Audit of the Management of Acute Lower Gastrointestinal Bleeding at Ninewells Hospital in Line with BSG and Oakland Guidelines

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Abstract:

Background: Lower gastrointestinal bleeding (LGIB) is a frequent cause of hospital admission and can range from self-limiting to life-threatening. The British Society of Gastroenterology (BSG) guidelines recommend structured assessment, including the Oakland score, to guide admission, investigation, and management [1,2]. Adherence to these protocols can optimise resource use and improve patient outcomes, yet real-world compliance remains variable [3]. This audit evaluated LGIB management at Ninewells Hospital against BSG standards.

Methods: A retrospective cohort study was conducted over February–March 2024. Data sources included ASRU clipboard, EKORA, Clinical Portal, ICE, PACS, and other EHRs. Audit criteria encompassed demographic details, admission pathway, initial assessment (shock index, Oakland score, ASA grade), diagnostics (CT angiography [CTA], colonoscopy, OGD), and management (blood transfusion, anticoagulant cessation, tranexamic acid). Compliance with BSG LGIB guidelines was assessed, including documentation standards and appropriateness of investigations based on stability and risk stratification.

Results: Thirty-eight patients were included (mean age predominantly ≥60 years; 39.5% male, 60.5% female). Comorbidities were present in 92.1%, and 55.3% had known LGI pathology. On admission, 12 patients had a shock index <0.6 and 22 had 0.6–1; four cases lacked shock index documentation. Oakland score was ≤8 in 4 patients and >8 in 30; four scores were unrecorded. Most patients were haemodynamically stable (33/38), while 5 were unstable.

CTA was performed on admission in only 3 patients; 35 did not receive CTA. Endoscopic evaluation (flexible sigmoidoscopy or colonoscopy) was performed in 14 patients; 24 had no inpatient scope.

Key gaps included:

- Unstable patients without CTA on admission: 3/38 (7.8%)
- Oakland score >8 without inpatient scope: 18/38 (47.3%)
- Unstable patients without inpatient scope: 2/38 (5.2%)
- Delayed inpatient scope (>24h) in unstable patients: 2/38 (5.2%)
- Melena documented without inpatient OGD: 2/38 (5.2%)

Conclusions: This audit identified significant variation from BSG LGIB guideline recommendations, particularly in the consistent use of the Oakland score and timely access to CTA or endoscopy for unstable or high-risk patients. Interventions should include embedding risk scores into admission proformas, improving urgent access to diagnostic services, and delivering targeted education to admitting teams. Re-audit is required to assess the impact of these changes.

Keywords:

Rectal bleeding, LGIB, Oakland score, BSG guidelines, audit, quality improvement.