

Table 1. (continued)

Parameter	NVUGIB, counts (%)	P-value
Uninsured	10.8 vs 9.8	0.21
Hospital LOS, days	6.0 vs 5.5	0.02
Total charges, \$	51198 vs 29914	0.01

*Abbreviations: LOS: length of stay.

S833

Comparative Analysis of Concurrent *Clostridium difficile* Infection on Hospitalization Outcomes in Variceal vs Non-Variceal Upper Gastrointestinal Bleeding: National Inpatient Sample Study

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Introduction: *Clostridium difficile* infections (CDI) significantly affect hospitalizations, leading to considerable mortality and morbidity. However, the impact of CDI on non-variceal bleeding remains unexplored as most research focuses on variceal bleeding. This study aims to compare the outcomes of CDI in variceal and non-variceal bleeding cases and investigate if variceal bleeding patients have a higher likelihood of developing CDI.

Methods: Retrospective analysis was performed using National Inpatient Sample (NIS) from years 2010 to September 2015. Patients were identified using the primary diagnosis of esophageal variceal bleeding and aggregate of different sources of non-variceal bleeding using ICD-9 codes. Primary outcomes were, all-cause mortality, length of stay, hospitalization charges, development of shock, and need for mechanical ventilation. Statistical analysis was conducted by STATA statistical software and analyses included multivariate logistic regression, negative binomial regression and generalized linear regression models.

Results: A weighted number of 225,708 hospitalizations were for variceal bleeding and 1,342,724 for non-variceal bleeding. Among variceal bleeding patients, 1.64% (n = 3,696, 95% CI: 1.52 - 1.76) had concurrent CDI, while among non-variceal bleeding patients, 1.07% (n = 14,390, 95% CI: 1.03 - 1.12) had CDI. Patients with variceal bleeding and CDI had significantly longer hospital stays (14.7 vs. 6.2 days, $P < 0.001$), higher in-hospital mortality (15.2% vs. 10.0%, $P < 0.001$), increased rates of shock (24.6% vs. 13.1%, $P < 0.001$) and mechanical ventilation (32.7% vs. 17.3%, $P < 0.001$), as well as higher hospitalization charges (\$168,275 vs. \$68,446, $P < 0.001$). Similar trends were observed among patients with non-variceal bleeding. Comparatively, patients with concurrent CDI had significantly longer hospital stays (10.6 vs. 4.3 days, $P < 0.001$), higher in-hospital mortality (5.5% vs. 1.9%, $P < 0.001$), increased rates of shock (13.1% vs. 5.0%, $P < 0.001$) and mechanical ventilation (12.0% vs. 3.3%, $P < 0.001$), as well as higher hospitalization charges (\$92,480 vs. \$37,553, $P < 0.001$). When compared with non-variceal bleeding patients, patients with variceal bleeding patients had significantly greater odds of contracting concurrent *C. difficile* infection (adjusted OR: 1.79; 95% CI: 1.60-1.98, $P < 0.001$).

Conclusion: Concurrent CDI for both variceal and non-variceal bleeding groups leads to worse outcomes. Esophageal variceal group has greater odds of developing CDI.

S834

Clinical Efficacy of Video Capsule Endoscopy and Balloon-Assisted in Suspected Small Bowel Bleeding: A Single Center Cohort Study

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Introduction: While video endoscopy capsule (VCE) and balloon assisted enteroscopy (BAE) have emerged as the gold standard for the evaluation and treatment of suspected small bowel bleeds (SSBB), little is known regarding the clinical efficacy when used in combination. We aim to assess diagnostic yields [DY] and inter-modality agreement between VCE and BAE in SSBB.

Methods: Patients who underwent VCE followed by BAE from 2012 to 2022 for SSBB were prospectively identified. Patients with incomplete study or waiting interval between VCE and BAE > 12 months were excluded. Clinical characteristics were collected via chart review. Diagnostic yield (DY) was defined as the proportion of positive test per the Saurin classification. Waiting interval between VCE and BAE was considered short if within 30 days and long if after 30 days. Inter-modality agreement was obtained by calculating Cohen's kappa (k) co-efficient. The agreement obtained was considered slight (k = 0.00-0.20), fair (k = 0.21-0.40), moderate (k = 0.41-0.60), substantial (k = 0.61-0.80), or almost perfect (k = 0.81-1.00). Continuous and categorical values were assessed with Fisher's or T-test when appropriate.

