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A reconsideration of the diagnosis and management of gastrointestinal bleeding based on its epidemiology and outcomes analysis


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Background: Traditionally, gastrointestinal bleeding (GIB) has been divided into upper and lower GIB with little consideration of the small bowel as a source. Furthermore, melena is generally included in the upper category, despite its poor localization value. We analyzed 341 consecutive GIB patients to see if those presenting with melena/hematocheiza have less efficient evaluations then when compared to those presenting with hematemesis.

Methods: A retrospective analysis was performed for 341 consecutive patients admitted to our ED with GIB over a year. Cohorts were separated based on presenting symptom to the ED, hematemesis (G1) and non-hematemesis (G2). Data obtained included demographics, diagnosis, number and type of procedure, diagnostic yield of each procedure, hours to diagnosis, ICU days, and total hospital days.

Results: G1 (n=105, 62%M) was younger than G2 (n=231, 53%M) with a mean age of 54 vs. 66, p≤0.001. 78% and 98% of patients were admitted to the hospital in G1 and G2 respectively (p=0.02). Median time to diagnosis was 14.0 hours and 20.0 hours for G1 and G2 respectively (p≤0.001). Median number of days in the ICU was 3.0 in both groups, and median number of hospital days was 3.0 for G1 vs. 4.0 for G2 (p=0.267). In G1, the 1st procedure was diagnostic 69% of the time vs 54% for G2 (p=0.07). The overall diagnostic yield for EGDs in G1 was 58% vs. 51% in G2 (p=0.279). Colonoscopies overall were diagnostic 39% of the time in G2 and, interestingly, VCEs were the most diagnostic, yielding a diagnosis 74% of the time in G2 (n=34). Unexpectedly, those admitted in G1 had a confirmed diagnosis only 61% of the time compared to 62% in G2.

Conclusion: Our data suggests that a portion of patients presenting with non-hematemesis (G2) are inefficiently managed and a search for an alternative strategy is warranted. Early deployment of VCE may be a more efficient and economic option, although prospective evaluation of this concept is needed.

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