 score appears to predict transfusion requirements in subjects with UGIB. AIMS 65 score did not appear to have a predictive value for length of stay, re-bleeding and readmission rates. A follow up study to consider the impact of AIMS 65 scoring based on the etiology of UGIB is planned.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2036124
AVERAGE SCORE: 5
PRESENTER: Kinesh Changela
PRESENTER (INSTITUTION ONLY): The Brooklyn Hospital Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Kinesh Changela: ACG Member
Taruna Bhatia: ACG Member
Sury Anand: ACG Non-Member
TITLE: Does prior therapy with anti-acid therapy impact clinical outcomes in Upper Gastrointestinal Bleeding? A retrospective analysis in a predominantly minority population
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Upper Gastrointestinal bleeding (UGIB) accounts for nearly 500,000 in-patient admissions annually in the United States and is associated with significant mortality and morbidity. Anti-acid medications like proton pump inhibitors (PPI) and H2 receptor blocking agents have shown efficacy in the treatment of acute UGIB. A protective role of prior anti-acid medication has been observed anecdotally but outcome measures have not been systematically studied. In this retrospective study, we compared certain clinical outcomes in UGIB in subjects who have received prior anti-acid therapy.
Methods: This is a retrospective study using data collected from a predominantly minority population. Subjects admitted with diagnosis of UGIB from January 2010 to January 2013 were identified by ICD-9 codes and subjects on anticoagulation were excluded. Subjects on prior anti-acid therapy were identified and the results were divided into two groups- Group A (on prior therapy) and Group B (not on prior therapy). Outcome measures including length of stay, transfusion requirements and re-bleeding within 28 days were tabulated. SPSS was used for statistical analysis.
Results: 201 patients met the inclusion criteria. 64.7% of the subjects from Group A compared to 42% in Group B had a length of stay less than 5 days (p = 0.005). 62.7% Group A compared to 61.3% Group B needed blood transfusion during their hospital course (p = 0.86). 33% Group A compared to 11.3% Group B had evidence of re-bleeding within 28 days (p<0.001)
Conclusion: Prior therapy with anti-acid agents like Proton Pump Inhibitors and H2 Blockers appear to impact length of stay in subjects with UGIB. Prior therapy did not appear to have a beneficial role in reducing transfusion requirement or preventing re-bleeding. A follow up study to consider the impact of prior therapy based on the etiology of UGIB is planned.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036102
AVERAGE SCORE: 5
PRESENTER: Kinesh Changela
PRESENTER (INSTITUTION ONLY): The Brooklyn Hospital Center
PRESENTER (COUNTRY ONLY): United States

AUTH DESIG: ACG Membership Status *:
Taruna Bhatia: ACG Member
Kinesh Changela: ACG Member
Emmanuel Ofori: ACG Non-Member
Manhal Izzy: ACG Member
Anju Malieckal: ACG Member
Sury Anand: ACG Non-Member

TITLE: Validation of Glasgow-Blatchford Score in predicting severity of Upper GI bleeding

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: Glasgow-Blatchford Score (GBS) used to assess the likelihood that a patient with an acute upper gastrointestinal bleed (UGIB) will need to have medical intervention such as blood transfusion or endoscopic intervention. It may be able to identify patients who do not need to be admitted to hospital after an UGIB. Advantages of the GBS over the Rockall score, which assesses the risk of mortality in patients with UGIB, include a lack of subjective variables such as the severity of systemic diseases and the lack of a need for EGD to complete the score, a feature unique to the GBS.

Methods: We reviewed and collected data from electronic medical records of adult patients who presented with signs or symptoms of upper gastrointestinal (UGIB) (hematemesis, melena and coffee ground emesis) from June 2010 to 2013 at our teaching community hospital. GBS was divided into severity groups according to the score. Group A was defined as subjects with GBS ≤ 5 and Group B was defined as subjects with score of more than 6. Statistical analysis was performed using SPSS 15.0.

Results: 189 patients were identified with mean age of 68.5 ± 15.5. 55.6% were males and 44.4% were females. 65.1% African Americans were identified and 24.9% were Hispanics. Average length of stay was 8 ± 11.6 days. Group A had 56 patients and Group B had 133 patients. In Group A, 1.1% had bleeding esophageal varices on endoscopy in comparison to 4.2% in Group B (p = 0.3). A clean based ulcer was found in 4.2% in Group A in comparison to 31.2% in Group B (p < 0.001). 0.5% had a visible vessel in Group A in comparison to 3.2% in Group B (p = 0.3). Active bleeding was noted in 3.2% in Group A compared to 22.8% in Group B (p = 0.007).

Conclusion: The Glasgow Blatchford score is easily calculated with laboratory and clinical variables and is useful in risk stratification and management of patients with upper gastrointestinal bleeding. In this study, GBS appears to consistently correlate with more serious causes of bleeding like esophageal varices, visible vessel and active bleeding. GBS appears to overestimate bleeding risk in clean based ulcers but this may be a function of timing of the endoscopy.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2036120
AVERAGE SCORE: 5.5
PRESENTER: Kinesh Changela
PRESENTER (INSTITUTION ONLY): The Brooklyn Hospital Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESG: ACG Membership Status *:
Taruna Bhatia : ACG Member
Kinesh Changela : ACG Member
Monica Kaminski : ACG Non-Member
Sury Anand : ACG Non-Member
TITLE: AIMS 65 scoring to predict clinical outcomes in Upper Gastrointestinal Bleeding from Peptic Ulcer Disease
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Upper Gastrointestinal bleeding (UGIB) accounts for nearly 500,000 in-patient admissions annually in the United States and is associated with significant mortality and morbidity. Several risk stratification scores have been developed and validated to identify high risk patients. AIMS 65 is a simple bedside risk score used to predict inhospital mortality in subjects with UGIB. Our prior study, in all UGIB subjects, looking at the predictive value of AIMS 65 in clinical outcomes provided mixed results. This study was designed to assess the predictive value of AIMS 65 score in subjects with UGIB from peptic ulcer disease.
Methods: This is a retrospective study using data collected from a predominantly minority population. Subjects admitted with diagnosis of UGIB from January 2010 to January 2013 were identified by ICD-9 codes and subjects on anticoagulation were excluded. AIMS 65 score (includes albumin<3.0 g/dl, INR>1.5, mental status, systolic blood pressure 90mmHg or lower, age>65) and outcome data were studied using retrospective chart review. High risk was defined as AIMS 65 score > 3 and low risk was defined as AIMS 65 score < 2.
Results: 201 subjects with UGIB were identified and 80 were identified to have bled from peptic ulcer disease. Length of stay in subjects with AIMS 65 < 2 was 8.7 days compared to 15.4 days in AIMS 65 > 3 (p = 0.151). 66 (89%) with AIMS 65 < 2 and 7 (100%) with AIMS 65 > 3 received blood transfusion (p = 0.359). 30 day re-admission was 16 (22%) in the low risk group compared to 2 (28 %) in the high risk group (p = 0.733). Re-bleeding rate was 17% in the low risk group compared to 14% in the high risk group (p = 0.814)
Conclusion: AIMS 65 score did not appear to have a predictive value for transfusion requirements, length of stay, re-bleeding and readmission rates in subjects with UGIB from peptic ulcer disease.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2038028
AVERAGE SCORE: 4.5
PRESENTER: Thomas Kowalski
PRESENTER (INSTITUTION ONLY): Thomas Jefferson University
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Thomas Kowalski : ACG Non-Member
David Loren : ACG Non-Member
Ali Siddiqui : ACG Non-Member
H. Mertz : ACG Non-Member
D. Mallat : ACG Non-Member
Nadim Haddad : ACG Non-Member
Nidhi Malhotra : ACG Non-Member
M. Lybik : ACG Non-Member
Sandeep Patel : ACG Non-Member
E. Okoh : ACG Non-Member
Laura Rosenkranz : ACG Non-Member
M. Karasik : ACG Non-Member
M. Golioto : ACG Non-Member
J. Linder : ACG Non-Member
K. Callenberg : ACG Non-Member
Sara Jackson : ACG Non-Member
Catalano M : ACG Non-Member
M. Allhaddad : ACG Non-Member

TITLE: Clinical utility of integrated molecular pathology (IMP) in determining the malignant potential of pancreatic cysts (n=492)

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: We compared IMP performance in 492 patients to that of Sendai 2012 guideline and Support Vector Machine (SVM) models to assess the clinical utility of IMP in diagnosing malignant pancreatic cysts.

Methods: Patient outcomes were classified as benign or malignant. Sendai criteria were used to separate patients into high risk (surgery) and low risk (surveillance) groups based on the presence/absence of ≥1 concerning clinical feature [Pancreatology 12:183]. These clinical features were also used to build an SVM, which was trained with a radial basis function kernel that underwent five-fold cross-validation to model the optimal combination of concerning features required to stratify patients. IMP separated patients into high and low risk groups based on DNA analyses interpreted in the context of clinical features.

Results: Sendai resulted in similar sensitivity, NPV, and NLR compared to IMP and SVM (Table 1). IMP had greater specificity, PPV, and PLR than Sendai and SVM due to a reduction in false positives (Fig 1). Specificity for malignancy increased at the expense of sensitivity when ≥2 Sendai concerning features were used to risk stratify patients (Fig 1).

Conclusion: IMP provides additional evidence for the need of surgery in patients at high risk of malignancy, while helping to avoid unnecessary surgeries in patients with benign cysts.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes

Extra Info: : MA-H reports a grant for this research from RedPath to his institution during the conduct of the study and personal fees from AbbVie, Boston Scientific, and Forest outside of the submitted work. MK reports a research grant for this research to his institution from RedPath during the conduct of the study and acknowledges support to his institution from The Ron Foley Foundation (www.ronsrun.org), West Hartford, CT, outside of the submitted work. MFC reports a grant for this research from RedPath to his institution during the conduct of the study. TK, AS, HRM, DM, NH, NM, BS, SNP, EO, LR, MJL, MG, and JL have no conflicts to disclose. SAJ and KC are employees of
Purpose: Radiofrequency ablation (RFA) of Barrett’s is associated with a high rate of complete eradication and a reduced risk of disease progression. Nevertheless, recent data indicate that about one third of patients had disease recurrence after reaching complete remission. We aim to evaluate whether probe-based confocal laser endomicroscopy (pCLE) can detect residual Barrett’s after complete RFA for optimized diagnosis and subsequent therapy.

Methods: Consecutive patients undergoing RFA for treatment of Barrett’s were prospectively included. pCLE was performed after complete remission (CR) of dysplasia (CRD) or intestinal metaplasia (CRIM) was reached. CR was defined as complete eradication of Barrett’s as documented by white-light endoscopy and mucosal biopsies. Recurrence was defined as the presence of IM or dysplasia in optical or standard surveillance biopsies. Two experienced gastrointestinal pathologists confirmed pathology findings.

Results: Based on histopathological analysis, 33% of patients (3/9) had high-grade dysplasia or esophageal adenocarcinoma and 67% (6/9) had low-grade dysplasia. Radiofrequency ablation (RFA) was successfully performed in all patients (median age 60 ± 10 yrs.). Three (33%) patients underwent EMR followed by RFA. Patients received a median of 3 ± 0.6 treatment sessions of RFA after which EGD with biopsies and pCLE were performed. pCLE documented CRD and CRIM in 78% and 44% of patients, while histology did in 90% and 67% respectively.

Conclusion: pCLE is reliable for in vivo diagnosis of residual Barrett’s after complete RFA in real time and has therefore the potential to optimize diagnosis and subsequent therapy of patients. Larger, prospective studies are now highly warranted to further proof this initial concept.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2038776  
AVERAGE SCORE: 5.5  
PRESENTER: Kevin Cowley  
PRESENTER (INSTITUTION ONLY): UAB  
PRESENTER (COUNTRY ONLY): United States  
AUTH DESIGN: ACG Membership Status *:  
Kevin Cowley : ACG Non-Member  
Shajan Peter : ACG Non-Member  
Klaus Mönkemüller : ACG Non-Member  
Charles Wilcox : ACG Non-Member  
TITLE: Radiofrequency Ablation for Barrett's Esophagus: Initial Outcomes from a Center Starting this Treatment Modality  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)  
ACG Research Grant Support: No  
Purpose: Radiofrequency ablation (RFA) is an effective and proven therapeutic treatment modality for Barrett's esophagus (BE). We aim to analyze the initial outcomes of RFA for treatment of dysplastic BE at a center new to this treatment modality.  
Methods: A retrospective review of patients undergoing RFA for treatment of Barrett's was performed. Data including patient demographics, medical history, maximum Barrett's esophagus (cm), number of RFA sessions, and pre and post histopathology was collected and analyzed. Based on results of endoscopic mucosal biopsy, histopathology was then divided into complete eradication (CE) of dysplasia (CE – D) or intestinal metaplasia (CE – IM). Patients were considered lost to follow-up if post-treatment biopsies were not obtained.  
Results: A total of 71 patients (mean age 64 ± 13 years) underwent RFA for BE, the majority white (85%), overweight (mean BMI 29.6), and male (85%). Of 61 records, 52 patients (85%) had a history of gastroesophageal reflux. Before treatment, 43 patients (61%) had low-grade dysplasia (LGD), and 28 patients (39%) had high-grade dysplasia or carcinoma (HGD). 12 patients (17%) were lost to follow-up. For the HGD cohort, CE – IM is 60% and CE – D is 72% (median BE length (M) 5 cm; average of 3.4 ± 1.6 RFA treatment sessions). 28% did not achieve eradication of BE (median BE length (M) 8 cm; average 3.9 ± 1.1 RFA treatments). 10 patients (40%) also underwent endoscopic mucosal resection (EMR), with 8 of these ultimately achieving CE – IM. For the LGD cohort, CE – IM is 65% and CE – D is 88% (median BE length (M) 3 cm; average 3.4 ± 1.5 RFA treatment sessions). 12% did not achieve eradication of BE (median BE length (M) 7 cm; average 5.3 ± 2.2 RFA treatments).  
Conclusion: RFA for dysplastic BE is an effective treatment modality, associated with a high rate of complete eradication. Outcomes from a center starting an ablation program are comparable to published data from established centers.  
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  
Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: No  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: Not Applicable  
Supported by Industry Grant: No
TITLE: Cyanoacrylate Therapy for Bleeding Gastric Varices: A Community-based Case Series and Results of a Survey of U.S. Endoscopists

Awards:

Current Category: K. Endoscopy
Current Sub-Category: None
Presentation Type: Oral or Poster
ACG Research Grant Support: No

Purpose: Current GI society guidelines specify cyanoacrylate injection as the preferred treatment for bleeding gastric varices. However, little is known regarding the use of this treatment in routine practice in the U.S. The purposes of this study were: 1) To evaluate the outcomes of cyanoacrylate injection for bleeding gastric varices in a community-based practice and 2) To conduct a survey of treatment preferences of bleeding gastric varices among U.S. endoscopists.

Methods: 1) Retrospective review of patients with bleeding gastric varices in a large U.S. community-based practice from 2009 - 2014. Among these patients, n-butyl-2 cyanoacrylate injection was the primary method of endoscopic therapy.

Results: Please see tables.

Conclusion: 1) Similar to previous studies, this series demonstrated a high success rate and low complication rate among patients treated with cyanoacrylate injection for bleeding gastric varices. 2) Survey data of U.S. endoscopists revealed preferential use of mechanical methods for gastric variceal bleeding; nearly 90% of respondents expressed concerns about technical aspects of cyanoacrylate injection. These data suggest that cyanoacrylate therapy for bleeding gastric varices may be under-utilized by U.S. endoscopists.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039060
AVERAGE SCORE: 4.25
PRESENTER: Michel Kahaleh
PRESENTER (INSTITUTION ONLY): Weill Cornell Medical College
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Deniz Duman: ACG Non-Member
Sheila Bharmal: ACG Non-Member
Monica Gaidhane: ACG Non-Member
Reem Sharaha: ACG Non-Member
Michel Kahaleh: ACG Member

TITLE: Cholangitis Associated with Spyglass Peroral Cholangiopancreatography: A Systematic Review of the Literature

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: The Spyglass Direct Visualization System for peroral cholangiopancreatography is associated with improved procedural success, however the risk of associated bacteremia and cholangitis remains unclear. Thus, peri-procedural antibiotics are often administered without evidence supporting their use. Our aim is to determine the incidence of infectious complications, specifically cholangitis, after endoscopic retrograde cholangiopancreatography (ERCP) using the Spyglass Direct Visualization System.

Methods: A systematic review was performed following a literature search in May of 2014. MEDLINE, Embase, Cochrane Library, Pubmed, Scopus and Web of Knowledge were reviewed for pertinent studies. Retrospective and prospective studies using the Spyglass Choledoscope System were identified. Procedure-related data was extracted and compiled into a database. Endpoints included number of patients, number of procedures, indications, peri-procedural antibiotic use, total procedure-related complications as well as infectious complications. Those patients with pre-existing cholangitis were not recognized as complications.

Results: 22 studies (9 retrospective and 13 prospective) published between 2007 and 2014 were identified. A total of 1839 procedures were done in 1834 patients using the Spyglass Choledoscope for diagnostic and therapeutic indications. Indications included choledocholithiasis, indeterminate strictures, Primary Sclerosing Cholangitis, benign and malignant neoplasms. Peri-procedural antibiotics were used in at least 1041 cases. Of 1839 procedures performed, a total of 126 (6.8%) resulted in complications. Importantly, 34 (1.8%) cases resulted in subsequent cholangitis. In addition, 4 patients had fever with or without a leukocytosis and 6 patients had procedure-related bacteremia without specific mention of cholangitis.

Conclusion: Use of the Spyglass Direct Visualization System may be associated with increased infection when compared to conventional ERCP. Complications including bacteremia, fever, cholangitis may be more likely to occur using the Spyglass system. Antibiotic prophylaxis seems reasonable given these preliminary findings, though data is insufficient to recommend its use. A randomized controlled trial comparing the infectious complications of standard ERCP versus ERCP plus Spyglass Cholangioscopy may be useful to further understand this risk.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes

Extra Info: Michel Kahaleh MD has received grant support from Boston Scientific, Fujinon, EMcision, Xlumena Inc., MauraKea, Apollo Endosurgery, ASPIRE Bariatrics, GIDynamics and MI Tech. He is a consultant for Boston Scientific and Xlumena Inc.

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Purpose: Carnegie Hill Endoscopy is a 5-room endoscopy center in Manhattan where 22 endoscopists perform 13,000 endoscopy procedures annually. In May 2014, all endoscopy rooms were changed from using Fujinon™endoscopic equipment to EndoChoice™Fuse equipment. We aimed to evaluate process and outcome differences pre and post implementation of the EndoChoice Fuse platform.

Methods: We prospectively collected all patient demographic and endoscopy data using the unit’s Provation™endoscopy reporting software. We evaluated the following endpoints: cecal intubation rate, polyp detection, procedure times, sedation dose using Fujinon equipment from March 3 to 28, 2014 and compared that to the EndoChoice Fuse between April 28 to May 23.

Results: A total of 1037 exams (642 colonoscopies, 350 EGDs) were performed using Fujinon vs 1074 exams (686 colonoscopies, 347 EGDs) using EndoChoice Fuse. There were 592 females, 445 males, average age 55.1 (18-94) who underwent procedures with Fujinon instruments. 621 females, 458 males, average age 55.6 (18-88) underwent procedures with Endochoice instruments. All the following study endpoints list Fujinon first and EndoChoice second. Cecal intubation rates for the two systems were similar 99.8% vs 99.5% (95-100) (p=0.97). Procedural times were also similar 18.1 vs 17.6 minutes (p=0.92). Total diprivan dose was 226,913mg vs 136,840mg (p=0.28). The mean propofol dose per case was 219.0mg vs 127.4mg (p<0.05). The total number of polyps removed was higher with the Endochoice system, 375 vs 415 polyps (p=0.03), an 11% increase.

Conclusion: Fuse technology has similar characteristics to standard endoscopes in terms of cecal intubation rates and procedure duration, but require less sedation while delivering increased polyp detection.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: Yes

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
CONTROL ID: 2039260
AVERAGE SCORE: 4
PRESENTER: Christopher Baliga
PRESENTER (INSTITUTION ONLY): Virginia Mason Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DEsig: ACG Membership Status *:
Christopher Baliga : ACG Non-Member
Andrew Ross : ACG Non-Member
Catherine Furman : ACG Non-Member
Michael Gluck : ACG Member

TITLE: The spread of multi-drug resistant bacteria following ERCP: Time to redesign the duodenoscope or enhance reprocessing?

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral Only
ACG Research Grant Support: No

Purpose: Endoscopes, particularly duodenoscopes, have been associated and implicated in the transmission of multi-drug resistant bacteria (MDRB). Our medical center has been voluntarily submitting cultures since 2012 to a reference laboratory surveying for the emergence of MDRB. We were informed in September 2013 that a cluster of patients treated at our institution had a unique AmpC-E. coli with a preponderance of those patients having had multiple ERCPs.

Methods: Extensive chart reviews were undertaken to identify demographics, co-morbid conditions, procedures performed, and clinical outcomes. The entire endoscope reprocessing procedure was reviewed and investigated for quality assurance. All endoscopes were cultured post-reprocessing. Root-cause analysis and procedure modifications using mistake-proofing and successive checks were undertaken.

Results: Thirty patients were identified of whom 17 had an underlying biliary obstruction secondary to carcinoma. The other 13 had benign biliary obstruction from complicated pancreatitis or stricturing biliary disease. All patients identified had undergone multiple ERCPs; the median number of ERCPs was 2 (range 1 to 13) with all but one patient having had a stent. Eleven patients died during the study period, 7 with pancreatic cancer, 2 with PSC, 1 with pancreatic necrosis, and one after pancreas/kidney transplant. Root cause analysis demonstrated that scope reprocessing was at or exceeded manufacturers' and professional societies' recommendations and that the reprocessing room did not harbor MDRB. Despite this, post-reprocessing endoscope cultures continued to identify MDRB. The elevator and channel appeared to be the safe harbor for bacteria. Multiple resolutions were considered including gas sterilization with ethylene oxide, a process that was rejected due to doubts about efficacy. Ultimately, we implemented the "penalty box" solution in which reprocessed endoscopes were routinely cultured and not released for use until the cultures were confirmed negative for MDRB or other pathogenic organisms.

Conclusion: Duodenoscopes are difficult to adequately reprocess under current manufacturers' and professional societies' recommendations. This can lead to the scopes serving as vectors of transmission for organisms, such as MDRB, into the GI tract. Once there, MDRB can lead to infection and/or colonization. Patients who have undergone multiple ERCPs seem to be at higher risk of MDRB infection, likely due to underlying comorbidities, high antibiotic exposure, and greater chance of inoculation of MDRB. These findings suggest a design flaw and/or inadequate reprocessing recommendations and have significant implications for high-volume ERCP centers.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039035
AVERAGE SCORE: 4
PRESENTER: Anoop Appannagari
PRESENTER (INSTITUTION ONLY): Loyola University Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Anoop Appannagari : ACG Member
Mukund Venu : ACG Member
TITLE: Is wireless capsule endoscopy safe in patients with implantable cardiac devices?
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Capsule endoscopy (CE) is widely used for the evaluation of small bowel pathology. Electromagnetic waves generated by CE may interfere with other electronic devices. For this reason, CE is contraindicated in patients with implantable cardiac devices. The primary aim of this study was to assess the safety of CE in patients with implantable cardiac devices.

Methods: All patients who underwent CE and also had an implantable cardiac device such as a pacemaker (PM), implantable cardiac defibrillators (ICD), and/or left ventricular assist device (LVAD) at an academic medical center from January 2007 to May 2014 were retrospectively reviewed. Age, gender, ethnicity, indication for CE, type of cardiac device(s) were evaluated. All patients underwent cardiac telemetry monitoring during CE. Pre and post procedure cardiac assessments were performed. Any cardiac events during CE and cardiac events within 30 days of study completion were reviewed.

Results: 79 CE were performed on 70 patients who fulfilled inclusion criteria. The majority of patients were male (70.9%). Mean age was 67.9. Most patients were Caucasian (60.8%), followed by African-American (25.3%), Hispanic (8.9%), Middle Eastern (3.8%), and Asian (1.3%). Patients most commonly had PM (46.8%), followed by PM + ICD (21.5%), ICD (13.9%), LVAD + ICD (12.7%), LVAD, ICD + PM (5.0%). Indications for CE included anemia (55.7%), GI bleed (26.6%), melena (8.8%), abdominal pain (6.3%) planned anticoagulation (1.3%), and Crohn’s Disease (1.3%). During the study period of 8 hours, no cardiac events were noted on telemetry monitoring. No cardiac events occurred within 30 days of completion of CE. Recording of the CE images was not affected by the presence of cardiac devices. One patient experienced chest pain during the study, however, interrogation of the ICD revealed no cardiac event.

Conclusion: Although CE is contraindicated in patients with implantable cardiac devices, our study demonstrates that CE may be safe in such patients. CE images were not compromised by the presence of cardiac devices.

1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

 Initiated Research: Investigator
 FDA Approval: No
 Designed Study: Investigator
 Performed Analysis: Investigator
 Investigator Contribution: No
 Abstract Author: Investigator
 Study Results: Yes
 Secondary Analyses: Not Applicable
 Supported by Industry Grant: No
Purpose: Radiofrequency ablation (RFA) is an effective endoscopic procedure that can be used for the management of dysplasia in Barrett's esophagus (BE). RFA has been used following EMR (endoscopic mucosal resection) in the evaluation and treatment of high grade dysplasia (HGD) and intramucosal cancer (IMC) in BE. In this study, we assessed the indications, safety and utility of performing focal RFA and EMR in the same endoscopic setting during endotherapy for BE related neoplasia.

Methods: We performed a retrospective review of a prospectively maintained electronic database of all patients who underwent RFA for the management of BE related neoplasia in a specialized BE endoscopy unit from January 2008 to April 2014. Patients in whom focal RFA and EMR were performed in the same endoscopic session were identified. Data were abstracted for baseline patient characteristics, endoscopic findings, treatment outcomes and adverse events. All patients had at least one RFA session combined with endoscopic resection of mucosal nodularity during the same endoscopic session.

Results: 14 patients (11 males, aged 66.3 ± 9.3 years) underwent combined focal RFA and EMR in a single endoscopic session. Two patients had more than one such session during the course of treatment. Five patients (34%) had IMC, 7 (50%) HGD and 2 (16%) low grade dysplasia (LGD) before initiation of therapy. The baseline length of BE was 7.4±3 cm. The patients underwent a mean of 1.3 ± 0.8 RFA procedures before the procedure with combined RFA and EMR. All patients had EMR due to the presence of nodular lesions. Focal RFA using the HALO 90 device was used in all cases to avoid the resection site. EMR was performed using the EMR-Cap method in 12 (85.7%) and the EMR-Band method in 2 (14.3%) patients. Patients had a mean of 2.3 ± 1.3 mucosal resections during the combined sessions. EMR histopathology showed LGD in 4 patients, 5 HGD and 4 IMC. Only 1 patient developed a stricture which was treated by a single session of esophageal dilation. The EMR had upstaged 2 (14.3%) patients from their pre RFA histology of HGD to IMC. These patients subsequently underwent esophagectomy. The mean follow-up time after the combined EMR and RFA procedure was 17.6 ± 6 months. At the time of the last endoscopy, 6 patients had no BE, 1 non-dysplastic BE, 1 LGD, 4 HGD and 2 IMC.

Conclusion: Careful endoscopic assessment for visible abnormalities during RFA of BE related dysplasia is important. In this series of patients, combined EMR and RFA in a single endoscopic session is feasible and safe. EMR performed at the time of RFA therapy was able to detect higher grades of dysplasia which has implications in the management of patients with dysplastic BE.
CONTROL ID: 2037285
AVERAGE SCORE: 4
PRESENTER: Andrew Watson
PRESENTER (INSTITUTION ONLY): University of Illinois Hospital and Health Sciences System
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Andrew Watson : ACG Non-Member
Divya Bhatt : ACG Non-Member
Kristin McBeath : ACG Non-Member
Cemal Yazici : ACG Non-Member
Fredrik Langi : ACG Non-Member
Russell Brown : ACG Member
Brian Boulay : ACG Member
TITLE: Risk Factors For Incomplete Inpatient Video Capsule Endoscopy
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Capsule Endoscopy (CE) has become an important tool in the evaluation of gastrointestinal (GI) bleeding. Failure of the capsule to reach the cecum may decrease the yield of the exam. Our purpose was to assess for predictive factors associated with incomplete CE performed for obscure GI bleeding (OGIB) in the inpatient (IP) setting.
Methods: Retrospective chart review of IPs in a single tertiary care center over a 9-year period. Capsules performed from January 2004 to October 2013 were reviewed. Data were collected for patient demographics, medical history, length of stay (LOS), capsule findings, endoscopic placement, small-bowel and gastric transit time (SBTT, GTT), CE incompletion rates (CEIR) and complications. Data were entered into an SPSS and analyzed using chi-square; t-tests and multivariate logistic regression as appropriate.
Results: 148 patients met inclusion criteria (age >18 years, IP CE for OGIB) during the study period. Endoscopic delivery to the small bowel was attempted in 39.9% (59/148) of cases. The remaining 60.1% of capsules (89/148) were swallowed. The overall CEIR was 20.9% (31/148). The CEIR was 25.4% (15/59) in the endoscopically-delivered group. The CEIR was 18.0% (16/89) in the swallowed group. In the incomplete endoscopically-delivered group, 13.3% of capsules (2/15) were unable to be placed in the duodenum compared to 2.3% (1/44) in the complete delivered group. An additional 13.3% of the incomplete delivered group (2/15) refluxed back into the stomach after SB placement compared to 0% (0/44) in the complete delivered group. SBTT was not significantly different between swallowed and endoscopically-delivered capsules. The endoscopic placement group had increased narcotic use (30% vs. 11.4%, p<0.004), prolonged GTT (>45mins, p<0.001) and hypothyroidism (30% vs. 8%, p<0.001) compared to swallowed group. Prolonged GTT, endoscopic placement and LOS were found as independent predictors of incomplete SB exams (p<0.001, p=0.007, p=0.023 respectively) on multivariate analysis. Factors including beta-blocker, calcium-channel blocker, anticholinergic use, diabetes mellitus and prior abdominal surgery were not significantly associated with incomplete studies. No complications, including capsule retention, occurred within the group.
Conclusion: Small bowel endoscopic delivery does not significantly increase capsule endoscopy completion rate or reduce small bowel transit time. Endoscopic delivery, prolonged gastric transit time and length of stay are associated with incomplete capsule endoscopy. Interventions including use of 12-hour capsules, limitation of narcotics and use of pro-motility agents should be considered to increase completion rates especially in high-risk inpatient groups.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
CONTROL ID: 2037676
AVERAGE SCORE: 3.75
PRESENTER: Ashraf Almarshruali
PRESENTER (INSTITUTION ONLY): University of Missouri - Columbia
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Ashraf Almarshruali: ACG Member
Rubayat Rahman: ACG Member
Samuel Jersak: ACG Non-Member
Akwi Asombang: ACG Member
Alisha Hinds: ACG Non-Member
Hazem Hammadi: ACG Member
Douglas Nguyen: ACG Member
Matthew Bechtold: ACG Member

TITLE: Prophylactic tracheal intubation versus no intubation for upper GI bleeding: Is there a true difference in patient outcomes? A meta-analysis

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Upper gastrointestinal bleeding (UGIB) is a serious condition that accounts for large volume of hospital and intensive care unit admissions each year. Endoscopy is the key diagnostic and therapeutic intervention for UGIB. Although significant morbidity and mortality can result from pulmonary aspiration that may complicate endoscopy, only a few studies have been conducted to evaluate the effect of prophylactic endotracheal intubation on such complication. We performed a meta-analysis on the outcomes of prophylactic endotracheal intubation versus no prophylactic intubation prior to endoscopy in patients with UGIB.

Methods: A comprehensive search of PubMed/MEDLINE, Embase, Scopus, CINAHL, Cochrane databases, and published abstracts from Digestive Disease Week and the American College of Gastroenterology national meetings (2004-2014) was performed (May 2014). All studies comparing prophylactic intubation versus no prophylactic intubation in patients with endoscopy for UGIB were included. Two authors independently extracted the data. Meta-analysis was performed using fixed and random effects models with odds ratio (OR) to assess for mortality, pneumonia within 48 hours, and aspiration. Publication bias was assessed using funnel plots. We assessed heterogeneity by calculating the I2 measure of inconsistency. RevMan 5.2 was utilized for statistical analysis.

Results: Four studies met the inclusion criteria (N=367). Patients that were prophylactically intubated prior to endoscopy for UGIB experienced a statistically significant increase in pneumonia within 48 hours as compared to patients not prophylactically intubated (OR 3.13; 95% CI: 1.17-8.39; p=0.02). Although trends were noted toward worse outcomes with prophylactic intubation, no statistically significant differences were noted for aspiration (OR 3.99; 95% CI: 0.72-22.12; p=0.11) or mortality (OR 2.19; 95% CI: 0.69-6.95; p=0.18) between the two groups.

Conclusion: Patients prophylactically intubated prior to endoscopy for UGIB are more likely to develop pneumonia within 48 hours than patients not prophylactically intubated. Furthermore, non-significant trends toward increased mortality and aspiration were observed. A randomized controlled trial is necessary to assess this issue of prophylactic intubation prior to endoscopy in patients with UGIB.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: Dr. Bechtold - Consultant: Nestle Nutrition Institute
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTROL ID: 2036757
AVERAGE SCORE: 3.5
PRESENTER: Reem Sharaiha
PRESENTER (INSTITUTION ONLY): Weill Cornell Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Reem Sharaiha : ACG Member
Prashant Keida : ACG Non-Member
Nkhil Kumta : ACG Member
Ersilia DeFilippis : ACG Non-Member
Andrea Benuveto : ACG Non-Member
Monica Gaidhane : ACG Non-Member
Alpana Shukla : ACG Non-Member
Louis Aronne : ACG Non-Member
Michel Kahaled : ACG Member
TITLE: Initial Experience with Endoscopic Sleeve Gastroplasty feasibility and reproducibility of technique.
AWARDS: ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Novel endoscopic techniques have been developed as effective treatments for obesity. Recently, reduction of gastric volume via endoscopic placement of full-thickness sutures, termed endoscopic sleeve gastroplasty (ESG) has been described.
Objective: To evaluate safety, technical feasibility, and clinical outcomes for endoscopic sleeve gastroplasty
Methods: Ten patients from August 2013 to May 2014 underwent ESG by a single endoscopist. The procedure was performed using an endoscopic suturing device (Overstitch, Apollo Endosurgery, Austin, TX) under general anesthesia. Weight loss waist circumference and clinical outcomes, including comorbidities were assessed.
Results: Ten patients underwent the gastric sleeve plication (7 females). Mean age was 43.7 years and mean body mass index (BMI) was 45.1 kg/m2. A median of 8 running sutures, each with 4-8 tissue stitches, was used per procedure. There were no significant adverse events in the post operative period. The mean hospital length of stay was 1.3 days. The median procedure time was 157 minutes.

At present, an excess weight loss of 18%, 26% and 30% at 1, 3 and 6 months respectively (Figure 1) was observed. The mean weight loss was 11.5 kg, 19.4 kg and 33.0 kg at 1, 3 and 6 months (figure 2). The differences observed in mean BMI and mean waist circumference were 4.9 kg/m2(45.2±8.9 to 40.3 ±6.7; P = .0004) and 21.7 cm (141.5 cm to 119.8 =0.0003) respectively. Expected clinical improvements in comorbidities including sleep apnea, diabetes mellitus, and hypertension were observed.

Conclusion: ESG is effective in achieving weight loss and improving comorbidities with minimal adverse events. This approach may provide a cost effective outpatient procedure to add to the steadily growing armamentarium available for this significant epidemic.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2038705
AVERAGE SCORE: 3.25
PRESENTER: Stavros Stavropoulos
PRESENTER (INSTITUTION ONLY): Winthrop University Hospital
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Stavros Stavropoulos : ACG Member
Rani Modayil : ACG Member
Collin Brathwaite : ACG Non-Member
Sharon Taylor : ACG Non-Member
Douglas Katz : ACG Non-Member
Thomas Coppola : ACG Non-Member
Kumkum Patel : ACG Member
David Friedel : ACG Non-Member
Bhawna Halwan : ACG Non-Member
James Grendell : ACG Member
TITLE: Per Oral Endoscopic Myotomy (POEM) for Achalasia: Effective, Durable and Safe Based on Outcomes of a Large Prospective Series
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: POEM represents a groundbreaking Natural Orifice Transluminal Endoscopic Surgery (NOTES) approach to lower esophageal sphincter (LES) myotomy that combines the long-term benefits of surgical myotomy with the advantages of a less invasive, endoscopic intervention. In 2009 we performed the first POEM outside of Japan and first worldwide by a gastroenterologist and currently have the largest single operator series by a gastroenterologist worldwide. The aim of this study is to report the outcomes of achalasia patients (pts) treated with POEM in a single tertiary referral center.
Methods: Between 10/2009 and 6/2014, comprehensive data was collected prospectively on all patients undergoing POEM.
Results: 141 achalasia pts (mean age 53 yo (10-93), 52 females) underwent POEM, with mean follow-up 14.5 months. We enrolled a large number of high risk, challenging and end-stage pts often excluded from POEM at most centers: 6.5% were ≥80 yo (four >90); 24% had severe comorbidities (ASA class III); 31% had treatments that make POEM challenging (28 Botox, 16 failed prior Heller), 29% had advanced or end-stage achalasia (41 esophageal diameter >6 cm with severe sigmoidization in 25/41). Initial 40 POEMs performed in OR and last 101 POEMs performed in endoscopy suite. Procedural characteristics include: mean myotomy length 12.3 cm, mean procedure duration 95 minutes, 49% anterior orientation, 55% closure with sutures. Intraoperative EndoFLIP with 30ml balloon after myotomy showed increase in diameter from 8mm to 12mm, cross-sectional area from 53mm2 to 121mm2, and distensibility Index (Cross Sectional Area/pressure) from 3.2 to 11.3 mm2/mmHg, p<0.0001. Clinical success (Eckardt score ≤3) seen in 98% (125/127), 97% (113/115), 95% (73/77) in pts with follow-up ≥3, ≥6, and ≥12 months, respectively. Mean Eckardt score and LES pressure improved, 7.7 to 0.1 (P<0.0001) and 43.7 to 17 mmHg (P<0.0001). Four pts had treatment failure (score>3) of which 3 underwent “salvage” dilation and 1 had repeat POEM with excellent results (score 1). Timed Barium>50% emptying at 5 minutes in 43/47 (92%), 100% Emptying in 31/47 (66%). No significant adverse events (AEs). No aborted POEMs, no POEM related readmissions. Minor technical AEs. mucosal injury 19%, capnoperitoneum requiring needle decompression 6%, 1 small capnothorax due to inadvertent air insufflation resolved without chest tube. Objective GERD assessment: 21/65 (32%) erosive esophagitis, 21/64 (33%) positive pH study.
Conclusion: At mean follow-up of over 1 year, POEM remains safe and effective on objective assessment even with the inclusion of a large number of challenging pts. On objective testing, GERD incidence is similar to Heller+Dor on high quality studies.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: : Stavros Stavropoulos: Boston Scientific consultant
Initiated Research: Investigator
CONTROL ID: 2039670
AVERAGE SCORE: 4.75
PRESENTER: Jason Huang
PRESENTER (INSTITUTION ONLY): University of California Irvine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Jason Huang: ACG Non-Member
Hassan Ghani: ACG Non-Member
Jason Samarasena: ACG Member
Ke-Qin Hu: ACG Non-Member
John Lee: ACG Non-Member
Gary Kanel: ACG Non-Member
Kenneth Chang: ACG Member

TITLE: A pilot study regarding safety and histological yield of endoscopic ultrasound (EUS) guided liver biopsy with a 19 gauge core histology needle (CHN) for the diagnosis and staging of benign hepatic parenchymal disease

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Liver biopsy is important for diagnosis and staging of chronic liver disease and is considered the gold standard especially when laboratory testing is inconclusive. This is usually performed via the percutaneous, transvacular or surgical route. Previous studies using EUS guided 19 gauge Trucut and non-Trucut straight FNA needles have been shown to be safe and feasible with variable histological yield. Here we report our experience with EUS guided liver biopsy using the 19g CHN (Cook Medical, Winston-Salem, NC).

