

Acute Gastrointestinal (GI) Bleed in the Emergency Department



Children's Mercy
KANSAS CITY

Evidence Based Practice



QR code for
mobile view

Inclusion criteria:

- Recent onset (< 6 weeks) of visible GI bleeding

AND

- Melena, hematochezia, or hematemesis

Exclusion criteria:

- Occult bleeding
- Patients outside CMH Kansas or Adele Hall ED

Concerns for severe or ongoing bleeding:

- Vitals suggestive of hypovolemia
- Hgb ≤ 7 g/dL
- Transfused 40 ml/kg in past 2 hours
- Anticipated need to transfuse 40 ml/kg in the next 24 hours
- Complex chronic conditions including technology dependence
- History of variceal bleeding**
- Concerning amount of observed blood loss

Anticipate Minimal/Self-limited Bleed

- Continue to monitor for worsening bleeding while evaluating source of bleed

Critical labs:

- i-STAT Hgb
- CBC
- BMP
- Hepatic function panel
- aPTT, PT/INR
- Fibrinogen
- Type and crossmatched
- Blood culture *if suspected variceal bleed*

Empiric Antibiotics for Suspected Variceal Bleed:

- Piperacillin/tazobactam 100 mg/kg (piperacillin content) IV x 1 time only **OR**
- Cefepime 50 mg/kg IV plus metronidazole 10 mg/kg IV x 1 time only

Penicillin Allergy:

For patients at **high risk for severe delayed** reaction, consult Infectious Diseases

Patient presents with acute overt gastrointestinal bleeding

Does patient have signs of shock?

No

Yes

Concerns for severe or ongoing bleeding?

No

Yes

AT RISK for Hemorrhagic Shock

- NPO
- Obtain IV access and initiate crystalloid fluids
- Draw critical labs
- If transfusion is indicated, crossmatched PRBCs should be started as soon as available
 - Administer PRBC 5 - 10 ml/kg over no more than 2 hours
- Reassess vitals q 15 min
- If signs of shock are observed, escalate treatment to presumed hemorrhagic shock
- If at CMH Kansas ED initiate transfer to Adele Hall ED

- Evaluate need for second PIV to administer medications
- High dose IV pantoprazole
 - 1 mg/kg x 1 time only (max dose: 80 mg)
- Start antibiotics *if suspected variceal bleed*
- Consult GI, surgery or other subspecialists as indicated

- Differential diagnosis based on age, location (upper vs lower) and severity of blood loss
- Important content for GI bleed H&P
- Refer to related clinical pathways as appropriate

Determine disposition based on severity of bleed and/or need for further diagnostic evaluation

DISCHARGE

Establish timely follow up with PCP, GI, or other subspecialists as needed (select 2 week priority for referrals)

ADMIT

To appropriate inpatient team based on clinical stability and leading diagnosis

Hemorrhagic Shock

- Stabilize per PALS and consult GI
- Obtain IV access x 2
 - If unable to obtain, start IO immediately
 - Rapidly bolus 20 ml/kg NS, repeat as needed until blood is available
- Obtain uncrossmatched PRBC supply from ED fridge
- Activate Massive Transfusion Protocol (Adele Hall)
- Draw critical labs
- Administer PRBC; infusion volume/time based on clinical status
- If at CMH Kansas ED initiate transfer to Adele Hall ED

- Consult surgery if continued uncontrolled hemorrhage
- High dose IV pantoprazole
 - 1 mg/kg x 1 time only (max dose: 80 mg/day)
- Start antibiotics *if suspected variceal bleed*
- Initiate transfer to ICU vs OR pending discussion with subspecialists
 - Notify bed control for ICU bed even if going to OR first
- Consider octreotide in consultation with GI (once stabilized and adequate IV access is available)
 - 1 mcg/kg bolus over 30 min followed by 1 mcg/kg/hr continuous infusion

Related Clinical Pathways:

- [Acute gastroenteritis](#)
- [Child physical abuse](#)
- [Foreign body ingestion](#)
- [Intussusception](#)
- [Newly diagnosed solid tumor](#)
- [Sepsis](#)

Abbreviations:

PALS = pediatric advanced life support
PRBC = packed red blood cells

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[Link to synopsis and references](#)

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This clinical pathway is meant as a guide for physicians and healthcare providers. It does not establish a standard of care, and is not a substitute for medical judgment which should be applied based upon the individual circumstances and clinical condition of the patient. Printing of Clinical Pathways is not recommended as these documents are updated regularly. Copyright © The Children's Mercy Hospital 2024. All rights reserved.