

12-11-2019

## Pantoprazole continuous infusion versus intermittent bolus for gastrointestinal bleed prior to esophagogastroduodenoscopy (EGD)

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### Recommended Citation

Dany V, et al. Pantoprazole continuous infusion versus intermittent intravenous (IV) bolus in non-variceal upper gastrointestinal (GI) bleed prior to esophagogastroduodenoscopy (EGD). Poster presented at: ASHP Midyear Clinical Meeting & Exhibition; December 8-12, 2019; Las Vegas, NV.

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# Pantoprazole continuous infusion versus intermittent bolus for gastrointestinal bleed prior to esophagogastroduodenoscopy (EGD)



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## Introduction

- Upper gastrointestinal (GI) bleeding is a complication of peptic ulcer disease (PUD) and is associated with morbidity and mortality
- Practice guidelines recommend the use of a continuous infusion PPI to prevent rebleeding in patients with non-variceal upper GI bleeds with
  - Active bleeding
  - Nonbleeding visible vessels
  - Adherent clots
- PPIs elevate gastric pH levels and aid in stabilization of blood clots
- Studies examining continuous infusion versus intermittent bolus PPI post EGD have demonstrated that intermittent bolus administration is comparable to continuous infusion
- To our knowledge no studies have been performed to evaluate the outcomes of continuous infusion versus intermittent bolus PPI prior to EGD

## Purpose

- The objective of this study is to evaluate the clinical outcomes of continuous infusion PPI versus intermittent bolus PPI prior to EGD

## Methods

### Study Design

- Retrospective chart review of patients with non-variceal upper GI bleeds admitted to a community teaching hospital between January 2013 to July 2019

### Study Population

- Patients diagnosed with a non-variceal upper GI bleed who underwent EGD during the same admission and received IV pantoprazole as either intermittent bolus or continuous infusion during their course of hospitalization will be identified
- Patients with colonic bleed, lower GI bleed, and who have esophageal or gastric varices on upper endoscopy will be excluded

### Study Groups

1. Intermittent bolus
  - Pantoprazole 40mg IV twice daily
2. Continuous infusion
  - Pantoprazole 80 mg IV loading dose followed by 8 mg/hr IV continuous infusion

## Statistical Analysis

- Based on existing studies, an estimated 1436 subjects per group are needed to achieve 80% statistical power and the type-I error of 0.05 (RR, 0.74; 2-sided 95% CI, 0.52-1.06)

## Study Outcomes

- Primary outcome of this study is the rate of re-bleeding
- Secondary outcomes will include
  - Findings and intervention during EGD
  - Need for blood transfusion
  - In-hospital mortality
  - Readmission within 30 days with a principle diagnosis of upper GI bleed

## Results

- No results available at this time, as data collection is in progress. Planned completion in Spring of 2020.

## Conclusion

- No conclusion available at this time, as data collection is in progress. Planned completion in Spring of 2020.

## References

1. Kaviani MJ, Hashemi MR, Kazemifar AR, et al. Effect of oral omeprazole in reducing re-bleeding in bleeding peptic ulcers: a prospective, double-blind, randomized, clinical trial. *Aliment Pharmacol Ther.* 2003;17:211-216.
2. Sachar H, Vaidya K, Laine L, et al. Intermittent vs continuous proton pump inhibitor therapy for high-risk bleeding ulcers. *JAMA Intern Med.* 2014;174(11):1755-1762.
3. Hung W, Li VM, Chung CC, et al. Randomized trial comparing pantoprazole infusion bolus and no treatment on gastric pH and recurrent bleeding in peptic ulcers. *ANZ J Surg.* 2007;77:677-681.
4. Alneaimi K, Abdelmoula A, Vincent M, Savale C, Baye B, Lesur G. Seven cases of upper gastrointestinal bleeding after cold biopsy. *Endosc Int Open.* 2016;4(5):E583-E584.
5. Laine L, Jensen DM. Management of patients with ulcer bleeding. *Am J Gastroenterol.* 2012;107(3):345-60
6. Barkun AN, Almadi M, Kuipers EJ, et al. Management of nonvariceal upper gastrointestinal bleeding: guideline recommendations from the international consensus group. *Ann Intern Med.* 2019

**Disclosure Statement:** Authors have nothing to disclose