Results: 151 patients met the inclusion criteria, of which 68 (45%) and 83 (55%) were found to have an overt and occult SSBB respectively. Patient outcomes are described in Table 1. Overall, BAE trended toward higher DY in comparison to VCE (56% vs 45%, $P = 0.06$) with overall fair inter-modality agreement (k=0.22). In patients with shorter waiting interval (< 30 days), DY was significantly higher in BAE compared to VCE (54% vs 34%, $P = 0.01$) with slight agreement (k=0.18). In patients with longer waiting interval (> 30 days), DY was similar between the BAE and VCE (59% vs 62%, $P = 0.85$) with moderate agreement (k=0.43). In patients with occult SSBB, BAE and VCE have similar DY (55% vs 55%, $P = 1$) and fair agreement (k=0.29). In overt SSBB group, BAE has significantly higher DY compared to VCE (57% vs 32%, $P = 0.01$) with slight agreement (k=0.15).

Conclusion: Compared to VCE, DY of BAE is significantly higher in overt SSBB and shorter waiting interval. Inter-modality agreement is better in occult SSBB and longer waiting intervals. DY of BAE and inter-modality agreement appear to be inversely related with respect to time and subtypes of SSBB. A larger sample size and additional studies are needed to confirm the results and provide guidance for clinical practice.

Table 1. Clinical Efficacy of the Study Population

Waiting Interval (days)		Diagnostic Yield			Inter-Modality Agreement		
		VCE	BAE	P-Value	Kappa	95% CI	Strength
	Total (N=151)	68 (45%)	85 (56%)	0.06	0.22	0.14-0.30	Fair
	1-7 (N=67)	23 (34%)	36 (53%)	0.04	0.16	0.05-0.27	Slight
	1-30 (N=92)	31 (34%)	50 (54%)	0.01	0.18	0.08-0.27	Slight
	> 30 (N=59)	37 (62%)	35 (59%)	0.85	0.43	0.29-0.56	Moderate
	Subtypes	Overt (N=68)	22 (32%)	39 (57%)	0.01	0.15	0.04-0.26
	Occult (N=83)	46 (55%)	46 (55%)	1	0.29	0.18-0.40	Fair

S835

Acute GI Bleed Following CABG With Atrial Fibrillation on Antiplatelet and Anticoagulant

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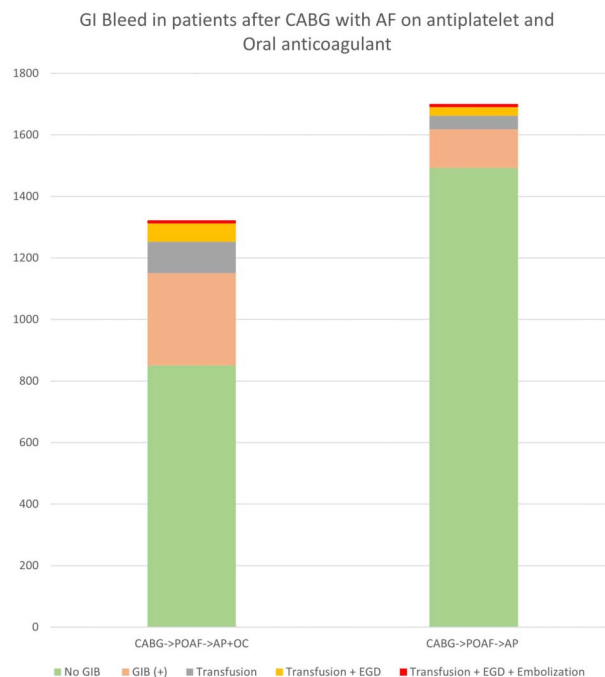
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Introduction: The risk of gastrointestinal bleeding (GIB) while on dual antiplatelets (AP) in patients after coronary artery bypass surgery (CABG) and post operative atrial fibrillation (POAF) requiring oral anticoagulants (OC) is well known. The objective of this study is to determine the truth of this effect with anticoagulants across multiple health care organizations, and to see the need to do treatment interventions in these patient populations.

Methods: The data used for this study was collected from the TriNetX Network, which provided access to electronic medical records. We compared the data available in patients with CABG or POAF using AP and OC vs patients using AP only. The incidence of GIB in both these groups were sought out. The number of these patients with GIB requiring transfusions, esophagogastroduodenoscopy (EGD) or interventional radiology embolization (IRE) were determined. The Odds ratio (OR) and Relative Risk (RR) in these groups with 95% Confidence Interval (CI) were calculated using statistical software. This was also examined for a P-value of < 0.05 significance.