Methods: Consecutive patients from a single tertiary referral center with various clinical indications underwent EUS guided liver biopsy by a single experienced endosonographer using the 19g CHN. The key outcome measures were complication rates, histological adequacy/artifact score, diagnostic yield; detailed quantitative specimen analysis was performed with the APERIO Imagescope software. Coagulation profile was documented and complications were captured via post-procedural interview of all patients either in person or by telephone.

Results: Complications: 16 patients undergone EUS guided liver biopsy with the 19g CHN without major complications despite high risk profiles: 7 (44%) suspected cirrhotic, 10 (63%) thrombocytopenic and 3 (19%) were uremic patients on hemodialysis. One patient was admitted overnight for pain control only and discharged the next day.

Histology and diagnostic yield: The histology was adequate in 9/16 based on visual assessment (artifact score 0-2, 2 = inadequate) by an expert liver pathologist. When using the standard definition of ≥ 6 complete portal tracts and ≥ 15mm, 8/16 were considered adequate. However in 12/16, a diagnosis or stage of severity of liver disease was achieved.

Quantitative analysis: There were large amounts of tissue acquired, usually on a single pass. Average number of portal tracts per patient was 36.625 with 10.25 complete and 26.375 partial portal tracts. However there was significant fragmentation which explains why 72% of all portal tracts were partial. Average cumulative length and area of specimen was 78.9mm and 35.9mm² respectively and > 80% the specimen was interpretable.

Conclusion: The 19 CHN is capable of obtaining a large volume of interpretable liver tissue with a reasonable diagnostic yield and high number of portal tracts. However, the majority of the portal tracts were partial therefore of suboptimal quality, particularly in challenging cases. By refining the biopsy technique, specimen extraction and handling, the overall quality is expected to improve as we postulate portal tracts are particularly susceptible to physical manipulation.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
CONTROL ID: 2035692
AVERAGE SCORE: 4.75
PRESENTER: Emilie Regner
PRESENTER (INSTITUTION ONLY): University of Colorado
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Emilie Regner: ACG Non-Member
Gregory Austin: ACG Member
Mark Gerich: ACG Member
TITLE: IBD Surveillance Colonoscopies Require More Time and Medication than Screening Colonoscopies for Non-IBD Patients
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To examine differences in procedure duration and medication use during colonoscopy with random dysplasia surveillance biopsies in IBD patients and screening colonoscopy with at least one biopsy in non-IBD controls.
Methods: We conducted a retrospective review of all surveillance colonoscopies performed at our institution from January 2010 to March 2014 for patients with IBD who were less than 75 years old and had no previous bowel resection. We extracted data regarding patient demographics and disease phenotype, total procedure time and withdrawal time, medication use, quality of bowel preparation, endoscopist, and complications. Corresponding data were collected for age-, gender- and endoscopist-matched non-IBD controls undergoing screening colonoscopy with at least one biopsy. Procedures performed by fellows or for diagnostic purposes were excluded. A generalized linear model (GLM) was used to compare procedure time, withdrawal time, and medication use between groups after controlling for patient age, gender, and endoscopist. A GLM was used to test for main effects of group (IBD or non-IBD) and endoscopist as well as the group by endoscopist interaction after controlling for patient age, gender, and quality of bowel preparation.
Results: 133 IBD surveillance colonoscopy procedures were included along with 133 non-IBD screening colonoscopy controls matched for age, sex and endoscopist. Compared with screening colonoscopies for non-IBD patients, surveillance colonoscopies for IBD patients required significantly longer withdrawal time (3.4 minutes; p<0.002), longer total procedure time (3.9 minutes; p<0.001), and more fentanyl (200 mcg vs. 150 mcg; p<0.003).
Conclusion: After controlling for other impacting factors, colonoscopy procedure time, withdrawal time, and medication use are greater for colonoscopies with random dysplasia surveillance biopsies in IBD patients than for screening colonoscopies in non-IBD patients during which a biopsy is performed. Dissimilar procedures with different resource utilization should be coded and reimbursed as discrete entities.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039818
AVERAGE SCORE: 4.5
PRESENTER: Pichamol Jirapinyo
PRESENTER (INSTITUTION ONLY): Yale New Haven Hospital
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Pichamol Jirapinyo : ACG Member
Avlin Imaeda : ACG Member
Christopher Thompson : ACG Member
TITLE: Interim Analysis of the Effectiveness of the Endoscopy Core Curriculum in Gastroenterology Fellowship Training Programs
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The gastroenterology core curriculum (GCC) represents the knowledge and skills desired at the completion of fellowship training. This study aimed to assess the experience and comfort level of graduating third year fellows with endoscopy.
Methods: A questionnaire consisted of 54 fields designed to assess the experience and comfort level at performing endoscopy. Third year fellows from all Accredited Council for Graduate Medical Education (ACGME) accredited fellowship programs were invited to participate by means of 3 sequential electronic mailings sent by the American Gastroenterological Association (AGA).
Results: Graduating third year fellows from programs across the country were represented. Of these, 79% were in the clinical track. 61% were from a large training program defined as having more than 20 attending physicians. On average, fellows had a total of 6 research months during their 3-year fellowship. 59% had a regular endoscopy conference at their training program.

On average, fellows had 4, 3, 3 endoscopy sessions per week during their training years 1, 2, 3. In addition to hands-on experience during supervised endoscopy, attendance at endoscopy courses (61%) was the most common teaching aid, followed by endoscopy simulators (57%), endoscopy textbook/atlas (50%), and the DAVE project (39%). 67% reported that their program had an endoscopy simulator, but only 15% required simulator use as a part of training.

96% met the required number of 130 EGD by the time of graduation. All fellows felt comfortable performing a diagnostic EGD independently. All fellows met the required 140 total diagnostic colonoscopies and felt comfortable performing the procedure independently. 72%, 70%, 44%, 40%, 33% met the required procedural numbers for nonvariceal hemorrhage (25), PEG placement (15), esophageal dilation (20), capsule endoscopies (25), and variceal hemorrhage (20) by the time of graduation. 85% to 96% reported feeling comfortable performing these procedures independently.

Most fellows graded the quality of their training on the cognitive aspects of endoscopy as adequate/good. The technical aspects of endoscopy was graded higher as good/excellent. Most programs provided marginal/adequate information on fellows’ quality indicators, such as cecal intubation rate, adenoma detection rate, withdrawal time.

Conclusion: Almost all fellows met the required numbers of EGD and colonoscopy defined by the GCC by the time of graduation. Most fellows would benefit from more experience on variceal hemorrhage cases, capsule endoscopies and esophageal dilation. Training on the cognitive aspects of endoscopy and quality indicators should be more emphasized.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
CONTROL ID: 2031529
AVERAGE SCORE: 4.5
PRESENTER: Arjun Vaid
PRESENTER (INSTITUTION ONLY): University of Arkansas for Medical Sciences
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Arjun Vaid : ACG Member
Mohit Girotra : ACG Member
Rayburn Rego : ACG Member
TITLE: Cost-based Comparison of Anesthetist-Administered Propofol versus Endoscopist-Directed Propofol as Sedation During Screening Colonoscopies in an Academic University Center

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Propofol use for sedation during colonoscopy is gaining wider acceptance, due, in part, to a better-reported safety profile, shorter recovery times, and better intra-procedure tolerability. However, requirements for administration of the agent differ markedly. In most academic settings, there is a requirement for the presence of an anesthetist during the procedure, which is not usually the case in non-academic settings, where endoscopist-directed administration prevails. Our aim was to perform a cost-based analysis of the presence of an anesthetist during colonoscopies performed under propofol sedation as compared to endoscopist-directed propofol administration.

Methods: We retrospectively evaluated 20 colonoscopies performed for colorectal cancer (CRC) screening by a single certified endoscopist using propofol in the absence of an anesthetist or certified registered nurse anesthetist (CRNA), and determined the average duration per procedure. Time-based billing charges for the presence of an anesthetist during a colonoscopy were obtained from the billing department (5 units x duration of procedure; each unit = 15 minutes or $80). The mean hourly wage of a CRNA was obtained from the Bureau of Labor Statistics, U.S. Department of Labor ($74.22, May 2012).

Results: The average duration of a colonoscopy with indications as above, performed under endoscopist-directed Propofol, was 19.5 minutes. The average per procedure charge for the presence of an Anesthetist was calculated as $504.

Conclusion: In a large university setting, the per procedure cost of anesthetist-administered propofol during routine colonoscopies for CRC screening is markedly higher than that with endoscopist-directed propofol administration, with a per-procedure cost difference of at least $504. The anesthetist’s time for intubation, induction of anesthesia, and recovery was not taken into account and could add considerably to this cost. The cost of training a gastroenterologist was also not considered; however, this is likely to have a minimal impact on the difference.

In a private practice setting, routine use of a CRNA is common; however, the per procedure additional cost would remain low (per our observations, an addition of $24.12 per procedure).

Growing evidence suggests that with appropriate patient selection and training, gastroenterologists can safely and effectively administer propofol during colonoscopies. There is also some evidence that anesthetists target deeper sedation with larger doses of propofol, potentially placing the patient at a higher risk for complications; hence, with appropriate training, endoscopist-guided propofol administration during colonoscopies can be a cost-effective and safe alternative to the presence of an anesthetist in any healthcare setting.

1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
TITLE: A National Survey of Physician Knowledge Regarding the Benefits of Percutaneous Endoscopic Gastrostomy (PEG) in Advanced Dementia

Awards:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: The continued use of PEG in patients with advanced dementia and feeding difficulties might be due to poor physician knowledge. The literature suggests that PEG feeding does not improve survival, pressure ulcers, weight, or aspiration risk in this group, and that 1-year mortality post-insertion is 50-70%. Our goal was to evaluate the knowledge of gastroenterology (GI) and general internal medicine (IM) physicians regarding the benefits of PEG in advanced dementia.

Methods: The program directors of 58 GI fellowships and 30 IM residencies agreed to distribute an e-mail to all faculty/trainees within their respective academic divisions inviting them to complete a web-based survey. The anonymous survey inquired about the benefits of PEG in advanced dementia (survival, ulcer formation/healing, weight gain, aspiration risk). Respondents also self-assessed their knowledge of the relevant literature.

Results: There were 670 respondents (135 GI attendings, 195 IM attendings, 95 GI fellows, 245 IM residents). More GI attendings (54%) felt well-versed in the literature about the outcomes of PEG in advanced dementia than IM attendings (34%; p<0.05) and residents (17%; p<0.05); there was no difference compared to GI fellows. There was significant difference in knowledge between those who felt well-versed in the literature to those who did not (Table 1). Misconception that PEG results in weight gain and ulcer healing was pronounced (Table 1). Knowledge of 1-year mortality rate post PEG insertion was poor (Table 2).

Conclusion: Many physicians do not feel knowledgeable about the outcomes of PEG in advanced dementia. There is misconception about the benefits of PEG feeding and underestimation of mortality post-PEG. This deficiency of knowledge might contribute to PEG tubes being recommended for patients with advanced dementia.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Dr. Colin Howden: Speaking honoraria from Takeda, Otsuka, Ironwood, Forest, GlaxoSmithKline International.

Dr. Alan Wong: NONE
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
TITLE: Impact of EUS-FNA on Patient Management, Resource Use, and Clinical Outcomes in Patients with Lung Cancer

AWARDS: None

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None

PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: Lung cancer is the most common cause of cancer death in the United States. The initial management is to confirm the diagnosis and to assess the stage of the disease. Unfortunately, about half of the patients at the time of the presentation have mediastinal lymph node involvement. Computed tomography (CT) scanning remains the initial method in staging of patient with suspected lung cancer, but it has limited sensitivity and specificity for detecting nodal involvement. EUS has been increasingly recognized as a valuable tool for mediastinal staging lung cancer. If EUS is not available the alternative is mediastinoscopy. The purpose of this paper is to study the impact of EUS on patient management, resource use, and clinical outcomes in patients with suspected lung cancer.

Methods: We studied 64 consecutive patients with suspected lung cancer who underwent EUS-FNA for lung staging or diagnosis in a retrospective study from 2003 – 2014. In 52 patients Olympus echo endoscope was used, while in 12 patients Pentax echo endoscope was used. FNA was performed using 22-g needle in 32 patients, 25-g needle in 13 patients and 19-g needle in 8 patients. A 25-g pro -core needle was used in 11 patients. Patients found to have operable disease underwent thoracotomy. We assumed that in the absence of EUS, patients with operable disease on CT will undergo thoracotomy. If suspicious lymph node were noted on computed tomography (CT), mediastinoscopy will be performed in the absence of EUS.

Results: Final diagnosis was available for each patient (Lung cancer n= 40, lymphoma n=8, benign n=9, cyst n=5). Benign included 5 Sarcoïdosis, 2 Reactive lymphadenopathy and 2 TB. Clinical management was altered due to the results from EUS-FNA in 48 of 64 patients, these include 35 patients with lung cancer, 8 with lymphoma, and 5 with a benign biopsy. EUS-FNA ($1614) was less expensive than mediastinoscopy ($2548). In 26 patients, an unnecessary thoracotomy was avoided. No complications were observed in EUS-FNA group of patients.

Conclusion: The use of EUS-FNA for mediastinal staging of suspected lung cancer appears to be a safe and cost-effective approach. In our study, EUS-FNA changed clinical management in most patients by avoiding unnecessary thoracotomy or mediastinoscopy, reducing hospital stay, and improving patient outcomes. The introduction of EBUS should supplant the use of EUS-FNA, making mediastinoscopy unnecessary in the staging of lung cancer.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
**CONTROL ID:** 2033345  
**AVERAGE SCORE:** 4.25  
**PRESENTER:** Ashley Davis-Yadley  
**PRESENTER (INSTITUTION ONLY):** Department of Internal Medicine, University of South Florida Morsani College of Medicine  
**PRESENTER (COUNTRY ONLY):** United States  
**AUTH DESIG: ACG Membership Status :**  
Ashley Davis-Yadley : ACG Non-Member  
Seth Lipka : ACG Non-Member  
Andrea Rodriguez : ACG Non-Member  
Kirbylee Nelson : ACG Non-Member  
Vignesh Doraiswamy : ACG Non-Member  
Roshanak Rabbanifard : ACG Non-Member  
Ambuj Kumar : ACG Non-Member  
Patrick Brady : ACG Member  
**TITLE:** The Safety and Efficacy of Single Balloon Enteroscopy in the Elderly  
**AWARDS:**  
**CURRENT CATEGORY:** K. Endoscopy  
**CURRENT SUB-CATEGORY:** None  
**PRESENTATION TYPE:** Oral or Poster  
**ACG Research Grant Support:** No  

**Purpose:** Single Balloon Enteroscopy (SBE) is an important tool in the management of small-bowel disease with limited data available on its performance in the elderly. We aimed to evaluate the safety, efficacy, diagnostic and therapeutic outcomes in the elderly.  

**Methods:** A retrospective review was performed on 377 patients undergoing 430 SBE from 2010-2014. Patients were divided into four different age groups: control <55, 55-64, 65-74, and >75 years. Data on comorbidities, complications, findings, diagnostic and therapeutic yield were compared between groups.  

**Results:** The mean age of patients undergoing SBE was 63±15.5 years. Diagnostic yield was significantly higher for >75 years compared to age <55, 66.3% vs. 50% OR 1.97 (95% CI 1.14,3.41), respectively. Therapeutic yield was significantly higher in all three older age groups compared to <55 years, 20.3%: 55-64 years, 44.4% OR 3.13 (95% CI 1.7,5.78); 65-74 years, 42% OR 2.84 (95% CI 1.59,5.06); and >75 years, 47.5% OR 3.55 (95% CI 1.96,6.43). No significant difference was seen between age groups in adverse events or failures. There was a significantly higher yield of angioectasias in the elderly. Argon plasma coagulation (APC) and electrocauterization were used more often in the older age groups.  

**Conclusion:** SBE is safe in elderly patients and delivers higher diagnostic and therapeutic yields compared to younger patients. The elderly are more likely to have angioectasias, and undergo APC and electrocauterization.  

**I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** No  

**Initiated Research:** Investigator  
**FDA Approval:** No  
**Designed Study:** Investigator  
**Performed Analysis:** Investigator  
**Investigator Contribution:** Yes  
**Abstract Author:** Investigator  
**Study Results:** Yes  
**Secondary Analyses:** Not Applicable  
**Supported by Industry Grant:** No
CONTROL ID: 2038032
AVERAGE SCORE: 4
PRESENTER: Ashley Davis-Yadley
PRESENTER (INSTITUTION ONLY): Department of Internal Medicine, University of South Florida Morsani College of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Ashley Davis-Yadley : ACG Non-Member
Jonathan Keshishian : ACG Member
Christian Andrade : ACG Member
Seth Lipka : ACG Member
Andrea Rodriguez : ACG Non-Member
Kirbylee Nelson : ACG Non-Member
Kimberly Kolkhors : ACG Member
Vignesh Doraiswamy : ACG Non-Member
Roshanak Rabbanifar : ACG Member
Ambuj Kumar : ACG Non-Member
Patrick Brady : ACG Member
TITLE: The Role of HAS-BLED Scoring in Single Balloon Enteroscopy
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The HAS-BLED scoring system evaluates several factors to determine risk for major bleeding in patients on chronic anticoagulation. We aimed to evaluate if the HAS-BLED scoring system will further increase diagnostic and therapeutic yield in Single Balloon Enteroscopy (SBE).
Methods: A retrospective review was performed on 377 patients undergoing 430 SBE from 2010-2014. Patients were divided into three different HAS-BLED score groups: Control group 0, 1-2, and ≥3. Data on comorbidities, findings, diagnostic & therapeutic yield were compared between groups.
Results: The mean age of patients undergoing SBE was 63±15.5 years. Diagnostic yield for bleeding was significantly higher for HAS-BLED scores of ≥3 compared to 0, 63% vs. 44.7% OR 2.1(1.08,4.13), respectively. Diagnostic yield for occult bleeding was also higher for increased HAS-BLED scores compared to 0, 29.2%: score 1-2, 65.5% OR 4.61(1.72,12.4) and scores ≥3, 62.3% OR4.02(1.5,11.0). Increasing HAS-BLED scores were associated with higher therapeutic yields for bleeding compared to a score of 0, 25.5%: score 1-2, 43.5% OR2.24(1.09,4.62) and scores ≥3, 47.8% OR 2.67(1.28,5.58). Increasing HAS-BLED scores were also seen with higher therapeutic yields in occult bleeding compared to a score of 0, 20.8%: score 1-2, 44.8% OR 3.09(1.06,9.02), and scores ≥3, 46.4% OR 3.29(1.10,9.80). There is an increased presence of vascular lesions seen with higher HAS-BLED scores.
Conclusion: HAS-BLED scoring can be used to further increase diagnostic and therapeutic yield in SBE, and may help predict the presence of vascular lesions. The HAS-BLED score may help guide gastroenterologists to determine the need for SBE.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2021313
AVERAGE SCORE: 4.25
PRESENTER: Meagan Gray
PRESENTER (INSTITUTION ONLY): Medical University of South Carolina
PRESENTER (COUNTRY ONLY): United States
AUTH DELEG: ACG Membership Status *:
Meagan Gray: ACG Non-Member
Andrew Brock: ACG Member
Brenda Hoffman: ACG Member
TITLE: Accuracy of Capsule Endoscopy to Determine the Lesion Location and Route of Insertion for Enteroscopy in the Evaluation of Small Bowel Disease
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To evaluate the accuracy of the CE progress indicator in determining correct therapeutic procedure.

Methods: A retrospective chart review was performed on 106 patients who underwent consecutive CE and endoscopy (EGD, colonoscopy, push enteroscopy, antegrade balloon enteroscopy, or retrograde balloon enteroscopy) between January 2004 and October 2013. Lesion location by CE was assessed based on the “progress indicator” (PI) provided by Given Imaging, Inc. Rapid 6® software. The location of the lesion by endoscopy was determined from endoscopy reports. The 2 methods were compared for level of discrepancy or agreement in the location of the lesion. Exclusion criteria included normal capsule endoscopy, failure of capsule to reach the cecum, or failure of the patient to undergo recommended therapeutic intervention.

Results: Thirty-nine patients met criteria to be involved in the study. Out of the 39 positive capsule studies, 27 lesions were successfully identified on endoscopy (69% yield). After reviewing the CE, 9 patients underwent EGD, 22 patients underwent antegrade enteroscopy, 2 underwent retrograde enteroscopy, 4 patients underwent push enteroscopy, and 1 patient underwent EUS. Lesions referred for EGD were between 0-5% on the PI with a 78% positive yield (7 out of 9 procedures). Lesions referred for push enteroscopy were between 0-15% on the PI with 50% positive yield (2 out of 4 procedures). Lesions referred for antegrade enteroscopy were between 0-99% on the PI with a 73% positive yield (16 out of 22 procedures). Lesions referred for retrograde enteroscopy were greater than 81% on the PI with a 50% positive yield (1 out of 2 procedures). Lesion referred for EUS was 1% on the PI with a 100% yield.

Conclusion: CE progress indicator may be used to guide the selection of enteroscopy approach. EGD, PE, antegrade SBE, retrograde SBE are optimal when abnormalities on CE are seen at ≤5%, ≤13%, ≤99% and ≥85% on the PI, respectively.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039573
AVERAGE SCORE: 4
PRESENTER: Luke McCrone
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Luke McCrone : ACG Member
Michael Bartel : ACG Member
Ruchir Puri : ACG Non-Member
Timothy Woodward : ACG Member
TITLE: Outcome of Endoscopic Mucosal Resection of Duodenal Adenomas – An update
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Background: The duodenum represents a challenging location for managing adenomatous growths which is reflected by historical data indicating a high adverse event rate following endoscopic resection (post procedural hemorrhage up to 30%).

Purpose: Update our previous data in terms of efficacy and safety of endoscopic mucosal resection (EMR) for duodenal adenoma resection.

Methods: Retrospectively collected cohort of patients undergoing EMR for duodenal adenoma at a single center tertiary referral center between January 2008 and October 2013.
Primary outcome: Efficacy was determined by the rate of residual tissue identified on follow-up endoscopy.
Secondary outcome: Safety was determined by rate of complications (bleeding and perforation).

Results: 92 patients underwent a total of 109 EMRs for duodenal adenomas (ranging from tubular adenomas to adenomas with high grade dysplasia). Mean polyp size was 15.89mm, ranging from 2mm to 150mm. Follow up endoscopy data was available for 15 of the 93 patients. Of these 15, 8 (53%) were biopsied due to concern for residual tissue. 3 patients (20%) had confirmed residual adenomatous tissue which was treated with argon plasma coagulation at the time of repeat endoscopy.
Post procedural hemorrhage occurred in 9 of 109 procedures (8.2%) and perforation in 0 of 31 patients for which we have data on perforation.

Limitations: retrospective study, limited follow-up data

Conclusion: Endoscopic mucosal resection appears to be an effective and safe method for resection of duodenal adenomas. We observed an acceptably low rate of residual adenomatous tissue on follow up endoscopy and adverse events. Randomized controlled studies incorporating surgery as an option for resection are warranted.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2033476
AVERAGE SCORE: 4
PRESENTER: Moira Hilscher
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Moira Hilscher : ACG Non-Member
Desiree Tynsky : ACG Non-Member
Sunanda Kane : ACG Member
TITLE: Pre-procedural Patient Education Reduces Fall Risk in an Outpatient Endoscopy Suite
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: In response to a patient fall resulting in significant morbidity we sought to determine whether pre-procedural patient education regarding fall risk and nurses’ intention to assist patients after receiving sedation is a feasible and effective measure to decrease fall risk in an outpatient endoscopy suite.
Methods: We prospectively identified patients as high fall risk if they met one of the following criteria: (1) required use of an assistive device, (2) had fallen two or more times within the last year, (3) sustained an injury in a fall within the prior year, (4) nursing judgment of high fall risk based on medical history and observation, or (5) age greater than 85 years. Nurses were instructed to educate high-risk patients of their fall risk and of the additional risk incurred after receiving sedation. Nurses informed these patients that they would be assisted when ambulating to the bathroom and changing with the goal of increasing patient receptiveness to post-procedural assistance. Nursing documentation of patient education, consent, and assistance was monitored as a measure of the feasibility of this intervention.
Results: The program was implemented and monitored over a 24-week period. A total of 892 patients undergoing a sedated procedure were identified as high fall risk; 790 (88.5%) of these patients consented to post-procedural assistance. Documentation of patient assistance demonstrated a dramatic increase from 33% to 100%. The percentage of patients who received both pre-procedural education and post-procedural assistance increased from 27.9% at the initiation of the intervention to 100% at week 24. Over the six-months following implementation of this intervention, no patients identified as high-risk by our criteria sustained a fall.
Conclusion: Pre-procedural education of patients identified as high fall risk is a feasible intervention that increases patient awareness and receptiveness to assistance after procedures requiring sedation, and can lead to a decreased fall rate.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035305
AVERAGE SCORE: 3.75
PRESENTER: Clelia Cicerone
PRESENTER (INSTITUTION ONLY): Policlinico I
PRESENTER (COUNTRY ONLY): Italy
AUTH DESIG: ACG Membership Status *:
Clelia Cicerone : ACG Non-Member
Maria Giovanna Graziani : ACG Non-Member
TITLE: Long-term outcome of endoscopic balloon dilatation in Crohn's stenosis is not associated to steroid intrastricture injection and to use of larger balloon
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No

Purpose: Endoscopic balloon dilatation (EBD) is the treatment of choice for intestinal short stricture in Crohn's disease (CD). The use of steroid intrastricture injection (SII) after balloon dilatation (BD) has been reported but the safety is controversial. To investigate the short and long-term outcomes of EBD for CD strictures.

Methods: 38 endoscopic BD were performed in 27 patients (pts) between 2006 and 2012 (14 women; 13 men; mean age 41 years). The inclusion criteria were symptomatic strictures refractory to medical treatment (20 thiopurine and 7 steroids therapy), with a length less than 5 cm (mean 2 cm); the exclusion criterion was the coexistence of a fistulizing pattern. All dilations were performed using through-the-scope balloons; in 24 procedures, was used, a balloon of diameter greater than 15 mm; in 14 a diameter less than 15 mm. The mean follow-up time was 18.8 months (5-50 months). Primary success was defined as passage of the scope through the stricture. Long-term outcomes were analyzed focusing on intervention-free survival.

Results: The 28 strictures (a pts had two de novo stenosis) included 10 anastomotic strictures (AS), 5 at the colocolic and 5 at the ileocolonic anastomosis, and 18 de novo strictures (DNS), 3 in the ileum, 4 in the sigma, 2 descendent colon, 6 in the rectum and 3 at the ileocaecal valve. Thirteen pts (46%) had active inflammation (AI) to biopsies and received a local quadrantic injection of triamcinolone (40 mg dose) after BD. Primary success was achieved in 37 of the 38 strictures (97%). Of the 38 treatments, complications occurred in 4 cases (10%) consistent with perforations. There was no procedure-related mortality. After a median follow-up of 12 months, re-strictures after EBDs occurred in 5 cases (22%). In conclusion at 1-year follow-up, 66% of the pts had undergone no further intervention (EBD or surgery) with a substantial but no significative difference in pts treated with SII compared to those treated only with EBD (8% vs 28% p=0.163). No significant difference between the AS and DNS in the reintervention-free survival (RFS) at 1 year follow-up (80% vs 83% p=0.825). In pts treated with the larger balloon the RFS was 70% versus 78.5% in pts treated with the smaller balloon (p=0.803).

Conclusion: This study confirms that EBD may be an effective alternative to surgical resection. SII did not to prolong significantly the efficacy of BD in selected pts with AI. The use of a balloon greater than 15 mm is not associated with a better long term outcome.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2031510
AVERAGE SCORE: 3.75
PRESENTER: Muneera Mohannadi
PRESENTER (INSTITUTION ONLY): Division of Gastroenterology and Hepatology, Department of Medicine, Hamad General Hospital
PRESENTER (COUNTRY ONLY): Qatar
AUTH DESIGN: ACG Membership Status *
Muneera Mohannadi: ACG Non-Member
Rafie Yakoub: ACG Non-Member
Ahmad Omar: ACG Non-Member
Moatasem Belah A S Gomaa: ACG Non-Member
Waleed Ibrahim: ACG Non-Member

TITLE: Balloon-occluded Retrograde Transvenous Obliteration of Gastric Fundal Varices: A Single Center Experience From Qatar

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Gastric fundal variceal bleeding is a substantial cause of morbidity and mortality. Our aim was to prospectively evaluate the clinical outcomes and complications of balloon-occluded retrograde transvenous obliteration (BRTO) for treating gastric fundal varices (prophylactic and during active bleed) in cirrhotic patients with spontaneous gastro-renal shunt. We report the largest series of prophylactic BRTO.

Methods: From January 2007 to September 2013, 24 consecutive cases of gastric fundal varices were treated by BRTO. Ten patients with moderate and large-sized fundal varices underwent prophylactic BRTO, and 14 patients with actively bleeding (hematemesis or melena within previous 24 hours) fundal varices underwent therapeutic BRTO. Post-procedure CT, serial endoscopies, and clinical follow-up were used to assess the therapeutic efficacy of procedure. Recurrence and rebleeding of gastric fundal varices, worsening of esophageal varices, development of ascites, and hepatic encephalopathy were evaluated.

Results: The mean age of the study group was 53.2±8.1 years and the predominant cause for cirrhosis was chronic hepatitis C virus infection (41.7%). The mean MELD score was 22.6±4.3 and the mean number of procedures per patient was 1.4±0.7. One patient had procedural failure (incomplete thrombosis of varices), who later on underwent cyanoacrylate glue injection. After a mean follow-up of 42.1±20.2 months, there were 2 patients with recurrence of gastric varices (8.3%) and 2 with rebleeding (8.3%). With standard protocol of renal hydration, no post-procedure renal dysfunction was observed. Worsening of esophageal varices was seen in 2 patients (8.3%). We did not observe development of ascites or hepatic encephalopathy. The cumulative survival over mean follow-up of 42.1 months was 95.8% (1 patient succumbed to refractory sepsis).

Conclusion: BRTO is a safe and effective procedure for prophylactic as well as therapeutic management of gastric fundal varices. We recommend the procedure irrespective of MELD status and without significant risk of decompensation of pre-existing liver disease.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2023973
AVERAGE SCORE: 3.75
PRESENTER: Gerald Bertiger
PRESENTER (INSTITUTION ONLY): Hillmont GI
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Gerald Bertiger : ACG Non-Member
Michael Epstein : ACG Member
Dennis Marshall : ACG Non-Member
David Dahdal : ACG Non-Member
Raymond Joseph : ACG Member
TITLE: A Low-volume Sodium Picosulfate and Magnesium Citrate Bowel Preparation Has No Effect on Cardiovascular Parameters in Patients Preparing for Colonoscopy
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No

Purpose: Although rare, hypermagnesemia may occur in patients receiving magnesium (Mg$^{2+}$)-containing cathartics when serum Mg$^{2+}$ concentrations increase to levels outside the normal range, 0.7–1.05 mmol/L. Mild clinical manifestations of hypermagnesemia begin at serum Mg$^{2+}$ levels of 1.5–2.0 mmol/L, become more profound with increasing concentrations, and are primarily associated with cardiac muscle depolarization. We performed a post-hoc analysis of 2 pivotal clinical trials to assess the effects of a Mg$^{2+}$-containing bowel preparation on electrocardiographic conduction in patients.

Methods: Data were obtained from 2 phase 3 randomized, multicenter, assessor-blinded studies that investigated split-dose (Rex DK, et al. Gastrointest Endosc. 2013;78:132) or day-before (Katz P, et al. Am J Gastroenterol. 2013;108:401) dosing of a nonphosphate, dual-action, low-volume preparation containing sodium picosulfate, magnesium oxide, and citric acid (P/ MC) compared with per labelled dosing of 2L PEG solution and 2.5-mg bisacodyl tablets in adults preparing for colonoscopy. In this post-hoc analysis, patients who received P/MC were stratified by serum Mg$^{2+}$ levels (within vs outside the normal range) on the day of colonoscopy. Cardiac electrical conduction was assessed by: heart rate, PR, QRS, QT, QTc-B, QTc-F, and RR intervals, via serial ECGs and interval measurements with central read provided by eResearch Technology, Inc.

Results: A total of 304 patients received split-dose, and 294 patients received day-before P/MC and were included in this analysis. No patients with elevated Mg$^{2+}$ experienced QTc-B or QTc-F intervals >500 msc. Five (0.8%) patients had a QTc-B or QTc-F interval increase >60 msc from baseline; all of these patients had Mg$^{2+}$ levels within the normal range. PR and QRS intervals were similar between patients with normal and abnormal Mg$^{2+}$ levels, regardless of dosing regimen. On the day of colonoscopy, 11% (split-dose) and 9% (day-before dose) of patients had serum Mg$^{2+}$ concentrations outside of the normal range (>1.05 mmol/L). Patients with increased serum Mg$^{2+}$ levels did not have any clinically significant changes in cardiac function or electrophysiology. All serum Mg$^{2+}$ levels returned to baseline 24–48 hours post colonoscopy. There were no reported cardiovascular treatment-emergent adverse events related to P/MC at the time of colonoscopy or at follow-up visits.

Conclusion: Treatment with P/MC did not clinically alter electrocardiographic conduction in any patient preparing for colonoscopy, regardless of serum Mg$^{2+}$ concentrations.

Disclosure: Supported by funding from Ferring Pharmaceuticals Inc, Parsippany, New Jersey. Editorial support was provided by The JB Ashlin Group, Inc.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes

Extra Info: Dr Bertiger has served as a consultant for Ferring Pharmaceuticals Inc.
Dr Epstein has received grant/research support, participated in speakers’ bureaus, and/or acted as a consultant for Abbott Laboratories, Otsuka Pharmaceuticals, Prometheus, and Sucampo.
Dr Marshall, Dr Dahdal, and Dr Joseph are employees of Ferring Pharmaceuticals Inc.

Initiated Research: Industry
FDA Approval: Yes
Designed Study: Industry
CONTROL ID: 2032157
AVERAGE SCORE: 3.75
PRESENTER: Gerald Bertiger
PRESENTER (INSTITUTION ONLY): Hillmont GI
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Gerald Bertiger: ACG Non-Member
Andrey Pavlov: ACG Non-Member
Richard Willey: ACG Non-Member
Susan Johansson: ACG Non-Member
Raymond Joseph: ACG Member
TITLE: Renal Function Decline in Patients Receiving Sodium Picosulfate/Magnesium Citrate or 2L PEG+bisacodyl in Preparation for Colonoscopy: A Retrospective Analysis
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: To identify risk factors for potential persistent or late renal function decline (RFD) among the 1201 patients who received a nonphosphate, dual-action, low-volume bowel preparation containing sodium picosulfate, magnesium oxide, and citric acid (P/MC, Prepopik<sup>®</sup>) or 2L polyethylene glycol solution and two 5-mg bisacodyl tablets (2L PEG+bis, Halfly<sup>®</sup>) in preparation for colonoscopy.
Methods: A retrospective analysis of 2 phase 3, randomized multicenter studies that investigated split-dose (SEE CLEAR I) or day before (SEE CLEAR II) P/MC versus 2L PEG+bis was conducted to assess potential risk factors associated with RFD. Patients with severe renal impairment were not included in the original studies. Two clinically distinct patient groups with a potential for RFD were identified: persistent (Group 1) patients with ≥ 25% decrease in eGFR or ≥ 25% increase in serum creatinine compared with baseline at, either the day of colonoscopy, 24–48 hours post colonoscopy, or 28 days post colonoscopy, and at 7 days post-colonoscopy; Late (Group 2) patients with ≥ 25% decrease in eGFR or ≥ 25% increase in serum creatinine at 28 days post colonoscopy compared with baseline. A reference population was also defined as patients whose eGFR and serum creatinine were within ± 15% of baseline at all visits during their study participation. Statistical Methods: Group 1 & Group 2 were analyzed separately. All potential risk factors were assessed for associations with RFD in univariate analyses within each study and arm combination. Factors that suggested a univariate association with RFD were further assessed by multiple logistic regression analyses. Study and treatment effects as well as their interactions with each other and the potential risk factors were considered. Stepwise variable selection was used with a P value of < 0.1 as the selection criterion.
Results: The logistic regression model did not identify any treatment or study effects, or any interaction with the potential risk factors. The risk factors for RFD identified for Group 1 were any comorbidity of interest and any concomitant medication of interest present at baseline including: sedation, anesthesia, NSAIDs, ACE inhibitors, ARBs, thiazide diuretics, and loop diuretics. The risk factors for RFD identified for Group 2 were any comorbidity of interest and any concomitant medication of interest added between day 7 and day 28.
Conclusion: This analysis did not identify any significant difference in the risk of renal dysfunction between P/MC and 2L PEG+bis. Identified risk factors were aligned with prior medical history and medication use.
Disclosure: Funded by Ferring Pharmaceuticals Inc, Parsippany, NJ. Editorial assistance by The JB Ashtin Group, Inc.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: G Bertiger has served as a consultant to Ferring Pharmaceuticals Inc.
A Pavlov is a consultant to Ferring Pharmaceuticals Inc.
R Joseph, R Willey, and S Johansson are employees of Ferring Pharmaceuticals Inc.

