

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




Authors

Paola Soriani¹, Paolo Biancheri¹, Cesare Hassan², Mauro Manno¹

Institutions

- 1 Gastroenterology and Digestive Endoscopy Unit, Azienda USL Modena, Italy
- 2 ONRM Hospital, Gastroenterology, Rome, Italy

Bibliography

Endosc Int Open 2021; 09: E977–E978

DOI 10.1055/a-1468-4326

ISSN 2364-3722

© 2021. The Author(s).

This is an open access article published by Thieme under the terms of the Creative Commons Attribution-NonDerivative-NonCommercial License, permitting copying

and reproduction so long as the original work is given appropriate credit. Contents may not be used for commercial purposes, or adapted, remixed, transformed or built upon. (<https://creativecommons.org/licenses/by-nc-nd/4.0/>)

Georg Thieme Verlag KG, Rüdigerstraße 14,
70469 Stuttgart, Germany

Corresponding author

Paola Soriani, Azienda USL Modena – Gastroenterology and Digestive Endoscopy Unit, Via Guido Molinari 2, Carpi 41012, Italy

Fax: +059 659500

paola.soriani@gmail.com

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.

References

- [1] Kherad O, Restellini S, Almadi M et al. Systematic review with meta-analysis: limited benefits from early colonoscopy in acute lower gastrointestinal bleeding. *Aliment Pharmacol Ther* 2020; 52: 774–788
- [2] Tsay C, Shung D, Stemmer Frumento K et al. Early colonoscopy does not improve outcomes of patients with lower gastrointestinal bleeding: systematic review of randomized trials. *Clin Gastroenterol Hepatol* 2020; 18: 1696–1703
- [3] Holzwanger EA, Bilal M, Stallwood CG et al. Acute lower gastrointestinal bleeding during the Covid-19 pandemic – less is more! Letter to the Editor. *Endoscopy* 2020; 52: 816–817
- [4] Strate LL, Gralnek IM. ACG Clinical Guideline: management of patients with acute lower gastrointestinal bleeding. *Am J Gastroenterol* 2016; 111: 459–474
- [5] Soriani P, Hassan C, Ottaviani L et al. Efficacy of rapid bowel preparation with new 1 L polyethylene glycol ascorbate solution in severe acute lower GI bleeding. *VideoGIE* 2020; 5: 114–115

CORRECTION

Paola Soriani, Paolo Biancheri, Cesare Hassan et al. Updating the recommendations on bowel preparation for acute lower gastro-intestinal bleeding: The time has come!

Endoscopy International Open 2021; 09: E977–E978.

DOI: 10.1055/a-1468-4326

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

Paola Soriani¹, Paolo Biancheri¹, Cesare Hassan², Mauro Manno¹

¹ Gastroenterology and Digestive Endoscopy Unit, Azienda USL Modena, Carpi, Italy

² ONRM Hospital, Gastroenterology, Rome, Italy