Important GI clinical pathways and guidelines

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Important GI clinical pathways and Guidelines

GI Bleeding Management-Clinical Pathway

Risk profile assessment

High Risk Patients:
- Presentation with shock (Pulse rate > 100 beats/min, systolic BP < 100 mmHg)
- Age > 60 years
- Presence of comorbidities (cardiac, renal, liver disease, cancer)

Low Risk Patients:
- Age < 60 years
- Hemodynamically stable or gets stabilized quickly after initial resuscitation
- No comorbidities

- Hematemesis/melena
- Bleeding per rectum
- Coffee ground vomitus

UGI Bleed

- Check vitals
- Risk profile assessment

Send CBC/LFT/Renal function test/Serum electrolytes/Blood group & match/ Coagulation profile

Reauacitation:
- Assess Airway, breathing, and circulation
- Tow large bore IV cannula
- Fluid resuscitation
- Follow HMC QEWS protocol
- Reassess patient after fluid challenge

stable

Unstable

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Stable

Initial management

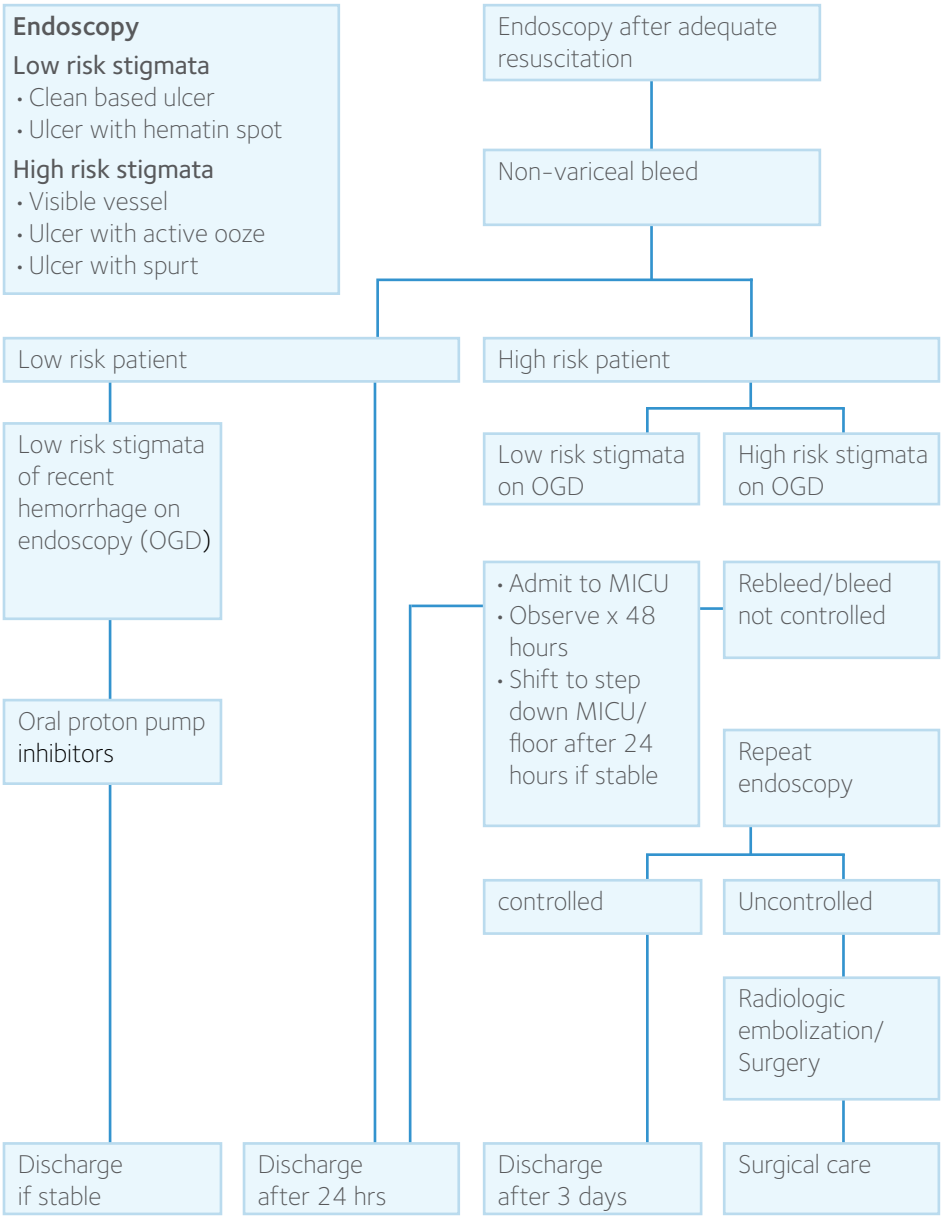
- NPO but sips of water is allowed
- Transfer to monitored bed with automatic blood pressure monitoring, ECG monitoring, and pulse oximetry
- Supplemental oxygen by nasal canula to maintain saturation 90-100%
- Repeat CBC
- Transfuse PRBC to maintain Hgb 8-10 g/dL
- Start oral proton pump inhibitors at the earliest sign of non-variceal bleed
- Intravenous proton pump inhibitors can be started if patient is bleeding actively and cannot be fed orally
- In case of cirrhotic patients, start Vasopressin anologs (Terliprissin) as soon as possible at a dose of 2 mg IV every 4 hours and can be titrated down to 1 mg IV 4 hours once hemorrhage is controlled for 5 days
- Inform GI on call next day