Initiated Research: Industry
FDA Approval: Yes
Designed Study: Industry
Performed Analysis: Industry
Investigator Contribution: Yes
**CONTROL ID:** 2034068  
**AVERAGE SCORE:** 3.25  
**PRESENTER:** Enqiang Linghu  
**PRESENTER (INSTITUTION ONLY):** the chinese PLA General Hospital  
**PRESENTER (COUNTRY ONLY):** China  
**AUTH DESIG:** ACG Membership Status *:  
Ying-ying LI : ACG Non-Member  
Enqiang Linghu : ACG Non-Member  
Hai-qing HU : ACG Non-Member  
Xiang-cong WANG : ACG Non-Member  
**TITLE:** Peroral endoscopic myotomy improves esophageal body motility in patients with short achalasia duration  
**AWARDS:**  
**CURRENT CATEGORY:** K. Endoscopy  
**CURRENT SUB-CATEGORY:** None  
**PRESENTATION TYPE:** Oral or Poster  
**ACG Research Grant Support:** No  

**Purpose:** To assess the esophageal body motility in a group of 66 patients with achalasia of the cardia undergoing peroral endoscopic myotomy (POEM) and to analyze the factors involved in this phenomenon.  

**Methods:** The study group comprised 60 patients with achalasia of cardia, the patients underwent peroral endoscopic myotomy at our Digestive Endoscopic Center and did pre- and postoperative high-resolution manometry within 1-6 months. Of these patients, 49 (81.6%) had no changes between the pre- and postoperative esophageal body motility, the remaining 11 (18.4%) patients' lower esophageal sphincter (LES) residual pressure, distal contraction integral (DCI), contraction of front velocity (CFV), synchronous contraction percentage were analyzed on the remaining 11 patients whose esophageal body motility data had changed. In addition, a statistical comparison of duration of symptoms was made between the 11 and 49 patients.  

**Results:** (1) In 16.7% of the patients after POEM, LES residual pressure (30.12 ±8.56 vs 17.13±7.60, P<0.05), DCI (353.3±95±370.4, 15 vs 1034.06±892.89, P<0.05) and synchronous contraction percentage (69.09±27.12 vs 42.73±31.36, P<0.05) decreased, and the difference was statistically significant, contraction front velocity (CFV) mean value reduced but the difference was not statistically significant (25.8 ±77.89 vs 4.02±25.04, P>0.05), and 4 cases presented a return of peristalsis; (2) The duration of patients with esophageal body motility improving was significantly shorter than the patients without esophageal body motility improving (1.53±0.63 vs 6.37±7.05, P<0.05), and the difference was statistically significant.  

**Conclusion:** (1) POEM can improve esophageal body motility in a certain group of patients with achalasia in the short term (1-6 month); (2) Peroral endoscopic myotomy improves esophageal body motility in patients with short achalasia duration.  

**I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** No  
**Initiated Research:** Investigator  
**FDA Approval:** Yes  
**Designed Study:** Investigator  
**Performed Analysis:** Investigator  
**Investigator Contribution:** Yes  
**Abstract Author:** Investigator  
**Study Results:** Yes  
**Secondary Analyses:** Not Applicable  
**Supported by Industry Grant:** No
CONTROL ID: 2035948
AVERAGE SCORE: 4
PRESENTER: Enqiang Linghu
PRESENTER (INSTITUTION ONLY): the chinese PLA General Hospital
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Enqiang Linghu : ACG Non-Member
Nan-jun Wang : ACG Non-Member
Xiang-dong Wang : ACG Non-Member
Hong Du : ACG Non-Member
Jiang-yun Meng : ACG Non-Member
Hong-bin Wang : ACG Non-Member
Jing Zhu : ACG Non-Member
TITLE: The clinical curative effect analysis of 41 cases of achalasia underwent asymptotic full-thickness myotomy type of peroral endoscopic myotomy
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To summarize the curative effect of asymptotic full-thickness myotomy type of peroral endoscopic myotomy (POEM) in treatment of achalasia so that it can promote the development of POEM.

Methods: We conducted a clinical study of 41 patients undergoing asymptotic type of POEM of all 188 cases in our Digestive endoscopy center between December 10th, 2010 and January 10th, 2014, comparing and analyzing the postoperative symptoms and reflux. The level of myotomy of this type was gradually deepening from the oral side to anal side, as it cut part of the circular muscle gradually deepen to all layers of muscle. Therefore, we named it as asymptotic full-thickness myotomy type.

Results: The postoperative Eckardt scores of symptoms of 41 patients had improved significantly (P<0.001) compared with before. Esophageal dynamic pressure also proved the effectiveness of symptoms. The incidence of postoperative reflux in symptoms and performances under gastroscope were 26.83% and 27.27%, respectively.

Conclusion: Asymptotic full-thickness myotomy type of POEM is good enough to alleviate the symptoms of achalasia and the effect of inhibiting reflux is generally satisfactory.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: Comparison of peroral endoscopic myotomy with right shoulder elevated supine position versus left lateral position for achalasia

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To compare the efficiency and safety of right shoulder elevated supine position peroral endoscopic myotomy (POEM) with left lateral position POEM.

Methods: We conducted a clinical study of 203 patients undergoing POEM with the position mentioned above of all 226 cases in our Digestive endoscopy center between December 2010 and April 2014, comparing and analyzing the general condition, operation time and safety.

Results: All 203 patients underwent POEM successfully, among whom 84 patients had a right shoulder elevated supine position and 119 had a left lateral position. The overall remission rate was 96.77% and there were no significant differences in two groups (P=0.487). The operation time of right-shoulder-elevated-supine-position group was significantly shorter than that of left-lateral-position group. Meanwhile, the gas-related complications mostly happened in the abdominal cavity in the former, while the latter mostly in diaphragm plane above.

Conclusion: POEM with a right shoulder elevated supine position can decrease the operation time and improve the safety so that it is worth popularization and application.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: The clinical significance of pressure relief degree for the selection of surgical method of peroral endoscopic myotomy for achalasia

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To illuminate the clinical significance of pressure relief degree (PRD) for the selection of surgical method of peroral endoscopic myotomy (POEM) for achalasia (AC).

Methods: We conducted a clinical study of 204 patients undergoing POEM with complete data of all 226 cases in our center between December 2010 and April 2014, analyzing and comparing the PRD, esophageal manometry, curative effect and incidence of reflux. The PRD was defined as the ratio of the preoperative lower esophageal sphincter pressure (LES P) and the postoperative LESP.

Results: The PRD of 5 kinds of surgical methods was 2.74, 2.76, 4.01, 6.77 and 3.81, respectively. The overall symptom remission rate was 96.79% and the incidence of reflux had significant differences between two groups that divided according to the value of postoperative LESP of 10 mmHg (P<0.05).

Conclusion: PRD can guide the selection of surgical method of POEM for AC and has a good prospect of clinical application.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035966
AVERAGE SCORE: 4.75
PRESENTER: Enqiang Linghu
PRESENTER (INSTITUTION ONLY): the chinese PLA General Hospital
PRESENTER (COUNTRY ONLY): China
AUTH DESIGN: ACG Membership Status *:
Nan-jun Wang : ACG Non-Member
Enqiang Linghu : ACG Non-Member
Xiang-dong Wang : ACG Non-Member
Hong Du : ACG Non-Member
Jiang-yun Meng : ACG Non-Member
Jing Zhu : ACG Non-Member
Hong-bin Wang : ACG Non-Member
TITLE: The clinical research for the selection criteria of surgical method of peroral endoscopic myotomy for achalasia
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To explore the selection criteria of surgical method of peroral endoscopic myotomy(POEM) for achalasia(AC).
Methods: We conducted a clinical study of 204 patients undergoing POEM with complete data of all 226 cases in our Digestive endoscopy center between December 2010 and April 2014, comparing and analyzing the esophageal manometry, pressure relief degree (PRD), Ling classification, curative effect and complications. The PRD was defined as the ratio of the preoperative lower esophageal sphincter pressure (LESP) and the postoperative LESP.
Results: The overall symptom remission rate was 96.79% and the reflux incidence had significant differences between two groups that divided according to the value of postoperative LESP of 10mmHg (P<0.05). The PRD of 5 kinds of surgical methods was 2.74, 2.76, 4.01, 6.77 and 3.81, respectively. What's more, total complication rate and gas-related complication rate were highest in patients of type Ling IIc and mucosal perforation rate was highest in type Ling IIb. The asymptotic type of POEM had advantages in terms of operation time.
Conclusion: We can use the ratio of the preoperative LESP and 10mmHg which expected as the postoperative LESP to find the closest PRD and select the corresponding surgical method. This can be used as the main selection criteria of surgical method of POEM.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
**Title:** The application of inverse T incision in digestive endoscopic tunnel technique comparing with longitudinal and transverse incision

**AWARDS:** Naomi Nakao Gender Based Research Award/Radhika Srinivasan Gender Based Research Award/ACG Obesity Award

**CURRENT CATEGORY:** K. Endoscopy

**CURRENT SUB-CATEGORY:** None

**PRESENTATION TYPE:** Oral or Poster

**ACG Research Grant Support:** No

**Purpose:** To investigate the advantages of inverse T incision, whether it is more safety and feasibility than the longitudinal incision and transverse incision.

**Methods:** Eighty patients with esophageal disease such as achalasia, esophageal leiomyoma who underwent POEM or ESTD or STER from December 2010 to March 2014 were enrolled. The data of these patients was collected like gender, time of operation, time of entry closure and complications for analyze

**Results:** All 80 patients underwent operation successfully, 75 patients underwent POEM, 3 patients underwent ESTD and 2 patients underwent STER. The longitudinal incision group has 12 cases, the transverse incision group has 32 and the inverse T incision group has 36. The duration of operation in inverse T incision group is shortest while longitudinal incision group is longest (38.8±8.7 min vs 72.0±19.2 min vs 56.7±15.0 min). Otherwise, the inverse T incision group take least time to establish the tunnel than the other 2 groups (23.2±6.0 min vs 45.7±10.6 min vs 34.0±10.0 min, P<0.05). The inverse T incision group took least time in entry closure and expended least clips (P<0.05). The incidence of complication in inverse T group is lowest in three groups (41.67% vs 31.25% vs 11.11%, P=0.043)

**Conclusion:** Digestive endoscopic tunnel technique with inverse T incision could decrease the entry closure time even the operation time, reduce the incidence of pneumatosis-related complications and facility to seal the entry incision. It is more safety and feasibility than the longitudinal incision and transverse incision.

**Disclosure of Relevant Financial Relationships:** No

**Initiated Research:** Investigator

**FDA Approval:** No

**Designed Study:** Investigator

**Performed Analysis:** Investigator

**Investigator Contribution:** Yes

**Abstract Author:** Investigator

**Study Results:** Yes

**Secondary Analyses:** Not Applicable

**Supported by Industry Grant:** No
CONTROL ID: 2016823
AVERAGE SCORE: 3.25
PRESENTER: Jatinder Goyal
PRESENTER (INSTITUTION ONLY): University of Alabama at Birmingham
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Jatinder Goyal : ACG Non-Member
Ali Khan : ACG Member
Hwasoon Kim : ACG Non-Member
Shajjan Peter : ACG Member

TITLE: Predictability of Capsule Endoscopy Referred to a Tertiary Care Center for Double Balloon Enteroscopy: Should Some Capsules Be Re-read?

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Patients with obscure gastrointestinal bleeding (OGIB) with 'positive' findings on capsule endoscopy (CE) by gastroenterologists practicing in the community are often referred to our tertiary care center for double-balloon enteroscopy (DBE). We aim to explore the degree of concordance between these 2 procedures, which had been done in 2 different clinical settings.

Methods: Patient data including demographics, referral diagnosis (on CE), and confirmatory diagnosis (on DBE) were collected and entered into a secure database. Concordance was calculated using kappa coefficient. A kappa of 0.60 or more suggests strong agreement, 0.40 to 0.60 moderate agreement, and less than 0.40 is indicative of low agreement.

Results: A total of 73 patients with OGIB were referred to our center for DBE after undergoing CE outside. Ten of these patients (10/73 or 13.7%) had been found to have blood in small bowel on CE without any concrete diagnosis. Six of these 10 patients (60%) had a normal small bowel on DBE, while 2 patients each (20%) were found to have ulcerative and vascular pathology in the small bowel. Sixty-three patients had a diagnosis of either normal small bowel, or ulcerative, tumorous, or vascular etiology on CE. DBE revealed a source of bleeding in 17 out of the 22 patients (77.3%) with normal CE. On DBE, 35 patients (35/63 or 55.6%) had a vascular pathology, 11 had ulcerative disease (17.5%), 11 showed a normal small bowel (17.5%), while diverticulosis and small bowel tumor were found in 3 patients each (4.8%). The kappa coefficient for CE and DBE for the 63 patients was 0.28, suggesting poor agreement. Most patients with a referral diagnosis of vascular pathology were confirmed to have vascular disease on DBE (19/23 or 82.6%). Similarly, an initial diagnosis of ulcerative disease on CE was confirmed in 5 out of 6 patients on DBE. However, a diagnosis of mass on CE was only confirmed in 2 out of 12 cases (16.6%).

Conclusion: Our study shows there is a poor concordance between capsule endoscopy done in the community and confirmatory DBE done at our tertiary care center. While a diagnosis of vascular or ulcerative pathology on CE has high likelihood of being confirmed on DBE, a diagnosis of normal small bowel or mass should prompt re-reading of the capsule study before DBE is pursued.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2005911
AVERAGE SCORE: 4.25
PRESENTER: Jatinder Goyal
PRESENTER (INSTITUTION ONLY): University of Alabama at Birmingham
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Jatinder Goyal : ACG Non-Member
Anshun Goel : ACG Non-Member
Gerald Megwin : ACG Non-Member
Frederick Weber : ACG Member
TITLE: Analysis of a Grading System to Assess Quality of Small Bowel Preparation for Capsule Endoscopy: In Search of the Holy Grail
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Capsule endoscopy (CE) diagnostic yield is vulnerable to inadequate visualization related to residual bile or chyme remaining in the lumen despite intestinal lavage. There remains no consensus on the reliability of qualitative, quantitative, or computer-derived quality assessments for CE. This study evaluates the intra-observer and inter-observer agreement of a previously validated scale.
Methods: The digital images of 34 patients who underwent CE were independently reviewed by 2 blinded physicians according to a previously validated grading scale. One of the physicians reviewed and graded the patients a second time, also in blinded fashion. The luminal bowel preparation quality was assessed using a qualitative parameter (fluid transparency) and a more quantitative one (mucosal invisibility) for each of 3 small intestinal segments. An overall small bowel score for each parameter was assigned as well. A weighted kappa coefficient was used to calculate the intra-observer (Observer 1A and 1B) and inter-observer (Observer 1A and Observer 2) agreement. A kappa of 0.60 or more suggests strong agreement, 0.40 to 0.60 moderate agreement, and less than 0.40 is indicative of low agreement.
Results: The intra-observer weighted kappa index was 0.52 for both fluid transparency and mucosal visibility, which is consistent with moderate agreement. The inter-observer weighted kappa indices were 0.29 and 0.42 for fluid transparency and mucosal visibility, respectively, demonstrating suboptimal inter-observer agreement. Individual segment inter-observer kappa indices were better for mucosal visibility (0.52, 0.39, and 0.47 for small bowel segments 1, 2 and 3, respectively) as compared to fluid transparency (0.18, 0.38 and 0.31).
Conclusion: The proposed grading scale for assessment of CE preparation quality has inadequate inter-observer and intra-observer agreement. Capsule endoscopy preparation grading scales which focus more on quantitative than qualitative assessment may demonstrate more reliable performance characteristics.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2019786
AVERAGE SCORE: 2.5
PRESENTER: Praveen Koneru
PRESENTER (INSTITUTION ONLY): UMass Memorial Medical center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Praveen Koneru : ACG Non-Member
Samuel Han : ACG Non-Member
Anupam Singh : ACG Member
John Levey : ACG Non-Member
TITLE: High-Resolution Colonoscopy Does not Improve Adenoma Detection Rate
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: With the increase in resolution of endoscopes in recent years, large amounts of capital have been invested in the use of high-definition (HD) colonoscopes and their respective accessories. As the value of utilizing more expensive HD colonoscopy has yet to be determined, this study aimed to examine adenoma detection rates of different gastroenterologists who performed colonoscopies with both standard and high-definition colonoscopes.
Methods: All standard colorectal cancer (CRC) screening colonoscopies performed for patients not at high-risk for CRC were analyzed for 4 gastroenterologists for a period of 4 years. The first 2 years analyzed included colonoscopies performed before high-definition, high-resolution colonoscopy was available. The last 2 years analyzed colonoscopies exclusively performed with high-resolution colonoscopes. The primary endpoint was adenoma detection rate, and secondary endpoints included the number of polyps found as well as the final pathology.
Results: A total of 1,368 colonoscopies were analyzed. The HD colonoscopy group included 666 cases, and the standard definition (SD) colonoscopy group included 702 cases, divided among 4 gastroenterologists. There was no significant difference in average adenoma detection rate between HD colonoscopy (19.7%) and standard definition (SD) colonoscopy 22.2% (p < 0.25). In terms of gender, there was a significant difference in males between the HD and the SD groups, with adenoma detection rates of 23.7% and 30.3%, respectively (p<0.05), while there was no significant difference in females with detection rates of 15.1% and 14.05%, respectively (p <0.73). Lastly, there was significant variability between the individual gastroenterologists in adenoma detection rates for males with a range of 16.3% to 34.6% (p<0.04), but no difference in variability for females (range 14.2-15.9).
Conclusion: High-definition colonoscopy has been advertised as allowing better visualization of polyps, with the implication of higher adenoma detection possibility. The use of HD colonoscopy and adenoma detection rates have been studied with equivocal results, some showing improvement in detection rates while others show no difference at all. While further studies will be needed to validate these results, in the context of cost-conscious care, endoscopists should not be rushing to upgrade to HD-colonoscopy
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037211
AVERAGE SCORE: 5.25
PRESENTER: Joseph Leung
PRESENTER (INSTITUTION ONLY): Gastroenterology, Sacramento VAMC and UC Davis Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESEG: ACG Membership Status *:
Joseph Leung : ACG Member
Wei-Chih, David Liao : ACG Non-Member
Wenbo Meng : ACG Non-Member
Andrew Yen : ACG Member
Dong Wang : ACG Non-Member
Yanglin Pan : ACG Non-Member
Hp Wang : ACG Non-Member
TITLE: Proper Tools and Technique Improve Biliary Papillotomy - A Simulation Study
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Outcome of biliary papillotomy depends on alignment of papillotome with “perfect” biliary axis (BA). Orientation of BA can change with distorted anatomy. A deviated papillotome cutting wire alters the alignment and affects the cut. Pre-shaping a papillotome can improve wire alignment. We tested the hypothesis that pre-shaping a papillotome can improve the papillotomy using the EMS.

Methods: 17 GI trainees attended talks on perfect BA, scope/papillotome alignment and control of cutting. They performed artificial papillotomy using EMS. 9 were randomly assigned marked papillae with “perfect” BA, 8 were given blank papillae. Using papillotomes (DASH 025, Cook), trainees performed papillotomies with 1.regular (un-manipulated) papillotome where cutting wire generally deviates slightly to the right with traction, 2.pre-shaped papillotome where cutting wire was positioned on left side, more aligned with perfect BA. Papillotomy was recorded, coded for review by blinded observer. Papillotomy performance was scored (based on position of cutting wire, direction of cut and control of cutting, with a 9 point scale; 9=excellent and 3=poor). Trainees responded to survey on practice credibility.

Results: Data of 17 video recordings presented in Table1. There were significantly higher scores and shorter procedure time for papillotomies performed with pre-shaped papillotome compared to regular papillotome. There were better scores for marked vs. blank papillae. There was a significant increase in post-practice credibility score (Table2).

Conclusion: Trainees performed significantly better artificial papillotomies using a pre-shaped papillotome due to better axis alignment and less adjustment for the cut, compared to regular papillotome. A proper tool ensures good alignment which may improve outcome of papillotomy.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: J Leung received research equipment support from Cook Endoscopy and Olympus, research grant support from Division of Gastroenterology and Hepatology, UC Davis Medical Center, and travel support from Chinese Society of Digestive Endoscopy to conduct this study.
The other co-authors have no relevant financial relationship to disclose
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
TITLE: Retrospective Review of Airway Management and Complications in the Treatment of Esophageal Food Impaction

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None

PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Review the rate of complications associated with therapeutic upper endoscopy for esophageal food impaction with the use of conscious sedation versus anesthesia combined with endotracheal intubation.

Methods: A retrospective chart review of all patients treated at an academic hospital for esophageal food impaction between 12/2011 and 11/2013 was performed. Demographic and clinical data including method of removal as well as complications associated with the procedure were reviewed and descriptive statistics applied.

Results: Thirty-nine patients were found to have food impaction and two of them had repetitive food impactions for a total of 42 episodes in the 2 years of study. Mean age was 63 years and 72% were Males. Twenty four percent (n=10) underwent elective intubation prior to EGD with no complications. This group had a higher incidence of known esophageal disorders such as achalasia, strictures and malignancy or neurologic disorders such as Parkinson’s disease. Seventy six percent (n=32) of patients received only conscious sedation and of those, 13% required termination of endoscopy in order to urgently intubate for airway protection due to hypotension, hypoxia, and large amount of impacted food. Fifty percent of those who were emergently intubated had esophageal or neurologic disorders and the pull technique was used in 75% of them. Patients with esophageal and/or neurologic disorders were shown to have a higher incidence (95%) of upper or middle impaction than patients with no known esophageal or neurologic disorders (5%). The most common method of removal was the push technique (43%), the pull technique (33%), followed by a combination of both techniques and dilatation (5%). The push technique was associated with one episode of esophageal tear and the pull technique was associated with one episode of hypoxia and hypotension and one episode of posterior oropharyngeal laceration.

Conclusion: The use of conscious sedation during endoscopic treatment of esophageal food impaction is common. Notably, 13% of patients required termination of endoscopy and conversion to endotracheal intubation due to large amounts of food in the proximal esophagus as well as for hypoxia and hypotension during removal of a proximal esophageal food bolus using the pull technique. In our study, 33% of patients received endotracheal intubation (both elective and urgent) during endoscopic treatment of esophageal food impaction. The decision of conscious sedation versus intubation prior to endoscopic treatment of esophageal food impactions should take into consideration a history of esophageal or neurologic disorders as this population is at increased risk of complications and may benefit from endotracheal intubation for airway protection.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2037907
AVERAGE SCORE: 5
PRESENTER: Philip Okafor
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Philip Okafor: ACG Member
Larissa Fuji: ACG Member
Michael Levy: ACG Member
TITLE: Endoscopic Ultrasound Fine Needle Aspiration for the Evaluation of Focal Ampullary Lesions
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Endoscopic ultrasound (EUS) is increasingly utilized to image ampullary lesions. However, there is uncertainty regarding the diagnostic yield and safety of ampullary EUS guided fine needle aspiration (FNA) of focal lesions confined to the ampulla.
Methods: A prospectively maintained EUS database was reviewed to identify consecutive patients who underwent EUS FNA of a focal ampullary lesion between 2006 and 2014. Clinicopathological, radiographic, endoscopic, and outcome data were analyzed.
Results: Thirty-one patients [mean age 70.4 (SD ±14) years, 74 % male] underwent ampullary EUS FNA. Patients were ultimately diagnosed with a malignancy (n=15), benign process (n=14), or indeterminate lesion (n=2). The most common indications included jaundice (n=12), double-duct sign (n=5) and ampullary mass detected by prior imaging or endoscopy (n=5). Non-invasive imaging failed to detect any ampullary pathology in 79% and 75% of lesions ultimately diagnosed as malignant or benign, respectively. The mean maximum diameter of the ampullary lesion at EUS was 1.2 cm. An average of 4.3 FNAs were obtained and the FNA cytology was positive for malignancy in 15 patients (48.3%): ampullary adenocarcinoma (n=13), diffuse large B-cell lymphoma (n=1), and carcinoma with neuroendocrine features (n=1). While all 15 patients with a gold standard diagnosis of malignancy had a positive FNA cytology result, prior biliary and/or ampullary sampling were interpreted as atypical or suspicious in 40% and negative in 60%. Among the 15 patients with positive FNA results, eight (62%) underwent pancreatoduodenectomy with EUS and surgical TMN staging corresponding in 75% of patients, with EUS failing to detect malignant lymphadenopathy in one patient and CT failing to detect liver metastasis in a patient with T2 disease in another patient. The only reported adverse event was mild pancreatitis that resulted in a 3 day hospitalization.
Conclusion: Our data suggests that EUS FNA of lesions confined to the ampulla is safe and feasible and may substantially facilitate the evaluation and management of patients with suspected ampullary pathology.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037179
AVERAGE SCORE: 4.75
PRESENTER: Justin Cochrane
PRESENTER (INSTITUTION ONLY): Providence Sacred Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Justin Cochrane: ACG Non-Member
TITLE: Fully Covered Self Expanding Metallic Stent as a Reversible Treatment Option for Common Bile Duct Stricture and Post ERCP Complications.
Justin Cochrane D.O, Gregory Schlepp M.D, and Wichit Srikureja M.D

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: The use of a Fully Covered Self Expanding Metallic Stent (FCSEMS) has limited literature looking at effectiveness for reversible intervention for common bile duct stricture, as an effective treatment for post ERCP perforation, or post sphincterotomy bleeding.

Methods: This is a retrospective study looking at patients who received FCSEMS at Providence Sacred Heart Medical Center from 2011 through 2014 for common bile duct stricture, post ERCP perforation, or post sphincterotomy bleeding. General search included all patients who had ERCP with stent placement with subsequent review of procedure notes dictated by gastroenterologists performing ERCP and stent placement to determine if FCSEMS were placed, and indication for stent placement. A total of 1,500 ERCP with stent placement were identified in a 3-year period, with 116 meeting criteria for this study. Primary outcomes included improvement in cholestatic liver enzyme pattern after placement of FCSEMS, post ERCP perforation/bile leak resolution without surgical intervention, and stabilization of Hgb with FCSEMS placement post sphincterotomy bleed. Sphincterotomy bleeds being defined as major bleeds as a drop in hemoglobin of 4g/dL or where a blood transfusion was given, and minor bleeds as hemoglobin drop less than 4g/dL and no blood transfusion given.

Results: Of the 116 patients that met criteria for this study, 71 (61%) were secondary to common bile duct stricture either from a mass (22) or no mass (49). Patients with a mass had 90% resolution of liver enzymes; with 2 repeat FCSEMS placed secondary tumor overgrowth with collapse of stent. Liver enzymes resolved in 92% of patients who received a FCSEMS secondary to stricture with no mass identified. FCSEMS placement for post ERCP perforation included 14 (12%) patients. All 14 patients had resolution of perforation after stent removal, which was verified with a cholangiogram. 20 (17%) patients were identified for stent placement post sphincterotomy bleeding with an average hemoglobin decline of 1.3 g/dL. Major bleeds included 4 (20%) patients and minor bleeds 16 (80%) patients with no patient requiring surgical intervention.

Conclusion: FCSEMS shows great promise as a non-permanent intervention for common bile duct strictures, either from a cancerous mass or stricture with no mass present, and a less invasive treatment option for post ERCP complications, perforations or bleedings.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: Retrospective Analysis of the Effectiveness of Covered Esophageal Stents for the Management of Benign Upper Gastrointestinal Disorders

AUTH DESIG: ACG Membership Status *:
Isaac Cline : ACG Non-Member
Nitin Ahuja : ACG Non-Member
Andrew Wang : ACG Member
Vanessa Shami : ACG Member
Bryan Sauer : ACG Member

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: The purpose of this study was to determine the effectiveness and complications of covered esophageal stents for management of benign upper gastrointestinal conditions.

Methods: Patient charts were retrospectively reviewed for 85 patients who underwent 173 individual esophageal stenting procedures between April 2005 and April 2013 for benign indications. We analyzed patient characteristics, indication for stenting, stent location, stent type, lesion resolution (clinical success) and associated complications (immediate and late).

Results: Patient characteristics, indication, location of stent, and stent type are described in Table 1. The mean number of stenting procedures was 2.0 (range 1-9) and mean stent duration was 59 ± 139 days. Successful stent placement was achieved in 172/173 cases (99%). At completion of stenting in the 85 individuals, resolution (partial or complete) of the underlying process (clinical success) occurred in 46 (54%) whereas 22 (26%) were unresolved and 15 (20%) were lost to follow-up. Based on lesion type, 18/33 (55%) of strictures resolved, 26/41 (63%) of leaks resolved, and 1/9 (11%) of fistulae resolved. Immediate complications (11/173; 6%) were defined as occurring within the first 24 hours after stent deployment and included migration 5/11 (45%), infolding 3/11 (27%), chest pain 2/11 (18%), and esophageal tear 1/11 (9%). Late complications (78/173; 45%), defined as occurring greater than 24 hours after stent deployment, included migration 57/173 (33%), ulcer 5/173 (3%), bleeding 4/173 (2%), infolding 4/173 (2%), pain 4/173 (2%), in-stent stenosis 3/173 (2%), and stent fracture 1/173 (1%).

Conclusion: Technical success for stent placement is good; however resolution of the underlying benign process is marginal at approximately 50%. Complications remain significant with over one-third experiencing migration; however, complications are rarely severe. Although placement of covered esophageal stents in the upper gastrointestinal system for the management of benign processes is not perfect, it is still a reasonable approach given morbidity/mortality of other treatment options.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2038170
AVERAGE SCORE: 4.75
PRESENTER: Juan Tejada
PRESENTER (INSTITUTION ONLY): The Brooklyn Hospital Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Hernan Lopez-Morra : ACG Non-Member
Juan Tejada : ACG Non-Member
Manhal Izyy : ACG Non-Member
Sandar Linn : ACG Non-Member
Emmanuel Ofori : ACG Non-Member
Luis Guzman : ACG Non-Member
Faraj Karagoli : ACG Non-Member
Sury Anand : ACG Non-Member
TITLE: Predictors of prolonged withdrawal time during screening colonoscopy among Gastroenterology Fellows.
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Background: Withdrawal time has been recognized as an important quality measure for screening colonoscopy. However, a prolonged withdrawal time cannot be considered an adequate quality measure without accounting for thoroughness of bowel prep and level of training of the endoscopist. In this study, we investigated the impact of the quality of bowel prep assessed by the Boston Bowel Preparation Score (BBPS) on withdrawal time. We also looked at the impact of fellows' training level on withdrawal time.
Methods: The study was conducted prospectively at the Brooklyn Hospital Center. 97 screening colonoscopy encounters performed by gastroenterology fellows and supervised by an attending gastroenterologist were included in the study. Data included withdrawal time, BBPS, pathology findings, year in training were collected. All subjects had received a gallon of polyethylene glycol (PEG) as the bowel preparation regimen. Withdrawal time was divided into two groups. Equal or Less than 6 minutes (Group A) and more than 6 minutes (Group B). BBPS was classified as 6 or less and more than 6. Statistical analysis was done using SAS software.
Results: 97 screening colonoscopy encounters were analyzed. Subjects with BBPS of ≤6, 86.9% had Group B withdrawal time. Subjects with BBPS of >6, 67.35% had a Group A withdrawal time (P 0.05). All first Year Fellows were in Group B withdrawal time. 79% of Second Year Fellows were in Group B withdrawal time. 73% of Third Year fellows had a Group B withdrawal time (P 0.07). There was no statistically significant difference noted in adenoma detection rate (ADR) based on year of training of the Fellow.
Conclusion: Inadequate bowel preparation as evidenced by low Boston Bowel Preparation Score can prolong withdrawal time. As expected, the level of training of the fellow directly correlates with prolonged withdrawal time. However, as the training progresses the adenoma detection rates are unchanged even as the withdrawal time falls. The unchanged adenoma detection rate could be due to adequate supervision.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
Purpose: Gastroenterology (GI) fellows perform endoscopic procedures throughout their years of training and are asked to record basic information regarding the nature of the procedure and their level of involvement. Unfortunately, no standard method for procedure logging exists and retrieval of data can be challenging for both the fellow and program director. Therefore, we have created a novel mobile device application (MDA) for endoscopic procedure logging to overcome these challenges. The MDA is iOS based and allows users to log details of individual procedures performed without including protected health information. Data is then uploaded from the iOS device to a central database on a secure server. The cases can then be easily retrieved and analyzed. A monthly report is also created for users and program directors. We hypothesize that the MDA will allow for improved endoscopic procedure logging and data retrieval.

Methods: A 19-item questionnaire was created to assess the current logging practice of the GI fellows at our tertiary care academic medical center. The questionnaire included questions on current logging practice, attending involvement in procedures, and fellows’ estimation of Polyp Detection Rate (PDR). Fellows downloaded the MDA free-of-charge from the iTunes App store. After 8 weeks of MDA use, fellows were asked to complete the same questionnaire and a the NASA task load index (TLX). The study was IRB approved.

Results: All 11 GI fellows (7 female) were enrolled in the study and received the questionnaire pre-MDA. 7 maintained a paper log, 7 computer-based log, and 1 web-based log. Pre-MDA, 84.9% of procedures completed were logged with 36% logged ≤ 24 hours of procedure completion. Pre-MDA, fellows estimated their PDR to be 54.5%±18.8% and attending take-over rate 39.25%. Post-MDA, 85.2% of procedures were logged (p=0.47) and 54.5% were logged ≤ 24 hours of procedure completion. PDR was 50%±31% (p=0.74) and attending take-over rate was 54% (p=0.19). NASA TLX among MDA users demonstrated very low physical demand 8.6 [0, 21], low mental demand 18.3 [14, 25], low effort 27 [10, 60], and high success 84 [76, 100].

Conclusion: The MDA allowed for efficient and successful procedure logging. Data was retrieved without difficulty and the MDA was quickly adopted into practice. This study suggests that the MDA may be a useful tool for recording and retrieving endoscopic procedures in a standard fashion.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

 Initiated Research: Investigator
 FDA Approval: No
 Designed Study: Investigator
 Performed Analysis: Investigator
 Investigator Contribution: No
 Abstract Author: Investigator
 Study Results: Yes
 Secondary Analyses: Not Applicable
 Supported by Industry Grant: No
CONTROL ID: 2038935  
AVERAGE SCORE: 4.5  
PRESENTER: Rabia Ali  
PRESENTER (INSTITUTION ONLY): New York University School of Medicine  
PRESENTER (COUNTRY ONLY): United States  
AUTH DESIGN: ACG Membership Status *:  
Rabia Ali : ACG Non-Member  
David Carr-Locke : ACG Member  
Srinadh Komanduri : ACG Member  
Sanjay Jagannath : ACG Member  
Toufic Kachaamy : ACG Member  
Peter Sargon : ACG Member  
Catherine Frenette : ACG Member  
Harish Gagneja : ACG Member  
Douglas Howell : ACG Member  
James Buxbaum : ACG Member  
Timothy Laurie : ACG Member  
Joseph Marsano : ACG Non-Member  
Seth Gross : ACG Member  
TITLE: Hemospray for Refractory Gastrointestinal Bleeding: Initial United States Experience  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  
Purpose: Endoscopic interventions including injection of epinephrine, bipolar coagulation, clipping and argon plasma coagulation have revolutionized the endoscopic breadth of managing acute gastrointestinal bleeds (GIB). Hemospray, a novel technology used for the management of acute GIB allows for further capabilities in achieving endoscopic hemostasis. The aim of this study is show the initial United States (US) experience of hemospray for intractable GIB.  
Methods: Hemospray is a hemostatic spray (Cook Medical) used for the management of upper GIB (non-variceal) in Canada and Europe. Hemospray is not currently approved in the US, unless it is being utilized for compassionate use. A powder spray is spread evenly over the bleeding surface via a catheter passed through the endoscope and combines with water, creating a barrier which allows for hemostasis. We performed a ten center retrospective study evaluating the use of hemospray for control of acute GIB.  
Results: A total of 10 cases were included, dating from February 2012 to March 2014. The mean age of subjects in our study was 59 (range 13-77). Indications for the use of hemospray included bleeding from peptic ulcer, ulcers at previous polypectomy site, ulcerated kaposi’s sarcoma, herpes virus infection causing mucosal damage, metastatic rhabdomyosarcoma, pancreatic cancer invasion into the stomach, neuroendocrine tumor invading the jejunum, ulcerated gastrointestinal stromal tumor and renal cell carcinoma invasion of the duodenum. Location of bleeding included the esophagus, gastric antrum, gastric cardia, gastric body, duodenum (2nd portion) and jejunum (at the level of previous choledochojenuunostomy from previous Roux-en-y whipple resection of pancreas). All cases were evaluated endoscopically after the clinical presentation revealed sequelae of acute blood loss from the gastrointestinal tract. The endoscopic evaluations revealed active oozing in the majority of the cases (80%), presence of fibrin plug (10%) and presence of multiple vessels without active bleeding (10%). All cases had previous attempts with alternative hemostasis techniques which included APC, embolization, clipping, bipolar coagulation and epinephrine without success. Hemospray was used alone in 80% of the cases and used in conjunction with epinephrine injection in one case and an over the scope clip in another. Acute hemostasis was achieved in all cases. Acute rebleed occurred in three of the ten cases within 7 days post-procedure. No adverse events were reported.  
Conclusion: Hemospray is a safe and effective mechanism used to achieve acute hemostasis for the management of GIB not controlled by traditional methods. This is the largest US study evaluating this novel technology to treat acute, life threatening GIB.  
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes  
Extra Info: Seth A. Gross, MD - Consultant: Cook Medical
TITLE: Incidence and Outcomes of Acute Gastrointestinal Bleeding in LVAD Patients

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: Increased incidence of gastrointestinal bleeding (GIB) in patients with continuous-flow left ventricular assist device (CF-LVAD) has been noted in many relatively small retrospective case series. In clinical practice, GIB has become a major management challenge as CF-LVAD has become increasingly a long-term destination therapy rather than just bridge to transplantation. Therefore, we aimed to evaluate the incidence and outcomes of GIB in a large all inclusive cohort of patients with the current generation CF-LVAD.

