

Endoscopic Management of Acute Peptic Ulcer Bleeding



Yidan Lu, MD^a, Yen-I Chen, MD^a, Alan Barkun, MD, MSc^{a,b,*}

KEYWORDS

- Peptic ulcer bleeding • Upper gastrointestinal bleeding • Endoscopy • Gastric ulcer
- Duodenal ulcer • Nonvariceal upper gastrointestinal hemorrhage

KEY POINTS

- Endoscopy should be performed within 24 hours of presentation in patients with upper gastrointestinal bleeding.
- Pre-endoscopic prokinetics should be considered in patients who are suspected of having a significant amount of blood in the upper gastrointestinal tract, such as those with positive nasogastric aspirate or active hematemesis, to improve the endoscopic view and decrease the need for repeat endoscopy.
- Endoscopic therapy should be performed in lesions with high-risk stigmata (Forrest classification I–IIb) with combination therapy or monotherapy using current endoscopic hemostatic agents except for epinephrine, which should not be used alone as definitive therapy.
- Postendoscopic care includes testing and eradication of *Helicobacter pylori*, avoidance of nonsteroidal anti-inflammatory drugs whenever possible, and the use of proper gastro-protective strategies in patients requiring ongoing antiplatelet and anticoagulant therapy.

INTRODUCTION

Peptic ulcers are the most frequently encountered cause of upper gastrointestinal bleeding (UGIB), with an annual incidence of 19.4 to 57.0 per 100,000 individuals.¹ Ulcers account for one-third to half of all presentations of acute UGIB.^{1–3} A large United States inpatient database reveals declining trends in the incidence of both UGIB and peptic ulcer bleeding.¹ Similarly, the mortality from UGIB has also

Disclosure: No conflicts of interest to disclose.

Yidan Lu and Yen-I Chen are co-authors.

^a Division of Gastroenterology, McGill University Health Center, McGill University, 1650 Cedar Avenue, Montréal H3G 1A4, Canada; ^b Division of Clinical Epidemiology, McGill University Health Center, McGill University, 687 Pine Avenue West, Montréal H3A 1A1, Canada

* Corresponding author. Division of Gastroenterology, McGill University Health Center, Montreal General Hospital Site, 1650 Cedar Avenue, Room D7-185, Montréal H3G 1A4, Canada.

E-mail address: alan.barkun@muhc.mcgill.ca

Gastroenterol Clin N Am 43 (2014) 677–705

<http://dx.doi.org/10.1016/j.gtc.2014.08.003>

gastro.theclinics.com

0889-8553/14\$ – see front matter © 2014 Elsevier Inc. All rights reserved.

decreased from 2.95% to 2.45%.¹ In the management of UGIB, the use of endoscopy plays a fundamental role in the diagnosis, treatment, and prognostication of UGIB. Pre-endoscopic considerations such as the use of prokinetics and timing of endoscopy are reviewed, with a focus on the endoscopic management of peptic ulcer bleeding. Such management includes the use of the available hemostatic modalities, including emerging therapies, which will be reviewed along with their comparative effectiveness. Proton-pump inhibitors (PPIs) after endoscopy, indications for second-look endoscopy, and the use of secondary pharmacologic prophylaxis are also discussed. Issues of risk stratification and initial resuscitation are discussed in an article elsewhere in this issue by Meltzer and Klein.

PROKINETICS

Prokinetic agents such as erythromycin and metoclopramide can be administered before endoscopy to improve endoscopic yield and reduce the need for a repeat endoscopy. Erythromycin, a motilin agonist, can be given at a dose of 250 mg intravenously, and metoclopramide 10 mg intravenously 30 to 60 minutes before endoscopy. The use of erythromycin is favored based on current data. Doses used in the literature range from 3 to 4 mg/kg of erythromycin administered 20 to 90 minutes before endoscopy. Furthermore, the QT-interval-prolonging effect of erythromycin should be taken into consideration, and an electrocardiogram first performed.

The use of prokinetics should be considered in acute UGIB, particularly when targeting patients with active bleeding and/or evidence of blood in the stomach.⁴ A meta-analysis comprising 3 randomized controlled trials (RCTs) with erythromycin and 2 abstracts with metoclopramide included a total of 162 patients, all showing evidence of active bleeding with blood in the stomach,⁵ showed that a prokinetic agent, in comparison with placebo or no treatment, led to a significant reduction in the need for repeat endoscopy (odds ratio [OR] 0.55; 95% confidence interval [CI] 0.32–0.94). This effect was not preserved when analyzing metoclopramide alone (OR 1.22; 95% CI 0.35–4.25).⁵ No differences were noted for blood transfusions or need for surgery, while mortality was not analyzed. A more recent meta-analysis solely looking at erythromycin showed similar results, with improvement in the visualization of the gastric mucosa (OR 3.43; 95% CI 1.81–6.50), and a decrease in the need for a second-look endoscopy (OR 0.47; 95% CI 0.26–0.83).⁶ Of note, the effect of erythromycin in decreasing units of blood transfused and length of stay in hospital reached significance⁷ when an additional trial that only included patients with variceal bleeding⁸ was added to the meta-analysis.^{7,9}

Pre-endoscopic intravenous PPI administration and nasogastric lavage can also be considered before endoscopy; these details are discussed elsewhere.

TIMING OF ENDOSCOPY

The performance of early endoscopy within 24 hours of patient presentation is warranted for most patients.^{4,10} This practice has been shown to be safe for all patients at risk, allows for earlier discharge of low-risk patients,¹¹ and improves outcomes in those at high risk.⁴ Lower costs are also associated with early discharge after endoscopy of low-risk patients.¹²

Several RCTs and retrospective cohort studies have examined very early endoscopy at less than 2 to 3, less than 6, less than 8, and less than 12 hours, compared with less than 24 to 48 hours.¹³ Faster time to endoscopy yielded higher rates of finding high-risk stigmata of bleeding at endoscopy,^{14–16} and similarly higher rates of hemostasis being performed^{16,17} without demonstrable effects on outcomes of

Download English Version:

<https://daneshyari.com/en/article/3300991>

Download Persian Version:

<https://daneshyari.com/article/3300991>

[Daneshyari.com](https://daneshyari.com)