Comparison of Outcomes in Patients Hospitalized With Acute Lower Gastrointestinal Bleed Based on Weekday versus Weekend Admissions

Kuldeepsinh P Atodaria, MD<sup>1</sup>, Meera Kohli, BA<sup>2</sup>, Samyak Dhruv, MD<sup>3</sup>, Shravya Ginnaram, MD<sup>1</sup>, Sunita Lakhani, MD<sup>1</sup>, Joseph Bruno, MD<sup>4</sup>
1 Internal Medicine, Jefferson Health - Abington, PA; 2 SKMC - Philadelphia, PA; 3 Hospital Medicine, MedStar St. Mary’s Hospital - Leonardtown, MD; 4 Gastroenterology, Jefferson Health - Abington, PA

Research Question

Is there a difference in outcomes amongst patients with weekday admissions (WD) versus weekend admissions (WE) for acute lower gastrointestinal bleed (ALGIB)?

Methods

- International Classification of Disease 10<sup>th</sup> Revision Codes from National Inpatient Sample database for years 2016-2019
- Outcomes measured:
  - Inpatient death (IPD)
  - Length of stay (LOS)
  - Total hospitalization charges (TOTCHG)
  - Early colonoscopy (EC) = colonoscopy within 1 day of admission
- Chi-square test and T-tests were utilized as appropriate

Results

- Total hospitalizations that resulted in IPD = 53,030 (3.4%)
- Total Colonoscopy cases = 285,165 (18.4%)
- Mean age was 68.53 (SD 16.07) in WD and 68.86 (SD 16.04) (P < 0.001)
- CCI was 4.92 (SD 2.52) in WD and 4.90 (SD 2.59) (P < 0.001)

Conclusions

Among ALGIB hospitalizations that received colonoscopies, there was NO statistically significant difference in IPD between WD and WE, despite WE receiving fewer early colonoscopies. WEs were associated with lower costs and shorter LOS.

- Inpatient death was overall higher in patients who
  1. were treated on the weekend
  2. treated on the weekend with early colonoscopy
- This could be because patients with ALGIB that received EC on WE are sicker than those that did not get EC
- Further research is needed to ascertain the cause and effect of these differences.

Contact: Kuldeepsinh Atodaria, MD
Kuldeepsinh.atodaria@Jefferson.edu
Jefferson Health - Abington, PA

* = P < 0.001
* = P = 0.005