Methods: This is an IRB approved retrospective cohort study of all patients that received Heartmate II CF-LVAD from 2005 to 2013 at our institution.

Results: 112 patients (median age 67 ± 14 years, 88% male) received CF-LVAD over an 8 year period. With median follow-up of 1.8 years (interquartile range 0.8-3.7 years) after LVAD placement, GIB occurred in 46 patients (41%). 81 GIB events were recorded over 282 person-years (p-y) of follow up with an overall rate of 28.7 GIB events per 100 p-y. For patients with destination therapy, GIB occurred in 40 (48%, median follow up 1.2 years, rate = 38.8 per 100 p-y) as compared to 6 (21%, median follow up 4.6 years, rate = 5.3 per 100 p-y) with bridge to transplantation, p= 0.001. Among GIB patients, 13 (28%) had occult, 33 (72%) had overt bleeding and 36 (78%) underwent endoscopy. See Table 1 for a summary of results. GI re-bleeding occurred in 23 (50%) patients with 35 separate GIB events over a median of 1 year (interquartile range 0.4-1.8 years, with p-y follow up 65.8) for an overall rate of GI re-bleed at 53.2 per 100 p-y.

Conclusion: In this long-term follow-up and large cohort of LVAD patients, GIB was very common. Endoscopy identified a GIB source in only half of the cases. The most common GIB source was the upper GI tract with ulcers being the leading cause. Re-bleeding was a common occurrence.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037436
AVERAGE SCORE: 4.5
PRESENTER: Divya Bhatt
PRESENTER (INSTITUTION ONLY): University of Illinois Chicago
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Divya Bhatt : ACG Non-Member
Andrew Watson : ACG Non-Member
Kristin McBeath : ACG Non-Member
Cemal Yazici : ACG Non-Member
Fredrik Langi : ACG Non-Member
Brian Boulay : ACG Member
Russell Brown : ACG Member
TITLE: The Utility of Video Capsule Endoscopy to Evaluate Gastrointestinal Bleeding in an Inpatient Setting.
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Capsule Endoscopy (CE) is increasingly utilized in the inpatient (IP) setting. Previous studies have found
that CE within 3 days of hospitalization is associated with significant findings. We analyzed IP CE at an urban
tertiary-care medical center, evaluating findings and impact on subsequent management.

Methods: 609 CE were completed from Jan 2004 to Oct 2013; of these, 148 (24.3%) were performed in IPs for GI
bleeding and were reviewed retrospectively. Data analyzed included: CE indication (melena, hematochezia, or iron
deficiency anemia (IDA)), demographics, bleeding risk factors (anti-coagulants, SSRIs, cirrhosis, ESRD), hospital day
of CE, # units transfused, and length of stay (LOS). CE findings (location, type, and # of lesions) and interventions
based on findings (repeat endoscopy, push or deep enteroscopy, angiography, surgery) were also assessed. CE
findings considered the definitive or likely source of bleeding were deemed Positive Findings (PF). Data was analyzed
with SPSS using Chi-square, Mann-Whitney U, T-tests, and multivariate logistic regression.

Results: Of 148 IPs, 69 (46.6%) presented with melena, 43 (29.0%) with IRA, and 36 (24.3%) with hematochezia.
There were no significant differences regarding rate of PF, LOS, # IPs transfused, and hospital day of CE between
these groups. 68 (45.9%) of all IPs had CE PF, with 43 being definitive (29.0% of all IPs.) There was no significant
difference in the rate of CE PF ≤ 3 days vs > 3 days of hospitalization. A history of prior GI bleed (99 IPs, p=0.032)
and cirrhosis (25 IPs, p=0.027) were predictors of PF. PF were associated with NSAID use, higher # units transfused
(not significant), and a longer LOS (p=0.012.) SSRI use was less associated with PF (not significant.) Anti-coagulants
and ESRD were not correlated with PF. CE PF led to repeat colonoscopy, EGD, push, or DB enteroscopy in 40
(58.8%), and angiography or surgery in 11 (16.2%). Only 10.0% of IPs without PF required further procedures.
Endoscopic procedures confirmed CE PF in 26 cases (65.0%); 21 (80.7%) of these underwent therapy.

Conclusion: Inpatient capsule endoscopy is useful for the evaluation of bleeding. Capsule endoscopy showed a likely
bleeding source in 45.9%, led to further intervention in 75.0%, and had findings confirmed by endoscopy in 65.0%.
Cirrhosis and prior history of GI bleeding were predictors of positive findings by multivariate analysis. Number of
transfusions and NSAIDs were more associated, and SSRI use less associated with positive findings, but none reached
significance. In contrast to prior studies, the rate of positive findings did not decrease after 3 hospital days. Given
these results, a negative capsule may preclude the need for further procedural intervention.

1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTROL ID: 2037044
AVERAGE SCORE: 4.5
PRESENTER: Ali Siddiqui
PRESENTER (INSTITUTION ONLY): Thomas Jefferson University Hospital
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Andrew Zabolotsky : ACG Non-Member
C. Andrew Kistler : ACG Non-Member
Saad Ghumman : ACG Non-Member
Sobia Laique : ACG Non-Member
Ali Siddiqui : ACG Member

TITLE: ENDOSCOPIC MUCOSAL RESECTION OF LARGE NONAMPULLARY DUODENAL POLYPS: TECHNICAL ASPECTS AND LONG TERM THERAPEUTIC OUTCOMES

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Recurrence of duodenal adenomatous polyps after local endoscopic excision is reported to be frequent; therefore many authors propose surgical treatment of these tumors. Our aim was to evaluate the efficacy, safety and long term outcomes of endoscopic mucosal resection (EMR) of large nonampullary duodenal polyps.

Methods: A retrospective review of patients undergoing EMR of nonampullary duodenal polyps ≥10 mm in size was performed. EMR was performed with initial submucosal injection of normal saline solution to lift the polyp in all patients followed by standard snare polypectomy using pure coagulation current. Data pertaining to patient demographics, polyp site and histopathology, resection technique, use of adjunctive argon plasma coagulation (APC) ablation, adverse events, and residual/recurrent neoplasia at follow-up and surgical interventions were evaluated.

Results: Over a 5 year period, 60 patients with 60 duodenal lesions were removed by EMR (mean age 63 years, 43.3% women). None of these patients had undergone previous endoscopic therapy of the polyp. Seventeen (28%) polyps were located in the bulb, 31 (52%) in the 2nd portion and 12 (20%) in the 3rd part of the duodenum. The mean size of lesions resected was 22±14 mm (range 10-90 mm). Forty-nine polyps were sessile and 11 were pedunculated. Complete endoscopic eradication during a single session was performed successfully in 48 (80%) patients. Six patients required 2 sessions and 6 required 3 sessions for complete eradication. En bloc resection was performed in 40 polyps (67%) and piecemeal resection in 20 (33%). Adjunctive ablation of focal residual neoplastic tissue with APC was applied in 18 cases. Procedure related complications were recorded in 9/60 (15%) of cases. This consisted to acute bleeding (n=8) and 1 microperforation managed with clip closure and antibiotics. Histologic examination revealed mucosal adenocarcinoma in 3, low-grade adenoma in 45, and high grade adenoma in 12 patients. The mean follow-up time was 37 months (range 22-53). The overall endoscopic cure rate was 93%. On follow-up surveillance endoscopy, residual/recurrent neoplastic tissue at the site of the previous EMR was identified in 13 (22%) patients. Residual/recurrent neoplasia was successfully eradicated with further endoscopic resection or ablation. Four patients went to surgery due to failed endoscopic resection. Polyps of >20mm and those removed piecemeal were associated with a statistically higher incidence of recurrence.

Conclusion: EMR for large nonampullary duodenal adenomas is a safe and effective technique to achieve complete eradication. However, endoscopic surveillance is mandatory in order to detect and treat polyp recurrence.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039285
AVERAGE SCORE: 4.25
PRESENTER: Michael Bartel
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Michael Bartel : ACG Member
Carlos Simons Linares : ACG Non-Member
Luke McCrone : ACG Non-Member
Mark Stark : ACG Member
Frank Lukens : ACG Member
TITLE: What is the impact of abdominal and pelvic surgery for patients with overt obscure GI bleed who undergo retrograde double balloon enteroscopy? Analysis of a large database
AWARDS: 
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Patients with overt obscure GI bleed (OGIB) have frequently undergone pelvic and abdominal surgeries for hemorrhage related and unrelated conditions. Whether previous surgeries impact negatively the diagnostic yield of retrograde DBE in overt OGIB is unknown. This is of particular importance for attempted complete enteroscopy. Aim: To investigate if abdominal or pelvic surgery affects the depth of intubation and the diagnostic yield of retrograde DBE in patients with overt OGIB.

Methods: 779 retrograde DBE were performed between February 2009 and September 2013 at a single tertiary center of which 153 were performed for overt OGIB. Data was abstracted by retrospective chart review. Primary outcome was the depth of intubation and secondary outcome the diagnostic yield, both stratified by patients with and without abdominal and / or pelvic surgery.

Results: 153 patients (mean age 66 years, SD 14.5; male 60%) underwent 153 retrograde DBE for overt OGIB. Mean intubation depth was 132cm (SD 85) with a range of 33 to 345cm. The diagnostic yield of retrograde DBE was 62% and included the following findings: arteriovenous malformations (AVM) 52%, carcinoid tumor 6%, Dieulafoy lesion 6%, ulcers 6%, anastomotic ulcers 5%, and other 25%. 55% had a history of surgery prior to retrograde DBE (49% abdominal surgery, 20% pelvic surgery, 31% surgery in both fields). Next, stratification of patients by presence or absence of surgical history as well as type of surgery was performed. Intubation depth dropped from 151cm (SD 92) to 118cm (SD 78) (p=0.01) when patients had a history of abdominal and / or pelvic surgery (abdominal: 122cm, pelvic: 122cm, and both: 111cm). The rate of complete DBE in attempted cases dropped from 71% to 53% in patients with surgical history (p=0.04). Similarly, diagnostic yield decreased from 79% to 61% (p=0.005) (abdominal: 62%, pelvic: 63%, and both: 58%).

Limitations: Single center, retrospective study, inclusion of only patients with overt OGIB

Conclusion: To our knowledge this is the largest cohort study of patients with documented abdominal and / or pelvic surgery who underwent retrograde DBE. Intubation depth, complete enteroscopy rate and diagnostic yield are significantly lower following these surgeries.

Discussion: Our data indicates that antegrade DBE requires likely deeper intubation in patients who underwent abdominal and / or pelvic surgery when complete enteroscopy is attempted in order to compensate the lower intubation depth of retrograde DBE.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTROL ID: 2036983
AVERAGE SCORE: 4.25
PRESENTER: Vishal Desai
PRESENTER (INSTITUTION ONLY): Rush University Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Vishal Desai : ACG Member
Sheena Patel : ACG Member
John Losurdo : ACG Member
Sohrab Mobarhan : ACG Member
Joshua Melson : ACG Member

TITLE: Noncompliance with Recommended Intervals for Surveillance of Polyps Leads to Reduced Adenoma Detection Rates

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: To define specific reasons why premature surveillance colonoscopy occurred in a cohort of patients undergoing surveillance colonoscopy. Also to determine if a defined noncompliant cohort due to prematurity would have a different adenoma detection rate (ADR) at surveillance from a compliant cohort.

Methods: Cases with index and follow-up colonoscopy performed were included. EMR clinic note, colonoscopy order and surveillance colonoscopy report itself were reviewed for noncompliance rationale. Patients with age <50 or >75 on index colonoscopy, inflammatory bowel disease and self or family history of colorectal cancer were excluded. Noncompliant cases were categorized as 1) No clinical reason for prematurity 2) Clinical justification (i.e. bleeding or altered bowel habits) 3) Fair bowel preparation and 4) Surveillance error (index colonoscopy without adenoma). ADR in compliant versus noncompliant cohorts was contrasted. Two tailed Chi-square or Fisher's exact test analysis compared differences amongst groups, p=0.05 significant.

Results: In review of 1680 surveillance colonoscopy cases, 462 met inclusion criteria. Based on 2012 USMTF guidelines, 58.2% (n=269) cases were compliant with interval and 41.8% (n=193) were noncompliant due to prematurity. No difference existed between cohorts in regards to age (mean 62), race (53.4% Caucasian), and gender (50.2% male). Amongst premature cases, the reason for prematurity from most to least frequent were 1) No reason given 42.2% (n=82), 2) Surveillance error 25.9% (n=50), 3) Fair prep 21.2% (n=41) and 4) Clinical indication given 6.8% (n=20). The ADR in surveillance colonoscopy in the noncompliant group was significantly lower at 38.3% (74/193) versus the compliant group ADR 47.6% (128/269) (p=0.048). The advanced ADR was likewise lower in the noncompliant group 3.4% (6/193 cases) versus the compliant advanced ADR of 6.7% (18/269) which approached significance (p=0.09).

Conclusion: Specific reasoning, if any, provided by gastroenterologists to order and perform surveillance colonoscopy premature to recommended USMTF guideline intervals has not been studied in a systematic way. In this cohort, noncompliant early colonoscopies most commonly occurred without any clinical or prep related justification provided in clinic note, order or procedure report. Fair preparation, as rationale for noncompliance, comprised less than a quarter of noncompliant cases. A simple EMR review and determination of compliance in regards to surveillance colonoscopy intervals yields lower ADR in noncompliance cohorts. The lower ADR in noncompliant cohort and low rate of clinical or preparation rationale for noncompliance are both findings that support using surveillance intervals as a metric for quality in colonoscopy practice.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTROL ID: 2036272
AVERAGE SCORE: 4.25
PRESENTER: Amanpal Singh
PRESENTER (INSTITUTION ONLY): Division of Gastroenterology, Roswell Park Cancer Institute
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Amanpal Singh: ACG Member
Samrath Singh: ACG Non-Member
Akriti Dewanwala: ACG Member
Andrew Bain: ACG Member
TITLE: Balloon Dilation Of Duodenal Strictures To Facilitate ERCP For Biliary Obstruction
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The presence of a duodenal stricture can prevent endoscope passage to the second portion of the duodenum and render an ERCP unsuccessful. The focus of this study is to describe the effectiveness and safety of endoscopic balloon dilation of duodenal strictures to facilitate ERCP for obstructive jaundice.
Methods: We performed a retrospective analysis of ERCPs at a comprehensive cancer hospital between August 2011 and June 2014. ERCP procedure notes were reviewed and cases requiring balloon dilation of a duodenal stricture prior to ERCP attempt were included.
Results: A total of 468 ERCPs were performed. Twenty-one dilations were performed on 18 patients for duodenal strictures prior to ERCPs (mean age 67 years, 44% male). Strictures were located in the first and second parts of the duodenum in 16 of 18 patients (89%) and only in the first part in 2 patients (11%). Malignant duodenal strictures were noted in 15 patients [pancreatic cancer (n=5), gallbladder cancer (n=2), duodenal cancer (n=1), others (n=7)] and benign strictures in 3 patients. The size of balloon dilation required to pass the therapeutic duodenoscope was 20 mm (n=1), 18 mm (n=12), 16.5 mm (n=1), 15 mm (n=4), 13.5 mm (n=2), and 12 mm (n=1). After dilation, the duodenoscope could be passed to the level of the ampulla in 20 of 21 procedures (95%). Biliary cannulation was successful in 17 of 21 procedures (81%). Nine out of the 17 successful cannulations were performed on native papillas without any prior intervention. In the four cases of failed biliary cannulation, three were due to suboptimal scope position in relation to the ampulla and one was due to inability to traverse the duodenal stricture despite dilation up to 16.5 mm. Duodenal stents were placed in 11 patients with malignant strictures. Seven duodenal stents were placed during the same session and 4 were placed during follow up. The only complication was one case of post-ERCP pancreatitis.
Conclusion: Balloon dilation of duodenal strictures to facilitate passage of the duodenoscope during ERCPs can be performed safely to achieve biliary cannulation. This may avoid the need for additional biliary drainage procedures such as percutaneous transhepatic cholangiography (PTC) and endoscopic ultrasound (EUS) guided choledochoduodenostomy.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039016
AVERAGE SCORE: 4
PRESENTER: Abhishek Bhurwal
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESG: ACG Membership Status *:
Abhishek Bhurwal: ACG Non-Member
Michael Bartel: ACG Member
Massimo Raimondo: ACG Member
Michael Wallace: ACG Member
Timothy Woodward: ACG Member
TITLE: Factors determining Residual neoplasia after EMR of flat sessile colonic polyps
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Determining factors associated with residual neoplasia after EMR of flat sessile colon polyps
Methods: A retrospective case series of 756 patients (mean age 68.70 years SD 11.3, 47% females, 53% ASA 2) with a total of 765 colonic lesions (mean polyp size 28.7 mm SD 15.5 Range 15-150 mm, 63.2% cecum and ascending colon, 19% hepatic flexure and transverse colon, 42% tubular adenoma, 22.5% tubulovillous adenoma, 21.5% hyperplastic polyp (including SSA) who underwent EMR (57% en bloc resection, 92% adult colonoscopy) in a single tertiary center by 3 experienced endoscopists between December, 2004 and September, 2013. 503 lesions were documented to have follow up.
Primary outcome - Residual tissue as determined by colonoscopy and pathology reports during follow up.
Secondary outcome – Factors associated with risk of residual tissue including Polyp Size, Procedure site, Absence of Lift sign, Polyp Pathology and piece meal resection
Univariate analysis was done to find the factors associated with residual neoplasia.
Results: On univariate analysis, larger polyps and piecemeal resection had significantly higher odds ratio to be associated with residual neoplastic tissue. Although the odds ratio for residual neoplastic tissue was higher for polyps in cecum, ascending and transverse colon, this was not statistically significant. In terms of pathology, high grade dysplasia had highest rate of residual tissue, followed by adenoma and hyperplastic polyps.
Conclusion: The analysis reinforces the association of piece meal resection with residual tissue. Larger polyps may also have higher frequency of residual tissue. However, no statistically significant difference was found for procedure site.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
Purpose: Define the learning curve of endoscopic mucosal resection (EMR) of colon polyps in terms of the residual disease on follow up and adverse events.

Methods: A retrospective case series of 756 patients (mean age 68.70 years SD 11.3, 47% females, 53% ASA 2) with a total of 765 colonic lesions (mean polyp size 28.7 mm SD 15.5 Range 15-150 mm, 63.2% cecum and ascending colon, 19% hepatic flexure and transverse colon, 42% Tubular Adenoma, 22.5% Tubulovillous Adenoma, 21.5% Hyperplastic Polyps (including SSA) who underwent EMR (57% en bloc resection, 92% adult colonoscope) in a single tertiary center by 3 experienced endoscopists between December, 2004 and September, 2013. Endoscopist 1 performed 249 EMRs (158 follow ups), endoscopist 2 performed 278 EMRs (193 follow ups), and endoscopist 3 performed 221 EMRs (152 follow ups).

Residual tissue was determined by colonoscopy and pathology reports during follow up.

Primary outcome: Rate of biopsy proven residual neoplastic tissue on follow up colonoscopy and adverse event rate.

Secondary outcome: Define learning curve of EMR of colorectal polyps based on rate of recurrent neoplastic tissue and rate of adverse events. To achieve this, EMR for each endoscopist were grouped into intervals of 20 sequential lesions and rate of residual neoplasia and adverse events were evaluated.

Results: The rate of residual neoplasia during follow up colonoscopy was initially 13%. This decreased only marginally as the EMR experience increased, plateauing at around 10%. Immediate adverse event rate was 6.6% and delayed adverse event rate 5.5%. The frequency of adverse events remained stable throughout the study.

Conclusion: These findings demonstrate that experienced endoscopists have high initial success rates for colon EMR with an early plateau phase.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037971
AVERAGE SCORE: 4
PRESENTER: Sharlene DSouza
PRESENTER (INSTITUTION ONLY): Portland VA Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Sharlene DSouza : ACG Member
Brinha Enestvedt : ACG Member
Brian Pavic : ACG Non-Member
Jennifer Holub : ACG Non-Member
Sarah "Betsy" Rodriguez : ACG Member
TITLE: Nationwide Utilization of Endoscopic Ultrasound
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Endoscopic ultrasound (EUS) is performed for the evaluation of cancer, tissue acquisition, and an expanding array of therapeutic indications. There is currently no data regarding the number and type of procedures being performed annually in the United States. The aims of the study are to estimate the proportion of total GI procedures that are EUS in a nationwide endoscopic database, describe the indications and maneuvers performed, and examine short-term trends in volume over a 4-year period.
Methods: The Clinical Outcomes Research Initiative, a nationwide consortium of 74 sites, was searched for all procedures entered between January 1, 2010-December 31, 2013. Data on EUS was collected and described. Short-term trends in volume were calculated using the Cochran-Armitage test.
Results: During the study period, 459,740 procedures were performed. EUS data was entered at a total of 18 sites by 68 endoscopists. 7,614 EUS cases were performed, representing 1.7% of the total number of procedures, compared to 264,985 colonoscopies (57.6%). The procedures were predominantly at academic institutions (57.9%); other sites included VA/military (13.8%) and community settings (28.3%).

Over the 4 year period, the number of EUS cases performed increased by 40.5%, with an increase in the percentage of the total by 1.04% (p<0.001 for trend). The mean age of patients was 61.6 years, and 54% were male. The majority (75.1%) of patients were white; 7.7% were black and the remainder were smaller percentages of Asian, Native American, and other.

The most common indications were for evaluation of pancreas mass or cyst (n=2163, 28.4%) and for diagnostic sampling with FNA (n=1077, 14.1%), followed by biliary indications (e.g., bile duct dilatation, choledocholithiasis; n= 1314, 17.3%), and evaluation of subepithelial mass (n=741, 9.7%). Therapeutic intervention was the indication in small numbers (e.g., cyst aspiration, celiac plexus neurolysis; n=400, 5.3%). FNA was performed in 27.9% of all cases.

Complications were reported rarely, with serious adverse events (e.g., bleeding, perforation, or death) noted in 19 patients (0.25%).
Conclusion: EUS represents a small proportion of the total number of endoscopic procedures being performed in a large endoscopic database, compared to colonoscopy which is the most commonly performed procedure. The majority of EUS patients are white males, and FNA is performed in just under 1/3 of cases. Use of EUS increased over the study period although not dramatically. There is currently no data regarding manpower needs for EUS. Further studies should assess how many endosonographers are needed nationwide to avoid an oversupply of endosonographers and subsequent lack of cases necessary to maintain skill.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
CONTROL ID: 2036713
AVERAGE SCORE: 4
PRESENTER: Kyo-Sang Yoo
PRESENTER (INSTITUTION ONLY): Hanyang University College of Medicine
PRESENTER (COUNTRY ONLY): Korea, Republic of
AUTH DESIGN: ACG Membership Status *
Kyo-Sang Yoo : ACG Non-Member
Ji Yeoun Kim : ACG Non-Member
Jongkwon Jung: ACG Non-Member
Youngouk Ro : ACG Non-Member
Young Jae Byun : ACG Non-Member
Sun Min Kim : ACG Non-Member
Chang Soo Eun : ACG Non-Member

TITLE: Endoscopic Nested Y-shaped Self-expanding Metal Stent Placement for Advanced Hilar Cholangiocarcinoma: a Study of a Novel Stent with a Unique Mesh Structure

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Hilar malignant biliary obstruction poses particular challenges for endoscopists. Although endoscopic placement of self-expanding metal stent (SEMS) is generally accepted as a palliative treatment in unresectable hilar cholangiocarcinoma, endoscopic placement of SEMS has been considered very difficult and complex. The aim of this study was to evaluate the technical and clinical efficacy of endoscopic placement of a newly designed SEMS with a nested Y-shaped configuration for hilar malignant biliary obstruction.

Methods: Thirty nine patients with unresectable hilar malignant biliary obstruction were enrolled for this study. The SEMS used in this study were newly designed self-expandable nitinol stent with a nested Y-shaped configuration (Bonastent M-hilar. Standard Sci Tech Inc., Seoul, Korea). Due to the unique mesh structure, it has superior widening center section with cross mesh structure between both end sections with hook and cross structure. In contrast with currently available product, this novel stent has more concise structure and finer (1.6 mm in width) interstices in the widening central section to prevent tumor ingrowth. Despite finer interstices in the widening section, the interstices can be readily widened to facilitate subsequent passage of the second SEMS. The stents were placed with a nested technique, in which an uncoated SEMS was first deployed across the confluence to one portion of the intrahepatic duct (IHD). The second uncoated SEMS was then deployed along the guidewire access through the interstices of the first SEMS. Technical success, functional success, early complications, and short-term clinical outcome were evaluated.

Results: Technical success was achieved in 32 of 39 patients (82.1%). Rendezvous technique after percutaneous transhepatic biliary drainage was needed in two patients for the passage of guide wire through the stricture. Mean procedure time for the placement of this stent was 26.6±10.0 minutes. All patients showed a significant decrease in serum bilirubin level after placement of the stents. There was neither any early complication within 30 days, nor procedure-related mortality. The mean stent patency period was 130 days (range, 35-514 days).

Conclusion: Endoscopic placement of a newly designed SEMS with a nested Y-shaped configuration is easy, safe, and reasonably effective in achieving bilateral drainage of malignant biliary hilar obstructions.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2038773
AVERAGE SCORE: 3.5
PRESENTER: Oleg Shulik
PRESENTER (INSTITUTION ONLY): University of Pennsylvania
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Oleg Shulik : ACG Member
Andy Cuchhiara : ACG Non-Member
Octavia Pickett-Blakey : ACG Non-Member
TITLE: Diagnostic yield of upper endoscopy and colonoscopy for isolated unintentional weight loss
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award|ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Unintentional weight loss is a symptom that concerns physicians because of its association with increased mortality. The diagnostic evaluation of unintentional weight loss (UWL) often includes endoscopic procedures when gastrointestinal symptoms are present. In the absence of alarm features such as vomiting, dysphagia and gastrointestinal bleeding, the diagnostic yield of endoscopic evaluation is poorly defined.
AIMS: The primary aim of this study is to investigate the diagnostic yield of upper endoscopy and colonoscopy in patients with isolated, unintentional weight loss. The secondary aim of this study was to investigate the diagnostic yield of upper endoscopy and colonoscopy particularly in adults over age 65.
Methods: A retrospective, cross-sectional analysis was performed using the electronic medical record at an academic gastroenterology practice from January, 2009 to December, 2013. The study sample included patients referred for endoscopic evaluation with an associated ICD-9 code for unintentional weight loss. Chart review was performed to abstract demographic and clinical data including age, sex, race, and clinical symptoms. The primary outcome was clinically significant abnormal endoscopic findings such as peptic ulcer, gastrointestinal malignancy, esophageal stricture, or colitis. Clinically significant weight loss was defined as greater than 5% of baseline body weight loss in kilograms in the 6 months preceding the endoscopic procedure. Statistical analysis was performed using Pearson's chi-squared test in STATA IC 13.0 statistical software.
Results: Of the 300 records initially identified, 140 were excluded. The final sample size was 160. The study sample was 63% female and 49% White. Median age was 61.2 years (SD 17.7). The mean percent baseline body weight loss was 9.69% (SD 6.19). The laboratory evaluation and imaging was normal in 98% (157) of patients. Upper endoscopy findings where clinically insignificant in 97% (155) of the study sample. Colonoscopy findings where clinically insignificant in 96% (153) of the study sample. In those > age 65 versus <65, there was no statistically significant difference in the frequency of clinically significant upper endoscopic (1.5% vs 1.63%; p=0.12) or colonoscopic findings (2.60% vs 1.62%; p= 0.09).
Conclusion: In this study, the diagnostic yield of upper endoscopy and colonoscopy was low in patients presenting with isolated unintentional weight loss in the setting of normal laboratory and imaging evaluation. Furthermore, individuals over age 65 did not have a significantly higher frequency of clinically significant endoscopic findings compared with those under age 65.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: Yes
Extra Info: "This project was supported by Grant Number UL1TR000003 from the National Center for Advancing Translational Sciences (NCATS) of the National Institutes of Health (NIH). The content is solely the responsibility of
CONTROL ID: 2039188
AVERAGE SCORE: 3.25
PRESENTER: Amit Bhaskar
PRESENTER (INSTITUTION ONLY): Duke University
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Amit Bhaskar: ACG Non-Member
Ziad Gellad: ACG Member
TITLE: Physician-Directed Bolus Sedation for Colonoscopy Improves Endoscopy Unit Efficiency
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To determine the impact of implementation of a physician-directed bolus sedation policy for colonoscopy on endoscopy unit efficiency and patient satisfaction.
Methods: We performed a retrospective analysis of time data for colonoscopies performed between April 2010 and April 2011 at a hospital-based endoscopy unit affiliated with an academic health system. Colonoscopies performed prior to October 2010 were performed under a nurse-directed titration sedation policy, in which nurses administered incremental doses of fentanyl and midazolam until sedation was felt to be adequate to begin the procedure. Colonoscopies performed after October 2010 were performed under a physician-directed bolus sedation policy, in which physicians directed the administration of fentanyl and midazolam guided by a weight-based dosing nomogram. To evaluate the impact of sedation policy on endoscopy unit efficiency, we compared the total procedure time, which is the time interval from the administration of sedation to the completion of the colonoscopy between the two sedation groups. We also analyzed several sub intervals, including: sedation time (sedation start to colonoscopy start); colonoscopy time (colonoscopy start to colonoscopy completion); and recovery time (time from procedure completion to patient discharge). We also compared patient satisfaction surveys performed in a subset of patients from each sedation group. Patient satisfaction was rated on a five-point scale with 1 corresponding to the greatest level of satisfaction and 5 being the least.
Results: The results of the analysis are provided in the Table. Bolus sedation had a shorter total procedure time (p<0.01) due to a reduction in sedation time (p<0.01). In contrast, colonoscopy time was minimally increased in the bolus sedation group. Bolus sedation did not significantly change the recovery time, and did not impact patient satisfaction.
Conclusion: Physician-directed bolus sedation using a weight-based nomogram improves endoscopy unit efficiency by allowing a faster onset to colonoscopy start, reducing the total procedure time; this benefit does not come at the expense of patient satisfaction.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: Comparison of Sedation Practices in GI Endoscopy Between Ambulatory Endoscopy Center and GI Lab in Hospital

AWARDS: None

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Sedation is widely used in GI endoscopy. Sedation practices in an ambulatory endoscopy center and a hospital GI lab may be different, but have never been compared and investigated. The aim of this study is to compare the sedation practice of a privately owned ambulatory endoscopy center to a GI lab at a tertiary care center.

Methods: We retrospectively reviewed and compared one hundred consecutive patients in each group at an ambulatory endoscopy center and a GI lab in a tertiary care center who underwent a routine screening colonoscopy. Patients with an average or high risk were included, and those excluded were patients with missing data or those patients with an upper endoscopy performed simultaneously with the colonoscopy. Baseline characteristics, aspects of endoscopic procedure, types and dosage of sedatives were analyzed and compared.

Results: Patients at the hospital GI lab were older (63.2 vs. 58.4, p<0.001), had higher baseline ASA scores (2.5 vs. 2.0, <0.001), took less endoscopic time (25.6 vs. 30.0 min, p=0.006), and more often received therapeutic procedures (1.8 vs. 1.0, p=0.010) compared to the patients in the ambulatory endoscopy center. In terms of sedatives, patients in the hospital GI lab received comparable amounts of propofol (220.2 vs. 230.6 mg, p=0.447), but higher amounts of fentanyl (64.9 vs. 39.5 mcg, p<0.001) and midazolam (1.8 vs. 1.5 mg, p=0.008) than patients in the ambulatory Endoscopy center. Interestingly, with midazolam or fentanyl, less amount of propofol was used in the ambulatory endoscopy center (224.2 vs. 304.4 mg, p<0.01), whereas no difference was noted in the hospital GI lab (243.7 vs. 212.1 mg, p=0.727).

Conclusion: There appears to be a difference in sedation practice between the ambulatory endoscopy center and hospital GI lab. Although the patients in the hospital group were expected to receive more propofol since they have more comorbidities and require more procedures, the dose of propofol was actually comparable in both groups. In our study, similar dose of propofol along with higher requirement of fentanyl and midazolam were observed to yield an appropriate sedation in the hospital GI lab compared to the ambulatory endoscopy center.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035835
AVERAGE SCORE: 4.75
PRESENTER: Chinemerem Okwara
PRESENTER (INSTITUTION ONLY): UT Southwestern Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Chinerem Okwara : ACG Non-Member
Leon Kundrotas : ACG Non-Member
Raju Akriti : ACG Non-Member
TITLE: Yield of Capsule Endoscopy for Obscure Gastrointestinal Bleed
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To determine the detection rate of capsule endoscopy in the South Texas VA population and the location of the lesions identified.

Methods: This is a retrospective study in which we examined 200 Veterans who received capsule endoscopy for either the indication of anemia or GI bleed from 2006 to 2013. Subjects who received the capsule endoscopy specifically for esophageal varices, malignancy screen or Crohn’s disease were excluded.

Results: In our study we found a source of bleed in 21 of the 200 subjects reviewed for a detection rate of 10.5%. From the 21 subjects in which a bleeding source was found, 10/21 (48%) was due to a gastric source, 7/21 (33%) was due to a small bowel source, 2/21 (10%) was due to a colonic source and 2/21 (10%) was due to both a small bowel and gastric source. Of the subjects with identified bleed (n=21), 38% (8/21) were overt obscure GI bleed and 61.9% (13/21) was occult obscure GI bleed. There were 11 incomplete studies; capsule failed to reach colon in 8/200 and fails to enter small bowel in 3/200.

Conclusion: In our study our detection rate was 10.5% for all sources of bleeding and 3.5% for isolated small bowel causes of bleeding. Incompletion rate was 5.5%. The most common finding without active bleeding identified by the capsule was angiodyplasias. Almost half of the lesions found were in the stomach, suggesting that the missed gastric lesions could have been found if a second look upper endoscopy was performed. Delivering the capsule via upper endoscopy to the small bowel can serve as a second look and decrease the incompleteness rate as well.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: Minimizing insertion pain in unsedated patients by combined water exchange and cap-assisted colonoscopy.

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: Implementation of scheduled unsedated colonoscopy to manage no shows due to no escorts saw an increase in patients accepting the unsedated option. Patient centered care would call for provision of the least painful insertion method to ensure success and satisfaction in these unsedated patients. While the impact of cap-assisted colonoscopy on insertion pain is mixed, attenuation of insertion pain during colonoscopy aided by air insufflation has been reported repeatedly by the addition of a cap to the tip of the colonoscope. Water exchange (WE) during the insertion phase of colonoscopy significantly reduced maximum insertion pain in unsedated patients. Pilot observations were made to determine if the combination of cap-assisted and WE colonoscopy would further decrease insertion pain.

Methods: In a performance improvement project, cap-assisted colonoscopy combined with WE was carried out as previously described in unsedated patients. Demographic variables, maximum insertion pain, and other outcome measures were reviewed in a database. The data were compared to those of a previously reported unsedated cohort examined by WE alone.

Results: Table 1

Conclusion: When WE is combined with cap-assisted colonoscopy, a significantly lower mean maximum insertion pain score was achieved. The pilot data suggest the hypothesis that the combination significantly reduces insertion pain in the unsedated patient should be tested in a RCT. The increased proximal colon adenoma detection rate, in part may be due to the use of high-definition colonoscope in the current study. Nonetheless, the data confirmed the results of a similar study in the proximal colon in sedated patients, lending additional credibility and validity to the current findings.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2033777
AVERAGE SCORE: 4.5
PRESENTER: Hussein Bitar
PRESENTER (INSTITUTION ONLY): University of Oklahoma, Veterans Affairs Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Hussein Bitar: ACG Non-Member
Sumit Alhuwalia: ACG Member
Mohammad Madhoun: ACG Member
TITLE: Seasonal Variation of Colonoscopy Bowel Preparation
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No

Purpose: Little is known about the association between season of the year and bowel preparation quality for colonoscopy. We investigated whether season of the year is an independent factor for bowel preparation quality.

Methods: We performed a retrospective study of 985 randomly selected patients (mean age 60.2±10.4; 94% male) who received outpatient colonoscopies in 2012 at the Veterans Affairs Medical Center in Oklahoma City, Oklahoma. 90% received conventional bowel preparation (4 liters of Golytely® the night before). Quality of bowel preparation was scored using the Boston Bowel Preparation Scale (BBPS) and categorized as either excellent vs. not excellent (BBPS≥7 vs. BBPS<7) or adequate vs. inadequate (BBPS≥5 vs. BBPS<5). A multivariate logistic regression analysis to identify factors independently associated with excellent bowel preparation was performed.

Results: Bowel preparation quality was excellent in 39% of patients and adequate in 91%. There was no seasonal variation for adequate bowel preparation. However, there was a significant increase in excellent bowel preparation in the spring and summer compared to autumn and winter (Table 1). A similar trend of increased rate of excellent bowel preparation was observed in the subgroup of patients using split dose bowel preparation (Table 2). Independent factors for excellent bowel preparation were spring and summer scheduling (OR, 1.6; 95% CI, 1.2-2.1; p<0.0008), split bowel preparation (OR, 1.6; 95% CI, 1.0-2.4; p=0.03) and use of narcotics (OR, 0.7; 95% CI, 0.5-0.9; P= 0.02).