Unstable
Large volume hematemesis/ melena, worsening tachycardia/hypotension despite resuscitation

Inform GI on call stat

Resuscitate aggressively

- Consider oropharyngeal intubation
- 500 mL of normal saline or lactated Ringer's over 30 minutes
- Transfuse PRBC to maintain Hb 8-10 g/dL
- Central line placement
- Platelet transfusion if patients are actively bleeding and have a platelet count of less than 50,000 /cc
- Fresh frozen plasma for patients who have either a fibrinogen level of less than 1 g/L, or a prothrombin time (INR) or activeted partial thromboplastin time greater than 1.5 times normal
- In case of cirrhotic patients, start Vasopressin anologs (Terliprissin) as soon as possible at a dose of 2 mg IV every 4 hours and can be titrated down to 1 mg IV 4 hours once hemorrhage is controlled for 5 days
- Urgent admission to MICU


Endoscopy
Low risk stigmata
• Clean based ulcer
• Ulcer with hematin spot
High risk stigmata
• Visible vessel
• Ulcer with active ooze
• Ulcer with spurt
Endoscopy after adequate resuscitation
Non-variceal bleed
Low risk patient
High risk patient
Low risk stigmata of recent hemorrhage on endoscopy (OGD)
Low risk stigmata on OGD
High risk stigmata on OGD
• Admit to MICU
• Observe x 48 hours
• Shift to step down MICU/ floor after 24 hours if stable
Rebleed/bleed not controlled
Oral proton pump inhibitors
Repeat endoscopy
controlled
Uncontrolled
Radiologic embolization/ Surgery
Discharge if stable
Discharge after 24 hrs
Discharge after 3 days
Surgical care

