Variceal Bleed

For patients with a suspected or confirmed variceal bleed.
For stable patients, a hemoglobin threshold of 70 g/L is recommended before initiating Packed Red Blood Cells transfusion; unstable or actively bleeding patients may need transfusion at a higher hemoglobin threshold.
Transjugular intrahepatic portosystemic shunt may be an option in some patients with refractory bleeding-suggest consult liver specialist if considering.

- [ ] EGD (Esophagogastroduodenoscopy)
- [ ] Medications
  - [ ] Blood Formation, Coagulation and Thrombosis

    For an elevated INR
    Vitamin K: to treat supra-therapeutic INR (likely helpful only if jaundiced). Use IV only when PO is not feasible.
    IV administration of vitamin K is associated with hypersensitivity reactions.

    - [ ] vitamin K1 (phytonadione) liquid oral
      10 mg, oral, daily, for 3 days
    - [ ] vitamin K1 (phytonadione) injection
      10 mg, intravenous, daily, for 3 days
    - [ ] Prothrombin Complex Concentrate
  - [ ] Antibacterial

    With GI bleeding, antibiotics decrease mortality, re-bleeding and sepsis. Extend duration beyond 5 days if bacteremic or other active infection. Shorten duration if discharged before 5 days.

    - [ ] erythromycin IV
      3 mg/kg/dose, intravenous, once, Infuse over 45 minutes. To be given 30 to 60 minutes pre-endoscopy; coordinate with gastroscopist to ensure appropriate timing; contraindicated with QT prolongation.
    - [ ] cefTRIAXone IV
      1 g, intravenous, daily, for 5 days
- [ ] Gastrointestinal Agents

  Until endoscopy, use proton-pump inhibitor (PPI) therapy. Intermittent PPI is equivalent to IV PPI infusions for known ulcer bleeds.
  Suggest PO dosing in stable patients not actively vomiting.

  - [ ] pantoprazole IV or PO
    - ○ pantoprazole IV
      40 mg, intravenous, every 12 hours, scheduled, for 72 hours, for 72 hours post endoscopy
    - ○ pantoprazole magnesium tablet enteric-coated
      40 mg, oral, 2 times per day, 30 minutes before breakfast and supper, for 72 hours, for 72 hours post endoscopy
  - [ ] octreotide IV

    octreotide 50 mcg in NaCl 0.9% 50 mL bag
    50 mcg, intravenous, once,

    Followed By

    octreotide 200 mcg in NaCl 0.9% 100 mL (2 mcg/mL) bag
    50 mcg/hr (25 mL/hr), intravenous, at 25 mL/hr, continuous,
    reassess at 72 hours. Recommend 3 to 5 days of therapy.
  - [ ] If hepatic encephalopathy is complicating acute upper gastrointestinal bleeding (UGIB)
    - ○ lactulose liquid oral
      15-30 mL, oral, 3 times per day, as needed, hepatic encephalopathy, Titrate for 2 to 3 bowel movements per day is achieved.
    - ○ lactulose 667 mg/mL oral liquid for rectal use
      300 mL, rectal, every 6 hours, scheduled, lactulose 300 mL in 700 mL water rectally every 6 hours until clinical improvement. Retain for 30 to 60 minutes (use if intolerant of oral therapy)
- [ ] Secondary Prophylaxis (Start once hemodynamically stable. DO NOT USE WHILE ON OCTREOTIDE)

  - Secondary prophylaxis ideally requires a combination non-selective beta blockers (NSBBs) and band ligation. With refractory ascites AND severe circulatory dysfunction NSBBs are contraindicated until improvement.
  - Consider starting at half dose if borderline BP/HR
  - Titrate as tolerated (to heart rate 55 to 60 bpm, systolic blood pressure not below 90 mm Hg)

  - ○ nadolol tablet (Avoid if renal dysfunction as it is renally cleared) ⓘ
    40 mg, oral, daily, Avoid if renal dysfunction as it is renally cleared
  - ○ propranolol tablet
    20 mg, oral, 2 times per day
  - ○ carVEDilol tablet (Avoid if decompensated (ascites). Reduces blood pressure)
    3.125 mg, oral, 2 times per day, with breakfast and supper, Avoid if decompensated (ascites). Reduces blood pressure