Conclusion: Spring and summer scheduled colonoscopies are associated with greater likelihood of achieving excellent bowel preparation. Seasonal variations in patient's eating behavior, fluid consumption, exercise and circadian rhythm could alter colonic transit and hence, quality of bowel preparation for colonoscopy.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2018676
AVERAGE SCORE: 4.33
PRESENTER: Eoin Slattery
PRESENTER (INSTITUTION ONLY): New York Presbyterian Hospital-Columbia University Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Gavin Harewood : ACG Non-Member
Eoin Slattery : ACG Non-Member
Yolanda Tiedt : ACG Non-Member
Diarmuid Fleming : ACG Non-Member
TITLE: Comparing the "Value" of Endoscopists: Are We All as Valuable as Each Other?
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: With the introduction of value-based payment in place of the fee-for-service model of reimbursement, the value of clinicians' performance is now subject to greater scrutiny. Value is defined as quality of care adjusted for cost. In the context of endoscopy, colonoscopy performance accounts for a major proportion of endoscopic resources. This study aimed to describe the "value" of individual colonoscopists' performances in an academic medical center.
Methods: Consecutive patients >50 years undergoing colonoscopy for investigation of new GI symptoms or colorectal cancer screening/surveillance between January and June 2013 were identified. Endoscopists included both staff gastroenterologists and senior fellows, all of whom had performed at least 200 colonoscopies independently. The adenoma detection rate was recorded to express quality of colonoscopy performance. Most component costs of a colonoscopy incurred by patients are fixed; the main source of variable costs arises from the number of specimen containers sent for histopathological analysis; patients are charged per specimen container. Therefore, the number of containers sent for analysis per patient was used as a surrogate measure of costs. Only biopsies of suspected malignancy, polyps, or normal-appearing mucosa were considered. Overall value was expressed as quality/cost for each individual endoscopist.
Results: In total, data from 322 colonoscopy procedures performed by 11 colonoscopists (5 staff gastroenterologists, 6 senior GI Fellows) were analysed. There was variation in mean adenoma detection rate (11% to 63%, overall mean 31%) and mean number of pathology containers per patient (0.6 to 2.0, overall mean 1.2) among all endoscopists (Table). There was weak correlation between adenoma detection (quality) and pathology containers/pt (cost), p=0.50. As shown in the table, there was a 3-fold difference in value among endoscopists, varying from 0.17 to 0.52; overall mean staff endoscopist value (0.34) was higher than mean trainee endoscopist value (0.22), p=0.03. The figure illustrates the quality and cost of each endoscopist with high value endoscopists in the upper left quadrant (high quality, low cost). All biopsies demonstrated either normal colonic mucosa, hyperplastic polyp, adenomatous polyp, or malignant tissue; malignancies were detected in 5 patients (1.6%).
Conclusion: With the advent of value based reimbursement models, colonoscopists will be required to demonstrate not only high quality, but also high-value behavior. These findings illustrate the variation in value among endoscopists with more experienced colonoscopists exhibiting higher value performance.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2034347
AVERAGE SCORE: 4.5
PRESENTER: Eoin Slattery
PRESENTER (INSTITUTION ONLY): New York Presbyterian Hospital-Columbia University Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Eoin Slattery: ACG Non-Member
Gavin Harewood: ACG Non-Member
TITLE: Does the Principal Agent Phenomenon exist in Gastroenterology: a region by region comparison
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: A principal-agent relationship is an arrangement between two or more individuals whereby the agent (i.e. the physician) of the relationship performs a task on behalf of the principal (i.e. the patient). The principal-agent phenomenon can potentially develop when an agent has financial incentives to maximize their profits at the expense of the patients’ interests. Procedural based specialties (including gastroenterology) in a fee for provider healthcare system are susceptible to this phenomenon. Our aim was to evaluate for evidence of the principal-agent effect in colonoscopy practice by describing the relationship between the prevalence of endoscopists and the adjusted per-person volume of colonoscopies performed for each geographic region in the United States.

Methods: The number of American Society of Gastrointestinal Endoscopy (ASGE) members for each US region (Northeast, Midwest, South and West) was used as a surrogate measure of the regional prevalence of endoscopists. The per-capita prevalence of endoscopists (number of endoscopists divided by total population) was compared with the per capita volume of colonoscopies performed (number of colonoscopies divided by total population) for each region using Pearson’s correlation coefficient.

Results: The per-person prevalence of endoscopists was highest in the Northeast (1 per 27,576 people) and South (1 per 25,442) of the US compared to the Midwest (1 per 40,006) and West (1 per 45,800). More colonoscopies were also performed in the Northeast (1 per 12) and South (1 per 12) compared to the Midwest (1 per 21) and West (1 per 32). Overall, there was a strong correlation between per-capita prevalence of endoscopists and per-capita volume of colonoscopies performed, r = 0.97.

Conclusion: There appears to be wide regional disparity in the per-capita volumes of colonoscopies performed. Colonoscopy performance also appears to correlate closely with per-capita prevalence of endoscopists in each geographical region.

1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035252
AVERAGE SCORE: 4.25
PRESENTER: Brandon Marion
PRESENTER (INSTITUTION ONLY): Wake Forest University School of Medicine, Department of Internal Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Brandon Marion: ACG Non-Member
Jason Conway: ACG Member
John Evans: ACG Member
Girish Mishra: ACG Member
TITLE: Colonoscopy with miniprobe ultrasound helps identify mucosal, submucosal, and extra-mucosal colonic lesions
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: Catheter ultrasound probes (miniprobes) have significant utility when coupled with endoscopic evaluation of the colon. Our aims were to determine the diagnostic value of colonoscopy combined with miniprobe ultrasound at either confirming an endoscopic diagnosis or better characterizing a submucosal abnormality.
Methods: Retrospective, single-center study including 60 patients undergoing colonoscopy with ultrasonography (Olympus UM2R at 12 MHz) between July 2005 and December 2013.
Results: 62 colonoscopies combined with ultrasound were performed on 60 patients overall. Of these procedures, 43 (69.4%) were performed using the Olympus UM2R 12MHz miniprobe. There were 24 female and 17 male patients evaluated with an average age of 59. The indications and findings are collectively summarized for each procedure performed in Tables 1 and 2 respectively.
Conclusion: Colonoscopy with miniprobe ultrasound provides valuable information when confronted with either mucosal or submucosal abnormalities in the colon. This tool is yet another armamentarium of the gastroenterologist when evaluation of an unusual lesion in the colon is needed.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: Dr. Girish Mishra - Consultant: Pentax Medical, Cook Medical
Dr. Jason Conway - Consultant: Pentax Medical
Dr. Jerry Evans - Consultant: Pentax Medical
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039682
AVERAGE SCORE: 4.25
PRESENTER: Patrick Koo
PRESENTER (INSTITUTION ONLY): Case Western Reserve University/University Hospitals Case Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Patrick Koo : ACG Non-Member
Chad Kawa : ACG Member
Amitabh Chak : ACG Member
TITLE: Yield of Endoscopic Evaluation in Left Ventricular Assist Device Associated Gastrointestinal Bleeding
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Left ventricular assist devices (LVADs) have been associated with an increased risk of gastrointestinal (GI) bleeding from arteriovenous malformations (AVMs). The aim of this study was to assess the diagnostic yield of various endoscopic procedures, including cap assisted endoscopy, in the evaluation of GI bleeding in LVAD patients.
Methods: A retrospective analysis of thirty-eight patients who underwent LVAD implantation at our institution from 2008 to 2013 was performed to determine the incidence, risk factors, location, etiology and endoscopic outcomes of GI bleeding.
Results: Sixteen LVAD patients (42.1%) experienced forty-two GI bleeding episodes. Twelve of the sixteen patients (75%) experienced multiple episodes of bleeding. Patients with GI bleeding were more likely to have a prior history of GI blood loss (P <0.001). The majority of bleeds were upper (65.2%), overt (85.7%) and secondary to AVMs (60.8%). Each bleeding episode required a mean of 1.8 +/- 0.8 diagnostic or therapeutic procedures. The diagnostic yield of endoscopy was poor, with active or recent bleeding seen in only 37.1% of procedures. Esophagogastroduodenoscopy (34.6%) and colonoscopy (20.5%) were the most common procedures performed but only revealed bleeding in 55.0% and 31.2% of cases respectively. Cap assisted endoscopy was performed in four cases (5.2%) and resulted in successful visualization and treatment of bleeding in all cases it was utilized.
Conclusion: GI bleeding occurs frequently in the LVAD population. GI bleeding in LVAD patients is often obscure as bleeding frequently occurs in difficult to visualize locations, such as between gastric or duodenal folds. This often makes endoscopic diagnosis and treatment challenging. A variety of endoscopic procedures have to be utilized in this patient population to determine the source of blood loss.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2021695
AVERAGE SCORE: 4.25
PRESENTER: Wu Shuang
PRESENTER (INSTITUTION ONLY): First Hospital of Jilin University
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Wu Shuang: ACG Non-Member
Yuqin Li: ACG Non-Member
Libo Wang: ACG Non-Member
Yang Shi: ACG Non-Member
Tongyu Tang: ACG Non-Member
Hong Xu: ACG Non-Member
TITLE: The Predictive Value of Endoscopic Ultrasound in Endoscopic Submucosal Dissection
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: Endoscopic submucosal dissection (ESD) is recommended for resection of subepithelial lesions. However, it usually takes higher risks, such as perforation and bleeding, than resection of epithelial lesions. The feature and depth of subepithelial lesions should be predicted preceding ESD to assess the feasibility and safety of the procedure. Endoscopic ultrasound (EUS) is able to reveal the depth and identify the feature of subepithelial lesions. This study is to evaluate the role of EUS in ESD for subepithelial lesions.
Methods: Twenty-three patients were enrolled who had undergone ESD of subepithelial neoplasm. EUS was performed on all patients before ESD to observe the depth and feature of subepithelial lesions. Comparing to the pathological results, the accuracy of EUS was evaluated.
Results: All epithelial lesions have been resected by ESD without severe complications of bleeding and perforation by guidance of EUS. The resected lesions confirmed by pathological tests were as seen on the following table.

<table>
<thead>
<tr>
<th>Lesion Type</th>
<th>EUS Depth</th>
<th>Pathological Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deep Mucosa</td>
<td>8/23</td>
<td>12/23</td>
</tr>
<tr>
<td>Submucosa</td>
<td>5/23</td>
<td>12/23</td>
</tr>
<tr>
<td>Muscularis Propria</td>
<td>3/23</td>
<td>9/23</td>
</tr>
</tbody>
</table>

EUS revealed the depth of lesions accurately in all cases (100%, 23/23): 8/23 arisen from deep mucosa, 12/23 from submucosa, 3/23 from muscularis propria. In 9 cases, EUS failed to identify the features of the lesions (39.1%, 9/23). The accuracy of feature identification was only 60.9% (14/23).

Conclusion: EUS can reveal the depth of subepithelial lesions accurately, which enables the guidance to ESD. Even though the predictive value of EUS for feature is not reliable, it is recommended for cases of ESD.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039645
AVERAGE SCORE: 4
PRESENTER: Razvan Arsenescu
PRESENTER (INSTITUTION ONLY): The Ohio State University
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Razvan Arsenescu : ACG Member
Martha Yearsley : ACG Non-Member
Violeta Arsenescu : ACG Non-Member
Wendy Frankel : ACG Non-Member
TITLE: Real time histologic assessment of dysplasia in IBD patients using probe based confocal endomicroscopy
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The endoscopic exam is an important tool in the management of patients with Crohn's Disease and Ulcerative colitis. Assessment of mucosal healing and surveillance of precancerous lesions are measures of quality care in patients with IBD. Assessment of precancerous lesions is rather tedious and relies on a random process with low yield. pCLE (probe based confocal endomicroscopy) is a new imaging technology providing real time assessment of histological features that can help focus the random process of tissue biopsy and increase the surface of microscopic examination.
Methods: We performed a retrospective analysis of 74 patients with IBD that underwent colonoscopy with pCLE for cancer surveillance and/or disease activity monitoring. Prior to the pCLE exam a 5 ml bolus of 10% fluorescein was administered. All visibly abnormal areas, as well as other newly identified areas in the terminal ileum and each colonic segment were imaged and biopsied by pCLE. Biopsy from pCLE were compared to matching histology from H/E slides. The following criteria were considered: gland symmetry, density, and shape, density of goblet cells, amount of lamina propria cellular infiltrate, overall inflammatory process, and dysplasia vs. inflammation related atypia. In addition, the mucosal blood flow was characterized in terms of vessel density, tortuosity, and flow abnormalities. Extravasations of fluorescein (fluorescein leak) was assessed by pCLE only and used to define the intensity of the inflammatory process.
Results: We noted an excellent correlation between standard histologic assessment and real time microscopic assessment of mucosal inflammation and dysplasia. The k agreement for individual descriptors of gland architecture, acute and chronic inflammation and dysplasia was greater than 0.77. pCLE correctly identified all dysplastic lesions and accurately differentiated benign from dysplastic polyps. In the presence of significant inflammation and reactive atypia, pCLE upstaged some of the lesions. A new histologic entity with malignant potential - diffuse segmental serrated transformation of endoscopically normal colonic mucosa was identified by pCLE. NPV of pCLE for dysplastic lesions was 100% and accuracy was 96%,
Conclusion: pCLE had excellent performance as a screening tool for dysplasia in conjunction with standard biopsies. False positive results are inherent to the fixed depth of laser and limitations in characterizing nuclear atypia. Given the high NPV and the advantage of probing significantly more areas than standard biopsy protocols, pCLE is expected to increase the diagnostic yield.
Incorporating pCLE in routine colorectal cancer screen of IBD patients will likely increase detection rate of dysplastic lesions and improve quality of care.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: : Dr Arsenescu - Abbvie - speaker bureau
Dr Arsenescu - UCB- speaker bureau
Dr Arsenescu - Mauna Kea - speaker bureau
Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
CONTROL ID: 2034143
AVERAGE SCORE: 4
PRESENTER: Sandeep Samuel
PRESENTER (INSTITUTION ONLY): University at Buffalo
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Sandeep Samuel : ACG Non-Member
Amanpal Singh : ACG Member
Theodore Pettle : ACG Non-Member
Wei Tan : ACG Non-Member
Andrew Bain : ACG Non-Member
TITLE: EUS-FNA During Initial ERCP For Obstructive Jaundice From Pancreatic Head Adenocarcinoma Results In Fewer Subsequent Invasive Procedures
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award|ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Patients with pancreatic masses presenting with obstructive jaundice often need both tissue diagnosis and biliary decompression prior to initiation of treatment. Where available, EUS-FNA for tissue diagnosis is often performed during the same session as the initial ERCP with stenting. The aim of this study is to determine whether performing EUS-FNA with the initial ERCP leads to patients undergoing fewer diagnostic and therapeutic invasive procedures.
Methods: Patients with pancreatic head adenocarcinoma presenting with jaundice referred to a comprehensive cancer hospital between Feb 2005 and Sep 2013 were identified by chart review. Patients were classified into two groups based on initial endoscopic procedure; 1) combined EUS-FNA plus ERCP with biliary stenting (combined group) or 2) ERCP with brushings and biliary stenting (ERCP group). The primary outcome was the number of subsequent invasive procedures for tissue diagnosis and biliary decompression patients needed to have prior to initiation of cancer treatment. Statistical analyses were done using Fisher’s exact test to compare categorical variables and Wilcoxon rank sum test to compare numeric variables. All associations were considered statistically significant at an alpha error <0.05 (P value 0.05).
Results: Overall, 161 patients met study criteria (combined = 57, ERCP = 104). Cytology was diagnostic for adenocarcinoma in 82.5% of the combined group vs. 19.8% in the ERCP group (p<0.0001). The combined group required fewer subsequent diagnostic interventions (10 vs. 100, p<0.001). Biliary cannulation rates were similar in both groups (82.1% vs. 71.2%, p=0.18). Due to information gained from rapid on-site cytologic evaluation of FNA specimens and EUS staging, more patients in the combined group received metal biliary stents than in the ERCP group (74.5% vs. 40.5%, p=0.004). The combined group required fewer subsequent biliary drainage procedures (19 vs. 47, p=0.03). Complications were similar in both groups (6 vs. 9, p=0.18). The type of initial cancer therapy was not statistically different between the two groups. Median time to treatment (in days) between the two groups was 28 vs. 49 for chemotherapy (p=0.001), 25 vs. 34 for surgery (p=0.917) and 7 vs. 31 for hospice referral (p=0.002).
Conclusion: Pancreatic cancer patients presenting with obstructive jaundice who undergo EUS-FNA with the initial ERCP are subjected to fewer subsequent invasive diagnostic and therapeutic procedures resulting in sooner initiation of cancer treatment. Further studies are needed to determine if this expedited treatment influences survival.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035306
AVERAGE SCORE: 3.75
PRESENTER: Lorette Kotze
PRESENTER (INSTITUTION ONLY): Pontifical University of Paraná
PRESENTER (COUNTRY ONLY): Brazil
AUTH DESIG: ACG Membership Status *:
Lorette Kotze: ACG Member
MAURO BONATO: ACG Non-Member
Luiz Kotze: ACG Non-Member
TITL/E: The improvement of the endoscopic technics for the diagnosis of celiac disease. Proposal of an endoscopic classification and correlation with histological findings.
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The purpose of this study was to evaluate the correlation between endoscopic aspects of the duodenal mucosa and histological findings for the diagnosis of celiac disease (CD) and detect patients response to a gluten-free diet (GFD).
Methods: Study of 34,540 patients submitted to standard upper gastrointestinal videoendoscopy (UGE) at a Brazilian gastroenterology service between January 2000 and March 2010. Among patients >14 years, 2,384 cases of duodenitis were found, 109 of which suggestive of CD (1/317 routine UGEs). Including 80 females (73.40%; mean age: 35.16 years; range: 16-58) and 29 males (26.60%; mean age: 34.10 years; range: 15-62), the selected patients were submitted to lab tests, a second UGE and histological evaluation of the duodenum by chromoscopy (indigo carmine, 115x magnification, registered with an Olympus GIF-160Z). All 109 patients were confirmed as CD by UGE, histology and serological tests. After one year of GFD, only 85/109 patients (females n=64/75.30% versus males n=21/24.70%) were controlled. Our UGE and chromoscopy findings were compared with the histological classification of Marsh (0-4). UGE Type I: agglutinated villi not forming mosaic appearance versus Marsh 1; UGE Type II: agglutinated villi forming mosaic appearance with identification of villi versus Marsh 2; UGE Type III: agglutinated villi, mosaic appearance with absence of villi versus Marsh 3 and 4.
Results: At the time of diagnosis correlations were: UGE I n=5 (5.8%): Marsh 2 n=4 (80%), Marsh 3 n=1 (20%); UGE II n=25 (29.4%): Marsh 2 n=4 (16%), Marsh 3 n=21 (84%); UGE III n=66 (64.7%): Marsh 2 n=4 (7.2%), Marsh 3 n=50 (90.9%), Marsh 4 n=1 (1.8%). After one year of GFD: normal UGE n=5 (5.8%): Marsh 1 n=2 (40%), Marsh 2 n=2 (40%), Marsh 3 n=1 (20%); UGE I n=44 (51.7%): Marsh 1 n=5 (11.1%), Marsh 2 n=23 (52.2%), Marsh 3 n=16 (36.3%); UGE II n=27 (31.7%): Marsh 2 n=6 (23%), Marsh 3 n=21 (77%); UGE III n=9 (10.5%): Marsh 1 n=1 (11.1%), Marsh 2 n=1 (11.1%), Marsh 3 n=7 (77%).
Conclusion: Standard UGE with chromoscopy and image magnification can reveal areas for biopsy, thereby contributing to the diagnosis of CD. The endoscopic classification into types may be used in both diagnosis and control of CD patients after GFD. The endoscopy/histology correlation was stronger in advanced duodenal lesions, but may be of help in intermediate cases.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2030996  
AVERAGE SCORE: 3.75  
PRESENTER: Richard Robbins  
PRESENTER (INSTITUTION ONLY): UT Southwestern Medical Center  
PRESENTER (COUNTRY ONLY): United States  

AUTH DESIGN: ACG Membership Status *:  
Richard Robbins : ACG Non-Member  
Chenlu Tian : ACG Member  
Deepak Agrawal : ACG Member  

TITLE: How Often Do We Let Our Patients Have Clear Liquids Up to Two Hours Before Colonoscopy?

AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  

ACG Research Grant Support: No  

Purpose: Determine what percentage of endoscopy centers follow recommended guidelines of allowing patients to have clear liquids up to 2 hours prior to colonoscopy.  

Methods: Colonoscopy preparation instruction sheets available online were collected and reviewed. The following information was noted: type of endoscopy unit – outpatient surgical center or hospital, and fasting time prior to procedure. Questionnaires were sent to endoscopy units to understand the reasons behind the instructions. ASGE has a national program recognizing quality and safety in the practice of GI endoscopy. We also analyzed the practices in the endoscopy units that were recognized by this program.  

Results: A total of 658 colonoscopy preparation instructions were obtained. Three hundred seventy-eight (57.4%) instructions were from ambulatory surgical centers; 200 (30.4%) were from hospitals, and 75 (11.4%) were from practices that performed procedures at both. Seventy-five (12.7%) allowed patients to have clear liquid up to 2 hours prior to colonoscopy. Three hundred forty-nine (59.3%) allowed clear liquids on the day of procedure (but greater than 2 hours) an average of 4 hours prior. One hundred sixty-five (28%) recommended remaining NPO after midnight prior to procedure. Of the endoscopy units recognized by the ASGE, 42 (11.2%) allowed patients to have clear liquids up to 2 hours prior. Two hundred twenty-nine 229 (61.7%) allowed clears on day of procedure (but greater than 2 hours), an average of 4.1 hours prior. One hundred-four (27.7%) recommended remaining NPO after midnight prior to procedure. The details are given in Figure 1. The reasons for restricting patients to a fasting time greater than 2 hours given by 50 endoscopy units (response rate 24%) included mandates by anesthesia (58%) and little downside to NPO (25%).  

Conclusion: Despite evidence that drinking clear liquids up to 2 hours prior to sedation for colonoscopy is safe and preferred by the patients, most endoscopy units do not follow these recommendations. Their primary concern remains risk of aspiration mostly dictated by anesthesiologists.  

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  

Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: No  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: Not Applicable  
Supported by Industry Grant: No
CONTROL ID: 2030682
AVERAGE SCORE: 4
PRESENTER: Richard Robbins
PRESENTER (INSTITUTION ONLY): UT Southwestern Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Richard Robbins : ACG Non-Member
Chenlu Tian : ACG Member
Deepak Agrawal : ACG Member
TITLE: Use of Split Dose Colonoscopy Preparation: A National Survey
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Determine what percentage of endoscopy centers use split-dose colon prep and the reasons for not using it.

Methods: Colonoscopy preparation instruction sheets available online were collected and reviewed. The following information was noted: 1) type of endoscopy unit – outpatient surgical center or a hospital, 2) split-dosing or single-dosed bowel preps, 3) Time of scheduling colonoscopy - morning or afternoon, 4) Fasting time prior to procedure. Questionnaires were sent to endoscopy units to understand the reasons behind the instructions.

Results: A total of 658 colonoscopy preparation instructions were obtained. Three hundred seventy-eight (57.4%) instructions were from ambulatory surgical centers, 200 (30.4%) were from hospitals, and 75 (11.4%) were from practices that performed procedures at both. Two hundred ninety-four (44.9%) recommended using split dosing of the preparation. Of these, 80 (27.2%) used split-dose prep only for afternoon patients. Four hundred-two (61.1%) of the preparation instructions reviewed were from endoscopy units that have been recognized by the ASGE endoscopy unit recognition program. Of these, 217 (54%) recommended using split dosing of the preparation. The reasons for not using split prep given by 50 endoscopy units (response rate 24%) included patients having to get up too early in the morning (44%) and having to wait 4-6 hours for sedation (25%), mostly mandated by anesthesiology.

Conclusion: Half of the endoscopy units reviewed throughout the country who display their preferred colonoscopy prep on the internet still recommend single-dose bowel preparation despite evidence of better observation and adenoma detection. The percentage within the units recognized by the ASGE is only slightly higher. The main reasons appear to be related to the requirement that patients wait 4-6 hours after the last ingestion of colon prep, mostly dictated by anesthesiologists. This makes it necessary to either have the patient wake up very early in the morning or schedule patients in the afternoon.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2030697
AVERAGE SCORE: 4
PRESENTER: Richard Robbins
PRESENTER (INSTITUTION ONLY): UT Southwestern Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DEISG: ACG Membership Status *:
Richard Robbins : ACG Non-Member
Chenlu Tian : ACG Member
Deepak Agrawal : ACG Member
TITLE: Do Endoscopy Centers Follow Recommendations About Not Stopping Aspirin Before Colonoscopy?
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To determine what percentage of endoscopy centers follow recommended guidelines of not routinely stopping aspirin before colonoscopy.
Methods: Colonoscopy preparation instruction sheets available online were collected and reviewed. The following information was noted: type of endoscopy unit --ambulatory surgical center or a hospital-- and instructions regarding continued use or discontinuation of aspirin prior to procedure. The individual endoscopy units were then contacted by phone or email to find out the reasons for asking patients to stop aspirin before the procedure.
Results: A total of 317 preparation instructions were obtained. One hundred seventy-one (53.9%) of the instructions were from ambulatory surgical centers, 109 (34.4%) were from hospitals, and 33 (10.4%) were from practices that performed procedures at both. One hundred seventy-four (54.9%) of the instructions recommended continuing aspirin, 143 (45.1%) recommended stopping aspirin for an average of 5.8 days prior to procedure. ASGE has a national program recognizing quality and safety in the practice of GI endoscopy. We also analyzed the practices in the endoscopy units, which were recognized by this program. One hundred fourteen (59.1%) of the instructions recommended continuing aspirin, 79 (40.9%) recommended stopping aspirin for an average of 5.9 days prior to procedure. The details are given in Figure 1. The reasons for asking patients to stop aspirin given by 30 endoscopy units (response rate 24%) included bleeding concerns (62%), reluctance to change old practices (19%), no strong downside to stopping aspirin (15%), and unaware of new guidelines (4%).
Conclusion: Half the endoscopy units in the country still recommend stopping aspirin before screening colonoscopies despite evidence that risks outweigh the benefits. The main reason for this practice appears to be a continued concern about bleeding, although reluctance to change practices and providers finding little downside to stopping aspirin appear to play roles in decision making as well.
1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2031161
AVERAGE SCORE: 3.75
PRESENTER: Michael Epstein
PRESENTER (INSTITUTION ONLY): Digestive Disorders Associates
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Michael Epstein : ACG Member
Edward Jones : ACG Non-Member
Gerald Bertiger : ACG Non-Member
David Dahdal : ACG Non-Member
Raymond Joseph : ACG Member
TITLE: An Investigation of Renal Function and Serum Magnesium Levels in Patients Receiving Day-before Low-volume Sodium Picosulfate and Magnesium Citrate Bowel Preparation
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: Serum magnesium (Mg²⁺) levels are strictly maintained with a narrow range (0.7-1.05 mmol/L) via excretion by the kidney. Although rare, hypermagnesemia has been reported in patients receiving Mg²⁺-containing cathartics. Certain factors such as impaired renal function or age may be attributed to a higher risk for increases in serum Mg²⁺ levels. We performed a post hoc analysis using data from a pivotal clinical trial to assess whether renal function affects the safety of a Mg²⁺-containing bowel preparation.
Methods: SEE CLEAR II was a phase 3 randomized, multicenter, assessor-blinded study that investigated day-before administration of a nonphosphate, dual-action, low-volume bowel preparation containing sodium picosulfate, magnesium oxide, and citric acid (P/MC) compared with conventional dosing of 2L polyethylene glycol solution and 2 5-mg bisacodyl tablets (2L PEG + bisacodyl tablets) in adults preparing for colonoscopy. In this post hoc analysis, serum Mg²⁺ levels in patients who received P/MC were analyzed and stratified by renal function (measured by creatinine clearance [CrCl] on the day of colonoscopy).
Results: A total of 294 patients received day-before P/MC in the SEE CLEAR II study and were included in this analysis. Based on CrCl, patients were stratified into the following groups: ≥ 90 mL/min (63%), 60 to 89 mL/min (32%), and 30 to 59 mL/min (3%); patients with CrCl <30 mL/min were excluded from the study. On the day of colonoscopy, 91% of patients had serum Mg²⁺ concentrations within the normal range (see table). The mean Mg²⁺ concentration for patients with abnormal levels on the day of colonoscopy was just above the upper limit of normal (1.05 mmol/L). Of the 25 patients with abnormal Mg²⁺ on the day of colonoscopy, 10 were considered to have normal renal function (CrCl ≥ 90), while 15 had mild to moderate impairment (CrCl 30–90); however, mean Mg²⁺ concentrations were similar between these groups. Increases in Mg²⁺ were transient and returned to baseline for both the normal and abnormal Mg²⁺ groups within 24 to 48 hours post colonoscopy, regardless of renal function. Additionally, there were no reported adverse events due to hypermagnesemia.
Conclusion: Serum Mg²⁺ concentrations in patients receiving P/MC are generally not affected by renal function. Moreover, elevated serum Mg²⁺ levels are not associated with an increase in adverse events.

Disclosure: Supported by funding from Ferring Pharmaceuticals Inc, Parsippany, New Jersey. Editorial support was provided by The JB Ashlin Group, Inc.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: Dr Epstein has received grant/research support, participated in speakers’ bureaus, and/or acted as a consultant for Abbott Laboratories, Otsuka Pharmaceuticals, Prometheus, and Sucampo.
Dr Jones serves on the board of directors for Cytosorbents, Inc.
Dr Bertiger has served as a consultant for Ferring Pharmaceuticals Inc.
Dr Dahdal and Dr Joseph are employees of Ferring Pharmaceuticals Inc.
Initiated Research: Industry
FDA Approval: Yes
Designed Study: Industry
Performed Analysis: Industry
CONTROL ID: 2022734  
AVERAGE SCORE: 3.75  
PRESENTER: Louis Wilson  
PRESENTER (INSTITUTION ONLY): Wichita Falls Gastroenterology Associates  
PRESENTER (COUNTRY ONLY): United States  
AUTH DESIG: ACG Membership Status *:  
Louis Wilson : ACG Member  
James Johnston : ACG Non-Member  
Dale McDonald : ACG Non-Member  
TITLE: PROPOFOL FROM START TO FINISH: EVIDENCE-BASED OPTIMIZED DOSING MODELS FOR THE INDUCTION AND MAINTENANCE OF MODERATE SEDATION  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  
Purpose: To develop evidence-based training tools and dosing strategies for propofol-based sedation by mathematical modeling and optimization of the induction dose and maintenance phase of sedation for outpatient endoscopy.  
Methods: At a single outpatient endoscopy center using physician-directed sedation we analyzed all cases performed during years 2011-12. Procedural data including age, sex, race, height, weight, home medications, and key time-stamps (N=11,328) were analyzed. Steps of analysis included: determining independent factors affecting dose, choosing the performance measure for optimization, creating optimized models for that measure, and applying those techniques to the induction and maintenance doses.  
Results: Analysis of variance tests indicated that age, height, weight, and race exerting independent effects on propofol (P) dose. Administration of fentanyl (F) reduced propofol dose in a dose-independent manner, while midazolam (M) reduced propofol dose in a dose-dependent manner (p < .001). Since total time to discharge (TTD) is measured in the same way for all methods, is significantly affected by sedation method (p=.001), and is an indicator of sedation tolerance, it was chosen as the performance measure for optimization. It was then determined that a derived Factor K (Height*Weight/Age) could express the relationship between those variables and propofol dose for induction, but not for maintenance. The dose and rate of propofol used for maintenance were strongly associated with the induction dose (p < .001). Models were achieved using regression analysis expressing average induction dose as a non-linear function of Factor K and then to express maintenance rate as a function of induction dose. Separate models were derived for each different combination of P, M, and F. Models were optimized by eliminating those with higher than median TTD. The R2 values suggested mathematical validity and models were validated against statistical and clinical realities.  
Conclusion: We report the creation of optimized evidence-based mathematical models for propofol-based moderate sedation that express the relationship between statistically significant patient factors and the induction dose, and maintenance dose and rate as functions of induction dose.  
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  
Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: Yes  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: Not Applicable  
Supported by Industry Grant: No
CONTROL ID: 1996180
AVERAGE SCORE: 3.5
PRESENTER: Michelle Tong
PRESENTER (INSTITUTION ONLY): University of Connecticut School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Michelle Tong : ACG Non-Member
Michael Tades : ACG Member
Haleh Vaziri : ACG Member
TITLE: Endoscopy in Neutropenic and/or Thrombocytopenic Patients: Review of Current Evidence and Development of Clinical Recommendations

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To develop clinical recommendation regarding endoscopic procedures in neutropenic and/or thrombocytopenic patients.

Methods: Review article of 11 relevant studies in which endoscopy was performed as part of the evaluation of neutropenic and/or thrombocytopenic patients. The studies were identified by 2 independent reviewers on Pubmed, Scopus, and Ovid databases.

Results: There was a high diagnostic yield with relatively low complication rates reported, related to the endoscopic procedures in patients with neutropenia and/or thrombocytopenia. Therapeutic endoscopic interventions including high-risk procedures such as sclerotherapy were safely performed in this group of patients, as were feeding tube placement and hemostasis via electrocautery, epinephrine injection, argon plasma coagulation, and fibrin glue. Indication for prophylactic platelet transfusions for thrombocytopenia patients ranged from platelet counts <50,000 per cubic mm to counts <10,000 per cubic mm. Several studies withheld biopsy for platelet counts <20,000-30,000 per cubic mm. Bleeding complications related to endoscopy were reported in 2 of 10 studies, but none resulted in major morbidity or mortality. Afebrile neutropenic patients received prophylactic antibiotics if absolute neutrophilic count (ANC) was <1000 per cubic mm, if the patient was undergoing colonoscopy and had a high inflammatory condition, or if the patient was in an aplastic phase. Endoscopy was also withheld in one study for severe pancytopenia.

Conclusion: Endoscopy can be safely performed in the settings of thrombocytopenia and neutropenia. Prophylactic platelet transfusion prior to endoscopy may be considered for platelet count <50,000 per cubic mm, although platelet count below 50,000 per cubic mm is not an absolute contraindication to endoscopy. In afebrile patients with neutropenia, prophylactic antibiotics may be given for high-risk endoscopic procedures. For low-risk procedures in afebrile neutropenic patients, endoscopists may consider prophylactic antibiotics based on the clinical setting.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2018195
AVERAGE SCORE: 3.5
PRESENTER: Chad Cooper
PRESENTER (INSTITUTION ONLY): Texas Tech University Health Sciences Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Chad Cooper : ACG Non-Member
Angel Morales : ACG Non-Member
Mohamed Othman : ACG Member
TITLE: Outcomes of the use of Fully Covered Esophageal Self-expandable Stent in the Management of Colorectal Anastomotic Strictures and Leaks
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Colorectal anastomotic leak or stricture is a dreaded complication of colorectal surgery that can lead to significant morbidity and mortality. The novel use of self-expandable metal stents (SEMS) can help in the management of postoperative colorectal anastomotic leaks or strictures without the need for surgical re-intervention.
Methods: Colorectal anastomotic leak or stricture is a dreaded complication of colorectal surgery that can lead to significant morbidity and mortality. The novel use of self-expandable metal stents (SEMS) can help in the management of postoperative colorectal anastomotic leaks or strictures without the need for surgical re-intervention.
Results: Eight patients had SEMS (WallFlex® stent) placed for the management of postoperative colorectal anastomotic leak or stricture with a mean age of 56 years of which included 62.5% (n=5) males. Five patients had a colorectal anastomotic stricture and 3 had a colorectal anastomotic leak. The CSEMS were left in place for 45 to 60 days. Complete resolution of the anastomotic stricture or leak was achieved in 7 (87.5%) patients. Two patients had recurrence of the anastomotic stricture approximately 2 months after the first stent was removed that later required placement of a larger stent. Of these 2 patients, one had complete resolution of the stricture and the other was technically too difficult to place a stent in the recurred stricture Stent migration was noted in one patient, 3 days after stent placement. A larger SEMS was placed and stricture resolution was achieved. No other complication was reported.
Conclusion: The use of SEMS in the management of colorectal anastomotic leaks or strictures is feasible and associated with high technical and clinical success rate.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2031501
AVERAGE SCORE: 3.5
PRESENTER: Anushka Baruah
PRESENTER (INSTITUTION ONLY): Division of Gastroenterology and Hepatology, Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Anushka Baruah : ACG Non-Member
Emmanuel Gorospe : ACG Non-Member
Louis Wong Kee Song : ACG Non-Member
Navtej Buttar : ACG Member
TITLE: Efficacy of the Over-The-Scope Clip Device in the Management of Acute Gastroduodenal Artery Territory Bleeding From Duodenal Ulcers: A Single Center Experience
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The over-the-scope clip (OTSC) is a novel device for the management of acute bleeding originating from the gastroduodenal artery (GDA) territory. The compression force and volume of tissue captured are greater with OTSC relative to standard hemoclips. We compared the outcomes between OTSC and standard hemoclips in the management of acute duodenal ulcer bleeding.
Methods: We reviewed the electronic medical records of all patients evaluated in our tertiary referral center for acute duodenal ulcer bleeding between January 2005 and May 2014. Data were abstracted for demographic, comorbid conditions, and important clinical parameters such as anticoagulation status, INR, medication history and information on bleeding disorders and platelet dysfunction, outcomes related to hemostasis, re-bleeding, and re-intervention rates, number of clips placed, procedural adverse events, and cost-effectiveness of the procedure. Means and proportions between the 2 groups were compared.
Results: A total of 828 patients had endoscopically confirmed acute duodenal source of bleeding. Of these, 211 patients underwent mechanical hemostasis as the primary treatment modality. Since 2008, in 25 patients (17 men), the source of bleeding was in the gastro duodenal artery territory, and this was treated with OTSC. We identified 45 (35 men) age, location, and comorbidity matched controls between 2005 and 2008 who were treated with hemoclips. The rate of presumed re-bleeding requiring repeat endoscopy in OTSC patients was 32% compared to 33% in the hemoclip treated group (p=0.91). However, the re-intervention rate was 40% in the hemoclip group as compared to 28% in the OTSC group (p = 0.02). The average cost related to OTSC use was $511 +/- 225, as compared to $807 +/- 538 (p= 0.01) related to hemoclip use. This can be attributed to the total number of clips utilized in patients undergoing hemoclip placement (mean: 3 SD: 2) as compared to patients treated with OTSC (mean: 1 SD: 0.3). The mean INR was 1.3 and there were no treatment-related adverse events in either of the groups.
Conclusion: Patients who underwent OTSC management for acute GDA territory duodenal ulcer bleeding demonstrated a statistically significant reduction in the cost of clipping and required fewer re-interventions during follow-up as compared to patients who underwent hemoclip placement. A randomized controlled trial is recommended to confirm these findings.
1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035849
AVERAGE SCORE: 3.5
PRESENTER: Hareesh Bose
PRESENTER (INSTITUTION ONLY): Advanced Digestive Center, Inc
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Hareesh Bose : ACG Non-Member
Sandeep Tummala : ACG Non-Member
Srinivas Vasireddi : ACG Member
TITLE: Usefulness of Trans-nasal Ultra-thin office Endoscopy in High Risk Pre-Bariatric Patients
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No
Purpose: Esophagogastroduodenoscopy (EGD) is an important tool for evaluating pre-bariatric patients. Obese patients are at high risk for airway complications during conventional sedated endoscopy. It is well known that sedation in obese patients is challenging due to the risks of sleep apnea and airway compromise while performing esophageal intubation. Improvement in technology has led to the use of ultra-thin scopes that can be used trans-nasally with minimal risk, patient discomfort, safety and efficacy.
Methods: 31 patients with Pre-Bariatric screening indications. The variables assessed were the success rate, tolerability and reliability with no use of sedation in the office setting. The endoscope used for all the procedures was the GIF-N180 Olympus 4.9 mm gastroscope. Biopsies were procured with a 2 mm pediatric biopsy forceps. 2% lidocaine gel was applied to the nasal orifice prior to the procedure.
Results: The study looked at 31 patients from June 2011 to June 2014 (14 men and 17 women) with an average age of 32 years (ranging from 21 to 46) and a BMI range of 35 to 55. All 31 patients had successful intubation of the second duodenal portion with no safety concerns or complications. Common pathology was found in all the patients with gastritis(100%), esophagitis(83%), esophageal reflux(50%), hiatal hernia(33%) and gastric ulcer(16%). All of the patients were satisfactorily assessed and cleared for bariatric surgery. After appropriate therapy the pathology specimens were adequately analyzed and satisfactorily in all the patients.
Conclusion: Initial data suggests that unsedated ultrathin endoscopy with 4.9 mm diameter GIF-N180 scope is safely feasible in ambulatory office care setting with the majority of pre-bariatric patients tolerating the procedure with no sedation. Alami et al. have done previous studies where they looked at morbidly obese patients in the out patient hospital setting. They showed all 25 patients reported successful endoscopy with no sedation using a 5.9 mm diameter GIF XP 160. Our study was able to show similar efficacy and safety in the ambulatory physician office setting with an even smaller(4.9 mm) scope. In the era of affordable and accountable care, this may prove to be the most effective and appropriate approach in Pre-Bariatric endoscopic screening and assessment of such patients.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
TITLE: Safety and Efficacy of Colonoscopy in Patients 85 Years and Older: Retrospective Review

AWARDS: Naomi Nakao Gender Based Research Award | Radhika Srinivasan Gender Based Research Award

CURRENT CATEGORY: K. Endoscopy

CURRENT SUB-CATEGORY: None

PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: To determine the safety and complication rate of colonoscopy in the population over 85 years and older in a single center outpatient ambulatory surgical unit.

