

# Updating the recommendations on bowel preparation for acute lower gastro-intestinal bleeding: The time has come!

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## Bibliography

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The management of acute lower gastrointestinal bleeding (LGIB) is still controversial, both in terms of timing and bowel preparation.

Recent meta-analyses report that early colonoscopy within 24 hours does not improve clinical outcomes [1, 2]. Holzwanger et al. suggest a conservative approach for SARS-CoV-2-positive patients with acute LGIB [3], but no advice is provided on management and outcomes of patients who remain hemodynamically unstable after adequate resuscitation. Risk assessment based on clinical parameters (heart rate, blood pressure, urine output, state of consciousness, signs of ongoing bleeding, comorbidities) represents the mainstay of LGIB management, allowing identification of patients at high risk of adverse outcomes and planning for subsequent management [4]. It is known that, in the majority of patients, LGIB stops spontaneously with favorable outcome. However, when hemodynamic instability persists after adequate resuscitation, especially in patients with cardiovascular comorbidities, colonoscopy should be performed as soon as possible, or alternatively, radiological embolization should be arranged [4].

With regards to bowel preparation, American guidelines recommend 4 to 6 L of polyethylene-glycol (PEG)-based iso-osmolar solution administered over 3 to 4 hours until the rectal effluent is clear. The most recent European Society of Gastrointestinal Endoscopy guidelines showed similar efficacy and safety profiles for low-volume PEG-based solutions in elective colonoscopies. However, there are limited scientific data on bowel preparation in an urgent setting, and recommendations should

be updated. We have successfully tested low-volume and very-low-volume PEG-based bowel preparation solutions in high-risk patients with acute LGIB [5]. This approach has the advantage of reducing the cleansing time, which is particularly important in those patients who need to restart antithrombotic therapy as soon as possible.

As an example, during the last 18 months, three patients (all men, mean age 69 years) presented to our unit with acute LGIB and hemorrhagic shock. All three patients were on regular antithrombotic therapy with warfarin, which had been suspended and reversed on patient arrival at the Emergency Department. We administered very-low-volume bowel preparation and performed emergency colonoscopy within 8 hours after arrival at the hospital. In all three patients, we achieved an optimal bowel preparation quality (Boston score 9), which enabled us to identify the bleeding source (1 Dieulafoy lesion at the cecum and 2 oozing vessels near a diverticular orifice, both in the sigmoid). All three bleeding lesions were effectively treated with through-the-scope clips, with complete hemostasis at the end of the procedure. Overall hemodynamic conditions improved rapidly after endoscopic treatment, and this allowed for an early restart of the antithrombotic therapy, which all three patients were taking regularly.

The possibility of achieving good-quality diagnostic and therapeutic colonoscopy in high-risk patients with acute LGIB is of paramount importance, especially in hospitals where interventional radiology is not available. This is even more relevant during the Covid-19 pandemic, when the transfer of patients

between hospitals should be restricted to minimize the risk of spreading infection and optimize human and technological resources. Therefore, we suggest that, in the setting of acute LGIB in high-risk patients, the sentence “less is more” should apply to bowel preparation volume.

### Competing interests

The authors declare that they have no conflict of interest.

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### CORRECTION

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In the above mentioned article the allocation of the institutions was corrected. Correct is:

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