

# Liver Stomach Hernia

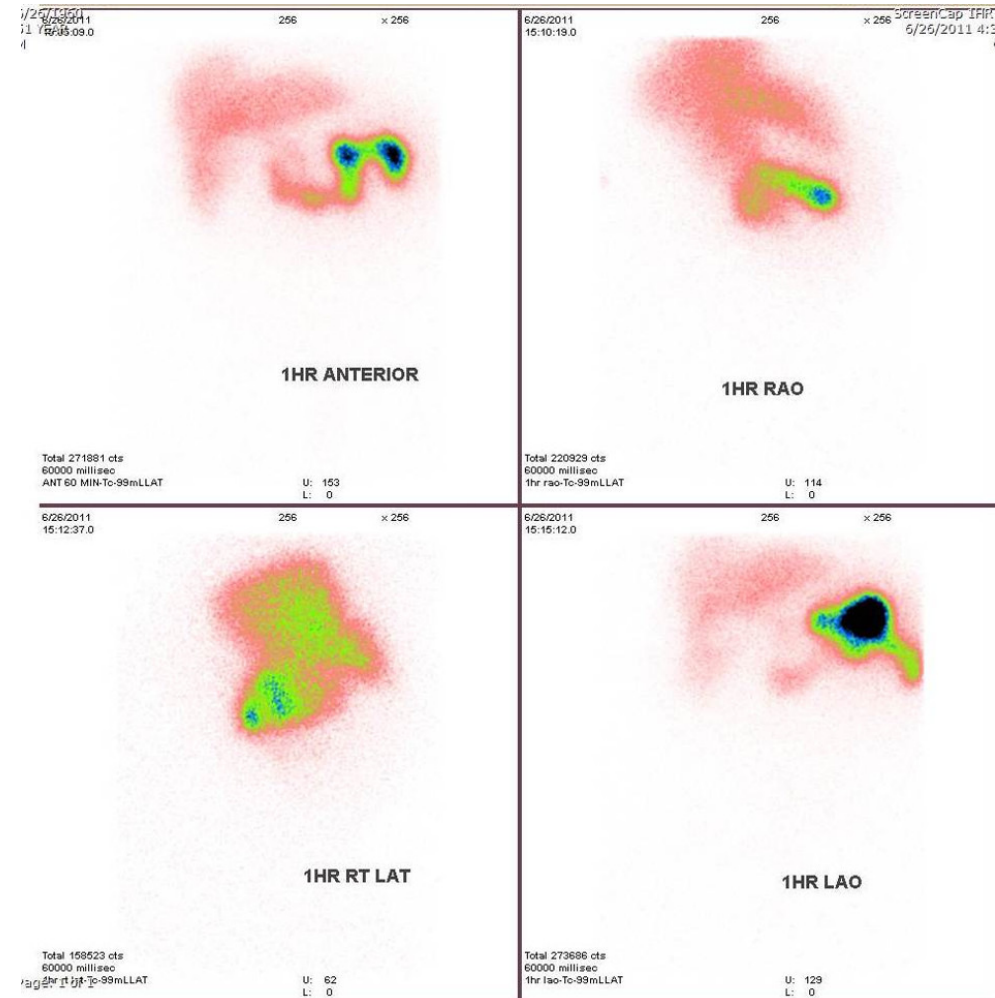
- Relative contraindications for laparoscopic approach to cholecystitis

- Generalized peritonitis, septic shock from cholangitis, severe pancreatitis, coagulopathy, suspected gallbladder cancer, previous abdominal surgeries.

- You placed trochars, then retract the fundus towards the right shoulder, what is the next operative step

- Retract the infundibulum laterally

- What's this show?



- Cholecystitis (nonvisualization)

- 3 days right upper quadrant pain dark urine, blood pressure 89/54, heart rate 114, bilirubin 3.4, white count 14.9, temperature 100.3. Management after resuscitation?



- ERCP

Why?

Because of the risk of CHOLANGITIS

- You're in the OR for cholecystitis and equivocal choledocholithiasis. You get the cholangiogram seen. What is your next step?



- Glucagon, positioning changes, then exploration through a longitudinal choledochotomy, or the cystic duct if you have those skills.