Methods: We undertook a retrospective review of 410 patients ages 85 years and older from 2006 through 2012 in a single center outpatient ambulatory surgical center. We reviewed the charts of these patients to find indication for colonoscopy, comorbidities, whether sedation was given, the quality of the bowel preparation, whether cecal intubation or ileal visualization was accomplished, and any complications.

Results: We reviewed 410 patients charts aged 85 years and older between 2006 and 2012. Mean age was 87.3 years, of which 228 (52.5%) of the patients were males. The leading indications for colonoscopy were: screening in 100 (38.2%), history of a polyp or cancer in 90 (34.4%), and history of bleeding and anemia in 38 (14.5%) patients. Heart disease was seen in 172 (42.0%), lung disease in 52 (12.7%), and renal disease in 40 (9.8%) patients. One hundred eighty-nine (46.1%) patients did not receive any form of sedation during colonoscopy. Excellent to good quality bowel preparation was documented in 146 (59.6%), fair to adequate in 82 (39.6%) and poor in 2 (0.8%) patients. Polyps were detected in 122 patients with 87 (21.2%) having pre-cancerous polyps (tubular, tubulovillous, or villous) and 7 (1.7%) having colon cancer. Cecal intubation or ileal visualization was accomplished in all of the patients. Bleeding after the procedure was seen in 7 (1.7%) patients, but in no case was hospitalization or further intervention required. There were no perforations, cardiovascular complications, or pulmonary complications observed. Sixty-five patients were deceased at the time of chart review. We were able to find the cause of death only in 3 of these patients, which were unrelated to the procedure.

Conclusion: The United States Preventive Services Task Force (USPSTF) recommends against colon cancer screening in the elderly population due to concerns over procedure-related complications. Over 70% of the population in this review underwent colonoscopy because there was a history of polyps or cancer or for screening. The complication rate in this review was negligible. With the increasing life span of people and reduced complications from colonoscopy, healthy elderly patients can consider colonoscopy for various indications. Further prospective study is needed to determine whether screening colonoscopies in the elderly can prolong life.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: No

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
TITLE: Diphenhydramine use in conscious sedation: A retrospective analysis of efficacy

Purpose: Conscious sedation is an integral component of endoscopy worldwide. In most practices, fentanyl and midazolam are used in combination for conscious sedation. However, due to intermittent shortages of these medications, costs, and patient resistance, other medications, such as diphenhydramine, are being utilized as concomitant therapy. Therefore, we performed a retrospective study to evaluate the efficacy of concomitant use of diphenhydramine with traditional fentanyl and midazolam for conscious sedation.

Methods: A retrospective study at a single tertiary-care center was performed over a 45-day period after IRB approval. All adult patients that underwent colonoscopy with conscious sedation by gastroenterologists with <5 years experience at our hospital- and ambulatory-based endoscopy centers were included. Patient charts were reviewed for the following data: Age, gender, ethnicity, body mass index (BMI), procedure indication, medication dosages, and post-procedure recovery time. The concomitant use of diphenhydramine with fentanyl and midazolam was compared to traditional fentanyl and midazolam for conscious sedation. Subgroup analysis was performed between the two groups for patient age ≥ 60 years and nursing experience ≥ 5 years. Statistical analysis was performed using descriptive statistics and two-tailed, unpaired t-test with statistical significance defined as p<0.05.

Results: A total of 193 patients were identified consisting of 91 males and 102 females with mean age 58.7 ± 12.4 years and mean BMI 31.4 ± 8.0 kg/m2. Of these patients, 64 received diphenhydramine with fentanyl and midazolam and 129 received traditional fentanyl and midazolam. No statistically significant difference was noted between the two groups for age (p=0.17) and BMI (p=0.09). Diphenhydramine use with conscious sedation resulted in statistically significant reduction in fentanyl (84.4 micrograms ± 35.5 vs 109.2 ± 43.3, p<0.01) and midazolam (4.3 mg ± 1.9 vs 5.7 ± 2.1, p<0.01) while not significantly prolonging post-procedure recovery time (30.0 minutes ± 13.6 vs 27.2 ± 13.1, p=0.17) as compared to traditional fentanyl and midazolam alone. In subgroup analysis, diphenhydramine with conscious sedation demonstrated similar results in those ≥ 60 years of age and in those where the medications were administered by experienced nurses.

Conclusion: The concomitant administration of diphenhydramine with conscious sedation resulted in less fentanyl and midazolam use as compared to fentanyl and midazolam alone. Furthermore, diphenhydramine did not prolong recovery times, even in patients' ≥ 60 years. A randomized controlled trial would be ideal for further evaluation of this topic.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2031513
AVERAGE SCORE: 3
PRESENTER: Yutang Ren
PRESENTER (INSTITUTION ONLY): Department of gastroenterology, Nanfang Hospital, Southern Medical University
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *
Yutang Ren : ACG Non-Member
Fengping Chen : ACG Non-Member
Zhiliang Deng : ACG Non-Member
Xiaofei Tang : ACG Non-Member
Jianhua Wu : ACG Non-Member
Fuchao Zhi : ACG Non-Member
Wei Gong : ACG Non-Member
Bo Jiang : ACG Non-Member

TITLE: Achalasia Subtypes have Different Motility Response of Esophagus to Per-oral Endoscopic Myotomy (POEM): High-resolution Manometry Approach with Chicago Classification

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To investigate the motility response after POEM in subtypes of achalasia according to Chicago classification.

Methods: Achalasia patients who received POEM were included for analysis. Eckardt score was used to assess symptom improvement. High-resolution manometry was applied for studying motility. Main parameters analyzed were (i) LES: resting pressure (restP), 4-second integrated relaxation pressure (4s-IRP); (ii) esophageal body (EB): contraction amplitude (CA); contraction duration (CD), distal contraction integral (DCI); (iii) upper esophageal sphincter (UES): relaxation pressure (relaxP).

Results: There were 11 type I, 23 type II patients included for analysis. There were no type III achalasia patients because of scarcity. Results were shown in Figure 1. (i) Eckardt score decreased more in type II than type I achalasia [-6.00(3-10) vs -5.00(3-9), p=0.046]. (ii) LES tone was reduced significantly in both subtypes. (iii) Motility parameters of EB (CA, CD and DCI) were all lowered in type II achalasia, but were not in type I. (iv) UES relaxP was reduced only in type II achalasia (13.49±6.58 vs 5.17±6.48 mmHg, p<0.001). (vi) Proximal segment of esophagus without myotomy changed with distal segment with myotomy correlatively in both subtypes.

Conclusion: Type I and type II achalasia had different proximal esophageal motility response to POEM, which could lead to different clinical outcome. This change was mediated by inhibition feedback of myotomy on distal esophagus.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2034363
AVERAGE SCORE: 4.5
PRESENTER: Scott Rathgaber
PRESENTER (INSTITUTION ONLY): Gundersen Health System
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Yogita Fotaria : ACG Non-Member
Scott Rathgaber : ACG Member
TITLE: Endoscopic yield and appropriateness of Esophagogastroduodenoscopy (EGD) in a community hospital-based gastroenterology practice
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To determine the adherence to American Society of Gastrointestinal Endoscopy (ASGE) indication guidelines and relevant diagnostic yield of upper gastrointestinal endoscopy (EGD) in a gastroenterology practice within an integrated health care system
Methods: A random sample of all EGDs completed in 2013 were retrospectively reviewed for demographics, hospitalization status, indication, findings (relevant to indication or not), and urgency. Appropriate indication was determined by adherence to ASGE guidelines. Appropriateness and diagnostic yield were calculated separately within these categories. The diagnostic yields between appropriate and inappropriate EGDs were compared using the chi-square test.
Results: 451 patient procedures were included. The patients' mean age was 57.3 years (71.2% equal to or greater than 50 years), more Female (56.5%), more Outpatient (86.5%), and more elective (83.4%). Indications were appropriate in 377 cases (83.6%). Inappropriate indications were more likely if the patient was Female, 68.9% vs 54.1% (p=0.019) or <50 years old, 62.1% vs 22.2% (p<0.001). Relevant findings were more likely if indication was appropriate, 57.8% vs 17.5% (p<0.001). Of the exams with appropriate indications, the relevant yields by diagnosis were as follows: Upper gastrointestinal (GI) bleeding 82.7%, Dysphagia 75%, Portal Hypertension 75%, Iron Deficiency Anemia 59.3%, Vomiting 57.1%, Abdominal Symptoms 42.5%, Refractory gastroesophageal reflux disease (GERD) 38.2%, and Malignancy/Dysplasia screening for Barrett's esophagus 2.3%. Relevant findings were more likely if the patient was Male, 54.6% vs 48.6% (p=0.017); Inpatient, 77.1% vs 47.2% (p<0.001); and age equal to or >50, 52.7% vs 47.7% (p=0.003).
Conclusion: This study demonstrated good adherence to ASGE guidelines for EGD indications within this practice. Higher yields of relevant findings were obtained in patients who were male, inpatients, and equal to or older than 50 years. This study confirms that most of the guideline recommended indications predict the identification of relevant lesions on endoscopy in fairly high percentages. EGDs for surveillance of malignancy/dysplasia in Barrett's esophagus had the lowest diagnostic yield.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2021304
AVERAGE SCORE: 4.5
PRESENTER: Andrea Rodriguez
PRESENTER (INSTITUTION ONLY): University of South Florida Mors Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Andrea Rodriguez : ACG Non-Member
Seth Lipka : ACG Member
Kirbylee Nelson : ACG Non-Member
Ashley Davis-Yadley : ACG Non-Member
Vignesh Doraiswamy : ACG Non-Member
Roshanak Rabbanifard : ACG Member
Ambuj Kumar : ACG Non-Member
Patrick Brady : ACG Member
TITLE: Yield of Balloon Assisted Enteroscopy After Abnormal Capsule Endoscopy Depends On The Source Of The Capsule Endoscopy
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award|ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Capsule endoscopy (CE) findings often result in referral to tertiary care centers for enteroscopy. There is published data analyzing CE prior to single balloon enteroscopy (SBE) but there are no studies comparing referral and non-referral CE that later underwent SBE. The aim of this study was to compare the diagnostic & therapeutic yield in patients undergoing SBE after CE either referred or performed at our institution.
Method: We performed a retrospective cohort study using the electronic health records of 428 patients undergoing SBE. After excluding those patients without CE, 240 patients were analyzed. Two groups were created: group-1 consisted of inside CE(n= 110) & group-2 consisted of outside CE(n=130). Data collected included demographics, diagnostic/therapeutic information, & complications. The association between dependent & independent variables were assessed using an independent sample t-test & logistic regression. The results are summarized as mean difference(MD) & standard deviation(SD) or odds ratio(OR) & 95% confidence intervals(CI).
Results: Overall, gender, age, race, & abdominal surgeries were not significantly different between the groups. However, patients were more likely to be hospitalized in the inside group 45.5% vs. outside group 21.5% OR 3.04(1.73-5.32; p <0.0001). Likewise, days of hospitalization was significantly higher in the inside group 13.5+/− 10.8 vs. 7.3+/− 7.6 in the outside group MD 6.24(95% CI 1.6-10.9; p = 0.009). Patients who had inside CE had higher rates of blood transfusions 33.6% vs. 18.4% in the outside group OR 2.7(1.45-4.92; p= 0.002). No significant difference was found in the diagnostic yield OR 1.49(0.89-2.5; p=0.13). Nonetheless, therapeutic yield was significantly higher with inside CE 47.2% vs. outside CE 33.8% OR 1.75(1.04-2.95; p=0.035).
Conclusion: We found a higher therapeutic yield for SBE done after CE performed inside our institution. Although diagnostic yield was also higher in this group, it did not reach statistical significance. Review of the video recording should be considered by tertiary care center gastroenterologists prior to balloon assisted enteroscopy in patients referred with a CE done at an outside institution.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTACT ID: 2021969
AVERAGE SCORE: 4.5
PRESENTER: Josh Wilson
PRESENTER (INSTITUTION ONLY): Wake Forest Baptist Health
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Josh Wilson : ACG Member
P. Wesley Benson : ACG Member
John Evans : ACG Member
TITLE: Successful Endoscopic Closure of Tracheoesophageal Fistula with APC and EVICEL Fibrin Sealant
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)
ACG Research Grant Support: No

Purpose: A 25-year-old male with history of Down syndrome, GERD, esophageal atresia status-post surgical correction, recurrent esophageal strictures/stenoses status-post serial dilations, and recurrent aspiration pneumonia presented with a 1-month history of dysphagia, weight loss, and coughing. Barium esophagram revealed severe stricture of the distal esophagus with marked dilation of the proximal esophagus and a fistula connecting the mid-esophagus to the right middle and lower lobe bronchi. A simultaneous EGD and bronchoscopy were performed and revealed a bubbling esophageal diverticulum and no esophageal stricture. Using a TTS catheter, methylene blue was injected into the fistula and was visualized in the RLL superior segment on bronchoscopy, thus confirming the diagnosis of TE fistula. CT surgery recommended conservative measures with endoscopic interventions, as the fistula appeared to be chronic in nature, and given his history of several prior thoracic operations.
Therapeutic EGD was performed, and using a cytology brush, the fistula tract was irritated in hopes to evoke some granulation tissue. EVICEL fibrin sealant was then injected into the fistulous tract, and once this congealed, the esophageal side of the fistulous tract was cauterized using an APC catheter (40 Watts, 1.4 L/min). One week following therapeutic EGD, repeat fibrin sealant application and APC cauterity were successfully performed. Follow-up 8 and 12-week post-procedure esophagrams showed persistent but improved pinhole TE fistula. APC was repeated, and follow-up esophagram 6 weeks later revealed complete resolution of TE fistula. His PEG tube was removed with slow advancement to regular diet. Subsequently, his weight returned to normal and he had no further episodes of aspiration pneumonia.

We report the successful use of APC, brush irritation, and fibrin sealant for the endoscopic treatment of a TE fistula. Open surgical repair of TE fistula is technically challenging and has high rates of morbidity, mortality, and recurrence. The reported success rate of fibrin injection alone is approximately 50%. Some case reports describe injection of fibrin glue into the surrounding submucosa rather than into the fistula itself in an attempt to decrease the rate of aspiration or dislodgement of the fibrin plug. This case is unique in that it is the first reported case of combination APC, brush irritation, and fibrin sealant in the closure of TE fistula in an adult. One should consider simultaneous EGD and bronchoscopy in localizing and confirming the TE fistulous tract, and use of the endoscopic modalities listed above as a less invasive treatment before open surgical repair in appropriate cases.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: No
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039581
AVERAGE SCORE: 4.33
PRESENTER: Ravi Vora
PRESENTER (INSTITUTION ONLY): Emory University School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Ravi Vora: ACG Non-Member
Amar Mandalia: ACG Non-Member
Xiao Jing Wang: ACG Non-Member
Tilak Shah: ACG Member
Kevin Woods: ACG Member
Steven Keilin: ACG Member
Field Willingham: ACG Member
Qiang Cai: ACG Member
TITILE: The Utility of an Upper Esophagogastroduodenoscopy in patients who are scheduled to undergo an Upper Endoscopic Ultrasound Examination
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The use of an upper endoscopic ultrasound (EUS) has evolved from primarily a diagnostic modality to use in various therapeutic applications. Although many endoscopists perform an esophagogastroduodenoscopy (EGD) prior to EUS examination, there are limited data regarding the clinical utility of this practice. In this study we examine the utility of a screening EGD directly prior to EUS.
Methods: This single-center, multiple-operator study in a tertiary care hospital involved a retrospective analysis of 145 EUS encounters for 135 patients with a visual endoscopic exam performed directly prior to EUS. Data was collected on variables such as patient demographics, indication for EUS, prior study indicating EUS, visual findings on EGD performed immediately prior, EUS visual exam findings, and final pathology if biopsies were taken. The primary outcome measured whether a visual exam with EGD directly prior to EUS precluded continuation to the scheduled EUS examination.
Results: A total of 145 EUS encounters for 135 patients were analyzed. Abnormal imaging and pancreatic masses were the two most common indications for EUS. The majority of the prior studies indicating need for EUS exam were CT and MRI scans (54%), while prior EGD exams indicated need for EUS 23% of the time. 143 (98.6%) encounters proceeded to EUS regardless of visual endoscopic findings directly prior. Two encounters did not proceed to EUS. The first demonstrated a duodenal mass on EGD that was deemed amenable to endoscopic mucosal resection. The second encounter also revealed a duodenal mass on EGD but was not evaluated by ultrasound as the scope could not be advanced further.
Conclusion: Our observations suggest that an EGD for visual inspection prior to EUS examination is not necessary. As imaging modalities such as MRI, CT, and EGD exams preceded the majority of referrals for EUS, and EGD findings ultimately did not halt proceeding to the scheduled EUS, visual inspection via EGD directly prior to EUS may not be warranted. However, further studies may be needed to analyze if EGD prior to EUS versus EUS examination alone would affect diagnosis and treatment of the initial indication for EUS.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039487
AVERAGE SCORE: 5.5
PRESENTER: Ravi Vora
PRESENTER (INSTITUTION ONLY): Emory University School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Ravi Vora: ACG Non-Member
Xiao Wang: ACG Non-Member
Tilak Shah: ACG Non-Member
Kevin Woods: ACG Member
Steven Keilin: ACG Non-Member
Field Willingham: ACG Non-Member
Qiang Cai: ACG Member
TITLE: The Utility of an Upper Esophagogastroduodenoscopy in Patients who are scheduled to undergo an Upper Endoscopic Ultrasound Examination
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The use of an upper endoscopic ultrasound (EUS) has evolved from primarily a diagnostic modality to use in various therapeutic applications. EUS examination and intervention is usually indicated following abnormal findings on other imaging or visualizing modalities, such as CT, MRI and EGD. Currently, there is no widely accepted role of performing visual exam with an endoscope directly prior to pursuing an ultrasound examination. However, many endoscopists pursue EGD due to its ease, safety, and short duration of exam. In this study, we examine the utility of a screening EGD directly prior to EUS.
Methods: This single-center, multiple-operator study in a tertiary care hospital involved a retrospective analysis of 145 EUS encounters for 135 patients with a visual endoscopic exam performed directly prior to EUS. Data was collected on variables such as patient demographics, indication for EUS, prior study indicating EUS, visual findings on EGD performed immediately prior, EUS visual exam findings, and final pathology if biopsies were taken. The primary outcome measured whether a visual exam with EGD directly prior to EUS precluded continuation to the scheduled EUS examination.
Results: A total of 145 EUS encounters for 135 patients were analyzed. Abnormal imaging and pancreatic masses were the two most common indications for EUS. The majority of the prior studies indicating need for EUS exam were CT and MRI scans (54%), while prior EGD exams indicated need for EUS 23% of the time. 143 (98.6%) encounters proceeded to EUS regardless of visual endoscopic findings directly prior. Two encounters did not proceed to EUS. The first demonstrated a duodenal mass on EGD that was deemed amenable to endoscopic mucosal resection. The second encounter also revealed a duodenal mass on EGD but was not evaluated by ultrasound as the scope could not be advanced further.
Conclusion: Our observations suggest that an EGD for visual inspection prior to EUS examination is not necessary. As imaging modalities such as MRI, CT, and EGD exams preceded the majority of referrals for EUS, and EGD findings ultimately did not halt proceeding to the scheduled EUS, visual inspection via EGD directly prior to EUS may not be warranted. However, further studies may be needed to analyze if EGD prior to EUS versus EUS examination alone would affect diagnosis and treatment of the initial indication for EUS.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
CONTROL ID: 2033251
AVERAGE SCORE: 4.25
PRESENTER: Rowena Almeida
PRESENTER (INSTITUTION ONLY): Gastrointestinal Diseases Research Uni
PRESENTER (COUNTRY ONLY): Canada
AUTH DESIGN: ACG Membership Status *
Rowena Almeida: ACG Non-Member
Nancy Craig: ACG Non-Member
Lawrence Hookey: ACG Member
TITLE: Factors that Influence the Efficiency of an Endoscopy Unit: A Patient Flow Analysis
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award|ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: With increasing demand for endoscopic procedures in the context of limited resources, it is imperative to identify factors that can be optimized to influence efficiency of the endoscopy unit.
Methods: A prospective study from December, 2013 to March, 2014 was undertaken in the endoscopy unit at the Hotel-Dieu Hospital, Kingston, ON. Time elapsed for all components from patient registration to exit from the endoscopy unit was recorded. The data was collected in three components – individual endoscopy room utilization, pre-procedure room, and overall endoscopy unit room usage. Mean times were analyzed to identify if maximal time consumption was attributed to patient related, endoscopist related, equipment or process related causes.
Results: Data were collected for 137 procedures in the endoscopy room, 139 procedures in the pre-procedure room, and 143 procedures for overall room usage. The mean time for patient registration was 39.22 minutes ahead (95% CI: -44.76 to -33.68) of their scheduled starting time. The mean time spent in the pre-procedure room was 50.15 minutes (95% CI: 45.84 – 54.47).
The mean time delay from the scheduled start time to the actual time the patient was transferred into the endoscopy room was 18.51 minutes (95% CI: 13.44 – 23.58). Whilst, the mean time delay between scheduled starting time to that of endoscopist arrival into the endoscopy suite was 27.05 minutes (95% CI: 20.93 – 33.18).
Overall, the mean time spent by the patient in the endoscopy room was found to be 27.15 minutes (95% CI: 24.60 – 29.69) for an EGD, 57.95 minutes (95% CI: 50.38 – 65.53) for a colonoscopy, 71.29 minutes (95% CI: 49.36 – 93.22) for a double procedure, and 29.15 minutes (95% CI: 16.16 – 42.13) for a flexible sigmoidoscopy. The average room turnover time was found to be 7.42 minutes (95% CI: 6.85 – 8.00).
Conclusion: There is limited literature on the range of efficiencies or validated methodology for evaluating the endoscopy unit. Nevertheless these findings are consistent with the recognition that individual units have unique operational characteristics and that identifying bottlenecks can lead to optimization of resources appropriately.

The patient arrival to the endoscopy unit was ahead of their scheduled registration time. However their entry into the endoscopy suite was much delayed, independent of further delay contributed by endoscopist unavailability. This suggests that delays cannot be attributed to patient related causes and are either endoscopist or process related.

Endoscopy efficiency to improve patient throughput is imperative for quality of care. Hence, the next phase underway entails staff interviews to further characterize the impediments and facilitate implementation of targeted quality improvement initiatives.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
CONTROL ID: 2039748
AVERAGE SCORE: 4
PRESENTER: Anna Lipowska
PRESENTER (INSTITUTION ONLY): Department of Medicine, Feinberg School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Anna Lipowska: ACG Non-Member
Srinadh Komanduri: ACG Non-Member
Rajesh Keswani: ACG Non-Member
TITLE: Endoscopic Versus Surgical Resection for Benign Complex Colon Polyps: Practice Patterns at an Academic Medical Center and Factors Influencing Management
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Patients with complex colon polyps (CCP) may be referred for either endoscopic mucosal resection (EMR) or surgical resection (SR). EMR has previously been shown to be more cost-effective with a high success rate. The primary aim of this study is to determine utilization of EMR and SR for CCP and factors influencing the use of EMR versus SR at an academic medical center.
Methods: We conducted a retrospective cohort study of patients with a CCP over a two year period (2012-2013) referred to either SR or to one of two specialists in EMR. A CCP was defined as a polyp not amenable to removal by the referring endoscopist with a hyperplastic, serrated, or adenomatous (including intramucosal carcinoma) histology; lesions with invasive carcinoma on initial or final histology were excluded. SR patients were identified via a query of the institutional data warehouse and EMR patients via a prospectively collected endoscopic database. Potential patient and polyp predictors of CCP management were analyzed.
Results: A total of 180 patients (51.1% male, mean age 64.1+10.3) were included in the study; 117 (65%) were initially referred for EMR and 63 (35%) for SR. Patients initially referred to SR instead of EMR (Table) were more likely to have a larger polyp size on initial colonoscopy (p<0.01), have a right sided lesion (p=0.02), and be uninsured (p=0.01). A minority (27%) of the 63 patients referred to SR were subsequently referred for EMR. Patients referred by surgeons for EMR were more likely to have their index colonoscopy at an outside institution (100% vs. 37%, p<0.01). EMR was attempted in 134 patients and was successful in 82.1%. Patients undergoing SR (including after unsuccessful EMR, n=70) were more often male (44% vs 63%, p<0.01) with larger polyps on initial colonoscopy (3.4cm vs 2.6cm, p<0.01) than patients treated with EMR.
Conclusion: Over a two-year period, one-third of all patients seen at our institution for CCP were referred directly to SR and the majority of patients referred to surgery for CCP are not offered EMR. Larger polyp size and right-sided location are associated with a referral for SR rather than EMR. As the success rate of EMR for CCP is high, methods to increase utilization of EMR for these lesions should be explored.
1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039555
AVERAGE SCORE: 4
PRESENTER: Disaya Chavalitdamrong
PRESENTER (INSTITUTION ONLY): Division of Gastroenterology, University of California, Los Angeles
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Disaya Chavalitdamrong: ACG Member
Mihir Wagh: ACG Member
Luis Lara: ACG Member
Kfir Ben-David: ACG Non-Member
Peter Draganov: ACG Member

TITLE: Prospective Evaluation of the Clinical Utility of Laparoscopy-assisted ERCP in Patients with Roux-en-Y gastric bypass

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Endoscopic retrograde cholangiopancreatography (ERCP) in patients with Roux-en-Y gastric bypass (RYGB) is usually technically challenging. Enteroscopy-based approaches are constrained by the forward viewing optics and small 2.8 mm therapeutic channel which severely limit therapeutic options. Laparoscopy-assisted ERCP with standard duodenoscope has been recently described, but the current knowledge on this technique is based exclusively on a small retrospective case series. Our aim is to prospectively evaluate the clinical utility and outcomes of laparoscopy-assisted ERCP in patients with RYGB.

Methods: This is a prospective study of patients who have undergone laparoscopy-assisted ERCP since February, 2012. Inclusion criteria are age 18 years or older and RYG. Laparoscopic exploration of the abdominal cavity was first done. The gastric remnant (excluded stomach) was identified and a purse-string suture was then placed on the anterior gastric wall. A 10 mm full thickness incision was made on the gastric wall and a 15 mm laparoscopic trocar was introduced into the gastric remnant. The standard 11.3 mm outer diameter/4.2 mm channel therapeutic duodenoscope (TFJ-Q180V, Olympus America) was introduced through the trocar into the second portion of the duodenum. ERCP was then done in a standard fashion using standard ERCP accessories. After the ERCP completion the laparoscopic trocar was removed and the gastric incision was closed with the previously placed purse-string suture.

Results: Our study has included 13 patients who underwent laparoscopy-assisted ERCP through the excluded stomach; age 39-70 years (mean age 59.1±11.7), three males and 10 females. Two of them experienced a prior failed enteroscopy-assisted ERCP. Total procedure time (from skin incision to skin closure) was 128.9±44.4 minutes ERCP time was 26.1±17.7 minutes. All ERCPs were technically successful. Selective deep bile duct cannulation was achieved, and the indicated therapies were successfully performed in all patients; endoscopic biliary sphincterotomy (13/13 patients), stone or sludge extraction (4/4 patients), and pancreatic duct stent placement facilitating difficult common bile duct cannulation (1/1 patient). Final diagnoses were Type 1 sphincter of Oddi dysfunction (9 patients), biliary stone (3 patients) and biliary sludge (1 patient). There were no adverse events.

Conclusion: Laparoscopy-assisted ERCP in patients with RYGB has a very high technical success rate and excellent safety profile. This approach benefits from the use of standard duodenoscope and conventional ERCP accessories, which resulted in a high procedure success rate that appears superior to enteroscopy-based ERCP.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2016994
AVERAGE SCORE: 4
PRESENTER: Swati Patel
PRESENTER (INSTITUTION ONLY): University of Michigan Health System
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *
Swati Patel : ACG Member
Rajesh Keswani : ACG Member
Grace Elta : ACG Member
Lindsay Hosford : ACG Non-Member
Aimee Myers : ACG Non-Member
Dennis Ahnen : ACG Member
Philip Schoenfeld : ACG Member
Sachin Wani : ACG Member
TITTLE: US Gastroenterology Fellowship Programs Are Not Practicing Competency Based Medical Education in Endoscopy Training: National Survey of GI Program Directors and GI Trainees
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: ACGME emphasizes importance of medical trainees meeting performance benchmarks and demonstrating readiness for unsupervised practice. The aims were to describe current methods of endoscopy training and assessment of competence and compare GI trainee (GIT) and GI program director (GPD) perceptions of current endoscopy curriculum quality and what is valued in competence assessment.
Methods: ACGME accredited GPDs and GITs completed an online survey of domains relevant to endoscopy training and competency assessment. Content validity was verified by expert panel of 13 academic GIs. IRB approved.
Results: 64% (94/148) of GPDs and 47% of GITs (546/1167) responded. Only 77% of GPDs reported having a formal endoscopy curriculum and only 39% of GITs are aware of a formal curriculum. According to GPDs, vast majority of programs assess competence by procedure volume (85%) and attending evaluations (96%). Minority use independent procedure completion rates (38%), adverse event rates (32%), skills assessment tools (30%) or validated quality metrics (28%). 10% of GITs are unaware how endoscopy competence is assessed. Only 64% of GPDs reported requiring fellows to meet specific benchmarks by year of training and only 65% of GPDs and GITs reported that current competency assessment by year of training is good or very good. GPDs rated their programs as having better quality of endoscopy training compared to GITs (tab1A) and GPDs rate quality of feedback better than GITs. Both GITs and GPDs value the importance of quality metrics in assessment of competence, GITs more so than GPDs (tab1B).
Conclusion: Although both GITs and GPDs rate quality of current endoscopy training highly (GPD>GIT) and both value quality metrics (GIT>GPD), minority of programs assess competence by year of training or metrics that demonstrate readiness for independent practice. There is a need for improved endoscopy curricula to include competency-based measures which are better suited to demonstrate readiness for unsupervised practice.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2034843
AVERAGE SCORE: 3.75
PRESENTER: oscar teramoto
PRESENTER (INSTITUTION ONLY): ABC medical center
PRESENTER (COUNTRY ONLY): Mexico
AUTH DESIG: ACG Membership Status *:
Griselda Martínez : ACG Member
oscar teramoto : ACG Non-Member
Alejandro Angeles-Labra : ACG Non-Member
Felipe Zamarripa : ACG Non-Member
María Elena Hernández : ACG Non-Member
Miguel Camacho : ACG Non-Member
Adrian Gollas : ACG Non-Member

TITLE: A RANDOMIZED CONTROLLED TRIAL COMPARING 3 REGIMES OF COLON PREPARATION EVALUATING THE PATIENT SATISFACTION AND QUALITY OF COLONOSCOPY

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Quality in colonoscopy is essential and includes factors like patient satisfaction and medical experience, as well as the technical aspects related to the procedures. Several parameters have been suggested as quality indicators, including appropriate screening/surveillance intervals, adenoma detection rates, cecal intubation rates, patient satisfaction and colon preparation. The purpose was to evaluate the quality of colonoscopy with the patient satisfaction using 3 types of colon preparation using a survey satisfaction questionnaire

Methods: Prospective, randomized, transversal, comparative and multicentric study performed. 60 ambulatory patients were included. They were assigned in three groups depending the kind of cleaning preparation: sodium phosphate (NaP), sodium picosulphate and magnesium citrate (PICO) or polietilenglycol (PEG). In all cases, following the actual consensus, verbal and written instructions were given, the patient was followed by telephone calls 12 hours before and after the procedure and all regimes were given as split dose. To all patients a satisfaction survey was done at the time of arriving to the endoscopy suite. The results were compared to the endoscopist evaluation of the quality of the colon visibility, performing time and the lesions found. Statistical analysis: Frequencies, averages and standard deviation (SD). To continuous variables between groups a Student t adjusted to different variants were applied.

Results: Groups were similar in age (47.35 years old vs. 51.3 years vs 54.6 years old p=0.45) or gender (Feminine 45% vs. 40% vs.50% p=0.43) PICO preparation was better tolerated and considered an easier preparation than NaP and PEG (90% vs 55% vs 45%, p=0.001). In NaP and PEG groups the taste was disagreeable and affected the quantity of the oral preparation ingested. The reported side effects were similar being the most common nausea, headache, asthenia. Thirst was the only side effect reported in NaP group. No complications during the procedure were informed. The endoscopists reported the visibility of the colon were from good to excellent in the NaP and PICO groups in more than 90%, and a polip was found in 37%. 2 patients with constipation in PICO group had a bad preparation that needed to had an extra day of preparation.

Conclusion: The patient satisfaction evaluation questionnaire is a good tool to evaluate the quality of colonoscopy, which one important factor found is related to the type of preparation. There are a direct correlation with an easier to follow, less quantity and less side effects type of preparation and the quality of colonoscopy

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
CONTROL ID: 2035239
AVERAGE SCORE: 3.75
PRESENTER: Bing-Rong Liu
PRESENTER (INSTITUTION ONLY): The Second Affiliated Hospital Of Harbi
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Bing-Rong Liu : ACG Non-Member
Ji-Tao Song : ACG Non-Member
TITLE: New peritoneal access for NOTES: Esophago-Cardial-Gastric-Tunneling access
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Safe and easy peritoneal access is a key point for the clinical application of NOTES. This study aims to develop a novel peritoneal access (Esophago-Cardial-Gastric-Tunneling Access) and evaluate its feasibility and safety.

Methods: The study comprised ten Beagle dogs. A longitudinal mucosal incision was made on esophageal wall and a submucosal tunnel was created through cardia into stomach. An incision was made on the muscular layer of the stomach and then the endoscope was advanced into the peritoneal cavity. After intraperitoneal exploration, the esophageal mucosal entry was closed with endoclips. All dogs resumed food 12 hours after the procedures. Diets, behavior and body temperature of all dogs were observed. Endoscopic examinations were performed 4 weeks after the procedure, and then necropsy were executed.

Results: The ECGT access was successfully created in all dogs. Diets, behavior and body temperature were normal in all dogs. The entry of esophagus was healed well in 9 dogs. The mucosa of the entry was torn in one dog, but the submucosal tunnel was healed well at cardia. Necropsy showed complete closure of gastric serosal exit, and no intraperitoneal abscess was found. Histopathological examinations showed submucosal tunnels healed well.

