Management of acute lower GI bleeding: evidence-based medicine?

We read with interest the guidelines concerning the management of acute lower GI bleeding (LGIB) by Oakland *et al* including the assessment algorithm and congratulate the authors for their work in what is an evidence light area. LGIB is a

common presenting condition; however, previous data show that in the majority of cases, bleeding stops without the need for any intervention.2 In the national audit, only 3.1% of 2528 cases received any direct intervention to help control LGIB of which 2.1% was endoscopic, 0.8% embolisation and 0.2% surgery and overall mortality was low (3.4%).³ It is well recognised in upper GI bleeding that the role of endoscopy is for delivering a therapeutic intervention to reduce the risk of rebleeding and need for surgery. There is no evidence that acute colonoscopy has the same role in LGIB, particularly given the rate described in the national audit and therefore we question the algorithm shown suggesting admission for acute colonoscopy. Most patients with LGIB are elderly, have other comorbidites and are unlikely to benefit from an acute colonoscopy and may even have a higher risk of adverse events due to the bowel preparation. An Oakland score >8 can be achieved in a 70-year-old woman (2 points), with no previous LGIB admissions, with no fresh blood on rectal examination, with a heart rate 70-89 beats per minute (1 point), blood pressure 120-129 mm Hg (3 points) and a haemoglobin level 130-159 g/L (4 points) as many of its variables attribute a score even with normal physiological parameters.4 To assess this burden, we examined 210 patients (median age 72 years, 98 males) admitted with acute LGIB and applied the LGIB algorithm. 15/210 (7.1%) presented with a shock index >1 of which 1/15 (6.7%) rebled within 30 days and 1/15 (6.7%) died with 30 days. Of the remaining 195 with a shock index <1, only 24 (12.3%) had an Oakland score <9 and would have been considered for early discharge, however, 0/24 rebled within 30 days and 1/24 (4.2%) died within 30 days.

Table 1 Causes of lower GI bleeding as per the BSG guidelines algorithm including those who would have been suitable for therapeutic intervention

High shock index	Low shock index and high Oakland score	Low shock index and low Oakland score
Normal endoscopy (n=6) Diverticulosis (n=5) Underlying liver disease (n=3) UC (n=1) Crohns' colitis (n=1) Underlying haematological disorder (n=1).	Normal endoscopy (n=4) Diverticulosis (n=3) Ischaemic colitis (n=3) Inflammatory (n=3) Haemorrhoids (n=3) UC (n=3) Radiation proctopathy (n=1) Crohns' colitis (n=1) Angiodysplasia (n=1) Polyp (n=1)	Normal endoscopy (n=28) Diverticulosis (n=74) Ischaemic colitis (n=15) UC (n=9) Haemorrhoids (n=9) Polyp (n=8) Colorectal cancer (n=8) Inflammatory (n=5) Declined investigations (n=3) Angiodysplasia (n=4) Postpolypectomy bleed (n=2)* Solitary rectal ulcer syndrome (n=2) Colonic stricture (n=1) Crohns' colitis (n=1) Small bowel varices (n=1) Anal fissure (n=1)

^{*}Denotes potential for endoscopic intervention to arrest bleeding BSG, British Society of Gastroenterology.

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PostScript

The 171/195 with an Oakland score of >8 would have been suggested to undergo inpatient bowel preparation and urgent colonoscopy. Final diagnoses are shown in table 1 but only 2/171 (both of whom presented with postpolypectomy bleeding) would have been suitable for endoscopic intervention. 18/171 (10.5%) rebled within 30 days and 10/171 (5.8%) died within 30 days of admission. Importantly, there was no significant difference in rebleeding and mortality rates in all three arms of the algorithm (1/15 vs 0/24 vs 18/171 for rebleeding rates, Kruskall-Wallis test, p=0.17, and 1/15 vs 1/24 vs 10/171 for mortality rates, p=0.85) again suggesting that intervention does not alter the outcome and the shock index may not discriminate in this group of patients. In summary, we feel there is too strong an emphasis on acute inpatient colonoscopy for which there is no evidence of benefit due to a very low intervention rate and therefore minimal opportunity to alter outcomes. The two randomised studies quoted in the guidelines showed no difference in diagnostic rates, therapeutic interventions, length of stay or most importantly rebleeding, surgery and mortality between urgent or elective colonoscopy.^{5 6} The vast majority of patients in our cohort required adequate clinical assessment, resuscitation including correction of clotting as needed followed by urgent outpatient colonoscopy to optimise bowel preparation and diagnosis.⁷ Changing from this management plan would have lead to a significant rise in the need for inpatient colonoscopy which has major service implications and no current evidence of improved outcomes.

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