Management of Gastroenterology Emergencies

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Objectives

- **Hemorrhage**
- Cholangitis
- Pancreatitis
- Hepatic Failure
- Hodgepodge
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Objectives

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- Hodgepodge
A 52 y/o male with a history of alcoholism presents to the emergency room with a complaint of “I just vomited some clots”

Drinks a fifth per day, on no medications, never been told he has liver disease

What are your thoughts?
Hemorrhage

Pulse 132, BP 72/32, RR 36
Slightly icteric with confusion
Mild abdominal distension
Upper chest spider telangiectasias

What are your thoughts?
Two large bore IVs (at least 18 gauge)

Type and **Cross** at least 2 Units PRBCs

Begin aggressive IV fluid resuscitation

**What next?**
Medical Management

Octreotide:

- Splanchnic vasoconstriction
- Decrease glucagon production – decreased mesenteric blood flow
- No significant side effects
- Dose is 50 mcg bolus then 50 mcg/hr

Initiate early, even if not clear if this is variceal in nature
Medical Management

Antibiotics:

• After bleeding, infection is the greatest risk to mortality
• Incidence of infection is 45%
• Quinolones
• Initiating early can save lives
Hemorrhage

- Call placed to DHMC for transfer
- GI fellow “send directly to ICU”
- ICU “DHART can be there in 3 hours”

Massive hematemesis ensues – now what?
Hemorrhage

- Intubate, Intubate, Intubate
- Call your blood bank
- Retry DHART, consider other centers
- Call x-ray to ED for portable films
- Esophagogastric tamponade
Minnesota Tube

- Four ports
- Gastric balloon (volume)
- Esophageal balloon (pressure)
- Truly life-saving device
Minnesota Tube

Placement:

- Test balloons and ports
- Prefer the mouth
- Advance approximately 60 cm
- Blow up gastric balloon 450-500 cc
- Pull the balloon snugly against the diaphragm and take-x-ray
Make sure the gastric balloon is in the stomach and not the esophagus.
Minnesota Tube

Placement:

Steady aspiration from gastric port

Blood present - done → Secure in place

Blood absent - continue → Esophageal Balloon → Secure in Place
Minnesota Tube

Securing in Place

- Biggest mistake is not having traction
- Football vs. hockey vs. IV bags
- Make sure clamps are secure
- Make sure patient stays sedated
Transfer for Variceal Bleeding

- Make sure traction is maintained on Minnesota tube

- Make sure Octreotide is running prior to leaving the emergency room

- Make sure blood bank at the receiving institution is notified
Variceal Hemorrhage Pearls

If you even think it might be variceal, start Octreotide

Make sure you and your staff are familiar with esophageal tamponade

Rectal variceal hemorrhage is deadly
Other Hemorrhage Pearls

• NG tubes are cruel and poor diagnosticians

• 90% of diverticular bleeding stops spontaneously

• Bismuth and iron are great mimickers of melena
Real Case Example

• 44 y/o alcoholic presented to OSH with hematochezia in September

• Resuscitated and admitted to the floor. Prepped for colonoscopy

• During prep has massive bleeding and receives 12 units PRBCs prior to transfer
Real Case Example

• Code Blue called upon arrival to DHMC ICU

• Receives 22 more Units PRBCs prior to GI consultation

• Started on Octreotide – bleeding resolves
Real Case Example
A 72 y/o female presents to the emergency room complaining of shaking chills, right upper quadrant pain and jaundice?

What are your thoughts?
Case

Pulse 101, BP 110/76, TMx 102.3
Slightly icteric
Moderate abdominal tenderness with palpation

- WBC 13.1 K, TB 6.2, AP 670, AST 312, ALT 450
- No ultrasound available

What next?
Cholangitis

Dilated Intrahepatic Ducts
Cholangitis

Dilated Common Duct
Cholangitis

Impacted Stone
Cholangitis

- CT scans are poor (~50% sensitivity) at finding choledocholithiasis. However, can give clues (dilated ducts) to diagnosis

- Broad-spectrum antibiotic coverage (Unasyn, Zozyyn, Cipro/Flagyl)

- “Never let the sun set on cholangitis!” – refer for ERCP
Transfer for Cholangitis

• Antibiotics should be started already

• Patient should be kept NPO

• Often times acceptable to have the procedure performed and then patient referred back to transferring hospital
Cholangitis
Cholangitis Pearls

Start antibiotics early

Have a low threshold for CT scan
Case

A 43 y/o female presents to the emergency room complaining of epigastric abdominal pain, nausea and vomiting?

What are your thoughts?
Case

Pulse 92, BP 90/66, RR24
Distended abdomen
Moderate abdominal tenderness with palpation

- WBC 16.1 K, Liver tests normal, amylase 13,000, lipase 11,000
Case

What are your thoughts?
Pancreatitis

Which emergency room intervention has been shown to decrease mortality in severe acute pancreatitis?

A. Prophylactic antibiotics with Meropenem
B. Aggressive intravenous fluid resuscitation
C. Early ERCP
Pancreatitis

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Pancreatitis

Severe volume depletion: 500-1000 cc/hr

Non pancreatic fluid loss: 300-500 cc/hr

No volume depletion: 250-350 cc/hr
Pancreatitis

• 5% of patients with acute pancreatitis die

• Prophylactic antibiotics are likely harmful – may increase intra-abdominal fungal infections

• Most patients should be admitted to the ICU
Transfer for Pancreatitis

- Continue aggressive fluid resuscitation
- Patient should be kept NPO
- NG tubes are not helpful
Pancreatitis Pearls

Early, aggressive fluid resuscitation

Minimize antibiotics
A 17 y/o male presents to the emergency room complaining of confusion, nausea, and depression after breaking up with his girlfriend?

What are your thoughts?
Case

Pulse 56, BP 134/76, RR 23
Lethargic
Asterixes
Distended abdomen

- WBC 13.2, TB 3.1, DB 1.6, AP 234, ALT 1564, AST 1675, INR 4.5, glucose 45

What are your thoughts?
Fulminant Hepatic Failure

- Less than 2 weeks in duration
- Most commonly caused by Acetaminophen overdose
- INR >3.5, Hypoglycemia are poor prognostic features
- Confusion is a hallmark of this condition
Fulminant Hepatic Failure

1. Start N-Acetyl Cysteine intravenously
Fulminant Hepatic Failure

2. Give dextrose to combat hypoglycemia

3. Raise the head of the bed – cerebral edema

4. Do not give Vitamin K/FFP if not bleeding

5. Immediate referral – Category I transplant
Transfer for Fulminant Hepatic Failure

- Continue N-acetyl cysteine intravenously
- Order that the head of the bed be kept raised
Fulminant Hepatic Failure Pearls

Confusion is a clue to serious liver disease

Contact referring center immediately

Give N-acetyl cysteine
Foreign Bodies

1. 2 x 5 cm/sharp rule
2. All esophageal foreign bodies
3. All batteries need to be removed
4. More than 90% foreign bodies pass
Hodgepodge

Food Impactions

1. Glucagon and Nitro rarely work
2. If you’re not sure, likely not out
3. Do not place an NG tube or obtain a barium study
4. Swallow test
Hodgepodge Feeding Tubes

1. Stay away, stay far away
2. If unclear what is happening, get a CT scan
3. If dislodged and a mature tract (6-8 weeks), can place a foley catheter
Remember

There is always a GI fellow and attending on call who would be happy to answer your questions
Conclusions