STANDARD TREATMENT WORKFLOW (STW)

Acute Gastrointestinal Bleed in Adults – Part A

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Standard Treatment Workflow (STW)

ACUTE GASTROINTESTINAL BLEED IN ADULTS - PART A
ICD-10-K92.2

Diagnose Acute GI Bleed if there is history of:
- Vomiting of blood (Hematemesis)
- Bleeding per rectum (Hematochezia)
- Black tarry stools (Melena)
- Blood in nasogastric tube (NC) [Active GI bleed]

Assess for high risk
(Classify as high risk if any of these are present)
- Pulse rate >100/min
- Systolic BP <90 mmHg
- H/O Syncope

Resuscitate
- Place at least one IV cannula (minimum 18 g) and start crystalloids (Ringer’s lactate or normal saline)
- Place a NG tube and perform lavage

Targets
- Pulse rate <100/min
- Systolic BP >90 mmHg
Dutta U, et al.: Acute Gastrointestinal Bleed in Adults – Part A

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D iagnose Acute GI Bleed if there is history of

- Vomiting of blood (Hematemesis)
- Black stools per rectum (Hematochezia)
- Black tarry stools (Melena)
- Blood in nasogastric tube (NG) (Active GI bleed)

Assess for:

- Pulse rate >100/min
- Systolic BP < 90 mmHg
- H/O Syncope
- Oxygen saturation <90%
- Altered sensorium
- Age > 60 years and/or significant co-morbid conditions

Assess for High Risk (Classify as high risk if any of these are present)

- Place at least one IV cannula (minimum 18 GA) and start crystalloids (Ringer’s lactate or normal saline)
- Place a NG tube and perform lavage
- Start supplemental oxygen at 2 L/min in high risk cases and those in shock
- Stop anticoagulants and antiplatelets. If H/o recent myocardial infarction or stent placed, consult a cardiologist
- Hemoglobin < 7 g/dL, or in case of heart disease, < 9 g/dL

CLINICAL EVALUATION

<table>
<thead>
<tr>
<th>Assess for</th>
<th>History and examination</th>
<th>Points towards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site of bleed</td>
<td>Hematemesis/blood in NG tube/melena</td>
<td>Upper GI bleed</td>
</tr>
<tr>
<td>Fresh blood per rectum/maroon stools</td>
<td>Lowes/Upper GI bleed</td>
<td></td>
</tr>
<tr>
<td>Etiology</td>
<td>H/O alcohol intake/juvenile blood transfusion Q.EL, jaundice/ascites/splenomegaly</td>
<td>Vascular bleed</td>
</tr>
<tr>
<td>H/O epigastric pain NS/AD intake/antiplatelets</td>
<td>Ulcer bleed</td>
<td></td>
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<tr>
<td>If lower GI bleed: H/O fever/diarrhea</td>
<td>Infective causes (eg: Typhoid)</td>
<td></td>
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<tr>
<td>H/O bleeding per rectum with concussant yellow stools</td>
<td>Hemorrhoids/rectal lesion</td>
<td></td>
</tr>
<tr>
<td>Rate of blood loss</td>
<td>Rapid blood loss</td>
<td></td>
</tr>
<tr>
<td>Precipitants</td>
<td>Aspirin/NSAIDs/antiplatelets/anticoagulants</td>
<td>Stop all precipitants</td>
</tr>
<tr>
<td>Co-morbid conditions</td>
<td>Cardiovascular disease/renal disease/malignancy</td>
<td>Assess functional status</td>
</tr>
</tbody>
</table>

INVESTIGATIONS

- Hemoglobin, platelets, TLC, PTL, INR
- Blood grouping and cross matching to arrange blood
- Desirable Tests: Prothrombin time (PT), liver function tests, blood urea and creatinine, HBsAg, HCV, HCV ultrasound abdomen

MANAGEMENT

- Continue resuscitation (as detailed above)
- Blood transfusion: Give packed RBC whole blood if Hb < 7 g/dL (or Hb < 9 g/dL in case of pre-existing heart disease)
- Patient may need ICU care depending on the overall general condition. If patient is in altered sensorium and bleed actively, secure airway

PHARMACOTHERAPY

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Class of drugs</th>
<th>Administration regimen</th>
</tr>
</thead>
<tbody>
<tr>
<td>All patients</td>
<td>PPIs</td>
<td>Inj. Pantoprazole or Esomeprazole 40 mg IV. stat, followed by 40 mg 12 hourly (if IV, not available, give oral Pantoprazole/Esomeprazole. Stop if variceal bleed is documented</td>
</tr>
<tr>
<td>Suspected variceal bleed</td>
<td>Vasoinhibitors</td>
<td>Inj. Terlipressin 2 mg IV. stat, followed by Terlipressin 1 mg 6 hourly X 3-5 days</td>
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<td></td>
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<td>Inj. Somatostatin 250 mcg IV. stat, followed by 50 mcg/hr infusion X 3-5 days</td>
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<tr>
<td></td>
<td></td>
<td>Inj. Octreotide 50 mcg stat IV, followed by 50 mcg/hr infusion X 3-5 days</td>
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<tr>
<td></td>
<td>Antiplatelet</td>
<td>Avoid Terlipressin in patients with suspected heart disease or peripheral vascular disease</td>
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<td></td>
<td></td>
<td>If patient is on Terlipressin examine for signs of peripheral ischemic ischemia regularly</td>
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<tr>
<td></td>
<td>Antibiotics</td>
<td>Inj. Ceftriaxone IV 1 g 12 hourly x 3-5 days</td>
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<tr>
<td></td>
<td></td>
<td>Inj. Cefotaxime 1 g 8 hourly X 3-5 days</td>
</tr>
<tr>
<td>Lower GI bleed with fever</td>
<td>Antibiotics</td>
<td>Inj. Ceftriaxone 2g IV. 12 hourly AND</td>
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<td></td>
<td></td>
<td>Inj. Metronidazole 500 mg IV. 8 hourly X 5 days</td>
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All cases of acute GI bleed must undergo endoscopy within 24 hours of initial stabilisation. Patients with active ongoing bleed may require an earlier endoscopy. Appropriate informed consent to be taken prior to endoscopy.

REFER TO PART B OF TREATMENT WORKFLOW FOR ENDOSCOPIC THERAPY AND/ OR SURGERY

ABBREVIATIONS

- HCV: Hepatitis C Virus
- INR: International normalized ratio
- PPI: Proton pump inhibitors
- HGB: Hemoglobin
- NS/AD: Non-steroidal anti-inflammatory drugs
- PTL: Platelet count
- RBG: Red blood cell
- TLC: Total leukocyte count

This STW has been prepared by national experts in line with feasibility considerations for rollout to the healthcare system in the country. These guidelines are advisory and are based on expert opinion and available scientific evidence. There may be variations in the management of an individual patient based on other specific conditions as decided by the treating physician. There will be no indemnity for direct or indirect consequences. Kindly visit the website of DNR for more information (www.dnr.org.in) for more information. © 2024 JEFI S70