- What is the critical view of safety

- Identifying 2 and only 2 structures entering the gallbladder after dissecting the lower one third of the gallbladder from the liver and exposing the cystic plate and clearing the hepatocystic triangle of fat and fibrous tissue

- What is the treatment of a bile leak and biloma found on postop day 2 after lap chole



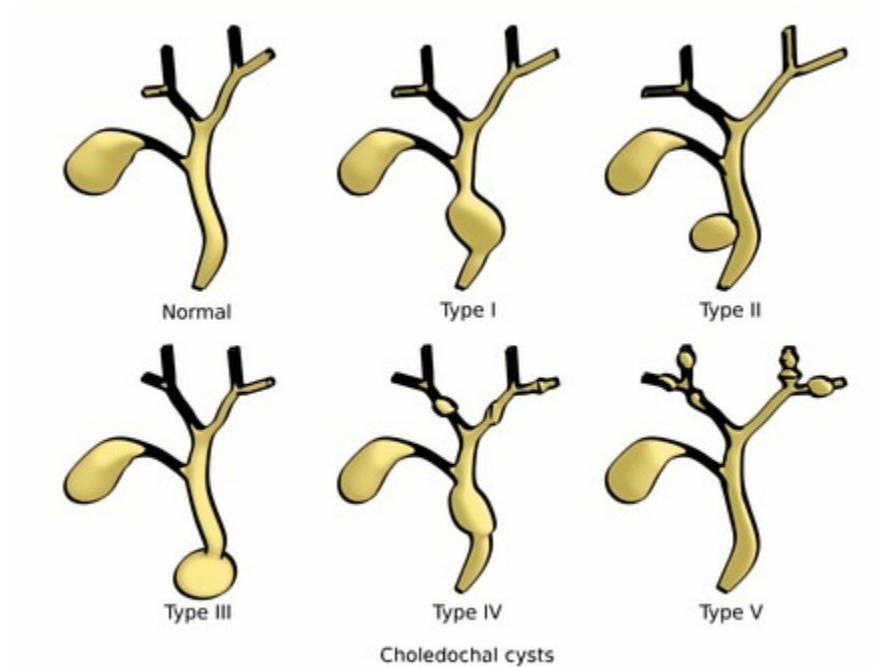
- Drainage and Roux-en-Y reconstruction in the first week

- Treatment for an injury to the common hepatic duct of 50% circumference done by cautery

- Roux-en-Y hepaticojejunostomy

- Treatment of a type II choledochal cyst without communication

- Cyst excision



- 35-year-old male with ulcerative colitis presents with pruritus and elevated LFTs. What test confirms the suspected diagnosis

- ERCP

- Treatment for a 2 cm stricture in the common hepatic duct just distal to the bifurcation after stenting



- Treatment for a 2 cm stricture in the common hepatic duct just distal to the bifurcation after stenting

- Roux-en-Y hepaticojejunostomy

- You admit for gallstone pancreatitis which resolves after 2 days.  
Next management?

- Lap chole

- Most common morbidity from spilled gallstones

- Abscess

# Bad Pancreatitis with a fluid collection. What is the management?

- Step up approach

# Biliary and Pancreatitis

- Indications for cholecystectomy
- Differentiate acalculous cholecystitis
- Choledocholithiasis



- First-line treatment for a liver lesion with a cavity, and enhancing wall and hypoattenuation in the center after a trip to the Amazon. Patient presented with fever chills and diarrhea

- Flagyl

- Treatment for two 5 cm abscesses in R Lobe, presumed from diverticulitis

- Antibiotics and perc drain(s)

- Findings of amebic abscess on CT

- Round, peripheral lesion, non-rim enhancing, peripheral edema

- Treatment of 32 y.o. female with 3cm hyperintense, well circumscribed lesion on CT, seen on incidental study. MRI shows central scar

- observation



- Treatment of GI bleeding, hemobilia, after liver bx.

