Management of Massive Upper GI Bleed

ABCs
- Consider intubation for inability to protect airway / hemodynamics
- No evidence for prophylactic intubation[1]
- 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[2]
- +/- Erythromycin 250mg IV over 20min given <30-90min prior to endoscopy[3]
- Vitamin K 10mg IV if INR>1.5 or known / suspected coagulopathy

History of cirrhosis, esophageal varices, or suspicion of varicea bleed?

No

Esomeprazole 80mg IV followed by 8mg/hr infusion[4]

Yes

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- Octreotide 50mcg IV followed by 50mcg/hr infusion[6]
- Prophylactic antibiotics[7] (Ciprofloxacin 400mg IV OR Ceftriaxone 1gm IV)
- Avoid routine use of vasopressin – evidence of enhanced mortality secondary to ischemic events

Ongoing severe hemorrhage without eminent arrival of endoscopy team?

Yes

- Continue ongoing resuscitation and transfusion efforts
- If anticipate transfusion of ≥ 10 units PRBC's, initiate massive transfusion algorithm[8]
- 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[9]

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 emguidelines.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.

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