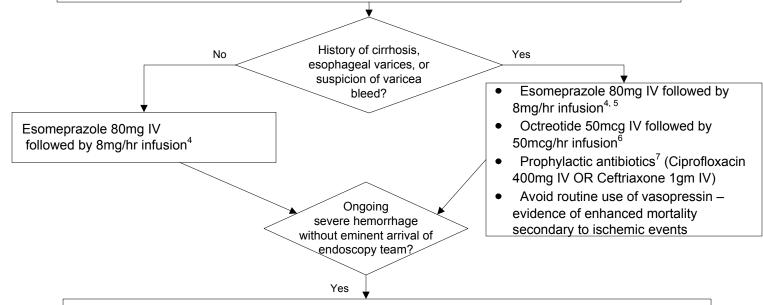
## Management of Massive Upper GI Bleed

## **ABCs**

- Consider intubation for inability to protect airway / hemodynamics
- No evidence for prophylactic intubation<sup>1</sup>
- Minimum 2 large bore IVs
- Initiate volume resuscitation with NS or LR bolus
- Uncrossmatched PRBCs
- Consider Level 1 Rapid Infuser for rapid transfusion
- Consult GI for emergent endoscopy, call SCU for admission
- Labs: type and cross, CBC, CMP, INR, ammonia, lactate, Mg, ionized Ca
- +/- NG tube / lavage no evidence to suggest diagnostic or therapeutic benefit<sup>2</sup>
- +/- Erythromycin 250mg IV over 20min given <30-90min prior to endoscopy<sup>3</sup>
- Vitamin K 10mg IV if INR>1.5 or known / suspected coagulopathy



- Continue ongoing resuscitation and transfusion efforts
- If anticipate transfusion of ≥ 10 units PRBC's, initiate massive transfusion algorithm<sup>8</sup>
- Consider placement of an esophageal / gastric balloon tamponade device
  - Call CSD for "Blakemore box" AND football helmet
  - Follow instructions included with tube carefully
  - Strongly consider endotracheal intubation for airway protection
  - Be aware of potential serious complications<sup>9</sup>
- 1. 2009 retrospective review of 307 ICU patients with UGIB, no difference in cardiopulmonary complications, ICU and hospital length of stay, and hospital mortality for those prophylactically intubated. (*Gastrointest Endosc.* 2009 Jun;69(7):e55-9)
- 2. Bloody aspirate = PPV 75% and NPV 78% of high risk lesion (*Gastrointest Endosc.* 2004 Feb;59(2):172-8) 2011 retrospective review = no difference in 30 day mortality, length of stay, blood transfusions required, or rate of emergency surgery (*Gastrointest Endosc.* 2011 Nov; 74 (5): 971-80.)

See also: Is nasogastric tube lavage in patients with acute upper GI bleeding indicated or antiquated? Gastrointest Endosc. 2011.

- 3. Improved view at time of endoscopy. Needs to be given in conjunction with endoscopy (ideally 30-60 mins prior). (Scand J Gastroenterol. 2011 Jul;46(7-8):920-4), equally effective as NGL (Ann Emerg Med. 2011 Jun;57(6):582-9)
- 4. Improved control of initial bleeding but no differences in mortality, rebleeding, transfusion rates, or surgery. (Proton Cochrane Database Syst Rev. 2010 Jul 7;(7):CD005415)
- 5. Some studies report up to 50% of massive UGIB in cirrhotic is non-variceal.
- 6. Improved control of initial bleeding and slightly decreased transfusion rate but do reduction of mortality or rebleeding. (Cochrane Database Syst

Rev. 2008 Jul 16;(3):CD000193)

- 7. Improved all cause mortality, recommended before endoscopy. (Cochrane Database Syst Rev. 2010 Sep 8;(9):CD002907)
- 8. Refer to MMC Massive Transfusion Algorithm available at emquidelines.org
- 9. Major complications have been reported in 8% to 16% of patients. Mortality directly related to use of GEBT tube reported to be ~3%.

This guideline was ratified by the emergency department faculty at Maine Medical Center in May 2012. It reflects our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for clinicians caring for patients and is not intended to replace providers' clinical judgment.

## Guideline Evidence

Guideline Topic: Management of Massive Upper GI Bleed

Author: Thomas Quimby MD

Date of Creation: 2/16/12 Sugg Update: 2014

Search Criteria: many

Databases: PubMed, Cochrane Database

Key Guidelines (Dates) Prevention and management of

gastroesophageal varices and variceal

hemorrhage in cirrhosis. AASLD Guidelines

2007

#	Recommendation	Source	Classification	Level of Evidence
1	No evidence to date supports prophylactic endotracheal intubation	Gastrointest Endosc. 2009 Jun;69(7):e55-9	Retrospective, propensity-matched case-control study	Ilb
2	NG Lavage is not highly sensitive or specific for diagnosis of high risk UGIB. Bloody aspirate = PPV 75% and NPV 78% of high risk lesion	Gastrointest Endosc. 2004 Feb;59(2):172- 8	Retrospective Review	III
3	Patients with UBIG who underwent NG lavage vs those that did not: there was no difference in 30 day mortality, length of stay, blood transfusions required, or rate of emergency surgery	Gastrointest Endosc. 2011 Nov;74(5):971- 80	Retrospective, propensity- matched case- control study	IIb
4	Erythromycin infusion prior to endoscopy in acute UGIB significantly improves visualization of gastric mucosa while decreasing the need for a second endoscopy.	Scand J Gastroenterol. 2011 Jul;46(7-8):920-4	Meta-analysis of 4 RCTs	la
5	In acute UGIB, administration of intravenous erythromycin provides satisfactory endoscopic conditions, without the need for a nasogastric tube and gastric lavage.	Ann Emerg Med. 2011 Jun;57(6):582-9	RCT	lb
6	PPI treatment initiated before endoscopy for UGIB might reduce the proportion of participants with evidence of recent bleeding at initial endoscopy and reduces the need for therapy at endoscopy. However, there is no evidence that PPI treatment affects clinically important outcomes, namely mortality, rebleeding or need for surgery.	Cochrane Database Syst Rev. 2010 Jul 7;(7):CD005415	Meta-analysis of 6 RCTs	la
7	Octreotide in acute UGIB due to esophageal varicies improves rate of initial control of bleeding and results in 0.7 units saved. There is no mortality benefit or reduction in the rate of rebleeding.	Cochrane Database Syst Rev. 2008 Jul 16;(3):CD000193	Meta-analysis of 21 RCTs	la
8	Prophylactic antibiotic use in patients with cirrhosis and UGIB significantly reduced bacterial infections, and seems to have reduced all-cause mortality, bacterial infection mortality, rebleeding events, and hospitalization length.	Cochrane Database Syst Rev. 2010 Sep 8;(9):CD002907	Meta-analysis of 12 RCTs	la
9	Balloon Tamponade is effect for initial control of hemorrhage (~90%) but there is a high rate of rebleeding and there is no mortality benefit.	Crit Care Clin. 1992 Oct;8(4):743-53	Retrospective Review	III
10	Vasopressin benefits for acute UGIB are outweighed by ischemic side effects. The use of nitrates with vasopressin may decrease side effects but compared to octreotide therapy still have higher risk.	Hepatology. 2007;46(3):922	Data from RCTs	lb