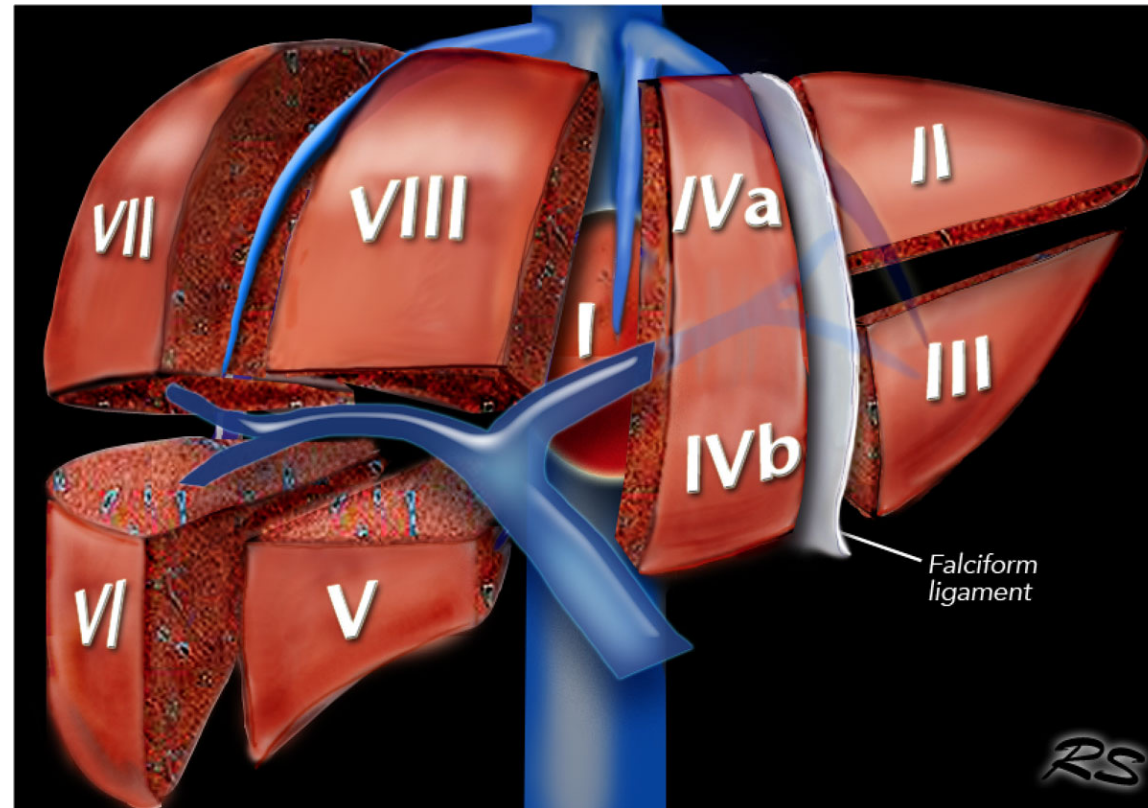
- Transarterial embolization

- CT scan demonstrates a 3.1-cm peripherally enhancing mass that is asymmetric and gradually enhances with delayed films. To further characterize the mass, you obtain an MRI without contrast. T1 shows a hypodense lesion. T2 shows hyperintense lesion. What is the next step in management?

- Observation (hemangiomas)

- The left hepatic vein lies medially. The left branch of the portal vein runs transversely along the base of the nodule. The liver is methodically scanned with no other lesions are found. In which Couinaud segment is this lesion located?

- 4



- A 35-year-old male patient presents to the emergency room obtunded, with the following vitals: HR 126 bpm, BP 82/43 mm Hg, RR 15 breaths/min, O2 sat 100% on non-rebreather. One month ago, he underwent a CT of the abdomen to rule out kidney stones, and was found to have a 12-cm mass in the right lobe of his liver occupying segments 5, 6 and 7, without a defined capsule. He did not have kidney stones, and was discharged from the ED. Otherwise, his previous medical history is unremarkable. He denies taking any medications but admits to using androgenic steroids. What does he have?

- Ruptured adenoma



- A 28-year-old female with three known hepatic abscesses secondary to intravenous drug usage had two percutaneous drains placed one week ago, with some improvement. Today, however, she again had fevers to 38.5°C and a leukocytosis of 15.5. Her antimicrobial therapy is broadened, and her previously inserted percutaneous drains are evaluated. Drainage from each of these two drains has ceased over the past 3 days. An updated CT scan confirms that both drains are well positioned within moderate-sized abscesses, with a third undrained abscess. What is the next step in treatment of this patient?

- Upsize both current drains and insert a third into the undrained collection.

- A 33-year-old female with no PMH s/p MVC with femur fracture is noted to have a 3.5-cm liver mass spanning segments 2 and 3 found incidentally on CT scan. The patient takes oral contraceptives for birth control, no other medications. Further questioning reveals a 15-lb unintentional weight loss and vague abdominal pain after eating. On triphasic helical CT, the lesion demonstrates strong enhancement in the arterial phase with the lesion becoming isointense in the portal and delayed phases. No central scar is seen. MRI was equivocal. What is it and What is the next step in management?

