

University of Massachusetts Medical School

eScholarship@UMMS

UMass Center for Clinical and Translational
Science Research Retreat

2014 UMass Center for Clinical and
Translational Science Research Retreat

May 20th, 12:30 PM

A Year of Gastrointestinal Bleeding: An Epidemiologic Study


Neil B. Marya

University of Massachusetts Medical School

Et al.

Let us know how access to this document benefits you.

Follow this and additional works at: https://escholarship.umassmed.edu/cts_retreat

 Part of the [Clinical Epidemiology Commons](#), [Digestive System Diseases Commons](#), [Gastroenterology Commons](#), and the [Translational Medical Research Commons](#)

Marya NB, Jawaid S, Gondal B, Maranda L, Marshall CA, Foley A, Charpentier J, Singh A, Cave DR. (2014). A Year of Gastrointestinal Bleeding: An Epidemiologic Study. UMass Center for Clinical and Translational Science Research Retreat. Retrieved from https://escholarship.umassmed.edu/cts_retreat/2014/posters/97

Creative Commons License



This work is licensed under a [Creative Commons Attribution-NonCommercial-Share Alike 3.0 License](#).

This material is brought to you by eScholarship@UMMS. It has been accepted for inclusion in UMass Center for Clinical and Translational Science Research Retreat by an authorized administrator of eScholarship@UMMS. For more information, please contact Lisa.Palmer@umassmed.edu.

Title: A year of gastrointestinal bleeding : an epidemiologic study

Authors: Marya, Neil B.¹; Jawaid, Salmaan A.¹; Gondal, Bilal¹; Maranda, Louise²; Marshall, Christopher A.¹; Foley, Anne¹; Charpentier, Joseph¹; Singh, Anupam¹; Cave, David R.¹

Affiliations: 1. Department of Internal Medicine, University of Massachusetts-Worcester, Worcester, MA, United States.

2. Department of Quantitative Health Sciences, University of Massachusetts-Worcester, Worcester, MA, United States.

Contact Information: Neil B. Marya, neil.marya@umassmemorial.org, phone: 978-855-3279.

Background: For decades the diagnosis and management of gastrointestinal bleeding (GIB) has been based largely on endoscopy. Studying a large cohort of patients presenting to the ED we may find cost-effective alternatives in the management of GIB. We analyzed the epidemiology and initial disposition of all patients who presented to our ED from the perspective of hematemesis versus non-hematemesis, to identify patterns among each cohort's presentations to aid in this.

Methods: Retrospective analysis of medical records for 338 patients presenting to the UMass ED. Two cohorts were identified: those with hematemesis (G1) or non-hematemesis (G2).

Results: 105 patients presented to the ED with hematemesis (G1), 233 patients presented with non-hematemesis GIB (G2). G1 was younger than G2 (54.4 years vs. 65.6 years, $p < 0.001$). There were more males in G1 vs. G2 (61% vs. 53%, $p = 0.154$). Comorbidities in G1 were liver disease (21%), alcohol abuse (20%), and diabetes (11%). Comorbidities in G2 were coronary artery disease (22%), atrial fibrillation (13.7%), and diverticulosis (8%). More patients in G2 than G1 used Coumadin (23% vs. 7%, $p < 0.001$), anti-platelet agents (12% and 3%, $p < 0.004$), and NSAIDs (40% and 32%, $p = 0.203$). Admission hematocrit was greater in G1 compared to G2 (34.1 vs. 30.0, $p < 0.001$). INR was greater in G2 compared to G1 (1.7 vs. 1.3, $p = 0.03$). BUN was greater in G2 compared to G1 (30.2 vs. 23.6, $p = 0.021$). More patients in G2 were admitted compared to G1 (89.6% vs. 78.1%, $p = 0.019$). More were admitted to the ICU in G1 compared to G2 (46% vs. 38%, $p = 0.237$).

Discussion: This study uses a novel approach that elicits different patterns than the traditional delineation of upper versus lower GIB. These results may lead to new decision-making in patients presenting with GIB, allowing for new diagnostic and management paradigms, resulting in cost-effective care.