Conclusion: The ECGT access is feasible and safe for NOTES peritoneal access. It should be a good choice for the clinical application of NOTES procedures.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036901
AVERAGE SCORE: 3.75
PRESENTER: Bing-Rong Liu
PRESENTER (INSTITUTION ONLY): The Second Affiliated Hospital Of Harbin Medic
PRESENTER (COUNTRY ONLY): China
AUTH DESIGN: ACG Membership Status *:
Bing-Rong Liu : ACG Non-Member
Jing Yang Liu : ACG Non-Member
TITLE: Clinical Value of Continuous Peritoneal Lavage for the Treatment of Iatrogenic Peritonitis after Endoscopic Intervention
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The standard approach to generalized peritonitis due to iatrogenic GI perforation involves open surgery and laparoscopic peritoneal lavage. This study assessed the feasibility and effectiveness of continuous peritoneal lavage (CPL) without laparotomy or laparoscopy.
Methods: A retrospective analysis of 8 patients from the Second Affiliated Hospital of Harbin Medical University between November 2010 and November 2013 was undertaken. All patients with iatrogenic perforation causing peritonitis underwent CPL by a peritoneal catheter after endoscopic perforation closure. Anti McBurney's point was chosen as the initial puncture site. 1500-2000ml saline was initially irrigated into the peritoneal cavity at a time. The amount of lavage in the first 24 hours was 1-1.8L which would be decreased according to the symptoms of peritonitis. Make sure the input and output ratio was about 1:1-1.5:1. A second tube was placed in 3 patients to ensure adequate drainage. Drainage fluid color becomes shallow and symptoms relieved were the sign of removing the catheter.
Results: In 8 cases with CPL, colon perforation in 4 cases, closed uncertain and delayed perforation in 2 cases respectively. Duodenal perforation in 4 cases which all for closure uncertain. Metallic endoclips were used in 2 cases. Metallic endoclips and endoloops were used in 5 cases. 1 case of delayed perforation of colon underwent CPL without endoscopic close techniques. CPL last for 2-12 days (mean: 5.375 days); Total amount of CPL was 251-85L (mean 8.95L a day). Time of the fever relief and white blood cell (WBC) restored to normal were synchronous which was 1-8 days (mean 3.125 days). Peritonitis lasted for 1-5 days (mean 1.875 days). No serious organ damage; no transferred to surgical department. All patients were discharged from hospital after recovery.
Conclusion: CPL appears to be a simple, safe, and useful for treating generalized peritonitis causing by iatrogenic perforation.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Industry
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Yes
Supported by Industry Grant: No
CONTROL ID: 2035951
AVERAGE SCORE: 3.5
PRESENTER: Wei Gong
PRESENTER (INSTITUTION ONLY): Nanfang Hospital, Southern Medical Univer
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Xiaowei Tang : ACG Non-Member
Wei Gong : ACG Non-Member
Bo Jiang : ACG Non-Member
TITLE: Endoscopic management of foreign bodies in the upper gastrointestinal tract: an analysis of 846 cases in China
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: The aim of this study is to report our experience of management of upper gastrointestinal foreign bodies in Chinese patients.
Methods: All patients with complaints about upper gastrointestinal (GI) foreign body ingestion presented to our institution from 1988 to 2013 were identified. Hospital medical charts and endoscopic records were examined to evaluate etiology, treatment, and outcomes for these patients.
Results: A total of 846 patients presented with a complaint of foreign body ingestion during the study period. Foreign bodies were detected in 737 (87.1%) patients diagnosed by X-ray or endoscopic procedure. The objects most frequently ingested were bones (n=395, 53.6%). The detected foreign bodies were mostly located in the cervical esophagus (n=325, 44.1%). Endoscopic foreign body extraction was successful in 92.5% of cases, while surgery was required in 6 patients. Thirteen patients required a second endoscopic procedure, performed by a more experience endoscopist. The commonly used endoscopic accessory devices were retrieval forceps (n=480, 65.1%), snare or basket (n=120, 16.3%). The complication rate was 6.9%, including mucosal laceration (n=10) and suspected perforation (n=1), all of which were successfully managed conservatively. The associated GI diseases were found in 77 (10.4%) patients, including postesophagectomy (n=34, 4.6%), esophageal cancer (n=16, 2.2%) and others.
Conclusion: The endoscopic procedure is safe and effective for removal foreign bodies from the upper GI tract, with high success rate and low significant complications.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035971
AVERAGE SCORE: 4
PRESENTER: Wei Gong
PRESENTER (INSTITUTION ONLY): Nanfang Hospital, Southern Medical Univer:
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Xiaowei Tang : ACG Non-Member
Wei Gong : ACG Non-Member
Bo Jiang : ACG Non-Member
TITLE: Systematic review: the role of Spyglass Direct Visualization System in the management of biliary disorders
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To evaluate the efficacy and safety of the Spyglass Direct Visualization System in the management of biliary disorders.
Methods: A comprehensive literature search was conducted using PubMed and EMBASE databases to identify relevant studies published between 2005 and 2011. Search terms included Spyglass, single-operator peroral cholangioscopy, biliary lesion, bile duct stone. Inclusion criteria were reports (prospective or retrospective trials) of Spyglass in patients of biliary lesions with long-term follow-up. Data were pooled and analyzed for clinical outcome and complications.
Results: Seven studies, including 654 patients with complete follow-up on outcome, were identified. There were 3 studies of patients receiving Spyglass for management of their indetermined biliary lesions and bile duct stone, 4 where Spyglass was used in indetermined biliary lesions. The overall procedural success rate of Spyglass was 89% (95% confidence interval =78-96%), accuracy of a Spyglass-guided biliary biopsy was 82% (95% confidence interval =73-88%), and success rate for the management of biliary stone was 88% (95% confidence interval =82-97%). In total, 46 (7%) patients had a Spyglass-related complication, more than half of which was cholangitis (26 patients, 4%).
Conclusion: Spyglass cholangioscopy is a significant advance in the management of biliary disease and allow for one operator to visualize and biopsy the targeted tissues directly, and perform fragmentation of difficult bile stone.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2035963
AVERAGE SCORE: 4
PRESENTER: Wei Gong
PRESENTER (INSTITUTION ONLY): Nanfang Hospital, Southern Medical University
PRESENTER (COUNTRY ONLY): China
AUTH DESIG: ACG Membership Status *:
Xiaowei Tang : ACG Non-Member
Wei Gong : ACG Non-Member
Bo Jiang : ACG Non-Member
TITLE: Endoscopic management of Dieulafoy lesion and long-term outcomes
AWARDS: Naomi Nakao Gender Based Research Award|Radhika Srinivasan Gender Based Research Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: This study was conducted to investigate retrospectively the clinical and endoscopic features of Dieulafoy lesions and to assess the long-term efficacy of endoscopic treatment in a single endoscopic center of China. Methods: This study was conducted to investigate retrospectively the clinical and endoscopic features of Dieulafoy lesions and to assess the long-term efficacy of endoscopic treatment in a single endoscopic center of China. Results: Dieulafoy lesion was identified in 138 patients, with a median age of 43.6 years. Hematemesis and melena were the most common presenting symptoms. The majority of Dieulafoy lesions (48.6%) were located in the stomach. Single-modality endoscopic therapy (hemoclip placement) was effective as combination therapy method. Initial hemostasis was successful in 129 patients (92.8%) without complication, while only 4 patients (2.9%) required surgery because endoscopic treatment failed. During the follow-up period, for a median of 36 months, 21 patients (15.2%) died of causes unrelated to the Dieulafoy lesion. Five patients (3.6%) had recurrent bleeding due to Dieulafoy gastric ulcer, and referred to endoscopic therapy. Conclusion: Dieulafoy lesion can be successfully managed by endoscopic treatment. The long-term prognosis is excellent.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
Purpose: To evaluate the indications, success rate, diagnostic and therapeutic yields, and complications of endoscopic retrograde cholangiopancreatography (ERCP) performed in Chinese children.

Methods: A retrospective study was conducted in two academic, tertiary care, medical centers of China, in which all children undergoing ERCP between 2000 to 2013 were identified from endoscopy databases. Data on demographics, indication, ERCP findings, ERCP interventions performed and complications were collected.

Results: A total of 66 children (mean age 12.8 years, range 4 years to 18 years) underwent 83 ERCP procedures. General anesthesia and sedation were performed in 44.2% and 55.8% of procedures, respectively. Indications for ERCP were common bile duct obstructions (n=45, 68.2%), recurrent or chronic pancreatitis (n=14, 21.2%), and choledochal cyst (n=7, 10.6%). ERCP was successful in 62 of 66 cases (93.9%) totally. The ERCP findings were bile duct stone(s) (n=34, 51.5%) and benign biliary stricture (n=7, 10.6%). A therapeutic intervention was performed in 80.3% patients (n=53), including sphincterotomy (n=40, 60.6%), stone extraction (n=36, 54.5%), and stent insertion (n=20, 30.3%). Complications occurred for only 4 patients (6.1%), including 3 cases of post-ERCP pancreatitis. No severe pancreatitis, perforation, or bleeding was noted.

Conclusion: Diagnostic and therapeutic ERCP is effective in the Chinese children population, with the high rates of technical success and low rates of complication.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: Yes

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
Purpose: Our aim was to examine the feasibility and safety of a novel endoscopic method for resection of gastric astric submucosal tumors (SMTs).

Methods: 3 consecutive patients, with gastric SMTs were enrolled in this study. During the procedure, a submucosal tunnel was endoscopically created starting approximately 4 cm proximal to the lesion. After careful submucosal dissection with carbon dioxide insufflation, the SMTs were completely removed, and the entrance of the tunnel closed using endoclips.

Results: The procedure was performed successfully in all cases. The en bloc resection rate was 100%. Of the 3 gastric SMTs, 2 were located in the antrum, and one in the lower body. Two of the SMTs originated from the muscularis propria, 1 from the muscularis mucosae. The average lesion size was 1.6 cm (range 1.3–2.0 cm). The mean required time for the procedure was 52.7 min (range 49–55 min). No patient presented with bleeding, perforation, dysphagia or other complications after the operation. Histopathological examination showed lipoma in one patients and GI stromal tumor in two patients. All the patient kept asymptomatic during follow-up (mean 12.7 months, range 6–20 months).

Conclusion: Our preliminary study demonstrated the feasibility and safety of endoscopic submucosal tunnel dissection (ESTD) in the treatment of gastric antrum SMTs.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
CONTROL ID: 2037803  
AVERAGE SCORE: 3.25  
PRESENTER: Wei Gong  
PRESENTER (INSTITUTION ONLY): Nanfang Hospital, Southern Medical University  
PRESENTER (COUNTRY ONLY): China  
AUTH DESIG: ACG Membership Status *:  
Xiaobing Cui: ACG Non-Member  
Wei Gong: ACG Non-Member  
TITLE: Endoscopic submucosal tunnel dissection for submucosal tumors of the esophagogastric junction originating from the muscularis propria  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  
Purpose: In this study, we aim to evaluate the efficacy and safety of the endoscopic submucosal tunnel dissection (ESTD) for submucosal tumors (SMTs) of the esophagogastric junction (EGJ) originating from the muscularis propria.  
Methods: Between June 2011 and November 2013, 30 consecutive patients with 30 SMTs located between 5 cm above or below the EGJ were included. The submucosal tunnel was created starting 5 cm proximal to the lesion. After submucosal dissection with carbon dioxide insufflation, the SMTs were removed, and the entrance of tunnel were closed using clips. The patient characteristics, clinical outcome, complication, hospital stays and cost were evaluated.  
Results: On EUS, 66.7% (20/30) of the SMTs were hypoechoic and 33.3% (10/30) were heterogeneous hypoechoic. The average length and width of these SMTs were 20 and 13.8 mm, respectively. The mean time of the ESTD procedure was 52.5 (range 18-150) min. The en bloc resection rate was 93.3% (28/30). Histologically, 25 leiomyoma and 5 gastrointestinal stromal tumors were identified. Four (13.3%) patients occurred perforation or gas-related complications during the ESTD, and five (16.7%) more patients occurred complications within 3 days after the ESTD. All these patients were cured with conservative management. The mean postoperative hospital stays were 5.6 (2-19) days, and the mean cost were 28600.2 (15049-55353) CNY.  
Conclusion: Our results suggested the ESTD was effective and relatively safe for the treatment of SMTs of the EGJ. The long-term outcome of the ESTD, with comparison to other conventional approaches, need be further evaluated.  
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  
Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: Yes  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: Not Applicable  
Supported by Industry Grant: No
Small Bowel Capsule Endoscopy in Patients With Implantable Cardiac Defibrillators and Permanent Pacemakers

Purpose: To determine whether small bowel capsule endoscopy (SBCE) is associated with implantable cardiac defibrillator (ICD) or permanent pacemaker (PPM) malfunction or adverse arrhythmias in patients with these devices.

Methods: This was a retrospective chart review of 163 patients who underwent capsule endoscopy at Wake Forest Baptist Medical Center between August 2011 and October 2013. Patients with ICDs or PPMs who underwent SBCE while on continuous telemetry at the time of the procedure were identified. All patients were monitored in the endoscopy unit with continuous electrocardiographic monitor until passage of capsule. ICDs were interrogated prior to the placement of the capsules and post-procedurally with cardiologist review. ICD sensing functions were disabled and returned to baseline parameters post-procedure. One patient underwent SBCE with post-procedure ICD interrogation only; the ICD sensing function remained on during procedure. PPMs were interrogated pre-procedure. Post capsule endoscopy, patients with PPMs were either re-interrogated or instructed to follow-up in device clinic.

Results: One hundred sixty-three total patients underwent SBCE. Sixteen patients who underwent capsule endoscopy were identified as having ICDs or PPMs. No adverse cardiac events or hemodynamically significant arrhythmias occurred during SBCE. One patient had loss of ICD capture on the electrocardiographic monitor; however, this was found to be a monitor malfunction. No signaling interference or loss of images occurred in any of the patients.

Conclusion: SBCE has become a valuable technology in visualizing the small intestine to aide in the evaluation of obscure gastrointestinal bleeding and Crohn’s disease. Unfortunately, a relative contraindication to capsule endoscopy is the presence of ICDs and PPMs, given the possibility of interference in radiofrequency communication of the capsule or causing a malfunction of the implanted cardiac device. Limited data has been available to demonstrate the safety of SBCE in these patients. SBCE does not appear to result in significant arrhythmias or precarious cardiac events when performed in patients with ICDs or PPMs. Furthermore, there was no loss of endoscopic images. This is one of the largest single-center studies demonstrating these results. A larger prospective analysis is necessary to confirm these outcomes.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039595
AVERAGE SCORE: 3.25
PRESENTER: Diana Winston
PRESENTER (INSTITUTION ONLY): Tufts Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Diana Winston: ACG Member
Moises Guelrud: ACG Non-Member
TITLE: Gastric Cardia Intestinal Metaplasia is Common in Schatzki’s Ring. Study of Resection Specimens
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To describe the prevalence of gastric cardia intestinal metaplasia (CIM) among patients with Schatzki’s ring.
Methods: Retrospective review of endoscopic and pathologic records from consecutive patients who presented with dysphagia to solids and had biopsy forceps ablation of Schatzki’s ring between September 2010 and April 2014.
Results: 27 patients, (median age 63.9 years, range 32-88; 26% women) had biopsy forceps ablation. CIM was found in 30% of patients. 1 of these patients (3%) had evidence of low grade dysplasia. These patients did not have evidence of Barrett’s mucosa or any other abnormal endoscopic findings.
Conclusion: Gastric cardia intestinal metaplasia is present in 30% of patients with Schatzki’s ring. CIM cannot be seen endoscopically and requires histologic examination of tissue. CIM may be associated with a clinically important malignant potential and further studies of CIM are needed.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2008032  
AVERAGE SCORE: 3.25  
PRESENTER: Ji Young Bang  
PRESENTER (INSTITUTION ONLY): Center for Interventional Endoscopy, Florida  
PRESENTER (COUNTRY ONLY): United States  
AUTH DESIG: ACG Membership Status *:  
Ji Young Bang: ACG Member  
Shantel Hebert-Magee: ACG Non-Member  
Bronte Holt: ACG Member  
Muhammad Hasan: ACG Member  
Amy Logue: ACG Non-Member  
Ashutosh Tamhane: ACG Non-Member  
Robert Hawes: ACG Member  
Shyam Varadarajulu: ACG Member  
TITLE: Impact of an Intensive, Short-Term Training Program in Cytopathology for Endosonographers  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  

Purpose: A major hindrance to establishing an accurate diagnosis in endoscopic ultrasound (EUS) is the dependence on onsite cytopathology services. The aim of this study was to assess the effectiveness of an intensive short-term training program designed to educate endosonographers about EUS-cytopathology.  

Methods: Six endosonographers (Male= 5; median age = 35 yrs) with minimal exposure to cytopathology, representing all time zones in United States, with a median annual EUS volume of 250 procedures (academic:private practice=3:3) comprised the study cohort for this pilot project. A 2-day training program was conducted at a central site in southern U.S. On day one, a pretest comprising 20 questions was administered (score range: 0 to 100). A 90-minute tutorial was then conducted by an academic cytopathologist with focus on 4 performance measures: specimen adequacy, sample interpretation (nondiagnostic, benign, atypical, neoplastic), specimen processing for ancillary testing, and preliminary diagnosis. Eight live EUS-FNA cases (5 on day 1 and 3 on day 2) were performed, and microscopic images were projected in real-time to an overhead monitor. For each case, study participants independently completed 4 questions pertaining to the performance measures (score range: 0 to 100). Similar to day 1, a post-test exam of 20 questions was administered on day 2 with assessment of performance measures. Additionally after tutoring, the ability of participants to smear/stain slides and operate a microscope was assessed. Outcome measures: 1) Compare pre- (day 1) and post-test (day 2) scores, 2) Examine learning curve (day 1 vs. day 2) for performance measures, and 3) Evaluate ability to handle specimens and operate a microscope.  

Results: When compared to the pre-test, the post-test scores of the 6 participants improved significantly from 48 to 78 (p=0.03). When the interpretation of FNA specimens from the live EUS procedures were compared between days 1 and 2, the overall performance score improved from 89 on day 1 to 100 on day 2. The corresponding individual performance measures for days 1 vs. 2 are as follows: specimen adequacy is 97 vs. 100%, sample interpretation 97 vs. 100%, specimen processing 80 vs. 100%, and preliminary diagnosis 83 vs. 100%. After training, all subjects were able to smear/stain slides and operate a microscope independently (superior rating for all).  

Conclusion: An intensive short-term tutorial was effective for training endosonographers in EUS-related cytopathology. Incorporating basic cytopathology training in EUS fellowship will likely improve the diagnostic performance of tissue acquisition procedures and will have a major impact in advancing EUS-FNA worldwide.  

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes  
Extra Info: Dr Varadarajulu is a consultant for Boston Scientific Corporation and Olympus Medical Systems. Dr Hawes is a consultant for Boston Scientific Corporation and Olympus Medical Systems. Dr Hebert-Magee is a consultant for Boston Scientific Corporation. Dr Hasan is a consultant for Boston Scientific Corporation.  
Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: Yes
CONTROL ID: 2037721
AVERAGE SCORE: 5.25
PRESENTER: Alexander Weick
PRESENTER (INSTITUTION ONLY): Henry Ford Hospital
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Alexander Weick: ACG Non-Member
Vinay Katukuri: ACG Non-Member
TITLE: Practice patterns of endoscopic ultrasound (EUS) with fine needle aspiration in pancreatic mass lesions
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: To investigate current practice patterns with regards to fine needle aspiration (FNA) of pancreatic mass lesions in the United States.
Methods: A 13-question online survey was sent to members of the American Society for Gastrointestinal Endoscopy (ASGE) within the United States. Categorical data were analyzed using Fisher's exact tests.
Results: A total of 298 responses were received of which 118(46.8%) were in academic setting and 119(47.2%) were in community practice. 71% of respondents performed at least 100 EUS procedures in the past year and another 18% performed between 50 and 100 procedures. 79% performed both EUS and ERCP. Interestingly, 54.5% used primarily 22 gauge needle as compared to 44% who preferred 25 gauge needle. Not surprisingly, academic practitioners had an on-site cytopathologist available 84% of the time, compared to 76% for community and 36% for independent practitioners (p value <0.05). Most of the practitioners consider using stylet during the FNA procedures (80% vs 20%) irrespective of their practice setting. 11% of academic practitioners regularly performed >6 passes per pancreatic mass lesion, compared to 3% for community and 36% for independent practitioners (p <0.05).

82% of academic practitioners had no minimum size of pancreatic mass lesion in which they considered performing FNA, compared to 74% for community practice (p 0.33). Providers who perform high volume of EUS procedures are more likely to consider repeating EUS/FNA if the initial procedure was non-diagnostic (75% vs 96%), (p <0.05). There is a trend towards performing higher volume of EUS procedures resulting in less likelihood of evaluating the superior mesenteric artery (SMA) for pancreatic cancer involvement with EUS. Similarly, academic practitioners are less likely to evaluate the SMA involvement as compared to private practice providers.
Conclusion: Among members of ASGE who responded to our online survey, there was only a slight variation in practice patterns between the academic and community practice providers. Despite evidence that 25 gauge needles are as efficacious as 22 gauge needles, respondents still primarily use 22 gauge needles, perhaps due to comfort with an established modality. This also explains why the majority of practitioners use a stylet during FNA. Finally, academic practitioners and the providers with high volume of EUS procedures were less likely to evaluate the SMA during EUS than their peers, perhaps due to the availability of radiology services for accurate tumor staging and thus making evaluation of the SMA with EUS at times unnecessary.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Industry
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2039211
AVERAGE SCORE: 5.5
PRESENTER: Salman Nusrat
PRESENTER (INSTITUTION ONLY): University of Oklahoma Health Sciences Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Salman Nusrat: ACG Member
Owais Bhatti: ACG Non-Member
Muhammad Saad: ACG Non-Member
Mohammad Madhoun: ACG Non-Member
TITLE: Hemostatic Spray: What's the most current evidence?
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: At times either because of location, extent or lesion features hemostasis can be difficult to achieve. We aimed to analysis the clinical outcomes of patients who were treated with hemospray either for primary hemostasis or when bleeding was refractory or not amenable to well establish therapy.
Methods: To identify pertinent case reports, case series and clinical trials we searched the abstracts presented at Digestive Disease Week 2014 and the pubmed data base using the keywords hemospray, hemostatic spray, TC-325, and spray until June 2014. The demographic information, location and type of lesion, effectiveness, rate of recurrence and complications were extracted and recorded.
Results: A total of 18 studies were identified and provided data on 206 patients. The mean age of the patients was 59.39 years and 74.2% were males. Following lesions were treated varices n=2, esophageal ulcers n=8, peptic ulcers n=114, portal hypertensive gastropathy n=4, Diculafoy lesions n=4, tumors n=10, iatrogenic; post polypectomy bleed n=6, post-endoscopic mucosal resection n=16, post banding ulcers n=2, post sclerotherapy ulceration n=1, post spinterotomy n=5, anastomosis n=1, others (MWT, arteriovenous malformation, GAVE, diverticular, fistula, colonic ulcers, Post halo therapy and proctitis) n=15 and unidentified or not reported (NR) n=18. Of the lesion treated (actively bleeding 96.2%) 10.6% were in the esophagus, 28% were in the stomach, 41.3% in the small intestine and 12.1% in the colon. Hemospray was used as first line therapy in 58.7% of the case and as salvage therapy in 39% of the patients (NR in 2.3%). The immediate hemostasis was achieved 89.4% of the patients (93.1% for the salvage procedures). Recurrent bleeding within 7 days was reported in 15.3% of the patients. Complication were noted in 2.1% of the patients and included possible splenic infarct, perforation and transient obstruction of hiliary obstruction. Mortality in the perioperative period (mostly thought to be unrelated to the procedure itself) was reported in 2.9% patients.
Conclusion: Our review of literature showed that hemospray is safe and effective. As it is easy to use, doesn't need direct targeting and can cover a large surface area it might have an advantage over routinely used hemostatic therapies in situations like tumor bleed, post EMR bleeding and posterior duodenal blub ulcers. However, prospective randomized trials are needed before routine use of hemospray can be recommended.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
TITLE: Factors affecting adverse outcomes during colonoscopy

Purpose: To determine the factors associated with increased adverse outcomes during a colonoscopy.

Methods: A retrospective review from June 2012 to June 2013 was performed to identify patients who underwent an outpatient colonoscopy. In order to identify potential risk factors for complications, we separated groups based on the occurrence of complications (Major complications including perforation, bleeding and death and Minor complications including hypotension, hypertension, hypoxia, apnea and pain) and compared these individuals to the rest of the group. Demographic information, co-morbidities, medications, procedural indication, sedation doses, procedural duration, and adverse events were extracted.

Results: Total of 612 patient were identified. Overall complication rate was low and there were no major complications. Minor complications were identified in 56 patients. Age, comorbid conditions, medical therapy and procedure duration were similar (Table 1). However, patients suffering complications were more likely to be on opioids (66% vs. 55.6%, p=0.04) and active smokers (42.8% vs. 22.6, p=0.01). Looking specifically at patients with documented pain during colonoscopy we noted these patients had longer procedural duration (40.3 vs. 35.9, p=0.04) and required higher dose of sedation with fentanyl (131.0 mcg vs. 112.3 mcg, p=0.003) and versed (6.2mg vs. 4.7mg, p=0.007) during procedure.

Conclusion: It is important to recognize chronic opioid use as a risk factor for adverse outcomes during colonoscopy. Adequate sedation and pain control can potentially help shorten duration of colonoscopy.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: Yes

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
CONTROL ID: 2039375
AVERAGE SCORE: 4.75
PRESENTER: Sergey Kantsevoy
PRESENTER (INSTITUTION ONLY): University of Maryland School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Sergey Kantsevoy: ACG Non-Member
Marianne Bitner: ACG Non-Member
Deborah Hockett: ACG Non-Member
Deborah Pennington: ACG Non-Member
Karen Chapman: ACG Non-Member
Kathleen Maier: ACG Non-Member
April Vilches: ACG Non-Member
Barbara O’Neil: ACG Non-Member
TITLE: Visualization Balloon Allows Successful Performance Of Colonoscopy In Patients With Prior Documented Difficult Colon Anatomy: A Pilot Clinical Study.
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Traditional colonoscopy with air or carbon dioxide (CO2) insufflation can be difficult in patients with long, redundant, and tortuous colons. Insufflation of gas lengthens the colon and makes colonoscope navigation towards the cecum difficult and sometimes even impossible. A proprietary visualization balloon, (Vizballoon™) was recently introduced into clinical practice in the USA. Use of Vizballoon™ eliminates the need for air or CO2 insufflation and facilitates advancement of the colonoscope through the colon.
Methods: We performed Vizballoon™-assisted colonoscopies in patients with documented previous difficult colonoscopies. Prior to the start of the procedure, Vizballoon™ was inserted through the biopsy channel of adult colonoscope (CF 190, Olympus, Tokyo, Japan) and filled with 5 ml of water. Then the colonoscope with Vizballoon™ was inserted into the rectum and advanced without any gas insufflation until the cecum was reached. At this point the water was aspirated from the balloon and the Vizballoon™ was removed. The CO2 was insufflated to optimize visualization of the colonic lumen during withdrawal of the Vizballoon™ colonoscope.
Results: Vizballoon™-assisted colonoscopies were performed in 4 consecutive patients with known previous difficult colonoscopies, performed in the past with CO2 insufflation. Previous colonoscopies in these patients required significant amount of external pressure and changes in patient position in order to reach the cecum. Technical difficulties during prior colonoscopies were caused by long, redundant colons (2 patients), and tortuous colons with diverticuli and multiple fixed turns (2 patients). In all study patients the colonoscope with Vizballoon™ was easily advanced to the cecum (within 3.75-12 minutes) without any external pressure or change in patient position. None of the study patients had any abdominal discomfort after colonoscopy.
Conclusion: In patients with documented difficult colonic anatomy, use of the visualization balloon eliminates the need for gas insufflation during advancement to the cecum. Balloon assistance makes colonoscopy technically easier, faster, and increases the likelihood of successfully reaching the cecum without the application of external pressure or change in patient position.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: Yes
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039523
AVERAGE SCORE: 4.75
PRESENTER: Yezaz Ghouri
PRESENTER (INSTITUTION ONLY): University of Texas- Health Science Center at Houston
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Yezaz Ghouri : ACG Non-Member
Ankur Varma : ACG Non-Member
Sachin Batra : ACG Non-Member
Nirav Thosani : ACG Member
Mehnaz Shafi : ACG Member
Sushovan Guha : ACG Member
TITLE: Overt Gastrointestinal Bleeding and Predictors of Rebleeding in Hematologic Malignancies
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: GI bleeding in patients with hematologic malignancies is not well studied. These patients tend to have lower platelet counts and/or dysfunctional platelets which are strong predisposing factors for bleeding distinguishing them from other groups. We aim to determine the various etiologies for GI bleeding and predictors of rebleeding in this group of patients.
Methods: We performed a retrospective chart review of all individuals who underwent EGD and colonoscopy for overt bleeding between 2009 to 2011, at our institution. We studied the etiologies of GI bleeding and the incidence and risk factors for rebleeding among patients with hematologic malignancies. The study population was followed for rebleeding after their index bleeding episode. The predictors of rebleeding were determined using competing risk regression with death as a competing event.
Results: The study population consisted of 79 patients with an index bleed, of which 50 underwent EGD and 44 underwent colonoscopy (15 had both). Amongst these, 13 (17%) had hematemesis, 31 (39%) had melena and 35 (44%) had hematochezia at presentation. The mean age of the patients was 61 years [58-64 at 95% CI], male:female ratio was 57:43 and 72% were Caucasians. There were 40 patients with leukemia (51%), 28 with lymphoma (35%) and 11 with multiple myeloma (14%). The etiologies for bleeding have been described in tables 1 and 2. The median follow up time was 7.5 months (0.3 - 55.3) during which 16 patients had a rebleeding episode. The incidence of rebleeding was 1.2% [0.7-1.9 at 95% CI] per patient month. Patients with multiple myeloma were 3.5 times more likely to rebleed after adjusting for demographics, platelet count, INR and WBC count.
Conclusion: In patients with hematologic malignancies, the presence of multiple myeloma and with underlying thrombocytopenia increases the risk of recurrent GI bleeding.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036405
AVERAGE SCORE: 5
PRESENTER: Sherif Elhanafi
PRESENTER (INSTITUTION ONLY): Division of Gastroenterology, Department of
Tech University Health Sciences Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Sherif Elhanafi : ACG Member
Yi Jia : ACG Member
Mohamed Othman : ACG Member
Jiayang Liu : ACG Non-Member
Alok Dwivedi : ACG Non-Member
Marc Zuckerman : ACG Member
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Evaluation of the small bowel with balloon-assisted enteroscopy provides a minimally invasive diagnostic and therapeutic approach to small bowel disorders. Single-balloon enteroscopy (SBE) was introduced as an alternative to double-balloon enteroscopy. However, there is limited data available on its clinical utility. The aim of this study was to evaluate the clinical utility of SBE and its impact on the diagnosis and management of small-bowel disorders in a university hospital setting on the US-Mexico border.
Methods: We conducted a retrospective chart review study on all SBE procedures done at the university hospital from September 2011 until February 2014. All SBE done for the purpose of feeding tube placement (9) or ERCP assistance (11) were excluded. Patient demographics, clinical characteristics, endoscopy procedure data and complications were reviewed. ANOVA test, Fisher’s exact test and Chi-square test were performed to compare variables in different procedure routes.
Results: A total of 90 SBE procedures were done in 68 patients. The mean age of patients was 60±18.6 years, 37 (54%) were females and 34 (50%) were Hispanics. The main indications were Iron deficiency anemia in 39 (43%), overt gastrointestinal bleeding in 33 (39%), abdominal pain in 7 (8%), chronic diarrhea in 3 (3.3%), and others in 6 (6.6%). The approach used was antegrade in 44 (48.9%), retrograde in 32 (35.6%) and antegrade after gastric bypass surgery in 14 (15.5%). The mean duration of procedures was greater in retrograde (99±33.4 min) compared with antegrade (82.5±38.7 min) (p=0.05). The mean depth of insertion was greater in the antegrade approach (217.5±57.9 cm beyond the pylorus) compared with the retrograde approach (94.8±71.1 cm beyond ileocecal valve) (p<0.001) Diagnostic yield was 42.2%. Findings on SBE included angioectasia in 10, erosions in 9, ulcers in 6, polyps in 6, submucosal lesions in 3, strictures in 2, others in 2. Of the 90 SBE studies, 46 (51%) were preceded by video capsule enteroscopy (VCE) with positive findings, 8 (8.9%) were preceded by a normal VCE study and 36 (40%) were not preceded by VCE. The SBE was successful in 44/44 (100%) antegrade procedures, in 23/32 (72%) retrograde (>20 cm beyond ICU), but only 8/14 (57%) post-bypass (reached the excluded stomach). Therapeutic and diagnostic interventions were performed in 22/90 (24.4%) procedures (hemostasis in 13, polypectomy in 4, tissue sampling in 5. There were no complications reported.
Conclusion: Single-balloon enteroscopy was a safe procedure with a high diagnostic yield for small bowel disorders and was useful for therapeutic interventions. Compared with the retrograde approach, the antegrade approach was more successful and achieved a greater depth of insertion.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
TITLE: Mapping of endoscopy unit workflow in a tertiary care teaching hospital

Awards:

Current Category: K. Endoscopy

Current Sub-Category: None

Presentation Type: Oral or Poster

ACG Research Grant Support: No

Purpose: Background: With the implementation of Affordable Care Act, there will be a shift from volume to value-based reimbursement and a greater emphasis on efficiency and cost-effectiveness of health services including endoscopy. These challenges will stress endoscopy units to focus on maximizing resource use while maintaining quality patient care. Measuring unit efficiency is complex, especially in units where a variety of routine and complex procedures are performed. Defining key steps that affect unit workflow is essential to development of a "value-stream map" and then implementing "Lean" methodology to enhance functioning. Although a few studies have evaluated factors that cause delay and decreased efficiency in endoscopy suites, data about workflow mapping in a large tertiary academic center are lacking. Objective: To create a value-stream map for performance of inpatient endoscopies at a 950-bed tertiary teaching hospital endoscopy unit and implement specific efficiency-enhancing measures.

Methods: We analyzed electronically collected data of all inpatient endoscopic procedures for September and November 2013 and recorded temporal metrics for patient flow beginning from the patient unit, through the procedure, and transport back. We pre-defined major process steps and determined time between each as follows: a) transport, b) pre-procedure, c) in-procedure, and d) post-procedure until discharge (from unit).

Results: There were 119 and 143 inpatient endoscopic procedures (colonoscopy, EGD, ERCP and EUS) for each of the two months, respectively. Average "transport time" was 42-46 ±15 mins; "pre-procedure time" 44-56±28-33 mins; "in-procedure time" 49±25 mins, and "post-procedure time" 44-49±20-24 mins. On average we noted a delay of 50-57±44 mins compared to the scheduled procedure. Using a Six Sigma team, we conducted detailed observational analyses of the process flow. We established goal times as follows: transport time 20 mins, pre-procedure time 30 mins, and will analyze in-procedure and post-procedure times. Using these metrics, we will define process components that prevent attaining these goals.

Conclusion: Our data provide required preliminary information for mapping out individual steps needed for inpatient endoscopies and help identify interventions to enhance efficiency and overall patient experience. After further analyses of processes and resulting data, we will identify specific barriers to achieving time goals with subsequent relevant interventions that add value to the process. This analysis will potentially serve as a model for similar teaching institutions as they strive to be efficient and financially sustainable with high patient satisfaction and excellent outcomes.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: No

Abstract Author: Investigator
CONTROL ID: 2039096
AVERAGE SCORE: 4.5
PRESENTER: Javier Nieves
PRESENTER (INSTITUTION ONLY): University of South Florida
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Javier Nieves : ACG Member
Seth Lipka : ACG Member
Ashok Shiani : ACG Non-Member
Kerolos Fahmi : ACG Non-Member
Sahab Mustafa : ACG Non-Member
Ambuj Kumar : ACG Non-Member
Patrick Brady : ACG Member
TITLE: Degree of concordance between single balloon enteroscopy and capsule endoscopy for obscure gastrointestinal bleeding after an initial positive capsule

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: In patients with obscure GI bleed (OGIB) capsule endoscopy (CE) is the initial diagnostic procedure of choice. Often patients undergo single balloon enteroscopy (SBE) with both diagnostic and therapeutic intention after CE. Although SBE offers a therapeutic benefit, long procedure times, complexity, and invasiveness are drawbacks. We aimed to evaluate the diagnostic correlation between these two modalities after an initial positive CE finding.

Methods: We performed a retrospective review of 418 patients that underwent CE at our institution from 1/2010-5/2014. 41 patients were analyzed after selecting patients that underwent SBE originally after a positive CE result for the evaluation for OGIB. Agreement beyond chance was evaluated using kappa coefficient. A p-value ≤5% was considered statistically significant.

Results: Mean age of our population was 67.2 +/-11.5 and was a male predominant group 27/41(65.9%). The most frequent positive finding were vascular lesions in SBE 36.6%, and 82.9% in CE. There was a fair agreement when looking at ulcers 0.38(0.22,0.54; p=0.015), and a slight agreement when diagnosing active bleeding/clot 0.17(0.001,0.34;p=0.05). There was low correlation with vascular lesions, mass, polyps, and others. Most lesions were detected in the duodenum in CE 100% with jejunum the most likely location in SBE. 67.9% and 38.5% with CE and SBE, respectively.

Conclusion: CE and SBE have a fair agreement for ulcers, and a slight agreement for active bleeding/clot. Further prospectively collected data is needed to confirm these findings.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2037470
AVERAGE SCORE: 4.5
PRESENTER: Hussein Al-Hamid
PRESENTER (INSTITUTION ONLY): St John Hospital and Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Hussein Al-Hamid : ACG Non-Member
Wuttiporn Manatsathit : ACG Non-Member
Steve Chausse : ACG Non-Member
Hussein Ballout : ACG Non-Member
Mohammed Barawi : ACG Non-Member
TITLE: Does Intravenous Toradol Lower the Risk for Post-Endoscopic Retrograde Cholangiopancreatography Pancreatitis?
AWARDS: Naomi Nakao Gender Based Research Award/Radhika Srinivasan Gender Based Research Award/ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: Post-ERCP pancreatitis (PEP) is not an uncommon complication after endoscopic retrograde cholangiopancreatography (ERCP) with incidence rate ranges from 1-40%. Cyclooxygenase 1 and 2 inhibition is the basis for non-steroidal anti-inflammatory drugs in preventing PEP. Rectal indomethacin was proved by randomized trial to reduce PEP. Intravenous (IV) toradol is potentially superior to other NSAIDs since it is easier to administer, more convenient to use and has better predicted bioavailability and higher potency. Objective: To test the effectiveness of IV toradol in reducing PEP and to identify isolated risk factors for PEP in an average case volume tertiary center.