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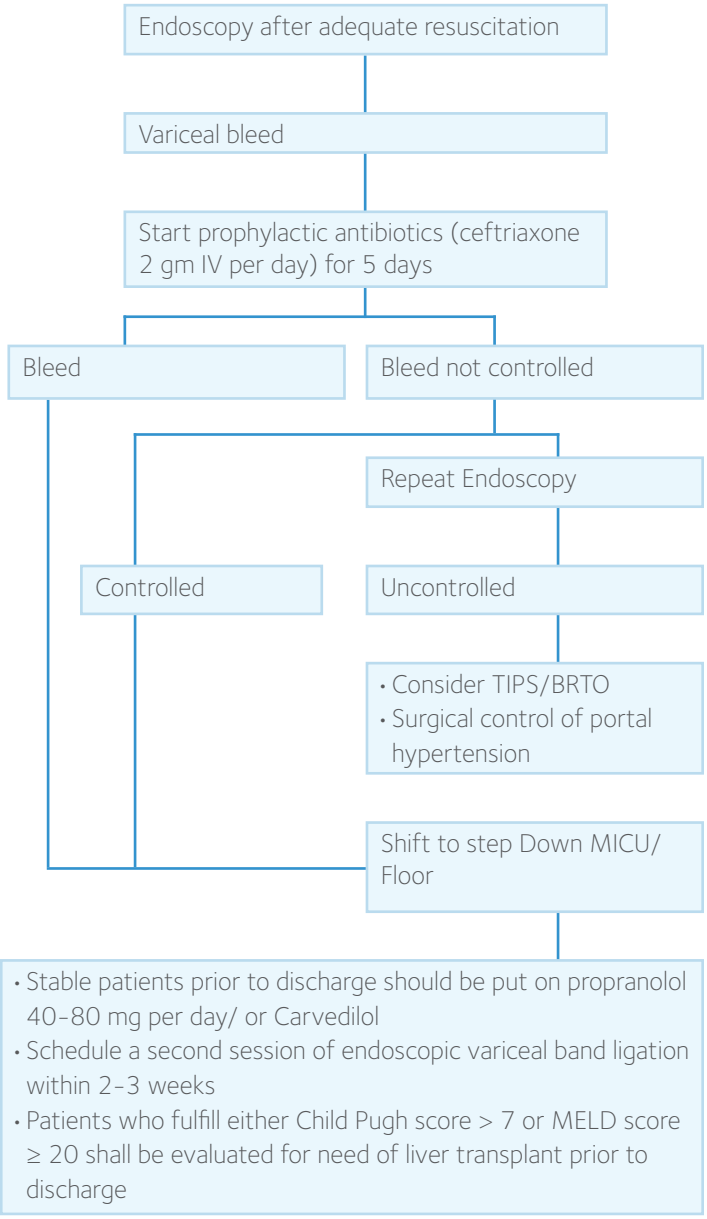

2- Acute Cholangitis Diagnosis and Treatment Pathway

When do I clinically suspect acute cholangitis?

Presence of Charcot's triad which include:

- Fever with or without chills/rigors
- Jaundice
- Abdominal pain

In severe cases, presence of Reynold's pentad which include (in addition to Charcot's triad):

- Shock
- Altered sensorium

History of biliary diseases such as gallstones, previous biliary procedures or placement of a biliary stent.

Differential diagnosis:
Acute cholecystitis, liver abscess, HELLP syndrome, mesenteric ischemia, complicated gastric and duodenal ulcer, acute pancreatitis, acute hepatitis, and septicemia from other origins (pyelonephritis, diverticulitis, appendicitis, right lower lobe pneumonia).

What tests are done to diagnose cholangitis?

For diagnosis:
WBC – white blood cell count
CRP - C-reactive protein
LFT – liver function test
USG – ultrasound Abdomen

For grading of severity and preparation for therapeutic procedure:
Hemoglobin (Hb) platelets, electrolytes, urea, creatinine, arterial blood gasses (ABG), prothrombin time (international normalized ratio) partial thromboplastin time - PT (INR)/APTT, amylase and blood culture.

Keep patient nil by mouth. Assess co-morbidities (respiratory, cardiac, diabetes, high BMI).

Give vitamin K IV if PT is prolonged and withhold heparin for 24 hours.

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Dignosis based on 3 criteria

A. Systemic inflammation
   Fever ± chills/rigors
   Elevated inflammatory markers

B. Cholestasis
   Jaundice
   Deranged LFT

C. Imaging
   Biliary dilatation
   Underlying etiology – stricture, stone, stent

Suspected: One item in A + one item in B or C
Definite: One item in A and B and C

TG 13

Initiate sepsis resuscitation and management protocols

NPO, intravenous fluid, antimicrobial therapy, and analgesia together with close monitoring of pulse, blood pressure, and urinary output

ICU consultation / admission if:

Airway not maintained, coma, anuria
RR >35/min, PaO2 <50 mmHg
HR <40 or >150/min, SBP <80 or MAP <60 mmHg
pH <7.1 or >7.7, Na <110 or > 170, K <2.0 or > 7.0 mmol/L
Ca >3.75 , Glucose >44.4 mmol/L
(considered SEVERE cholangitis)

JCAHCO

Grading of severity

SEVERE

Organ dysfunction present (any one)