- Atypical, likely FNH but symptoms mean biopsy

# Liver

- Anatomy
- Abscesses
- Imaging/masses

# Stomach

# Chief Cells Secrete

# Pepsinogen



# Parietal Cells Secrete

H<sup>+</sup>/ Intrinsic Factor

- Treatment for paraesophageal hernia and volvulus

- OR for reduction and possible gastric resection if needed

You go to OR and successfully reduce, now what?

- Nissen and crural closure

After a successful Nissen, a patient comes back several weeks later with new onset substernal pain, no heartburn, no regurgitation. Most likely diagnosis is:

- Migration into chest



- Artery most likely to be injured during initial hiatal dissection of a Nissen

- Left gastric (or replaced left hepatic)

- Technique of choice for obtaining more esophagus in order to do a fundoplication

- Wedge gastropasty

Name 5 types gastroduodenal ulcers

- 1: Lesser curve/Body (mucosal)
- 2: 2 ulcers, lesser curve/duo (acid)
- 3: pre-pyloric (acid)
- 4: high along cardia (mucosal)
- 5: NSAID induced

Best test H. Pylori eradication

# Urea breath test



# Head Trauma and Gastric Ulcer

# Cushing's ulcer

Burn and duo ulcer

# Curling ulcer

# GIST Mutation

C-kit

Adjuvant therapy if GIST malignant or too difficult to resect

# Imatinib (Gleevec)



# EGD for GI bleed shows mass, bx Shows Lymphoid Tissue

- Diagnosis and Management

# MALT

- Low Grade: H. Pylori treatment
- High Grade: may need chemo/radiation

# Treatment Gastric Lymphoma

- Chemo/rads
- Can resect for symptoms (bleeding/perforation/Ulcer)
- Can resect if stage 1 (Stomach only site of disease)

- During open operative exploration for incarcerated inguinal bulge, you notice bowel exiting inferior to the inguinal ligament that ascends in a cephalad direction. What to do?

- Femoral repair as well.

- Necrotic bowel found in hernia sac. What to do?

- Resection and primary repair



- Border of femoral hernia

- Superior- Iliopubic tract; Inferior- Cooper ligament; Lateral- Femoral vein; Medial- Lacunar ligamen

- A 62-year-old male is 4 days postoperative from a repeat open right inguinal hernia repair with mesh placement. He complains of right scrotal fullness and pain. He is normotensive with normal sinus rhythm and euthermic. Physical exam reveals a firm, tender, and engorged testicle. Most likely diagnosis and management

- Ischemic orchitis, conservative

- Hematuria and pain after hernia repair. Likely diagnosis and workup

Bladder injury, cystogram

- What to do if you can't reduce a femoral hernia

- Divide inguinal ligament

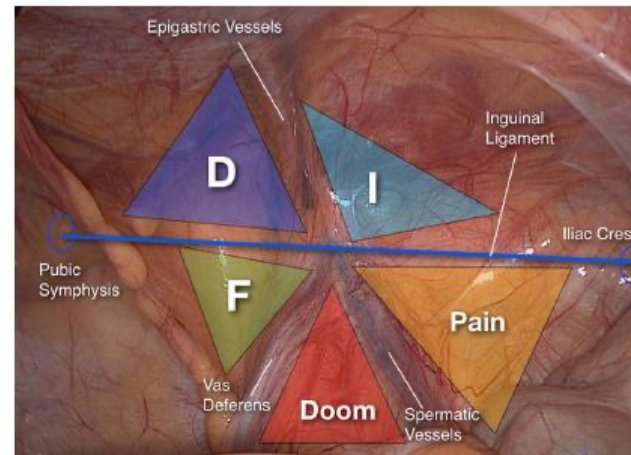


What is triangle of doom

- Vas deferens, spermatic vessels, peritoneal fold. Contains vessels and genital femoral nerve (genital branch)

What is triangle of pain?

- Iliopubic tract, testicular vessels, peritoneal fold. Contains lateral femoral cutaneous, femoral and femoral branch of genitofemoral



Little old lady with sbo and CT below



# Obturator hernia

What are the medial and lateral borders of spigelian hernia

- Rectus abdominus medially, semilunar line laterally



How much overlap do recent guidelines suggest for underlay mesh ventral hernia repairs?

- 5 cm

What do you do when presented with obese, smoking patient with elective hernia?

Make them modify risk factors first

# Hernias

- Anatomy, anatomy, anatomy
- Strange hernias