Results: In CABG with POAF using AP and OC there was 301 with GIB events and 850 without any GIB. CABG with POAF using OC only 125 had GIB events while 1493 did not have any GIB events. Adverse events noted in the AP+ OC group was 26%, vs 7.7% patients in the AP group. The RR between the groups were 3.38 95% CI (2.78-4) with P-value < 0.0001. OR between the groups was 4.2; 95% CI (3.4-5.3). Number needed to harm (NNH) or cause GIB was 6; 95% CI (4.7- 6.4). In the group with AP and OC 102 patients got blood transfusions, 59 received additional EGD and 10 required IRE eventually. The group with OC use, 44 patients got blood transfusions, 28 got EGD additionally and 10 required IRE eventually.

Conclusion: The incidence of GIB as expected is more with AP and OC together in patients with CABG and POAF. NNH of 6 is high causing a GIB. Strengths of this study is that the data was obtained from multiple healthcare organizations. Limitations of this study is that an in-depth analysis of patient data and chronologic events was beyond the scope of this study. Detailed review after IRB approval is pending (Figure 1, Table 1). A need to stop, adjust or reconsider anticoagulation in patients with CABG and POAF is an important clinical decision that needs to be constantly addressed on subsequent visits between the clinician and the patient.



[0835] **Figure 1.** Acute GIB in post CABG/POAF patients on AP/OC.

Table 1. GIB in CABG and AF on Anti-platelet and Oral Anticoagulation

Group/Variable	No GIB	GIB Present	Transfusion	Transfusion + EGD	Transfusion + EGD + Embolization
CABG- >POAF- >AP+OC	850	301	102	59	10
CABG- >POAF- >AP	1493	125	44	28	10

S836 Outstanding Research Award in the GI Bleeding Category (Trainee) Presidential Poster Award

Over-The-Scope Clip vs Conventional Endoscopic Therapy for Bleeding Peptic Ulcers: An Updated Meta-analysis

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Introduction: Significant number of patients (around 10-20%) with high-risk (Forrest type Ia, Ib, IIa, IIb) bleeding peptic ulcers manifest rebleeding even after successful routine endoscopic therapy. Over-the-scope clip (OTSC) has been studied in this setting with conflicting results, and the current ACG guidelines recommend OTSC only in patients with recurrent ulcer bleeding. ESGE guidelines however allow for OTSC as a first line option. We, therefore, conducted an updated meta-analysis to reconcile the available data.

Methods: Multiple online databases, such as Pubmed, MEDLINE, Cochrane and Embase were searched for studies comparing OTSC to conventional/standard endoscopic therapy (such as heater probe, standard clips, epinephrine injection etc.) in patients with bleeding peptic ulcers. The primary endpoints of interest were early rebleeding (within 48-72 hours), rebleeding and mortality at the longest available follow up. Standard meta-analysis methods were employed using a random-effects model.

Results: Five studies: 2 randomized controlled trials (RCTs) and 3 retrospective studies, comprising a total of 399 patients (OTSC group n=171, conventional endoscopic group n=228) were included. The mean follow up duration was 1 month, mean age was 68 years and 68% of the patients were men. Most studies reported data on Forrest type I lesions - 47.6% in the OTSC group and 30% in the conventional group, with the rest being other types. Rebleeding at 30 days was significantly lower in the OTSC group as compared to the conventional endoscopic group (12 vs 27, RR 0.46, 95% CI 0.24-0.87, p = 0.02) and the studies were without any heterogeneity (I² = 0%). Early rebleeding (within 48-72 hours) was reported in only 2 studies with similar rates between the two groups (RR 0.45, 95% CI 0.10-2.03, p = 0.30, I² = 0%). No significant difference was observed in the total deaths in OTSC vs conventional groups (RR 0.67, 95% CI 0.16-2.83, p = 0.58, I² = 41%).

Conclusion: Using OTSC clips in bleeding peptic ulcers was associated with overall lower rebleeding rates at 30-days, however with a similar rate of early rebleeding and deaths when compared to conventional endoscopic therapies. Granular data with regards to high-risk features of bleeding ulcers, based on Forrest type, are warranted to further understand the role of OTSC in this patient population (Table 1).