Methods: Retrospective case-control chart review of all adult patients who had their ERCP procedure at St John Hospital and Medical Center between June 1st, 2011 and March 1st, 2014. To maintain statistical independence, only the first ERCP procedure per each patient was included. Intervention phase was started on June 1st, 2012, during which every patient received an injection of IV toradol prior to ERCP. Patients who did not receive IV toradol during the intervention phase were excluded. PEP was defined by the consensus criteria definition as any new or worsening abdominal pain associated with amylase and/or lipase levels three times normal levels 24 hours after the procedure, and requiring more than one night of inpatient management. We calculated pre-procedure risk score for each patient by modeling risk-scoring systems used in other studies. PEP cases were identified by reviewing patients' electronic charts. We recorded various demographic data, pertinent medical history and ERCP-procedural details and compared these variables between patients who had PEP and those who did not in order to identify isolated risk factors for PEP.

Results: Out of 210 ERCP procedures performed on 210 different patients during the study period, only 8 patients were excluded. The majority of patients were intermediate-high risk. There was no significant difference in PEP rate between patients who received IV toradol and those who did not receive IV toradol (7/91, 7.7%) vs. (13/111, 11.7%) respectively (p=0.47). Suspected sphincter of Oddi dysfunction, biliary sphinctor manometry and higher risk scores were significantly associated with PEP. Patients with higher total bilirubin levels had significantly lower PEP rate. Expert ERCP operators had lower PEP rates compared to less experienced operators. Regression analysis identified biliary sphincter manometry and procedure operator as best two predictors for PEP.

Conclusion: IV toradol did not lower PEP rate significantly. Multi-center randomized trials might be necessary.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037903
AVERAGE SCORE: 4.5
PRESENTER: Carson Keck
PRESENTER (INSTITUTION ONLY): Mercer University School of Medicine
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Carson Keck : ACG Nor-Member
Mudit Chowdhary : ACG Non-Member
Minh Hang : ACG Non-Member
Ali Keshavarzian : ACG Member
Shahriar Sedghi : ACG Member
TITLE: Novel Cost Effective Application of Multiband Ligator in Endoscopic Mucosal Resection
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Endoscopic band ligation is approved for eradication of esophageal varicose and hemorrhoids. This technique has also been used to provide hemostasis for post-polypectomy bleed and tissue consolidation for snare resection. A potential unused application is for prophylactic banding of high bleeding risk resection sites instead of clips. With a simple change of scope, it can replace looping/band devices. It can also provide better prophylactic hemostasis by opposition of healthy tissues together and extend tissue resection margins. In addition, multiband ligators could prove to be more cost effective. Our aim was to retrospectively assess the efficacy of multiband ligation in aiding EMR in the GI tract.
Methods: Twenty patients underwent EMR using a Boston Scientific multiband ligator. Tissue diagnosis was known prior to EMR by biopsy or was made following resection. Single or multiband ligation was used with or without submucosal saline injection prior to snare resection to collect tissue and/or post resection to reduce bleeding risk and increase resection margins. In high-risk cases, ligation alone was performed. Table 1 summarizes removed lesions. The specific EMR technique used reflected size, histology, location of the lesion and comorbidities.
Results: Follow-up endoscopies were performed in all patients confirming successful lesion removal with no post-procedure complications.
Conclusion: The multiband ligator seems to be a safe, low cost and effective adjunct to EMR. This method alone also proved to be effective for removal of lesions in patients with resection contraindicated. Further studies are recommended to confirm the widespread efficacy of the multiband ligature method.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2037295
AVERAGE SCORE: 4.5
PRESENTER: Umangi Patel
PRESENTER (INSTITUTION ONLY): University of Pennsylvania Health System
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Umangi Patel : ACG Non-Member
Caroline Kemer : ACG Member
Chantal Lewis : ACG Non-Member
Amol Agarwal : ACG Non-Member
Patricia Ford : ACG Non-Member
TITLE: Outcomes in Bloodless Medicine Patients with Acute Gastrointestinal Bleeding
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Red blood cell transfusion is often indicated in acute gastrointestinal bleeding (GIB), but some patients refuse blood transfusion for personal or religious reasons. Limited data exists regarding the clinical management and outcomes in this population. We describe the in-hospital mortality and endoscopic outcomes of patients with overt GIB.
Methods: A single center retrospective cohort study was performed using the clinical database of the Bloodless Medicine referral center at a university-affiliated hospital. Inclusion criteria were age 18 years or older, inpatient admission between January 2007 and January 2014, an ICD-9 diagnosis code for GIB, and documented refusal of blood transfusion.
Results: Ninety-two patients (63% female, 37% male) met inclusion criteria. Mean age was 68 years (range 20-97) with a median length of stay of 5 days (range 0-48 days). A source of bleeding was documented in 86% of patients (35% upper, 51% lower, and 14% undetermined). For medical therapy, 76% received intravenous iron, 75% received erythropoietin, and 30% received aminocaproic acid. In-hospital mortality was 8.6%. Fifty-two patients (56%) underwent endoscopy (45% EGD, 30% colonoscopy, and 25% both). In the endoscopy group, mean admission hemoglobin was 9.2 g/dL (range 4.5-14.7), mean nadir hemoglobin was 7.8 g/dL (range 3.5-14.3) and in-hospital mortality was 1.9%. A source of bleeding was identified on endoscopy in 61% of patients. Of the 40 patients who did not undergo endoscopy, mean admission hemoglobin was 8.9 g/dL (range 3.5-14.9), mean nadir hemoglobin was 7.3 g/dL (range 3.1-13.2), and in-hospital mortality was 17.5%.
Conclusion: In carefully selected Bloodless Medicine patients, endoscopy is safe and effective in the evaluation and treatment of acute GIB.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036092
AVERAGE SCORE: 4.5
PRESENTER: Sofia Nigar
PRESENTER (INSTITUTION ONLY): Columbia Presbyterian Medical Center
PRESENTER (COUNTRY ONLY): United States

AUTH DESIG: ACG Membership Status:
Taruna Bhatia: ACG Member
Muhammad Virk: ACG Member
Sofia Nigar: ACG Non-Member
Manhal Izzy: ACG Member
Faraj Karagoli: ACG Non-Member
Sury Anand: ACG Non-Member

TITLE: Endoscopic PEG Replacement versus External PEG replacement: An Outcome Analysis

AWARDS:

CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: Since its introduction in the early 1980s percutaneous endoscopic gastrostomy (PEG) has become the modality of choice for providing long-term enteral nutrition in patients with inadequate oral intake. PEG tubes have to be periodically replaced due to wear and tear, migration, leakage and infection. Limited data is available regarding the preferred method of replacement: endoscopic versus external PEG replacement. This study compared the outcomes of both procedures in the inpatient setting.

Methods: This is a retrospective study conducted at The Brooklyn Hospital Center. Records of patients who underwent inpatient PEG replacements within a three-year period were reviewed. Data regarding PEG replacement, demographics, length of stay, PEG-related complications, PEG-related morbidity and mortality was collected. SAS was used for statistical analysis.

Results: We reviewed 349 PEG replacement encounters among which 251 were endoscopic (Group A) and 98 were external (Group B). Mean age in Group A was 80.3±11.7 while in Group B mean was 83.1 ±11.9. The period between PEG replacement and patient discharge was 4.9 days in group A and 5.2 in group B (p <0.001). During a mean follow up period of 280 (± - 311) days PEG dislodgement or leaks were noted in 12.4% of Group A and 19.5% of Group B (p=0.03). There was no statistically significant difference between the two groups in PEG-related readmissions, post-PEG cellulitis or aspiration pneumonia. Kaplan Myer survival analysis did not reveal significant difference in survival between two groups.

Conclusion: In this study, long-term follow up showed a decrease in PEG dislodgements and leaks in the endoscopic PEG replacement group compared to the external PEG replacement group. There appeared to be shorter hospital stay in the endoscopic group but this could have been influenced by co-morbidity. Procedure related complication between both groups did not appear significantly different.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: No

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
CONTROL ID: 2038910
AVERAGE SCORE: 4.25
PRESENTER: Mustafa Huseini
PRESENTER (INSTITUTION ONLY): Geisinger Medical Center
PRESENTER (COUNTRY ONLY): United States

AUTH DESIG: ACG Membership Status *
Mustafa Huseini : ACG Member
Kimberly Fairley : ACG Member
Kimberly Chaput : ACG Member
Amir Rezk : ACG Member
C.Nishal Ravindran : ACG Non-Member
Michael Komar : ACG Member
Nicholas Inverso : ACG Non-Member

TITLE: Is Body Mass Index an Independent Predictor of Inadequate Bowel Preparation

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Poster Only (Will not be considered for oral presentation)

ACG Research Grant Support: No

Purpose: Colonoscopy and polyp detection is largely dependent on the quality of bowel preparation. There is evidence that suggests higher polyp detection rate related to higher quality bowel prep. But to our knowledge there is only one study that has evaluated the effect of BMI on quality of bowel prep.

Methods: We performed a prospective analysis of 944 consecutive adult outpatients undergoing colonoscopy between 02/2013- 07/2013. Patients with an ileocolonic or colonic bowel resection, chronic kidney disease (CKD) > stage III, or pregnancy were excluded from the analysis. Patient demographic information including body mass index (BMI) at the time of endoscopy was recorded. Obese patients were categorized as having a BMI > 29.9 kg/m2. Normal weight patients were classified as a BMI < 25 kg/m2. Physicians were asked to score the quality of the bowel preparation as 1) clear 2) mostly clear and some flecks 3) colored but can see through liquid 4) dark liquid stool 5) semi-solid stool and 6) solid stool present after they completed the endoscopy. A good, fair, or poor prep was defined as scores of 1-2, 3, or 4-6, respectively.

Results: Complete data was available on 854 of the above patients. 409 of the patients were classified as obese whereas 175 patients were of normal weight. The average BMI was 31.4 kg/m2. Of the obese patients, 96 (23.5%), 69 (16.8%), and 244 (59.7%) had poor, fair, and good preparations, respectively. Of the normal weight patients, 25 (14.3%), 24 (13.7%), and 126 (72.0%) had poor, fair, and good preparations, respectively.

Conclusion: We observed a direct correlation between the quality of the bowel preparation and body mass index. A higher BMI was associated with a poor bowel preparation. This data is useful in making clinical recommendations for helping patients prepare for a high quality colonoscopy.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2036678  
AVERAGE SCORE: 4.25  
PRESENTER: Bing-Rong Liu  
PRESENTER (INSTITUTION ONLY): The Second Affiliated Hospital Of Harbin  
PRESENTER (COUNTRY ONLY): China  
AUTH DESIG: ACG Membership Status *:  
Bing-Rong Liu : ACG Non-Member  
Lingjian Kong : ACG Non-Member  
TITLE: Endoscopic full thickness gastric wall resection for tumors originating from deep muscularis propria  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  

Purpose: To investigate the feasibility and efficacy of endoscopic full thickness resection (EFR) for treatment of gastric submucosal tumors originating from deep muscularis propria (deep-MP).  

Methods: The tumor was dissected by EFR: 1. Douching the esophagus and stomach with normal saline and antibiotic.  
2. Precutting the overlying mucosa above the lesion.  
3. Exposing and dissecting the tumor away from muscularis propria by using IT knife, SB knife or the blunt dissection.  
4. Closing the perforation with endoclips and loops.  

Results: The en bloc resection rate was 100% (17/17). The average lesion size was 39mm (25-56mm). Results of pathologic studies: 11 were leiomyomas, 6 was GI stromal tumors. No serious symptoms of peritonitis after the EFR. No recurrence was observed during 3 to 16 months follow-up.  

Conclusion: Endoscopic full thickness gastric wall resection is a safe and feasible method for gastric deep-MP tumors.  

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  
Initiated Research: Investigator  
FDA Approval: No  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: No  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: No  
Supported by Industry Grant: No
CONTROL ID: 2039065
AVERAGE SCORE: 4
PRESENTER: Saurabh Mukewar
PRESENTER (INSTITUTION ONLY): Mayo Clinic
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Saurabh Mukewar : ACG Member
Nitin Kumar : ACG Member
Pichamol Jirapinyo : ACG Non-Member
Haasan Ghoz : ACG Non-Member
Christopher Thompson : ACG Member
Christopher Gostout : ACG Member
Barham Abu Dayyeh : ACG Member
AWARDS: ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: Weight regain or insufficient loss after Roux-en-Y gastric bypass (RYGB) is common. A dilated gastrojejunal Anastomosis (GJA) is associated with weight regain in patients with Roux-en-Y gastric bypass (RYGB). Due to a high rate of perioperative morbidity, surgical revision is generally not performed. Endoscopic transoral outlet reduction (TORe) by various techniques have shown safety and early efficacy for this indication. We conducted a systematic review and meta-analysis to pool the results and compare various endoscopic techniques.
Methods: MEDLINE, Embase, and Web of Science were searched to identify relevant abstracts and full-length articles. Corresponding authors of selected studies were contacted to get additional data. Pooled absolute weight loss at 6, 12, and 18 months were calculated using a random-effects meta-analysis. Standard difference in means over sham was calculated based on two randomized sham-controlled trials to calculate efficacy over sham.
Results: Eleven studies with 408 post-RYGB patients undergoing TORe for weight regain were included in the meta-analysis. Body mass index (BMI) prior to TORe was 39.6 ± 2 kg/m2. At 6, 12, and 18 months patients lost 6.8kg [95%CI 5.8-6.8] (n=408), 6.4kg [95%CI 3.6-9.2] (n=299), and 7.2kg [95%CI -2 -16.4] (n=37), respectively (table 1). Full thickness suturing with the overstitch device was the most effective and durable endoscopic intervention for weight regain resulting in absolute weight loss of 8.8kg [95%CI 6.5-11] and 11.5kg [0 - 23] at 12 and 18 months, respectively. TORe resulted in significant weight loss over sham at 6 months based on two high quality (Jadad score 4/5) randomized trials, standard difference in means -0.5 (p=0.004). Procedure was well tolerated with no major complications.
Conclusion: TORe is a safe, effective, and minimally invasive endoscopic approach for the treatment of weight regain after RYGB that is ready for wide clinical adaptation.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
CONTROL ID: 2039090
AVERAGE SCORE: 4
PRESENTER: Michel Kahaleh
PRESENTER (INSTITUTION ONLY): Weill Cornell Medical College
PRESENTER (COUNTRY ONLY): United States

AUTH DESIGN: ACG Membership Status *:
Kunal Karia : ACG Non-Member
Irving Waxman : ACG Non-Member
Vani Konda : ACG Non-Member
Frank Gress : ACG Member
Amrita Sethi : ACG Member
Uzma Siddiqui : ACG Member
Reem Sharaiha : ACG Member
Prashant Keida : ACG Non-Member
Armeen Jamal-Kabani : ACG Non-Member
Monica Gaidhane : ACG Non-Member
Michel Kahaleh : ACG Member

TITLE: Needle Based Confocal Endomicroscopy for Pancreatic Cysts: Is There Any Agreement in Interpretation?

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster

ACG Research Grant Support: No

Purpose: The diagnosis of pancreatic cystic lesions (PCLs) remains challenging. Endoscopic ultrasound (EUS) with fine needle aspiration (FNA) is limited by sampling error and nondiagnostic cytology samples. Needle-based Confocal Laser Endomicroscopy (nCLE) performed at the time EUS can be used to improve diagnostic yield via FNA by providing in-vivo histology of PCLs. However, the interobserver agreement (IOA) of nCLE of PCLs has yet to be studied.

Methods: De-identified video clips from 15 patients who underwent nCLE at the time of EUS-FNA of PCLs via the AQ-Flex™ 19 Miniprobe (Cellvizio; Mauna Kea Technologies, Paris, France) were sent out to 6 interventional endoscopists at 3 institutions. Each endoscopist had familiarity of interpreting nCLE images. Six variables were assessed for interobserver agreement using the Fleiss kappa statistic which included presence or absence of (1) vessels, (2) villi, (3) dark clumps, (4) reticular pattern, (5) acinar cells and (6) debris. Interpretation of the PCL was categorized as mucinous, serous, pseudocyst, malignant or indeterminate, and final diagnosis as benign, malignant or indeterminate. Each endoscopist also rated the quality of each nCLE clip as excellent, good, or poor.

Results: Overall IOA was 'slight' for all variables. The K statistics are as follows: vessels (K=0.04, SE=0.05); villi (K=0.16, SE=0.07); dark clumps (K=0.22 SE=0.06); reticular pattern (K=0.13, SE=0.06); acinar cells (K=0.14, SE=0.06); debris (K=0.06, SE=0.06); interpretation (K=0.15, SE=0.03); final diagnosis (K=0.13, SE=0.05); and image quality (K=0.19, SE=0.05); The final diagnosis was malignant (10), benign (13), and indeterminate (2). The mean accuracy of the observers was 46%, with the lowest being 20% and highest being 67%.

Conclusion: The IOA in this study was limited by the small sample size of nCLE clips. As nCLE is not usually performed in isolation, it is likely the IOA would be stronger if the endoscopists were provided with clinical information (lab values, imaging, etc) to review in conjunction with the nCLE clips. Continued and regular use of nCLE by interventional endoscopists will also raise the accuracy of final diagnoses.

1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
   Extra Info: 
   1. Michel Kahaleh MD has received grant support from Boston Scientific, Fujinon, EMcision, Xlumena Inc., MaunaKea, Apollo Endosurgery, ASPIRE Bariatrics, GIDynamics and MJ Tech. He is a consultant for Boston Scientific and Xlumena Inc.
   2. Amrita Sethi is a consultant for Boston Scientific

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
CONTROL ID: 2038740
AVERAGE SCORE: 4
PRESENTER: Rani Modayil
PRESENTER (INSTITUTION ONLY): Winthrop University Hospital
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Rani Modayil: ACG Member
David Friedel: ACG Non-Member
Maria Marotta-Kollars: ACG Non-Member
James Grendell: ACG Member
John Allendorf: ACG Non-Member
Stavros Stavropoulos: ACG Member
TITLE: Endoscopic Suturing Registry: A Single Center’s Two-Year Experience
AWARDS: ACG Obesity Award
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: The full thickness endoscopic suturing device, a relatively inexpensive device with a short learning curve, has demonstrated a broad array of applications ranging from promoting weight loss through endoscopic bariatric surgery to closure of full-thickness intentional or accidental defects during NOTES procedures. This is a prospective observational single center registry and likely the largest single operator series worldwide. The aim of this study is to determine the patterns of use, efficacy and safety of the endoscopic suturing device.

Methods: From 6/2012-6/2014, consecutive patients (pt) were enrolled from a single institution. All procedures performed by one gastroenterologist (SNS) with extensive interventional endoscopy experience. Data was retrieved from a prospectively maintained database.

Results: 161 procedures were performed including 80 per oral endoscopic myotomy (POEM) submucosal tunnel closures, 19 endoscopic full thickness resection (EFTR) defect closures, 5 submucosal tunnel endoscopic resection (STER) submucosal tunnel closures, 16 Endoscopic Submucosal Dissection (ESD) defect closures, 10 accidental perforation closures, 6 transoral outlet reductions, 1 primary sleeve gastroplasty, 1 ulcer oversew, 10 stent anchors, 2 leak closures & 11 fistula closures. All 132 full-thickness defect closures (POEM, STER, EFTR, ESD, accidental perforations & leaks) were successful with mean closure time for POEM/STER 10 min for a mean 2cm defect, EFTR/ESD 13min for mean 3cm defect, perforations/leaks 18min for mean 1.8 cm defect. Only 2 minor adverse events including one pt with dysphagia due to stricture at site of tunnel closure requiring one balloon dilation with complete resolution of dysphagia & one superficial mucosal tear in hypopharynx during endoscopic suturing device insertion, which was clinically insignificant but prevented use of the device (clips used instead). In stent anchoring cases, mean time 8min & there were no episodes of stent migration at mean 8 weeks (wks) follow-up (f/u). At mean 34wks f/u, there was mean 19.1lb weight loss (2-34lbs) in transoral outlet reduction pts. At 15wks f/u, the primary sleeve gastroplasty pt lost 40lbs. The pt who had anastomotic ulcer oversewn required surgical intervention 2wks post procedure due to lack of response. Of the 11 fistulas, 10 fistulas were due to bariatric surgery (8 gastric sleeves & 2 roux en y gastric bypass) & 1 fistula post- PEG tube removal. 82% fistulas were successfully closed using endoscopic suturing device as an adjunctive tool. There were 2 fistula pts that ultimately required surgical intervention.

Conclusion: The endoscopic suturing device allows for the minimally invasive management of complications and enhances the feasibility of POEM/STER/EFTR/ESD.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes
Extra Info: Stavros Stavropoulos: Boston Scientific Consultant
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
CONTROL ID: 2037062
AVERAGE SCORE: 4
PRESENTER: Ali Abbas
PRESENTER (INSTITUTION ONLY): University of Florida, Department of M
PRESENTER (COUNTRY ONLY): United States
AUTH DESIGN: ACG Membership Status *:
Ali Abbas : ACG Non-Member
Haseeb Jabbar : ACG Non-Member
Mustafa Mohammed Ahmed : ACG Non-Member
Charles T Jr Klodell : ACG Non-Member
Peter Draganov : ACG Member
TITLE: Predictors of Gastrointestinal Bleeding and Incidence of Recurrence after Endoscopic Intervention among Recipients of Left Ventricular Assist Device.
AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No
Purpose: High incidence of gastrointestinal bleeding (GIB) among left ventricular assist device (LVAD) recipients has been reported. Predictors of GIB, and the recurrence following endoscopic intervention are yet to be investigated.
Methods: We performed an IRB approved, retrospective cohort study of all patients that received current generation LVAD (Heartmate II) at our institution. GIB and re-bleed rates by the level of endoscopic management were reported as events per person-year (p-y) of follow-up. Multivariate Cox regression analysis used to investigate the predictors of first GIB.
Results: From 2005 to 2013, 112 patients received LVAD (median age 67, 88% male). Over median follow-up of 1.8 y (282 p-y), 81 GIB events occurred in 46 (41%) patients, yielding a rate of 28.7 per 100 p-y. Multivariate analysis predicting first GIB (table 1) showed higher age, female sex and LVAD as destination therapy as the main predictors. Endoscopy was done for the first GIB episode in 36 (78%) of patients. Endoscopic therapy was performed in 18 (38%) patients. Recurrence occurred in 23 (50%) patients with 35 separate GIB events over a median of 1 y (65.8 p-y) of follow up, yielding a rate of GI re-bleed 53.2 per 100 p-y. There was no statistically significant differences in GI re-bleeding rate based on the level of endoscopic management of the first GIB, (table 2).
Conclusion: GIB is common among LVAD recipients. Older age, female sex and LVAD implanted as a destination therapy are the main predictors of first GIB Re-bleeding occurred in 50% of the patients at comparable rates across different levels of endoscopic management of the first GIB.
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No
Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: No
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: No
Supported by Industry Grant: No
CONTROL ID: 2036731
AVERAGE SCORE: 3.75
PRESENTER: Mankanwal Sachdev
PRESENTER (INSTITUTION ONLY): Arizona Advanced Endoscopy
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *:
Brenda Valercia : ACG Non-Member
Mankanwal Sachdev : ACG Non-Member
Debi Bradley : ACG Non-Member
Ananya Das : ACG Member
TITLE: Safety and Economic Feasibility of Endoscopic Ultrasonography (EUS) in a Free-Standing Ambulatory Surgery Center (ASC) is comparable to colonoscopy

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: EUS has been historically limited to hospital based facilities due to cost, resources and time constraints. ASCs offer convenient, safe and economical options for performance of standard endoscopy and attractive to both patients and health care payers because they provide high quality care at a significantly lower cost when compared to the hospital based outpatient facilities (Frakes 2006). We aimed to evaluate if EUS procedures could be safely and efficiently performed in an ASC without incurring financial losses.

Methods: After a trial period of two months, all patients ASA 3 or less requiring EUS were routinely performed in a free standing ASC by two experienced endosonographers, using propofol based sedation, administered by a supervised CRNA in a dedicated EUS room equipped with electronic echo-endoscopes. Monthly audits were performed to evaluate for adverse events, for tracking average time in the facility (from check in to check out), cost and reimbursement per procedure. Data was collected from the electronic health record as a part of a quality improvement project, which also included patient satisfaction survey.

Results: From April 2013 to April 2014 a total of 885 EUS procedures were performed in the ASC, of which 313 involved FNA (35.3%, diagnostic yield 89%; no onsite cytology). 53% EUS procedures were performed for evaluation of pancreatic-biliary abnormality and 17% were for luminal cancer staging. 95.9% procedures were upper EUS. 5 major adverse events (0.6%) requiring post-procedure hospital admission were encountered. There was no difference in patient satisfaction among patients undergoing EUS compared to colonoscopy. Table shows comparable data on average time in the facility, cost and reimbursement for colonoscopy and EUS. The net profit per EUS procedure for Medicare patients were $236 and $315 for colonoscopy and EUS, respectively. With respect to facility fee alone, for each EUS procedure done in the ASC, cost saving by Medicare was $406, when compared to a HOPD facility. Sensitivity analyses showed a threshold volume of 6.5 EUS procedures per week required for the ASC to be revenue neutral with respect to EUS.

Conclusion: EUS in an ASC is feasible and safe, and has cost, time requirements and revenue earnings similar to colonoscopy. A medium to high volume EUS practice should consider performing EUS in ASC which would not only add to the revenue earnings for the ASC but would lead to substantial cost saving for the payors.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator
FDA Approval: No
Designed Study: Investigator
Performed Analysis: Investigator
Investigator Contribution: Yes
Abstract Author: Investigator
Study Results: Yes
Secondary Analyses: Not Applicable
Supported by Industry Grant: No
Purpose: Inpatient status is a known risk factor for inadequate bowel preparation (IBP) for colonoscopy; potential risk factors for and impact of IBP are unclear.

Aims: 1) determine the quality of bowel preparations for inpatient colonoscopy, 2) assess impact of IBP on procedure delays, length of stay (LOS), and repeat colonoscopy, and 3) identify potential risk factors for IBP.

Methods: This IRB-approved retrospective cohort study was conducted at a single academic teaching institution. All patients age ≥18 years who underwent an inpatient colonoscopy over an 8-month period (01/2013-08/2013) were included. IBP was defined as patients with a preparation described as “Poor” or “Unsatisfactory” or when colonoscopy was delayed ≥1d due to poor preparation. Optimal bowel preparation (OBP) was defined as patients with “Adequate”, “Good” or “Excellent” preparation without delay. Patients with a “Fair” preparation were excluded in the analysis of potential risk factors.

Results: A total of 300 patients (median age 57±17.6, 50.3% male) were identified. At colonoscopy, 48% had an excellent/good/adequate preparation; 32% a fair preparation; and 20% a poor/unsatisfactory preparation. Only 43% met criteria for an OBP. Due to poor preparation, 14 (4.7%) patients required a repeat inpatient colonoscopy and 11 patients (3.7%) were recommended to undergo repeat outpatient colonoscopy within 1 year. Twenty-three patients (7.7%) had a delay in colonoscopy (median 1 day, range 1-3) due to IBP, 3 with a poor preparation after delay. In total, 79 (26%) patients had an IBP. LOS was greater in patients with an IBP (13.5±16.3 days) than those with an OBP (10.0±14.4 days, p=0.05).

Patients taking tricyclic antidepressants (TCA) or opiates (OR 2.00, CI 1.10-3.50) and those admitted to surgical service (OR 2.49, CI 1.00-6.20) had a significantly higher rate of IBP (Table). Patients undergoing colonoscopy in the afternoon (p=0.06) and those with an ASA ≥3 (p=0.10) had a trend towards a higher rate of IBP.

Conclusion: In this large cohort, IBP occurs in 26% of inpatient colonoscopies and procedure delays occur in 8%; patients with IBP have an overall increased LOS. Risk factors for IBP include opiate/TCA use and admission to a surgical service and possibly afternoon cases and ASA class ≥3. These populations should be targeted for quality improvement efforts to limit the significant financial and clinical impact of IBP.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: Yes

Extra Info: Dr. Johnston - No financial disclosures
Dr. Yadlapati - No financial disclosures
Dr. Keswani - Consultant to Boston Scientific and Cook Medical

Initiated Research: Investigator

FDA Approval: No

Designed Study: Investigator

Performed Analysis: Investigator

Investigator Contribution: Yes

Abstract Author: Investigator

Study Results: Yes

Secondary Analyses: Not Applicable

Supported by Industry Grant: No
**TITLE:** A Retrospective Evaluation of Quality in Photo-documentation During Colonoscopy

**AUTH DESIGN:** ACG Membership Status *:
Mohamed Bayoumi: ACG Non-Member
Brendon Maher: ACG Non-Member
Michael Hsu: ACG Non-Member
Edwin McDonald: ACG Non-Member
Michael Brown: ACG Member

**AWARDS:**

**CURRENT CATEGORY:** K. Endoscopy
**CURRENT SUB-CATEGORY:** None
**PRESENTATION TYPE:** Oral or Poster

**ACG Research Grant Support:** No

**Purpose:** Photo-documentation of landmarks confirming both cecal intubation and examination of the distal rectum is a quality indicator in colonoscopy. Photo-documentation of these landmarks and abnormalities found during colonoscopy has medical-legal implications. In this study, we aimed to examine the rates of photo-documentation of important anatomic landmarks and abnormal findings during colonoscopy.

**Methods:** As part of a quality improvement program, we retrospectively reviewed 529 consecutive colonoscopies performed over two months in 2013 at an academic medical center. We evaluated colonoscopy reports for photo-documentation of anatomic landmarks including the appendiceal orifice, cecal os with ileocecal valve, terminal ileum, and retro-flexion in the rectum or a forward view of the anus proximal to the dentate line. All abnormal endoscopic findings documented in colonoscopy reports were assessed for corresponding photo-documentation. Other data collected included demographics, indication for colonoscopy, and endoscopists' initials. We excluded procedures lacking cecal intubation, those involving patients with colonic resections, and those with dictated procedure reports lacking photographs. All colonoscopies were performed by attending gastroenterologists, hepatologists, colorectal surgeons, or gastroenterology fellows under direct supervision. Two-tailed t tests and Pearson's correlation were used for comparisons between groups.

**Results:** During the two-month study period, 529 colonoscopies were performed. We excluded 70 procedures for the following reasons: dictated reports (n=34), lack of cecal intubation (n=21), and colonic resection (n=15). Four hundred fifty-nine colonoscopies were analyzed (276 female, 183 male). Colon cancer screening/surveillance was the most common indication (n=307). Sixty-six colonoscopies (14.3%) lacked photos demonstrating completion of the exam. The frequencies of missing photos of specific anatomic landmarks were as follows: cecal os (n=139, 30.3%), appendiceal orifice (n=126, 27.5%), terminal ileum (n=347, 75.6%), and rectal retro-flexion or forward view proximal of the anus to dentate line (n=153, 33.3%). Complete photo-documentation of all abnormal findings occurred in 287 (62.5%) procedures. The presence of a fellow significantly correlated with photo-documenting examination of the distal rectum (P=0.013).

**Conclusion:** We demonstrated that photo-documentation of landmarks confirming completion of colonoscopy, abnormal findings, and examination of the distal rectum does not occur in every colonoscopy. Further quality improvement projects to may be warranted to improve rates of photo-documentation.

**1. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS:** No

**Initiated Research:** Investigator

**FDA Approval:** No

**Designed Study:** Investigator

**Performed Analysis:** Investigator

**Investigator Contribution:** No

**Abstract Author:** Investigator

**Study Results:** Yes

**Secondary Analyses:** Not Applicable

**Supported by Industry Grant:** No
CONTROL ID: 2039566
AVERAGE SCORE: 4.75
PRESENTER: Leonid Shamban
PRESENTER (INSTITUTION ONLY): Providence Hospital Medical Center
PRESENTER (COUNTRY ONLY): United States
AUTH DESIG: ACG Membership Status *
Leonid Shamban : ACG Non-Member
Serge Sorser : ACG Member
Stan Naydin : ACG Non-Member
Mousa Shukr : ACG Non-Member
Charlotte Wiemann : ACG Non-Member
Daniel Yevsyukov : ACG Non-Member
Michael Piper : ACG Member
Bradley Warren : ACG Member

TITLE: Factors Associated with number of Duodenal Samples obtained in suspected Celiac Disease in a Community Setting

AWARDS:
CURRENT CATEGORY: K. Endoscopy
CURRENT SUB-CATEGORY: None
PRESENTATION TYPE: Oral or Poster
ACG Research Grant Support: No

Purpose: To investigate the contributing factors to the number of biopsies obtained at the time of endoscopy when Celiac Disease (CD) could be considered as a diagnosis.

Methods: In a retrospective study, data was collected from two community hospitals from January 1, 2008- February 11, 2013. Patients were selected with gastrointestinal manifestations of CD defined by the American College of Gastroenterology (ACG). Three cohorts of subjects were studied: non-celiac disease (NCD), CD or cannot exclude celiac disease (CECD) patients, that were pathologically defined by the modified Marsh 3a criteria. With each cohort the relationship was evaluated for the numbers of samples obtained with respect to endoscopic features, pre-endoscopic ICD-9 diagnoses, patient status (inpatient versus outpatient), the participation of a gastroenterology fellow, endoscopist experience as well as patient demographics. Findings were analyzed in SPSS-15 using univariate and multivariate analysis.

Results: 5,997 patients met inclusion criteria. 42 patients in the CD cohort and 62 were in CECD group. 67.8% of subjects were females, 92.2% of subjects were over the age of 20 and 58.9% were found to be Caucasian. 77.7% of the endoscopies performed in the outpatient setting.

The yield of CD diagnosis increased up to 3 specimens from 0.29% to 1.84%, with maximum diagnostic yield at 6 specimens at 13.63%. The yield for CECD diagnosis increased from 2.35% to 3.13% up to 4 specimens and then tapered to 2.27% at 6 samples.

In the subgroup analysis, in the NCD group, endoscopic features, patient demographics, pre-endoscopic ICD-9 diagnosis, endoscopy setting and fellow participation statistically impacted the number of biopsies that were obtained (p values less than 0.001). In the CD group, only the endoscopic feature variable statistically impacted the number of biopsies obtained with p value of 0.041. In the CECD cohort, only the pre-endoscopic diagnosis variable statistically impacted the number of biopsies obtained with p value of 0.001. Further, a greater rate of CD diagnosis was observed for gastroenterologists who had the least amount of experience, while the rate of CECD diagnosis was higher for gastroenterologists with 26 or more years of experience.

Conclusion: The goal is to minimize CECD cohort by following ACG endoscopic protocol with diagnostic yield of CD increasing with 6 or more biopsy specimens, while more will be diagnosed with CECD diagnosis when up to 4 biopsies are obtained. Decreasing CECD can be achieved by identifying variables that affect compliance. The variables identified within this study show a concrete relationship between the number of samples obtained and the final diagnosis.

I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No

Initiated Research: Investigator

FDA Approval: No
CONTROL ID: 2034734  
AVERAGE SCORE: 4.75  
PRESENTER: Patrick Basu  
PRESENTER (INSTITUTION ONLY): Columbia School of Physicians and St  
PRESENTER (COUNTRY ONLY): United States  
AUTH DESIG: ACG Membership Status *:  
Patrick Basu : ACG Member  
Niraj Shah : ACG Non-Member  
Mark Aloysius : ACG Non-Member  
David Lee : ACG Non-Member  
Frank Gress : ACG Non-Member  
TITLE: Novel colonoscopy preparation of organic coconut water with Miralax and Dulcolax in split doses for decompensated cirrhotics. A randomized double blinded open labelled clinical pilot single centered observational study. COSMIC Study.  
AWARDS:  
CURRENT CATEGORY: K. Endoscopy  
CURRENT SUB-CATEGORY: None  
PRESENTATION TYPE: Oral or Poster  
ACG Research Grant Support: No  
Purpose: Screening colonoscopy is routine for patients been evaluated for OLT. Most aqueous colonoscopy preparations are poorly tolerated, cause gross dyselectrolytemia and even renal dysfunction. This ultimately leads to poor compliance affecting diagnosis. This pilot study evaluates the efficacy, safety and utility of coconut water as a vehicle for: colon cleansing with Miralax for decompensated cirrhotics being evaluated for OLT undergoing screening colonoscopy.  
Methods: Sixty (n=60) patients aged 45-69 (MELD 16-20, with moderate ascites and MHE on Diuretics, Lactulose and Xifan) were recruited. Single center, one gastroenterologist, anesthesiologist, nurse and medical assistant. All were on Lasix (mean dose of 60 mg daily), Aldactone 100 mg, Lactulose 30 ml and Xifan 550 mg BID. All were placed on total liquids of 1200 cc along with a semi solid diet: 2 grams sodium, 120 grams protein, 2300 cal/day, ice cream, 1 liter of natural coconut water with 8 oz of Miralax from 4:00 pm till 10:00 pm and 4 tablets of Dulcolax 5 mg each (at bed time). Total mean nocturnal bowel movements were 3-5 in am from 7:00 am till 10:00 am with Miralax 8 oz and 1 liter of coconut water. All diuretics were stopped 2 days prior to the initiation of the split doses of prep. Questionnaire was taken post prep in the morning and then again post procedure.  
Results: Kindly refer to table  
Conclusion: This study postulates a novel organic coconut water preparation with Miralax compared to traditional preparation to be safe (lesser dyselectrolytemia), well tolerated with wide satisfactory score and greater retention. It has greater efficacy with no side events in special population (decompensated cirrhotics awaiting OLT)  
I. DISCLOSURE OF RELEVANT FINANCIAL RELATIONSHIPS: No  
Initiated Research: Investigator  
FDA Approval: Yes  
Designed Study: Investigator  
Performed Analysis: Investigator  
Investigator Contribution: Yes  
Abstract Author: Investigator  
Study Results: Yes  
Secondary Analyses: Not Applicable  
Supported by Industry Grant: No