1. Cardiovascular - Hypotension requiring inotropes
2. Respiratory - Type 1 or 2 respiratory failure, PaO2/FiO2 <300
3. Renal - Oliguria or creatinine >177umol/L
4. Haematological - Platelets <100 x10^3/uL
5. Neuro - Impaired consciousness
6. Hepatic - INR >1.5

MODERATE

Any two of the following

1. WBC >12 or <4 x10^3/uL
2. Fever > 39 ºC
3. Age >75 yrs
4. Bilirubin >85 umol/L
5. Albumin <28 gm/L

MILD

None of the above

TG 13

Biliary drainage (by ERCP, if not possible, by percutaneous transhepatic route)
SEVERE >> URGENT (within 24 hrs)
MODERATE >> EARLY (within 48 hrs)
MILD >> ELECTIVE

3- Regimens Used to Treat Helicobacter Pylori Infection

Standard initial treatment (use one of the following three options)

Triple therapy for 7–14 days
- PPI, healing dose twice/day*
- Amoxicillin, 1 g twice/day†
- Clarithromycin, 500 mg twice/day

Quadruple therapy for 10–14 days‡
- PPI, healing dose twice/day*
- Tripotassium dicitratobismuthate, 120 mg four times/day
- Tetracycline, 500 mg four times/day
- Metronidazole, 250 mg four times/day§

Sequential therapy
- Days 1–5
  - PPI, healing dose twice/day*
  - Amoxicillin, 1 g twice/day
- Days 6–10
  - PPI, healing dose twice/day*
  - Clarithromycin, 500 mg twice/day
  - Tinidazole, 500 mg twice/day§

Second-line therapy, if triple therapy involving clarithromycin was used initially (use one or the other)

Triple therapy for 7–14 days
- PPI, healing dose once/day*
- Amoxicillin, 1 g twice/day
- Metronidazole, 500 mg (or 400 mg) twice/day§

Quadruple therapy, as recommended for initial therapy

* Examples of healing doses of proton-pump inhibitors (PPIs) include the following regimens, all twice per day: omeprazole at a dose of 20 mg, esomeprazole at a dose of 20 mg, rabeprazole at a dose of 20 mg, pantoprazole at a dose of 40 mg, and lansoprazole at a dose of 30 mg. In some studies, esomeprazole has been given at a dose of 40 mg once per day.
† If the patient has an allergy to amoxicillin, substitute metronidazole (at a dose of 500 mg or 400 mg) twice per day and (in initial triple therapy only) use clarithromycin at reduced dose of 250 mg twice per day.
‡ Quadruple therapy is appropriate as first-line treatment in areas in which the prevalence of resistance to clarithromycin or metronidazole is high (>20%) or in patients with recent or repeated exposure to clarithromycin or metronidazole.
§ Alcohol should be avoided during treatment with metronidazole or tinidazole, owing to the potential for a reaction resembling the reaction to disulfiram with alcohol use.

4- Guidelines for Surveillance of Colorectal Cancer in IBD Patients

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The following are intradepartmental recommendations for surveillance for colorectal cancer (CRC) in IBD patients at HMC:

1. Surveillance is clearly indicated and the method should be chromo-endoscopy when available. Otherwise any form of surveillance including using NBI/WL endoscopy with targeted and random Biopsies is reasonable.
2. The interval of such surveillance should be tailored according to the patient risk.
3. Patients ideally should be categorized into high, intermediate and low risk as follows:

High risk group (yearly):

1. Patients with IBD and PSC
2. Patients with IBD and extensive colitis with severe inflammation despite treatment.
3. Patients with low grade dysplasia (in case no colectomy performed).

Surveillance to be started at time of diagnosis in this high-risk group.

Intermediate risk (every 2-3 years):

a. Patients with IBD and extensive colitis with > 8 years of duration of symptoms.
b. Left-sided colitis with > 10 years of disease duration.
c. Patients with IBD and family history of CRC in first degree relative.

Surveillance to be started 8-10 years after diagnosis in this intermediate risk group.

Low risk (every 5 years):

a. Patients with left sided disease which is mild and quiescent and of > 10 years of duration.

Surveillance to be started 10 years after diagnosis in this low risk group.

Notes: