



BTR Surgery - 11-09-2025

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1. In a case of head injury, which patient would not require an immediate CT scan?

- A. Child with post-traumatic seizure**
- B. Biker with skull fracture suspicion**
- C. RTA victim with GCS 12**
- D. One episode of vomiting**

TABLE 28.3 UK National Institute for Health and Care Excellence (NICE) guidelines for computed tomography (CT) in head injury.

Indications for CT imaging in head injury within 1 hour

- GCS <13 at any point
- GCS <15 at 2 hours
- Focal neurological deficit
- Suspected open, depressed or basal skull fracture
- More than one episode of vomiting
- Post-traumatic seizure

Indications for CT imaging within 8 hours

- Age >65
- Coagulopathy (e.g. aspirin, warfarin or rivaroxaban use)
- Dangerous mechanism of injury (e.g. fall from a height, RTA)
- Retrograde amnesia >30 minutes

2. A 27-year-old patient is brought into the casualty with maxillofacial trauma following a road traffic accident (RTA). He is unconscious with a GCS of 7/15 and his SpO₂ is dropping with absent breath sounds on right side. JVP is raised. What is the next step?

- A. Bag and mask ventilation**
- B. Cricothyrotomy**
- C. Needle thoracostomy**
- D. Nasotracheal intubation**

3. Which of the following is incorrect regarding the BRCA genes?

- A. BRCA1 is located on the long arm of chromosome 17**
- B. BRCA1 mutation causes well-differentiated cancer**
- C. BRCA2 carcinomas are Luminal A type**
- D. BRCA2 mutation is associated with male breast carcinoma**

4. A 32-year-old female presents to your OPD with severe nausea and recurrent bilious vomiting. Her symptoms initially began as postprandial epigastric pain and early satiety, but have progressed over the last two weeks. She works as an actress, and tells you that her symptoms only started when she "landed a role in a TV serial" and was inspired to lose 15kgs. on a "crash diet". On physical exam, her abdomen is tender and slightly distended with high-pitched bowel sounds. A laparotomy is performed, and it is observed that the angle between her superior mesenteric artery and her aorta is significantly decreased. Which of the following structures is most likely to be obstructed by the artery?

- A. Ascending portion of the duodenum**
- B. Descending portion of the duodenum**
- C. Duodenal bulb**
- D. Transverse portion of the duodenum**

5. A 50-year-old man presents to the clinic with a gradually enlarging neck mass over the past 2 months. Neck ultrasonography confirms a hypoechoic nodule with microcalcifications. Fine-needle aspiration (FNA) biopsy shows spindle-shaped cells in eosinophilic amorphous background. Which of the following genetic mutations is most likely responsible for this patient's condition?

- A. BRAF gene mutation**
- B. Activation of RET**
- C. Inactivation of p53**
- D. Overexpression of PTC gene**

6. A 65-year-old woman comes to the emergency department due to a 5-day history of left lower abdominal pain, nausea, and poor appetite. Although she has a history of chronic constipation, she has been having 2–3 loose, nonbloody bowel movements daily. History is notable for hysterectomy and bilateral salpingo-oophorectomy 15 years ago. Rectal and pelvic examinations elicit exquisite left-sided tenderness. Stool testing for occult blood is negative. Laboratory results include a white blood cell count of $16,500/\text{mm}^3$. Which of the following is the best next step in diagnosis?

- A. CT scan of the abdomen**
- B. Flexible sigmoidoscopy**
- C. Stool culture**
- D. Stool PCR testing for *Clostridioides difficile***

7. Which of the following is the embryologic explanation for the malformation shown in the image?

- A. Expansion of the foramen cecum
- B. Failure of fusion of the maxillary and mandibular processes
- C. Failure of fusion of the maxillary and medial nasal processes
- D. Failure of fusion of the lateral palatine processes



8. A 56-year-old male presents to the emergency with abdominal pain and an episode of binge drinking, in shock with a BP of 70/50 mm Hg and HR of 115/min. The oxygen saturation of the patient is 70 mm Hg. The serum creatinine level was 2.4 mg/dL. What is the likely diagnosis based on the CT image shown below?

- A. Liver abscess**
- B. Necrotising Acute pancreatitis**
- C. Pneumoperitoneum**
- D. Interstitial acute pancreatitis**



9. All of the following are minimum standards for monitoring of a patient in shock except?

- A. ECG
- B. Pulse oximetry
- C. Urine output
- D. Base deficit

Monitoring for patients in shock

Minimum

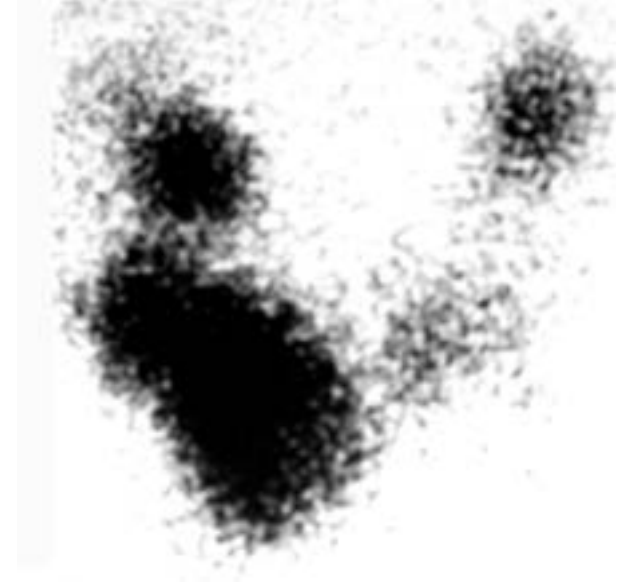
- ECG
- Pulse oximetry
- Blood pressure
- Urine output

Additional modalities

- Central venous pressure
- Invasive blood pressure
- Cardiac output
- Base deficit and serum lactate

10. Identify the likely pathology from the thyroid scan pattern shown in the figure:

- A. Hypersecreting adenoma
- B. Cold nodule
- C. Grave's disease
- D. Plummer disease



11. A 60-year-old man comes to the office due to pain, redness, and swelling in his right arm. The patient was recently diagnosed with unresectable lung cancer. He received the first cycle of chemotherapy 2 weeks ago through a right-sided peripherally inserted central catheter (PICC). Temperature is 36.9°C (98.4°F), blood pressure is 130/80 mm Hg, pulse is 78/min, and respirations are 14/min. Oxygen saturation is normal. Examination shows right arm swelling and mild erythema. Capillary refill is normal. No discharge is seen around the PICC line. The remainder of the examination is normal.

Which of the following is the most appropriate next step in management?

- A. Chest MRI**
- B. Duplex ultrasonography**
- C. Empiric antibiotics**
- D. Warm compresses and NSAIDs**

12. All are components of MELD 3.0 score, except:

A. INR

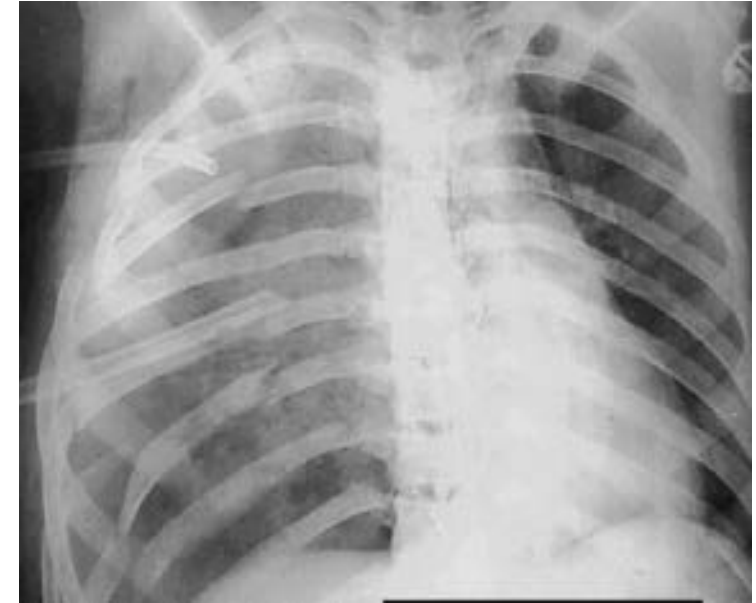
B. Female sex

C. Platelet count

D. Creatinine

13. A man presented to the emergency department following a road traffic accident with complaints of chest pain and difficulty breathing. An X-ray was taken and is displayed below. Based on the findings, which type of breathing pattern is most likely observed in this patient?

- A. Cheyne-Stokes respiration**
- B. Paradoxical respiration**
- C. Biot's respiration**
- D. Kussmaul respiration**

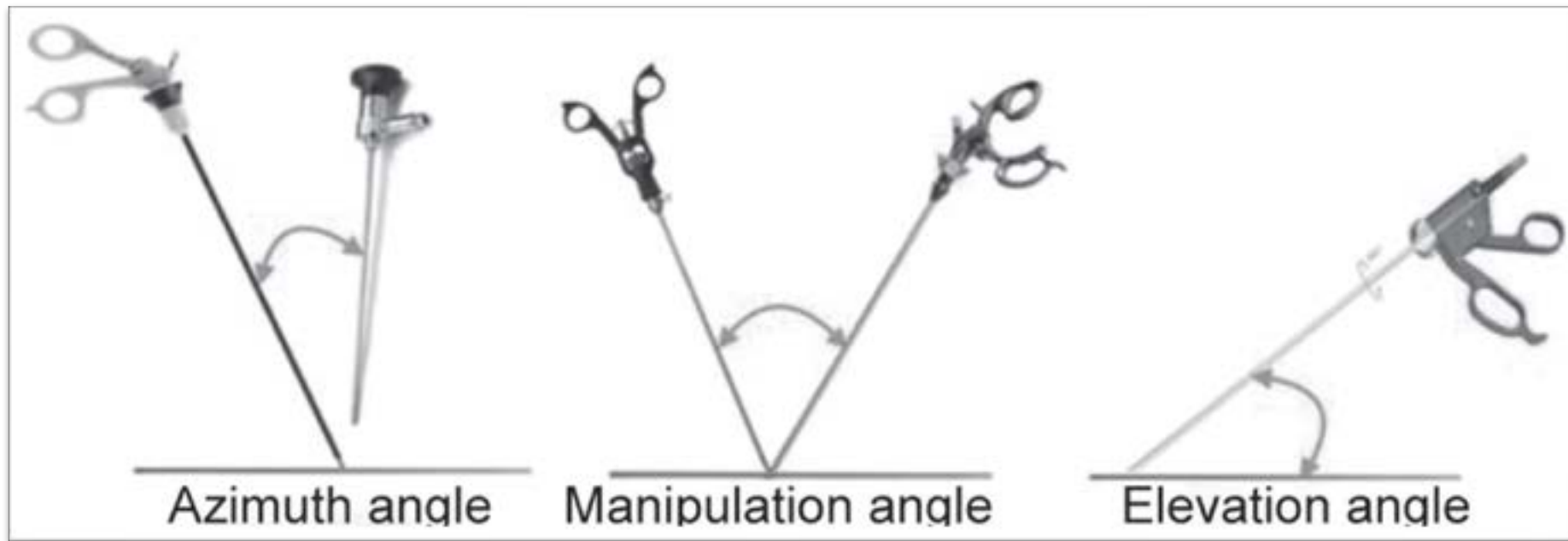


14. A 30-year-old man is brought to the emergency department after being struck by a car while he was crossing the street one hour ago. He did not lose consciousness. He has pain in his right arm, forehead, and pelvis. He also has an urge to urinate but has been unable to do so since the accident. His temperature is 37.1°C (98.9°F), pulse is 72/min, respirations are 18/min, and blood pressure is 118/82 mm Hg. He is alert and oriented to person, place, and time. Musculoskeletal examination shows tenderness and ecchymosis over the right distal forearm with intact pulses, sensation, and capillary refill. Abdominal examination shows suprapubic tenderness. A scant amount of blood is present at the urethral meatus. A CT scan of the abdomen and pelvis shows a fracture of both ipsilateral pubic rami. Which of the following is the most appropriate next step in management?

- A. CT cystography
- B. Retrograde urethrography
- C. Foley catheterization
- D. Intravenous pyelography

15. What is the angle between the telescope and a working instrument in a laparoscopy defined as?

- A. Azimuth angle**
- B. Manipulation angle**
- C. Elevation angle**
- D. Verees angle**



16. A 60-year-old man with a history of nonalcoholic fatty liver disease resulting in cirrhosis comes to the emergency department due to worsening abdominal distension, pain, fatigue, and dyspnea for the past 3 days. Medical history includes gastrointestinal reflux disease and hypertension. The abdomen is distended with shifting dullness and tenderness. There is 2+ pedal edema. Laboratory results show thrombocytopenia and mildly elevated PT. Prompt diagnostic paracentesis is recommended, and risks and benefits of the procedure are discussed with the patient. The patient provides informed consent, and the medical team makes appropriate preparations for the procedure. Immediately prior to inserting the paracentesis needle, a time-out is called. Which of the following information is most essential to include during the time-out?

- A. Indication for performing the procedure**
- B. Medications currently taken by the patient**
- C. Names of team members and associated roles**
- D. Type of procedure being performed**

Surgical safety checklist

Before induction of anesthesia	Before skin incision	Before patient leaves operating room
Sign In	Time Out	Sign Out
<input type="checkbox"/> PATIENT HAS CONFIRMED <ul style="list-style-type: none"> • IDENTITY • SITE • PROCEDURE • CONSENT 	<input type="checkbox"/> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE	Nurse verbally confirms with the team: <ul style="list-style-type: none"> <input type="checkbox"/> The name of the procedure recorded <input type="checkbox"/> That instrument, sponge and needle counts are correct (or not applicable) <input type="checkbox"/> How the specimen is labelled (including patient name)
<input type="checkbox"/> SITE MARKED/NOT APPLICABLE	<input type="checkbox"/> Surgeon, anesthesia professional and nurse verbally confirm <ul style="list-style-type: none"> • Patient • Site • Procedure 	
<input type="checkbox"/> ANAESTHESIA SAFETY CHECK COMPLETED	Anticipated Critical Events	
<input type="checkbox"/> PULSE OXIMETER ON PATIENT AND FUNCTIONING	Has antibiotic prophylaxis been given within the last 60 minutes?	<input type="checkbox"/> Surgeon, anesthesia professional and nurse review the key concerns for recovery and management of this patient
DOES PATIENT HAVE A: KNOWN ALLERGY? DIFFICULT AIRWAY? RISK OF >500ML BLOOD LOSS?		

OT ZONES

Zone 1:

-Protective reception, waiting, trolley bay, change rooms

Zone 2:

-clean area –preoperative, recovery, plaster room, staff lounges, stores

Zone 3:

-Sterile area-Operating room, Anesthesia room

Zone 4:

-Disposal area –dirty utility, disposal corridor

17. A 65-year-old man is brought to the emergency department due to nausea, vomiting, and increasing abdominal pain over the last 3 hours. Four weeks ago he was discharged from the hospital following an inpatient admission for acute myocardial infarction. His other medical problems include type 2 diabetes mellitus, hypertension, hypercholesterolemia, and peptic ulcer disease. His temperature is 37.8°C (100°F), blood pressure is 150/90 mm Hg, pulse is 110/min and irregular, and respirations are 22/min. The patient appears to be in severe distress due to pain. There is diffuse abdominal tenderness, but it is more pronounced over the lower right quadrant.

Liver function studies:

Amylase: 275 U/L

Lipase: 80 U/L (normal, 0-160 U/L)

Which of the following is the most likely diagnosis in this patient?

- A. Acute appendicitis**
- B. Acute pancreatitis**
- C. Bowel ischemia**
- D. Diabetic ketoacidosis**

18. As per the ANDI classification of benign breast disorders, all of the following would be considered under disorders of early reproductive years, except

- A. Adolescent hypertrophy**
- B. Nipple eversion**
- C. Fibroadenoma**
- D. Nipple inversion**

Age group	Normal	Disorder	Disease
Early reproductive years (age 15–25 y)	Lobular development	Fibroadenoma	Giant fibroadenoma
	Stromal development	Adolescent hypertrophy	Gigantomastia
	Nipple eversion	Nipple inversion	Subareolar abscess, Mammary duct fistula
Later reproductive years (age 25–40 y)	Cyclical changes of menstruation	Cyclical mastalgia, Nodularity	Incapacitating mastalgia
	Epithelial hyperplasia of pregnancy	Bloody nipple discharge	—
Involution (age 35–55 y)	Lobular involution	Macrocysts, Sclerosing lesions	—
	Duct involution	Duct ectasia	Periductal mastitis
	Dilatation	—	—
	Sclerosis	Nipple retraction	—
	Epithelial turnover	Epithelial hyperplasia	Epithelial hyperplasia with atypia

19. A 25-year-old male patient presented with sudden onset breathlessness and a sharp pain in his left chest after a road traffic accident. His BP is 85/69mm Hg and HR is 110bpm. The chest X-ray is given below. What is the next step for this patient?

- A. eFAST**
- B. Insert IV cannula and start IV fluids**
- C. Needle thoracostomy**
- D. Intubate the patient**



20. A young female presents with pain in lower abdomen and vomiting in the ER. Clinical examination reveals a swelling, lateral and below the pubic tubercle. X-ray is shown below. What is the most probable diagnosis?

- A. Adhesions
- B. Strangulated inguinal hernia
- C. Strangulated femoral hernia
- D. Direct hernia



21. Identify the correct statements

- 1. Liposarcoma is the most common retroperitoneal tumor.**
- 2. M3 midline hernia refers to epigastric hernia**
- 3. A mesenteric cyst shows mobility perpendicular to line of mesenteric attachment.**
- 4. Colon cancer risk can be decreased by metformin**

- A. 1, 2, 3, 4**
- B. 1, 3, 4**
- C. 2, 3**
- D. 1, 4**

22. Calculate for Burn Surface Area (BSA) for a patient with burn involving the anterior torso, upper right arm and circumferential right thigh:

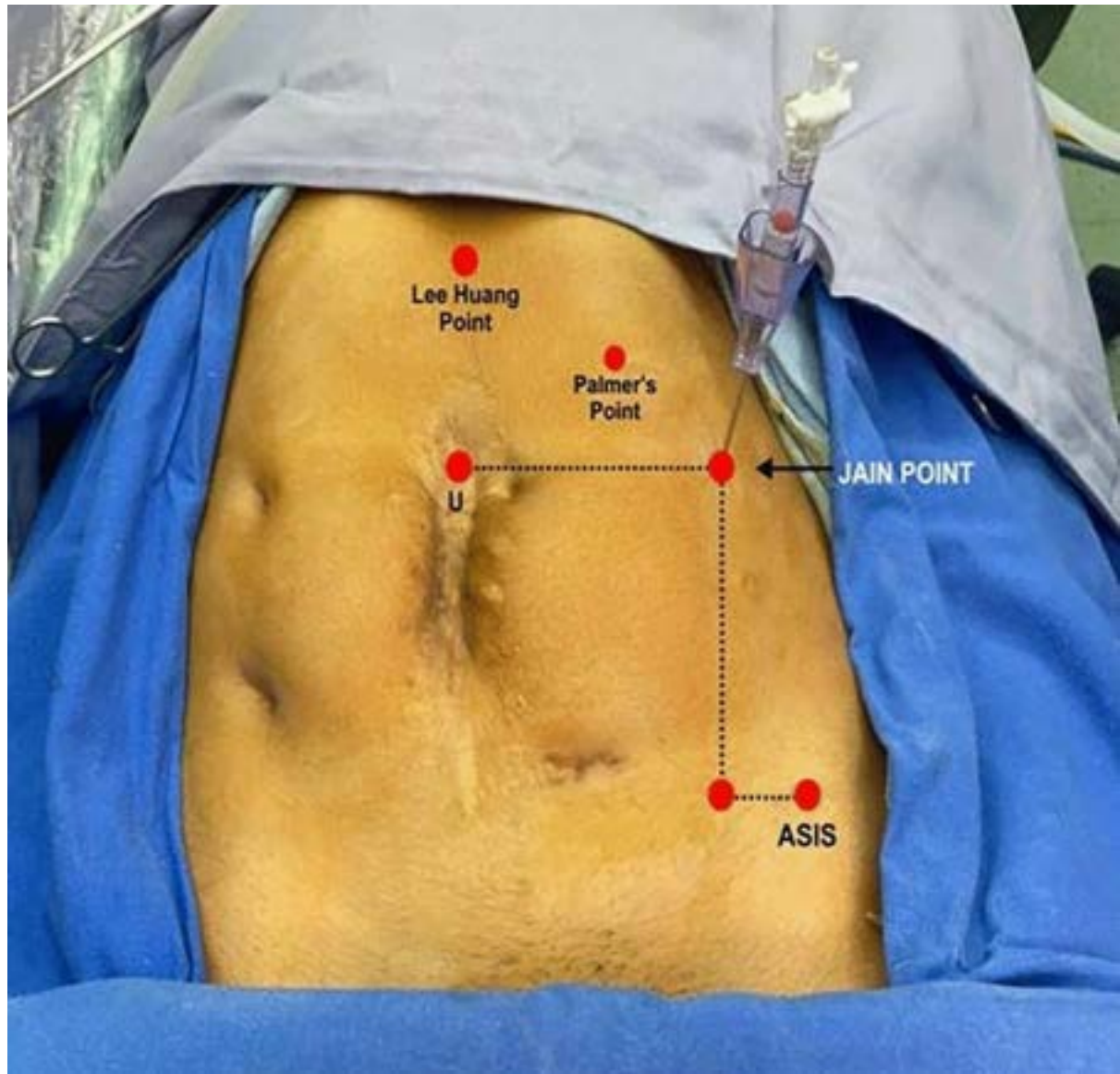
- A. 45%**
- B. 27%**
- C. 36%**
- D. 31.5%**

23. A 59-year-old man comes to the OP for a postoperative follow-up. He underwent a partial gastrectomy for a perforated peptic ulcer 3 weeks ago. For the last 10 days, he has had intermittent abdominal cramps and diarrhea. Symptoms begin 25-30 minutes after eating and are associated with nausea, weakness, palpitations, lightheadedness, and diaphoresis. On examination, the abdomen is soft and nontender with normal bowel sounds. The surgical wound is healing well without erythema or discharge. Which of the following is the most appropriate next step in management of this patient?

- A. Dietary modification**
- B. Endoscopy**
- C. Trial of octreotide**
- D. Upper gastrointestinal contrast study**

24. Palmer's point is the point where you would insert the Veress needle. Identify it

- A. 3 cm below the left costal margin at the mid-clavicular line**
- B. 7 cm below the left costal margin at the mid-clavicular line**
- C. 3 cm below the right costal margin at the mid-axillary line**
- D. 7 cm below the right costal margin at the mid-clavicular line**



The benefits of laparoscopic surgery

- Less postoperative pain
- Better cosmesis
- Earlier return to normal physiology
- Shorter hospital stays
- Fewer intraoperative adhesions created
- Better perception of anatomy as image is often magnified

Open Hasson's technique for laparoscopic primary trocar insertion

In most cases, the umbilicus is the preferred site for a 10–12-mm initial port placement (*Figure 7.10a–e*).

- 1 A 10-mm incision in Palmer's point (3 cm below the left costal margin, in the mid-clavicular plane) is the location preferred by many surgeons for Veress needle insertion.
- 2 The needle is advanced until it reaches the muscle. The abdominal wall is then lifted and the needle advanced through the oblique muscles.
- 3 Classically, a 'pop' is heard and a 'give' felt on successful insertion into the peritoneal cavity.
- 4 The intraperitoneal placement is confirmed using a combination of the following techniques.
 - The hanging drop method, wherein a drop of water is placed in the hub of the needle; on elevating the abdominal wall the resultant loss of intra-abdominal pressure would result in the drop emptying into the abdominal cavity.
 - Free flow of saline into the peritoneal cavity and no return of bowel content or blood on aspiration.
 - Abdominal pressure reading of less than 10 mmHg.
- 5 Once the position is confirmed CO₂ insufflation at a slow pace is commenced until the target pressure is reached. The needle is now removed.

25. Which of the following is not a component of Triple H therapy used in the management of vasospasm following subarachnoid hemorrhage?

- A. Hypertension**
- B. Hypervolemia**
- C. Hypothermia**
- D. Hemodilution**

26. Reynold's pentad includes all except?

- A. Jaundice**
- B. Hypotension**
- C. Altered sensorium**
- D. Hematemesis**

27. During the secondary survey of a trauma patient, an AMPLE history is taken to gather critical information. Which of the following is not a part of the AMPLE history?

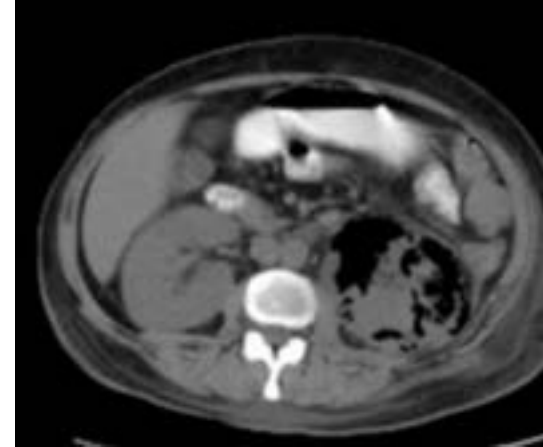
- A. Allergies**
- B. Medications**
- C. Past illness or pregnancy**
- D. Lucid interval**

28. A trauma patient suffered a renal laceration with urine extravasation. He was managed conservatively. However, after a few days, he presented with a urinoma. The next best management for this patient would be:

- A. Ureteral stenting**
- B. Surgical repair and exploration**
- C. Observation**
- D. Pigtail drainage of collection**

29. A diabetic patient presented with acute onset fever and dysuria. Urine examination revealed plenty of leukocytes with glycosuria. A CT scan of the abdomen was done. What is the most likely diagnosis?

- A. Acute pyelonephritis**
- B. Emphysematous pyelonephritis**
- C. Perinephric abscess**
- D. Renal abscess**



30. A 35-year-old male presented to the clinic with complaints of pain and swelling in the right side of his face. Upon examination, the physician noted swelling in the submandibular gland. The patient also reported that his symptoms worsened when he ate food, and he had lost his appetite due to the discomfort. USG is shown below. What is the most likely diagnosis?

- A. Sialolithiasis**
- B. Pleomorphic adenoma**
- C. Osteoma of floor of mouth**
- D. Cervical lymphadenopathy**



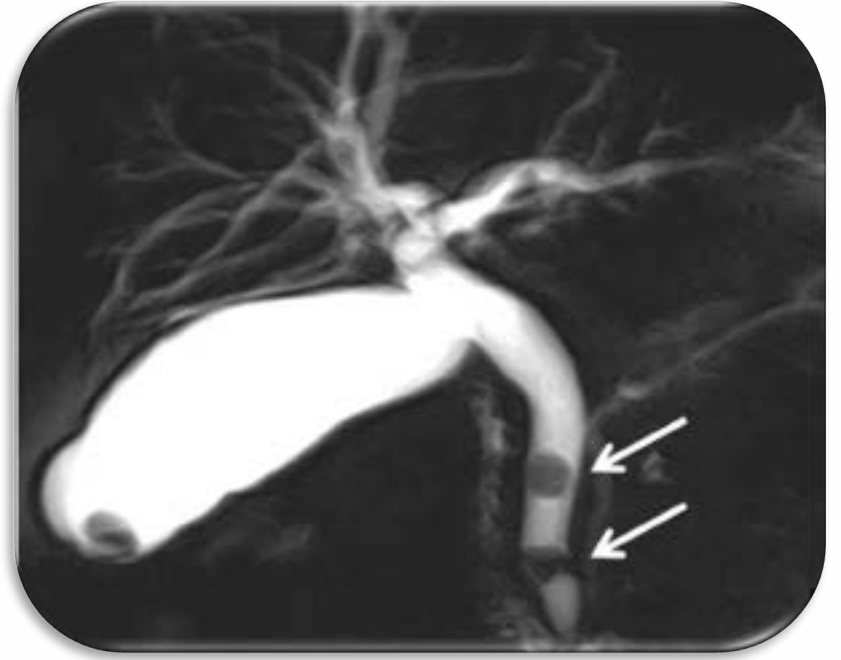
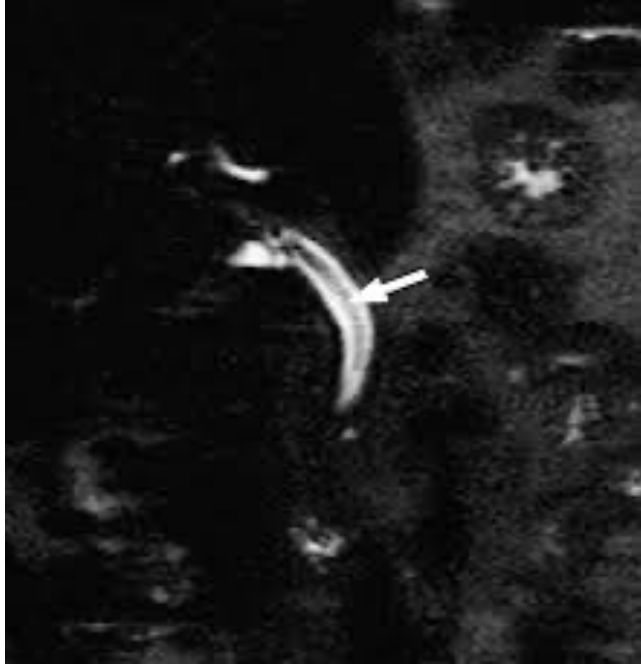
31. A 7-month-old baby boy is brought to the clinic by his mother due to “empty scrotum”. On examination, hemiscrotum on right side is not developed and testis is not palpable in the inguinal region. What is the next step?

- A. HCG test dose**
- B. Diagnostic laparoscopy**
- C. Reassurance**
- D. Inguinal exploration**

32. What is the likely diagnosis based on the MRCP image?

- A. Choledochal cyst**
- B. Biliary ascariasis**
- C. Caroli disease**
- D. Choledocholithiasis**





33. A 14-year-old boy presented to the OPD with a scald injury on his arm. The lesion was pink, oozing, and painful to moving air and touch. Which of the following would be the most appropriate management?

- A. Silver sulphadiazine cream dressing**
- B. Excision and grafting**
- C. Paraffin gauze dressing**
- D. Collagen dressing**

34. A 27-year-old woman presents with a thyroid nodule. Serum TSH is normal. Ultrasound of her thyroid reveals a 1.5-cm hypoechoic nodule in her right thyroid lobe with irregular margins, internal microcalcifications, and internal vascularity. FNAC is performed which is reported as Thy3 Bethesda grade. Which of the following is the next most appropriate step in management of this patient?

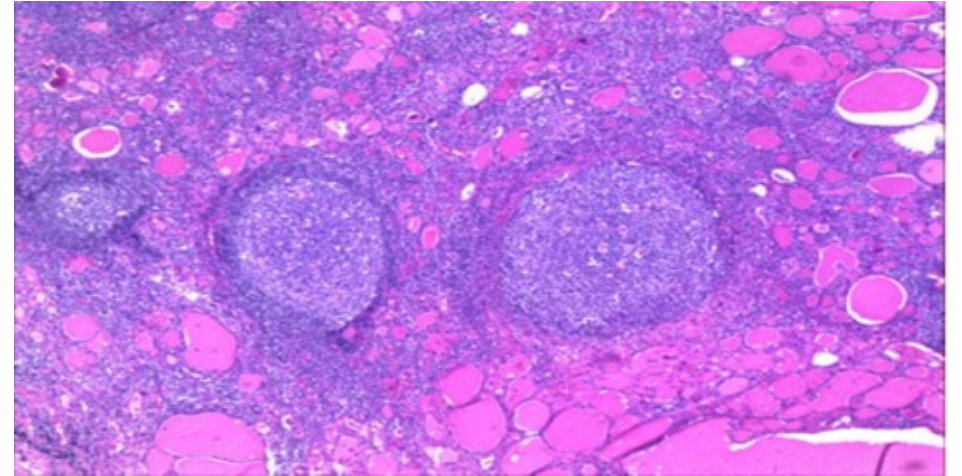
- A. Repeat FNAC**
- B. MRI of the neck**
- C. Hemi-thyroidectomy**
- D. RAIU scan**

TABLE 55.2 Classification of fine-needle aspiration cytology reports.

Thy1	Non-diagnostic
Thy1c	Non-diagnostic cystic
Thy2	Non-neoplastic
Thy3	Follicular
Thy4	Suspicious of malignancy
Thy5	Malignant

35. A 35-year-old woman complains of fatigue, weight gain, and increased sensitivity to cold. On physical examination, she has noticeable swelling in her neck the histological image is shown below. Additionally, an ultrasound examination shows that her thyroid gland is diffusely enlarged and has an uneven texture. Which of the following conditions is most likely the cause of her symptoms?

- A. MTC**
- B. deQuervian thyroiditis**
- C. Grave's disease**
- D. Hashimoto's thyroiditis**



36. A surgeon returns the entire hernial sac into the abdominal cavity of a patient with an inguinal hernia without reducing its contents. What is this known as?

- A. Maydl's hernia**
- B. Reduction en masse**
- C. Sliding hernia**
- D. Incarcerated hernia**

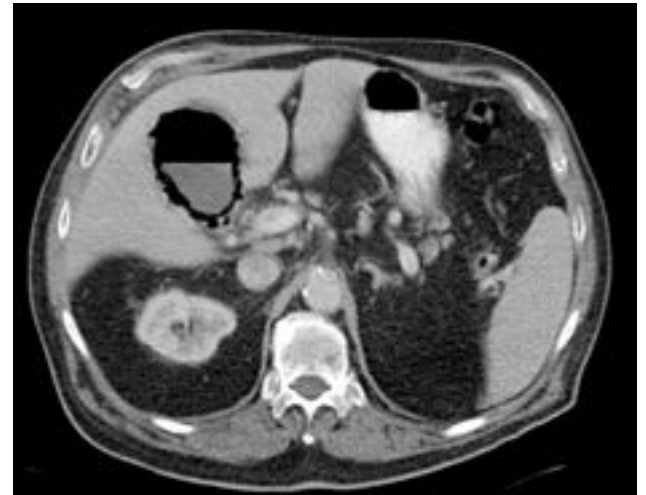
37. A 3-day-old neonate presented with recurrent bilious vomiting. An X-ray erect abdomen is shown below. What is the next best step in managing this condition?

- A. Upper GI endoscopy**
- B. Gastrograffin follow-through**
- C. Air enema**
- D. Explorative laparotomy**



38. 75-year-old woman comes to the emergency department due to fever, chills, abdominal pain, nausea, and vomiting for the past 2 days. Medical issues include type 2 diabetes melitus, hypertension, obstructive sleep apnea, and coronary artery disease. There is marked tenderness over the epigastrium and right upper quadrant with guarding. Bowel sounds are decreased. CECT abdomen is shown below. Which of the following additional intervention is most appropriate in the management of this patient?

- A. Delayed cholecystectomy prior to the hospital discharge**
- B. Elective cholecystectomy 2 weeks after complete recovery**
- C. Urgent cholecystectomy**
- D. Conservative management**



39. An 8-year-old child is brought to the emergency department with severe abdominal pain and vomiting. The child's parents mention that the pain has been increasing over the past few hours. On examination, the child appears distressed and has abdominal tenderness. An X-ray is ordered, and it reveals a gasless abdomen. What is the most likely diagnosis?

- A. Appendicitis**
- B. Intussusception**
- C. Acute pancreatitis**
- D. Crohn's disease**

40. A young male presents to surgery OPD with a verrucous lesion over the penis as shown in the image. On examination, inguinal lymph nodes are not enlarged. What is the management of choice in this patient?

- A. CO2 laser ablation**
- B. Podophylline**
- C. Topical 5-Fluoro uracil**
- D. Partial penectomy**



Tumor management

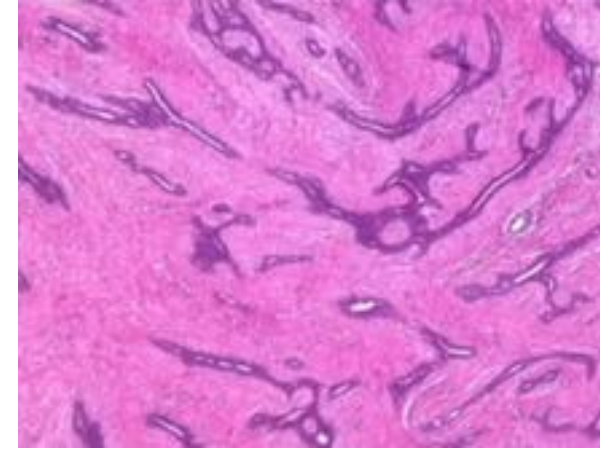
- **A. In situ carcinoma** → Topical 5-FU / Laser
- **B. Distally placed** → Partial penectomy (if residual stump ≥ 2 cm)
- **C. Proximally placed** → Total amputation + Perineal urethrostomy

Lymph node management

- **Not enlarged** → Sentinel lymph node biopsy
- **T3, T4** → Prophylactic superficial inguinal lymph node dissection
- **Enlarged** → Ilioinguinal lymph node clearance or radiotherapy

41. A 35-year-old female presents with a mobile, rubbery mass in her left breast. A histological image is provided. What is the most likely diagnosis for the given image?

- A. Invasive ductal carcinoma**
- B. Fibroadenoma**
- C. Phyllodes tumor**
- D. Lobular carcinoma in-situ**



42. A 50-year-old male presents with rectal bleeding, a change in bowel habits, and tenesmus for 6 months. Examination reveals a mass in the rectum 2 cm from the anal verge extending to the anal sphincters, and biopsy confirms adenocarcinoma. What surgical intervention is most appropriate?

- A. Total mesorectal excision**
- B. Low anterior resection**
- C. Abdominoperineal resection**
- D. Hartmann's procedure**

43. A young woman presented to the OPD with dysphagia and regurgitation of food. She was diagnosed with iron deficiency anemia 3 months back. Barium swallow was done and is shown below. What is the most probable diagnosis?

- A. Shatzki ring
- B. Zenker's diverticulum
- C. Esophageal leiomyoma
- D. Plummer-Vinson syndrome



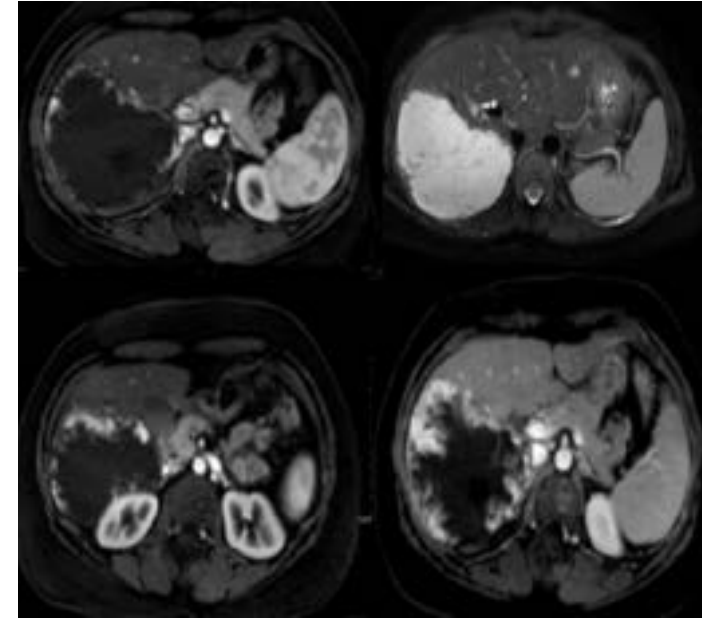
44. A 35-year-old man came with complaints of dark-colored tarry stools to the OPD. Which of the following structures is the likely site of the bleed?

- A. Proximal to Ligament of Treitz**
- B. Distal to Ligament of Treitz**
- C. Anal canal**
- D. Sigmoid diverticulosis**



45. A 45-year-old male with carcinoma colon underwent USG of the abdomen that showed a hyperechoic lesion in the liver. MRI was performed as shown here. Identify the liver lesion shown on MRI sequence.

- A. Solitary metastasis
- B. Hydatid cyst
- C. Amoebic liver abscess
- D. Hemangioma liver



46. All of the following are components of UW solution except :

- A. Thymine**
- B. Allopurinol**
- C. Glutathione**
- D. Lactobionate**

TRANSPLANT SURGERY

UW solution :

Adenosine

Allopurinol

Glutathione

Lactobionate

Hydroxyethyl starch (HES)

Warm Ischemia time:

Cold ischemia time:

Min (3-6hrs)-

Max(24-36hrs)-

Warm ischemia time (WIT) is defined as the period during which an organ remains at body temperature after its blood supply has been reduced but before it is cooled.

Cold ischemia time (CIT) refers to the time an organ is preserved in a cold environment after being flushed with cold preservation solution and before it is transplanted and reperfused.

47. A 67-year-old man comes to the emergency department due to abdominal discomfort and distension. Five days ago, he began having large-volume watery stools 6-8 times daily after eating at a new restaurant. He self-treated with increased oral fluids and the stool frequency and consistency began to improve. However, his bowel movements abruptly stopped yesterday, and the diffuse abdominal discomfort and distension worsened. The abdomen is distended, tympanic, and mildly tender to palpation with no guarding or rebound tenderness. Bowel sounds are decreased. Abdominal CT scan shows diffuse colonic dilation with nondilated small bowels. Which of the following most likely contributed to this patient's current condition?

- A. Adhesions**
- B. Colonic hypoperfusion**
- C. Electrolyte abnormality**
- D. Colonic mass**

48. An 45-year old female comes to your clinic reporting feelings of constant fatigue. Upon performing USG, you discover that she has a scleroatrophic gallbladder containing impacted stones. In addition, a 6mm stone is detected within the common bile duct, causing dilation of the biliary tree. What should be the subsequent course of action in her treatment?

- A. Immediately take up patient for cholecystectomy**
- B. ERCP**
- C. Elective cholecystectomy**
- D. MRCP**

49. A patient who sustained blunt abdominal trauma after a road accident is admitted to the ICU overnight. He is hemodynamically stable. On abdominal examination, he now has tenderness, rigidity, and rebound tenderness. Which is the next best step?

- A. Laparotomy**
- B. Conservative**
- C. eFAST**
- D. Diagnostic peritoneal lavage**

50. An elderly male patient presented with purulent discharge from an opening located in the perianal region. The patient is put in a lithotomy position and the opening is located at the 11 o'clock position, 4 cm from the anal margin. What will be the likely position of the internal opening and where does the internal opening start?

- A. 12 o'clock**
- B. 11 o'clock**
- C. 9 o'clock**
- D. 6 o'clock**

51. A 38-year-old woman comes to the OPD due to increasing episodes of nausea and substernal discomfort over the past several months. The episodes frequently occur after eating. Chest imaging is shown below. Which of the following is the most likely underlying cause of this patient's current symptoms?

- A. Degeneration of esophageal ganglion cells**
- B. Esophageal metaplastic and dysplastic changes**
- C. Gastric herniation into the thoracic cavity**
- D. Laxity of the lower esophageal sphincter**



52. A 45-year-old male patient suffering from leprosy presents with an ulcer on his foot. What is the next step in management?

- A. Debridement and antibiotics**
- B. Start multi-drug therapy (MDT)**
- C. Foot care, limb rehabilitation**
- D. Deformity correction**



53. A dye factory worker with a history of benzidine exposure undergoes cystoscopy. What is the appropriate management?

- A. IV BCG**
- B. Cystoscopy with removal of tumor**
- C. TURP**
- D. Radical cystectomy**



54. A 46-year-old female patient undergoes a mammography for a lump in the right breast. Based on the imaging report, she is advised to undergo a biopsy. Which of the following could have been reported?

- A. BIRADS 1 or BIRADS 2**
- B. BIRADS 2 or BIRADS 3**
- C. BIRADS 3 or BIRADS 4c**
- D. BIRADS 4b or BIRADS 5**

55. A 55-year-old man comes to the physician because of swelling and unusual heaviness of his scrotum that he first noticed a few weeks ago. The symptoms improve when he is lying in bed. He also reports a 5-kg weight loss and increasing fatigue over the past 6 months. He has smoked 1 pack of cigarettes daily for the past 15 years. Physical examination shows tenderness to palpation of his right flank. There are soft strands palpable in the right hemiscrotum superior of the right testis. The strands increase with Valsalva maneuver. Applying a bright light to the right hemiscrotum shows no transillumination. Obstruction of venous drainage into which of the following vessels is most likely responsible for this patient's scrotal enlargement?

- A. Right internal iliac vein**
- B. Right inferior rectal vein**
- C. Right renal vein**
- D. Inferior vena cava**

56. A 55-year-old male presents with complaints of pain in the calf muscles after walking for a certain distance. The pain is relieved by rest and reoccurs upon resuming walking. Based on Boyd's classification, what is the most likely grade?

- A. Grade I**
- B. Grade II**
- C. Grade III**
- D. Grade IV**

Grade	Pain
I	Pain relieved on continued walking
II	Walks in pain
III	Compelled to take rest
IV	Pain at rest

Stage	Symptoms	Category	Symptoms
I	Asymptomatic	0	Asymptomatic
IIa	Intermittent claudication >200m	1	Mild claudication Exercise AP drop > 20 mm Hg, AP > 50 mm Hg
IIb	Intermittent claudication <200m	2	Moderate claudication
		3	Severe claudication Cannot complete treadmill, AP < 50 mm Hg
III	Ischaemic rest pain	4	Ischaemic rest pain Rest AP < 40 mm Hg, TP < 30 mm Hg
IV	Ulceration or gangrene	5	Minor tissue loss
		6	Major tissue loss

57. Identify the correct statements

- 1. Annual risk of adenocarcinoma in Barrett's esophagus with low grade dysplasia is 0.7% per year.**
- 2. The iliohypogastric nerve is most commonly injured during Rutherford-Morrison incision**
- 3. Replaced left hepatic artery arising from superior mesenteric artery is the most common vascular anomaly of the liver.**
- 4. Malignant melanoma in the last 5 years is a contraindication to renal transplant**

- A. 1, 2, 3, 4**
- B. 2, 4**
- C. 1, 2, 4**
- D. 1, 3**

Category	Diagnosis
1	Negative for neoplasia
2	Indefinite for neoplasia
3	Mucosal low grade neoplasia Low grade adenoma or dysplasia
4	Mucosal high grade neoplasia 4 – 1 High grade adenoma or dysplasia 4 – 2 Noninvasive carcinoma (carcinoma in situ) 4 – 3 Suspicious for invasive carcinoma 4 – 4 Intramucosal carcinoma (lamina propria invasion)
5	Submucosal invasion by carcinoma

Absolute	Relative
Untreated malignancy Active infection	Co-morbidities, e.g. diabetes mellitus Age >65 years
Untreated HIV infection or AIDS	Obesity
Any condition with a life expectancy <2 years	HBV or HCV infection
Malignant melanoma within the previous 5 years	Previous malignancy (depending on type)

Table 1 - Contraindications to renal transplantation

58. Which of the following is correct regarding the treatment of a patient who presented with the following as shown in the image? Earlier the abdominal mass was reducible, but now it has become irreducible.

- A. Umbilical excision
- B. Umbilical excision with herniorrhaphy
- C. Antibiotics
- D. Incision and drainage



59. Which of the following is not a component of Thoracscore?

- A. Performance status**
- B. Complication of surgery**
- C. ASA grading**
- D. Priority of surgery**

Thoracscore
Age (years)
Gender (male)
ASA
Performance status
Dyspnoea score
Priority of surgery
Procedure class
Diagnosis group

60. A 35-year-old female patient presents to the hospital with complaints of abdominal pain and discomfort for the past few months. On evaluation, a mass is palpable in the upper abdomen, and an endoscopy shows an ulcerated lesion in the stomach. A biopsy of the lesion is taken and sent for immunohistochemistry. The biopsy sample is found to be positive for CD117 and negative for LCA, cytokeratin, and S100. CT is shown below. What is the most likely diagnosis?

- A. GIST**
- B. Adenocarcinoma**
- C. Hodgkin's lymphoma**
- D. Squamous cell carcinoma**



61. In extended right hemi-hepatectomy, the liver segments resected are:

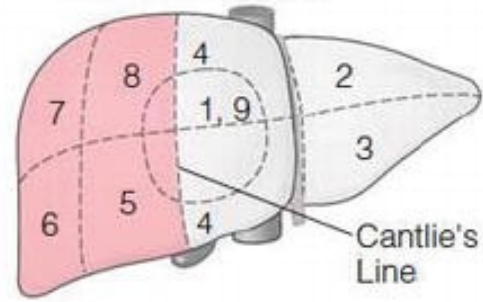
A. 4-8

B. 5-8

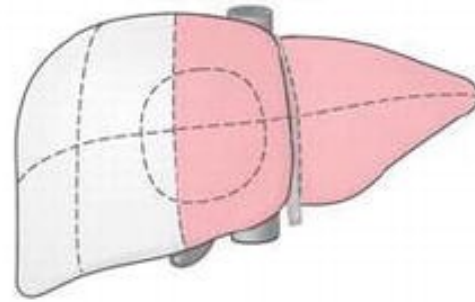
C. 2-8

D. 4, 5, 7, 8

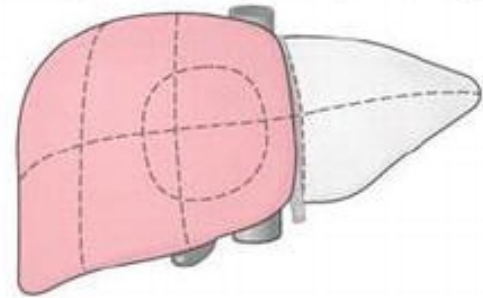
a Right Hepatectomy



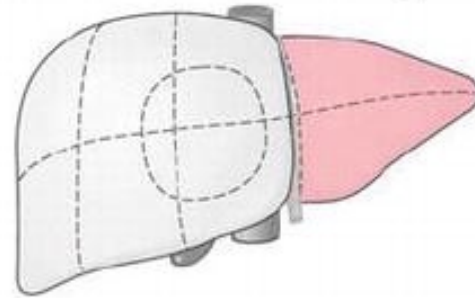
b Left Hepatectomy



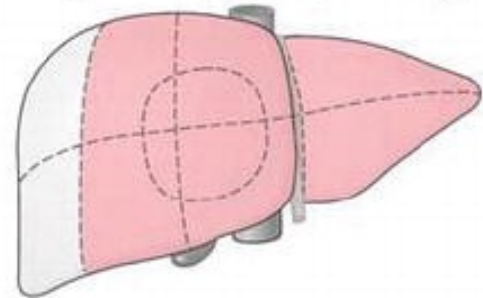
c Right Trisectionectomy
(Extended Right Hepatectomy)



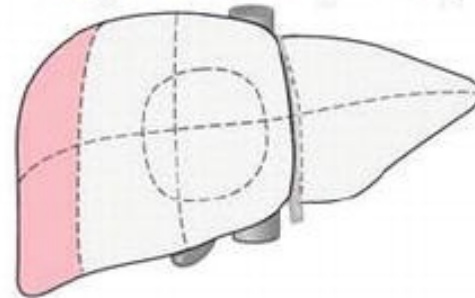
d Left Lateral Sectionectomy



e Left Trisectionectomy
(Extended Left Hepatectomy)



f Right Posterior Sectionectomy



62. A 32-year-old man comes to the physician because of a 3-week history of recurrent thumb pain that worsens with exposure to cold temperatures. Examination shows a 6-mm, blue-red papule under the left thumbnail. The overlying area is extremely tender to palpation. The thumbnail is slightly pitted and cracked. This lesion most likely developed from which of the following types of cells?

- A. Dysplastic melanocytes**
- B. Capillary endothelial cells**
- C. Modified smooth muscle cells**
- D. Osteoclasts**

63. When considering a patient with lung cancer, the imaging studies have measured the tumor size at 2.5 cm not invading in to the main bronchus. According to the TMN staging system, which stage would be appropriate for this patient?

- A. T2b**
- B. T1**
- C. T3**
- D. T2a**

TNM 8th - Primary tumor characteristics

T_x	Tumor in sputum/bronchial washings but not be assessed in imaging or bronchoscopy
T₀	No evidence of tumor
T_{is}	Carcinoma in situ
T₁	≤ 3 cm surrounded by lung/visceral pleura, not involving main bronchus
T_{1a(mi)}	Minimally invasive carcinoma
T_{1a}	≤ 1 cm
T_{1b}	> 1 to ≤ 2 cm
T_{1c}	> 2 to ≤ 3 cm
T₂	> 3 to ≤ 5 cm or involvement of main bronchus without carina, regardless of distance from carina or invasion visceral pleural or atelectasis or post obstructive pneumonitis extending to hilum
T_{2a}	>3 to ≤4cm
T_{2b}	>4 to ≤5cm
T₃	>5 to ≤7cm in greatest dimension or tumor of any size that involves chest wall, pericardium, phrenic nerve or satellite nodules in the same lobe
T₄	> 7cm in greatest dimension or any tumor with invasion of mediastinum, diaphragm, heart, great vessels, recurrent laryngeal nerve, carina, trachea, oesophagus, spine or separate tumor in different lobe of ipsilateral lung
N₁	Ipsilateral peribronchial and/or hilar nodes and intrapulmonary nodes
2	Ipsilateral mediastinal and/or subcarinal nodes
3	Contralateral mediastinal or hilar; ipsilateral/contralateral scalene/supraclavicular
M₁	Distant metastasis
M_{1a}	Tumor in contralateral lung or pleural/pericardial nodule/malignant effusion
M_{1b}	Single extrathoracic metastasis, including single non-regional lymphnode
M_{1c}	Multiple extrathoracic metastases in one or more organs

64. A 57-year-old white man is brought to the emergency department by ambulance because of sudden-onset, bright red emesis. His blood pressure is 80/40 mm Hg and heart rate is 124/min. Physical examination is notable for jaundice and an enlarged abdomen that is dull to percussion and positive for a fluid wave. Which of the following vessel anastomoses is responsible for the patient's bleeding?

- A. Left gastric vein and azygos vein**
- B. Paraumbilical vein and inferior epigastric vein**
- C. Portal vein and inferior vena cava**
- D. Splenic vein and left renal vein**

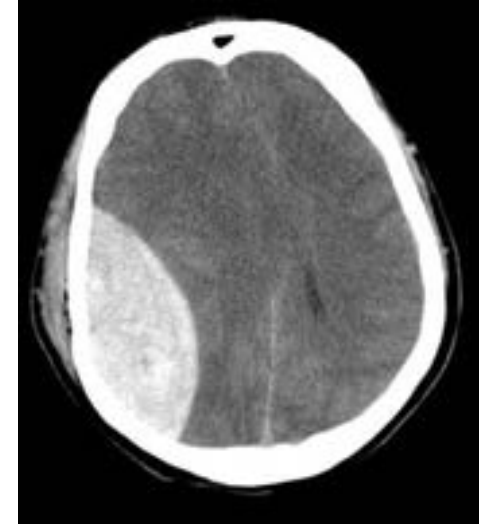
Measurement	Significance
1–5 mm Hg	Normal
6–10 mm Hg	Preclinical sinusoidal portal HTN
≥10 mm Hg	Clinically significant portal HTN → Variceal formation
≥12 mm Hg	↑ Risk for rupture of varices

65. Millard's Rule of 10 for indications of cleft lip surgery include all except

- A. Infant is at least 10 weeks old**
- B. Infant weighs around 10pounds**
- C. Hemoglobin level of 10 grams per deciliter**
- D. Defect is 10mm**

66. A patient following head injury with altered consciousness, vomiting, and GCS of 10/15 undergoes CT scan as shown. What is the next step?

- A. IV Mannitol**
- B. Wait and watch**
- C. Decompression**
- D. IV thrombolytic**



67. An intra-operative image of scrotal exploration in a 18 year old male with acute scrotal pain is shown. Identify the pathology.

- A. Testicular torsion**
- B. Torsion of Hydatid of Morgagni**
- C. Epididymoorchitis**
- D. Testicular hematoma**



68. A 35 Y/f presents with bleeding during defecation and straining. Examination reveals pile mass which appears on straining, at 7 and 11 O'clock, which reduces spontaneously. Preferred treatment:

- A. Barron's Banding**
- B. Stapled hemorrhoidopexy**
- C. Milligan Morgan procedure**
- D. Sitz bath**

69. A 60-year-old patient has been diagnosed with proximal transverse colon carcinoma. The physician recommends an extended right colectomy as a treatment option. Which arteries should be resected during an extended right colectomy to prevent the spread of cancer in proximal transverse colon carcinoma?

- A. Ileocolic, right colic and branch of middle colic**
- B. Ileocolic, right colic, stem of middle colic, left colic**
- C. Ileocolic, right colic and trunk of middle colic**
- D. Middle colic only**

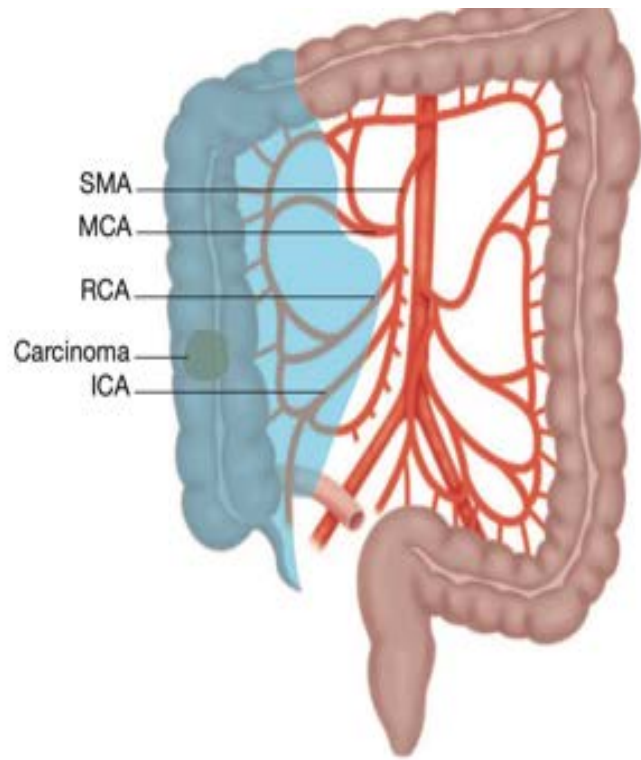


Figure 77.8 Schematic showing right hemicolectomy. This shows the basic plane of dissection for a complete mesocolic excision. ICA, ileocolic artery; MCA, middle colic artery; RCA, right colic artery; SMA, superior mesenteric artery.

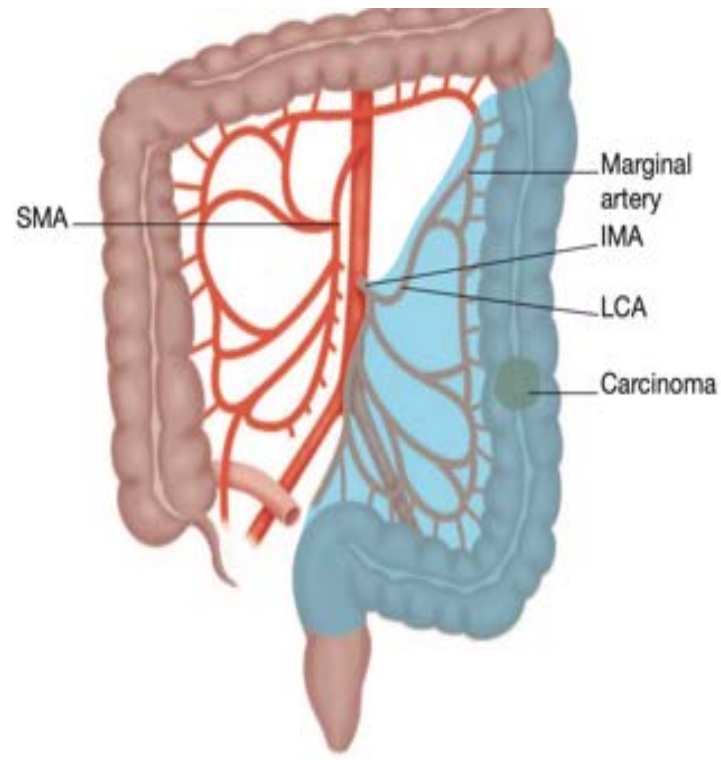


Figure 77.9 Schematic showing left hemicolectomy. This shows the basic plane of dissection for a complete mesocolic excision. IMA, inferior mesenteric artery; LCA, left colic artery; SMA, superior mesenteric artery.

70. A 80-year-old male patient presents with a PSA level of 7 ng/mL and a small tumor focus in prostate with a Gleason score of 6, what would be the most appropriate course of action for management?

- A. Radical prostatectomy**
- B. External beam radiation**
- C. Brachytherapy**
- D. Active surveillance**

71. All of the following are components of ERAS Protocol (Enhanced Recovery After Surgery) except:

- A. Avoid Active IV fluid resuscitation**
- B. Start prophylactic LMWH to avoid risk of DVT**
- C. Use regional anesthetics and nonopioid analgesics**
- D. Avoid prolonged fasting before surgery and prewarm fluids**

A proactive ERAS approach to prevent unnecessary aspects of the surgical stress response

- Minimal access techniques
- Blockade of afferent painful stimuli (e.g. epidural analgesia, spinal analgesia, wound catheters)
- Minimal periods of starvation
- Early mobilisation

Nausea vomiting prophylaxis (at least 2 classes)

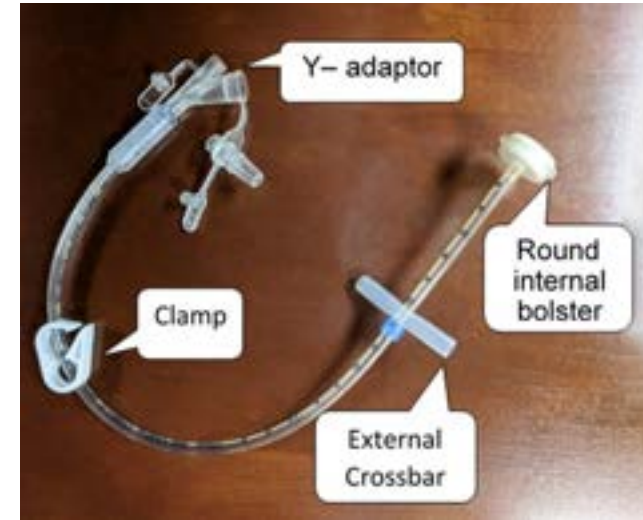
Early oral fluids post-op within 24hrs

Avoid drains

Avoid opioids

72. Identify the device in the image:

- A. PEG tube
- B. NJ tube
- C. NG tube
- D. Chest drain tube



73. A 32-year-old female patient arrives at the emergency department with a history of stabbing injury to her arm. Upon examination, there is a noticeable hematoma, and the patient reports not feeling any radial or ulnar pulses in the affected arm. Imaging reveals a 3cm longitudinal tear in the brachial artery. The medical team is faced with deciding the best treatment option for the patient. Which option should they choose?

- A. Primary repair with end-to-end anastomosis**
- B. Repair with great saphenous vein graft**
- C. Repair with prosthetic graft**
- D. Repair with IMA**

74. Which of the following statements about inguinal hernias are true?

- 1. Medial border of the triangle of doom is bound by gonadal vessels**
- 2. Lateral border of the triangle of pain is bound by Iliopubic tract.**
- 3. Medial border of myopectineal orifice is bound by rectus abdominis.**
- 4. Lateral border of myopectineal orifice is bound by iliopsoas**

A. 1,2,3,4

B. 2,3,4

C. 2, 3

D. 1,4

75. A 52-year-old man presents with severe abdominal distension, pain for the past two days. Physical examination reveals a distended, tympanic abdomen. What is the most likely diagnosis?

- A. Small bowel volvulus**
- B. Intestinal obstruction**
- C. Sigmoid volvulus**
- D. Caecal volvulus**



76. All of the following are correct about ACS guidelines for average-risk population for colorectal carcinoma except

- A. Begin screening at 50yrs**
- B. Annual faecal occult blood test (FOBT)**
- C. Flexible sigmoidoscopy every 5 years**
- D. Colonoscopy every 5 years**

77. During total thyroidectomy for papillary thyroid cancer, which of the following steps will not lead to hoarseness of voice?

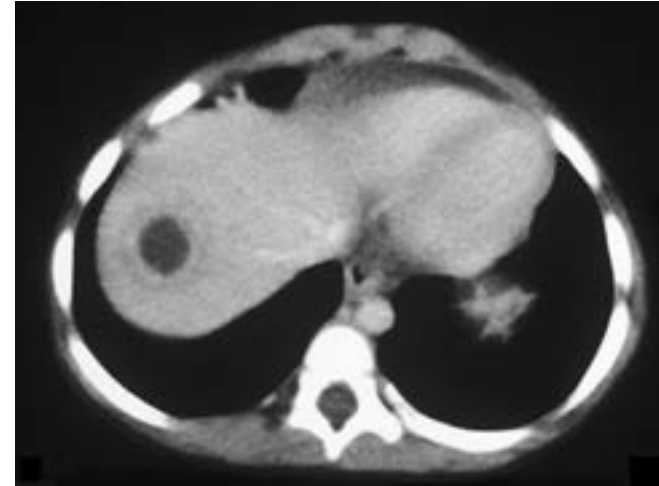
- A. Dissection of Beahr's triangle**
- B. Dissection of Zuckerkandl tubercle**
- C. Dissection of Berry ligament**
- D. Ligation of Superior thyroid artery**

78. A 63-year-old female patient presented with a 5x1 cm lump in the left upper outer quadrant, with no axillary lymph node involvement. Mammography revealed BIRADS 4b staging. She underwent breast conservation surgery, and the final HE reports showed high nuclear grade DCIS with 7 mm margin clearance. What is the further management?

- A. Adjuvant radiotherapy**
- B. Adjuvant chemotherapy**
- C. Follow up 6 monthly for 2 years and then yearly follow up**
- D. Trastuzumab therapy**

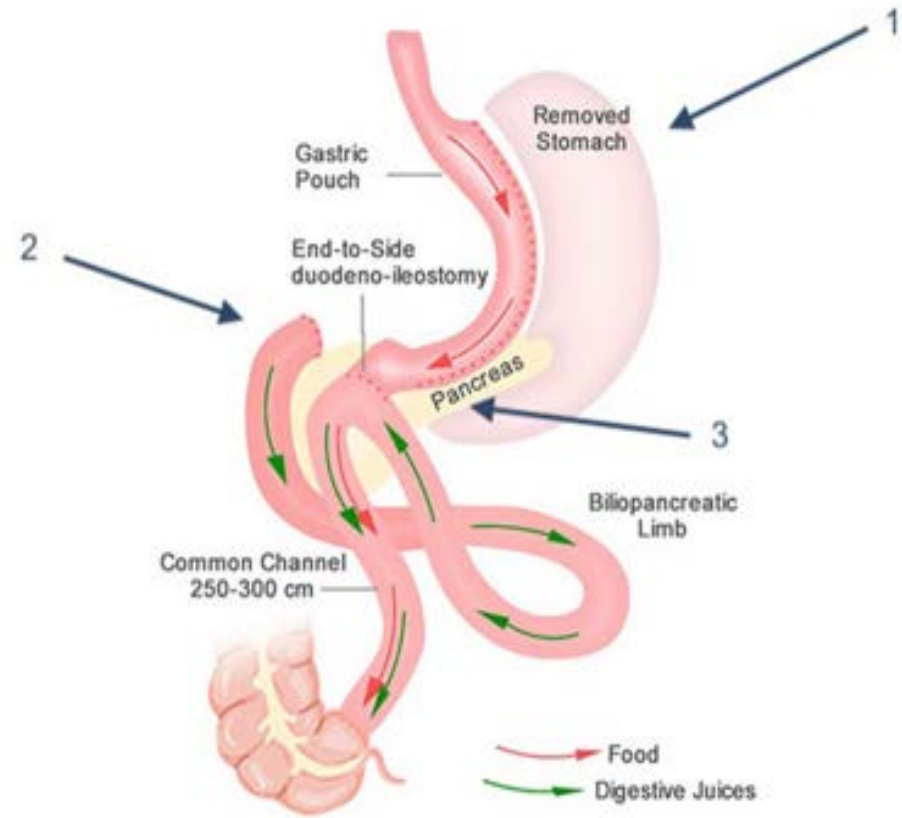
79. A 25-year-old man presents with weight loss and fever. The patient reports a history of blood in the stool and vomiting two weeks ago. Upon examination, tenderness is noted in the right hypochondrium along with an enlarged liver. An abdominal CT scan is shown below. What is the next step?

- A. Start metronidazole**
- B. Broad spectrum antibiotics to cover GNB**
- C. PAIR**
- D. Pigtail drainage**



80. Identify the procedure shown

- A. SADI-S
- B. Sleeve gastrectomy
- C. Roux-en-Y gastric bypass
- D. Biliopancreatic diversion with duodenal switch





Adjustable Gastric Band (AGB)



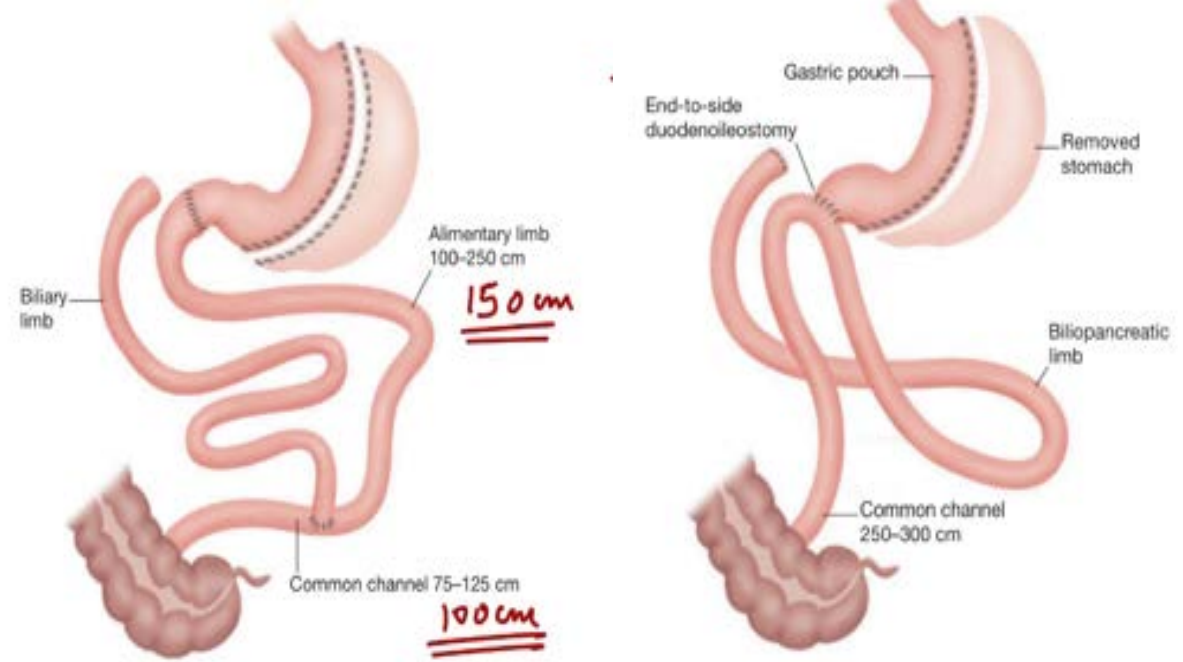
Vertical Sleeve Gastrectomy (VSG)



Roux-en-Y Gastric Bypass (RYGB)



Biliopancreatic Diversion (BPD)



Classification

Restrictive	<ul style="list-style-type: none"> • Vertical band gastroplasty • Adjustable band gastroplasty • Sleeve gastrectomy (Banded sleeve gastrectomy)
Malabsorptive and restrictive (ideal balanced)	<ul style="list-style-type: none"> • Roux en Y gastric bypass
Mainly malabsorptive and mildly restrictive	<ul style="list-style-type: none"> • Biliopancreatic diversion • Duodenal switch (DS - BPD) • SADI- S (Single anastomosis duodenal ileal - sleeve gastrectomy)

Acronym	Full Form
POSE	Primary Obesity Surgery Endoluminal
ROSE	Restorative Obesity Surgery Endoluminal
ESG	Endoscopic Sleeve Gastroplasty
TOGA	Transoral Gastroplasty

95. What is the procedure being shown below?

- A. Billroth-I reconstruction**
- B. Billroth II reconstruction**
- C. Braun anastomosis**
- D. Roux-en Y gastrojejunostomy**



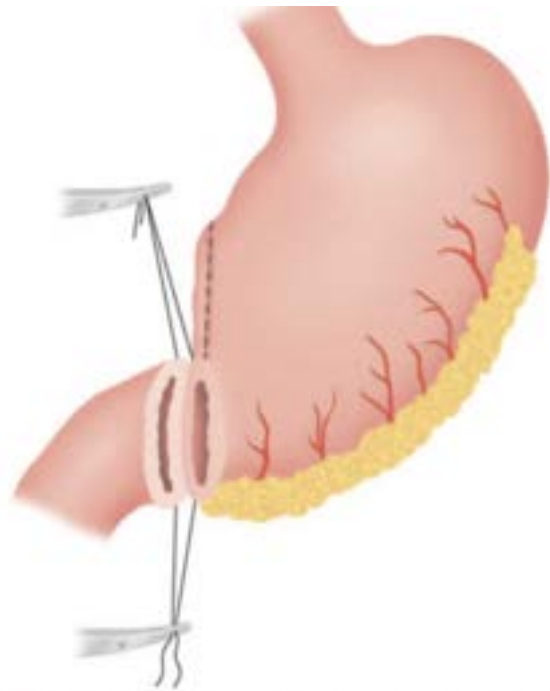


Figure 67.14 Billroth I gastrectomy. The lower half of the stomach is removed and the cut stomach anastomosed to the first part of the duodenum.

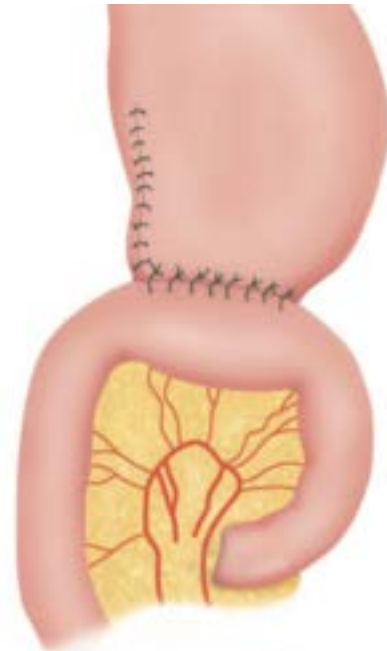


Figure 67.15 Billroth II. Two-thirds of the stomach is removed, the duodenal stump is closed and the stomach anastomosed to the jejunum.

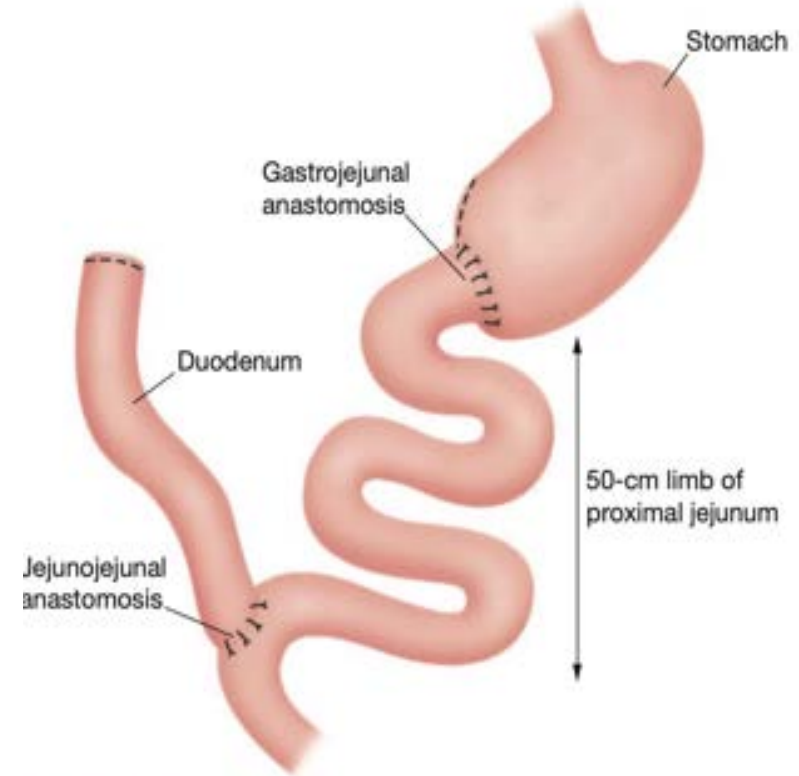


Figure 67.20 Roux-en-Y reconstruction following Billroth I gastrectomy. Note the length of the proximal jejunal limb required to minimise bilious reflux.

Nutritional deficiencies

- **Most common:** Iron deficiency
- **Other deficiencies:** Vitamin B12, Vitamin D3

Internal hernia

- **Petersen's hernia:** Bowel loop herniates behind Roux limb
 - *Antecolic reconstruction*
- **Stemmer hernia:** Bowel loops herniate through the transverse mesocolon
 - *Retrocolic reconstruction*

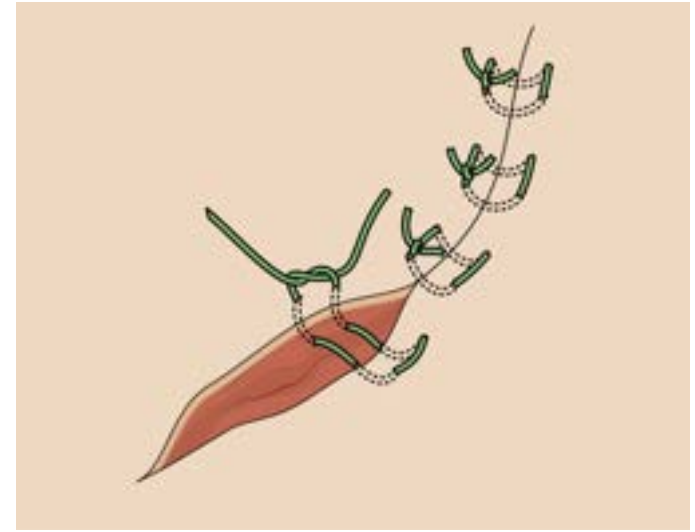
81. What is the likely diagnosis based on the ERCP image?

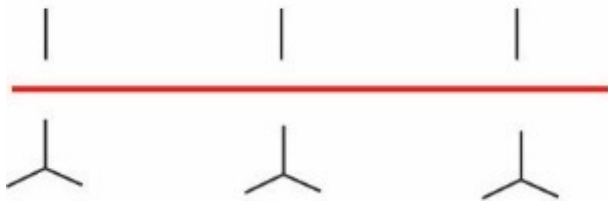
- A. Choledochal cyst
- B. Biliary ascariasis
- C. Caroli disease
- D. Choledocholithiasis



82. Identify the suture

- A. Horizontal mattress
- B. Vertical mattress
- C. Interrupted
- D. Continuous





83. A 34-year-old male patient presented with pain and tightness on the glans penis and pigmentation with difficulty in urination. Examination finding is shown below. What is the most likely diagnosis?

- A. Balanitis xerotica**
- B. Condyloma acuminata**
- C. Erythroplasia of Queyrat (EQ)**
- D. Peyronies disease**

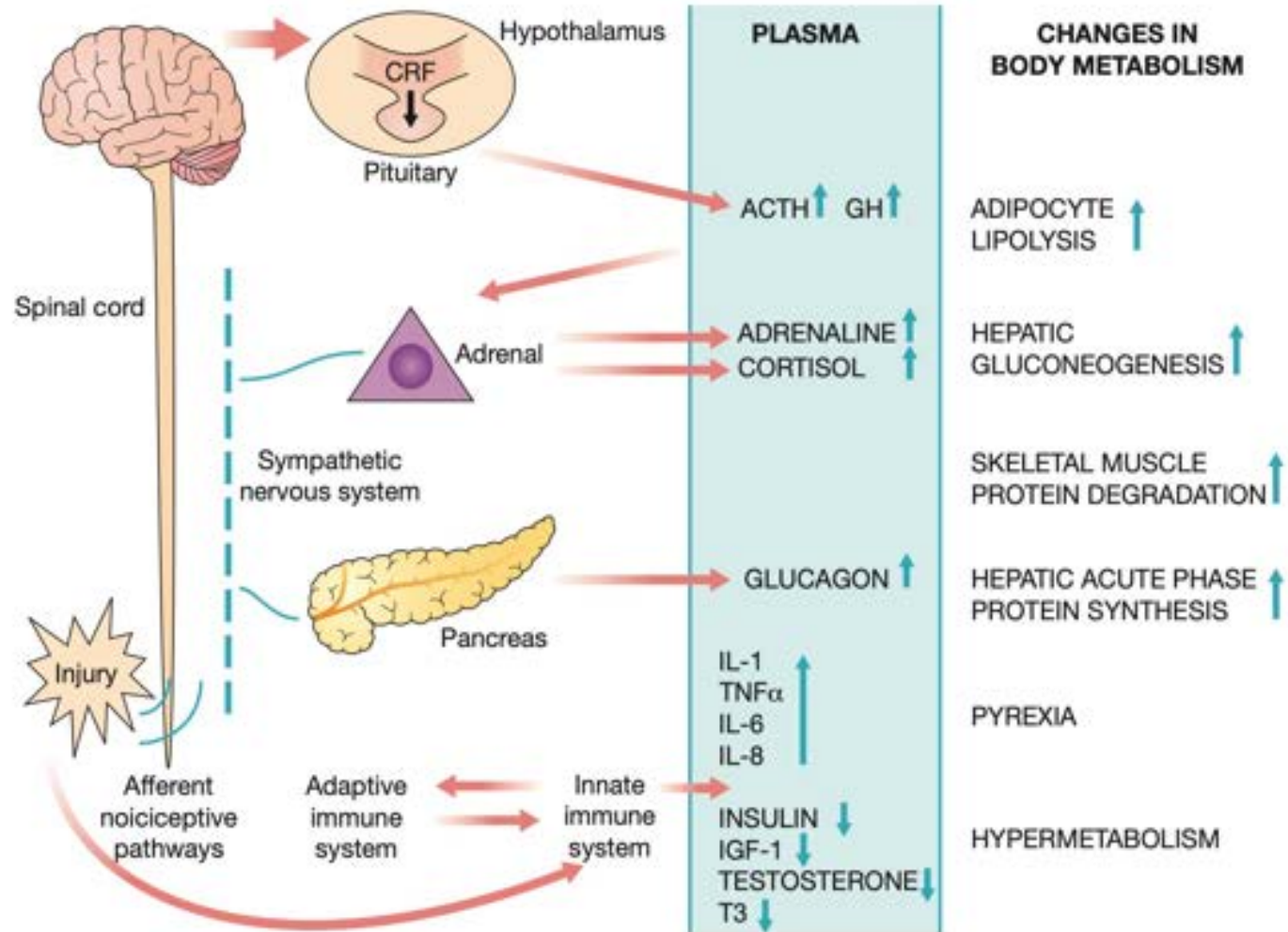


84. In a patient with hyperplasia of all four parathyroid glands who undergoes total parathyroidectomy followed by implantation of parathyroid tissue in a different site, which term best defines this procedure?

- A. Isograft**
- B. Auxiliary**
- C. Heterotopic**
- D. Orthotopic**

85. All of the following are true regarding the metabolic and hormonal response to surgical stress/trauma except:

- A. Increased ACTH and cortisol levels are characteristic findings**
- B. Insulin levels are elevated in the ebb phase of stress**
- C. There is increased hepatic gluconeogenesis and lipolysis**
- D. Growth hormone (GH) and TNF- α levels are elevated**



86. All of the following are contraindications for PAIR (Puncture, Aspiration, Injection, Re-aspiration) in hydatid cyst except:

- A. Honeycomb cysts with multiple septae**
- B. Cysts communicating with bile duct**
- C. WHO type CE1 cyst**
- D. Pulmonary hydatid cyst**

87. Which of these open inguinal hernia repairs involves double breasting of conjoint tendon with inguinal ligament?

- A. Bassini's repair
- B. Maloney's repair
- C. Shouldice's repair
- D. Desarda's repair

- **In Bassini's repair, the conjoint tendon is approximated to the inguinal ligament in a single layer.**
- **Desarda's repair uses a strip of external oblique aponeurosis, which is sutured to the conjoint tendon and inguinal ligament to reinforce the posterior wall of the inguinal canal**
- **Shouldice repair : conjoint tendon is sutured to the inguinal ligament in multiple overlapping (double-breasting) layers.**

88. All of the following tumor classifications are correctly matched with their associated tumors except:

- A. Bloom–Richardson grading – Carcinoma breast**
- B. Duke staging – Colorectal carcinoma**
- C. Gleason scoring – Testicular cancer**
- D. Masaoka staging – Thymoma**

Classification	Associated Tumor
Bloom Richardson grading	Carcinoma breast
Butchart staging	Mesothelioma
Chang staging	Medulloblastoma
Jackson	Carcinoma penis
Masaoka staging	Thymoma
Noguchi	Adenocarcinoma lung
Nevin's staging	Carcinoma gall bladder
Robson staging	Renal cell carcinoma
Reiss and Ellsworth classification, Esson prognostic index	Retinoblastoma
Shimada index	Neuroblastoma
Sullivan modification of Macfarlane system	Adrenocortical carcinoma

89. A female with ER+, PR+, HER2- breast cancer is to be treated. Which of the following is the most recently approved agent for this condition?

- A. Ipatasertib**
- B. Buparlisib**
- C. Palbociclib**
- D. Herceptin**

• **Cyclin-dependent kinase 4/6 inhibitors**

- **Palbociclib:** With aromatase inhibitor (Letrozole) or SERD (Fulvestrant)
- **Ribociclib:** With aromatase inhibitor (Letrozole)
- **Abemaciclib:** With SERD (Fulvestrant)

• **mTOR pathway inhibitors**

- **Everolimus:** Approved for advanced/metastatic HR+, HER2- breast cancer

• **Phosphatidyl-inositol 3 kinase (PI3k) inhibitors-Buparlisib**

• **AKT (Protein kinase B) inhibitors-Ipatasertib**

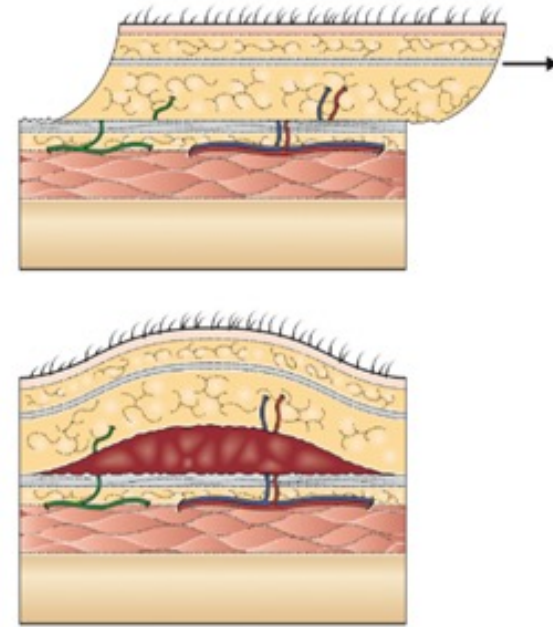
90. Breast conservation surgery is feasible in which of the following patients with breast carcinoma?

- (1) A post-partum woman**
- (2) Small breast with a large tumor**
- (3) Persistently positive margin**
- (4) Diffuse microcalcification on mammogram**
- (5) Prior chest radiation**

- A. Only 1**
- B. 1, 3 and 4**
- C. 2, 3, 4 and 5**
- D. 2 and 3**

91. Identify the type of injury

- A. Closed degloving injury
- B. Incised looking laceration
- C. Subcutaneous hematoma
- D. Flaying laceration

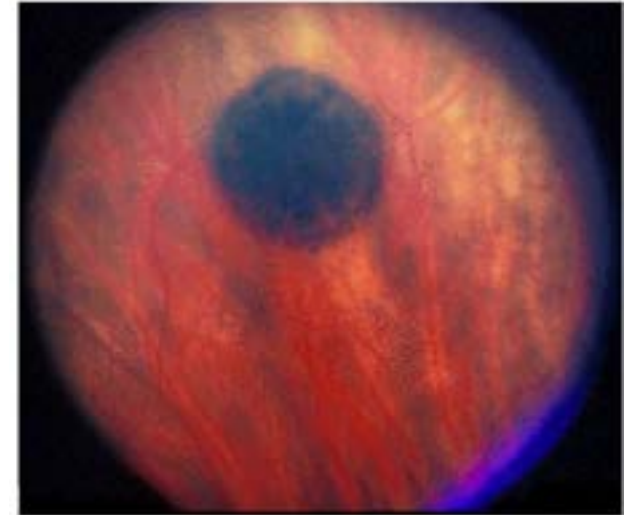


92. A 65-year-old man presents with hematuria and left flank pain. Imaging studies reveal a renal mass, and a subsequent biopsy confirms the diagnosis of papillary renal cell carcinoma. Which of the following cytogenetic abnormalities is most characteristic of papillary chromophilic renal cell carcinoma?

- A. Loss of 3p**
- B. Trisomy 7/17**
- C. Xp translocation**
- D. Mutant VHL gene**

93. A 14-year-old boy undergoing ophthalmoscopy shows pigmentary changes. Family history reveals colon and endometrial cancers. APC gene mutation is confirmed. Which statement is incorrect about this condition?

- A. Condition is inherited in an autosomal dominant pattern
- B. Mutation is located on chromosome 15
- C. Risk of colon cancer is nearly 100%
- D. Prophylactic surgery is recommended



94. A 34-year-old man comes to the office due to erectile dysfunction. A palpable plaque is present on the dorsal side of the penis approximately halfway between the glans and the pubis. The testes are normal with no scrotal erythema or skin ulceration. Which of the following is the most likely diagnosis?

- A. Genital warts**
- B. Penile cancer**
- C. Peyronie disease**
- D. Systemic sclerosis**

96. All are valid indications for surgery in asymptomatic primary hyperparathyroidism, except:

- A. Age >60 years**
- B. Vertebral fracture**
- C. Serum calcium >1 mg/dL above ULN**
- D. 24-hr urine calcium >400 mg/day**

TABLE 56.2 Consensus guidelines for surgical intervention in asymptomatic primary hyperparathyroidism.

Measurement of serum calcium	0.25 mmol/L (1.0 mg/dL) above the upper limit of normal
Skeletal	<ul style="list-style-type: none">• BMD by DEXA; T score -2.5 at lumbar spine, total hip, femoral neck or distal one-third of radius• Vertebral fracture
Renal	<ul style="list-style-type: none">• Creatinine clearance <60 mL/min• 24-hour urinary calcium >10 mmol/dL (>400 mg/day) or increased risk of stone formation by risk analysis
Age	<50 years

97. Identify the type of suture material given in the image.

A. Monofilament

B. Braided

C. Biological

D. Polyfilament



SUTURES

Absorbable

Mechanism:

Synthetic

Natural

Monocryl: Polyglycaparone

PDS: Polydioxanone

Vicryl: Polygalactin

Dexon: Polyglycolic acid

CATGUT

Non - Absorbable

Synthetic

Natural

Nylon-Polyamide/ Ethilon

Prolene - Polypropylene

Novafil - Polybutester

Polyester- Ethibond

SILK

98. A wide mouth non-indurated Meckel's diverticulum is found during surgery for acute appendicitis. What should be done?

- A. Excision**
- B. Resection-anastamosis**
- C. Nothing to be done**
- D. Take consent from patient and re-explore**



When found in the course of abdominal surgery, a Meckel's diverticulum can safely be left alone, provided it has a wide mouth and is not thickened. When there is doubt, it can be resected. The finding of a Meckel's diverticulum in an inguinal or femoral hernia has been described as 'Littre's hernia'.

Summary box 74.4

Features of Meckel's diverticulum

- Remnant of vitellointestinal duct
- Occurs in 2% of patients, 5 cm (2 inches) long, 60 cm (2 feet) from the ileocaecal valve, 20% heterotopic epithelium
- Should be looked for when a normal appendix is found at surgery for suspected appendicitis
- If a Meckel's diverticulum is found incidentally at surgery, it can be left provided it has a wide mouth and is not thickened
- Can be a source of gastrointestinal bleeding if it contains ectopic gastric mucosa

99. The criteria for early renal graft dysfunction includes:

- A. Rise in serum creatinine of $>15\%$ baseline
- B. Rise in serum creatinine of $>10\%$ baseline
- C. Rise in serum creatinine of $>10 \mu\text{mol/l}$
- D. Rise in serum creatinine of $>15 \mu\text{mol/l}$

Causes of early graft dysfunction

Any rise in serum creatinine of $>10\%$ of baseline or $\geq 20 \mu\text{mol/L}$ should be considered as acute allograft dysfunction that requires investigation. Possible causes are:

- Acute rejection (antibody mediated or cell mediated)
- Calcineurin inhibitor toxicity
- Dehydration
- Urinary tract infection or pyelonephritis
- Any other source of sepsis
- Renal vein or renal artery thrombosis
- Ureteric obstruction or urine leak

100. A 34-year-old female presents with a lump in her left breast for 2 years. On examination, a 6 x 4 cm mass is palpated. Dimpling of the skin and bloody discharge from the nipple is present. The lesion is invading the pectoralis major muscle. Ipsilateral Level I and Level II matted axillary lymph nodes and C/L Level 1 axillary nodes are present. There was no distant metastasis. What is the TNM staging.

- A. T4bN1M0**
- B. T3N2M0**
- C. T4aN1M0**
- D. T3N2M1**

Thank You



BTR Surgery - 11-09-2025

Dr. Zainab Vora

1. In a case of head injury, which patient would not require an immediate CT scan?

- A. Child with post-traumatic seizure
 - B. Biker with skull fracture suspicion
 - C. RTA victim with GCS 12
 - D. One episode of vomiting
-

TABLE 28.3 UK National Institute for Health and Care Excellence (NICE) guidelines for computed tomography (CT) in head injury.

Indications for CT imaging in head injury within 1 hour

- GCS <13 at any point
- GCS <15 at 2 hours
- Focal neurological deficit
- Suspected open, depressed or basal skull fracture
- More than one episode of vomiting
- Post-traumatic seizure

Indications for CT imaging within 8 hours

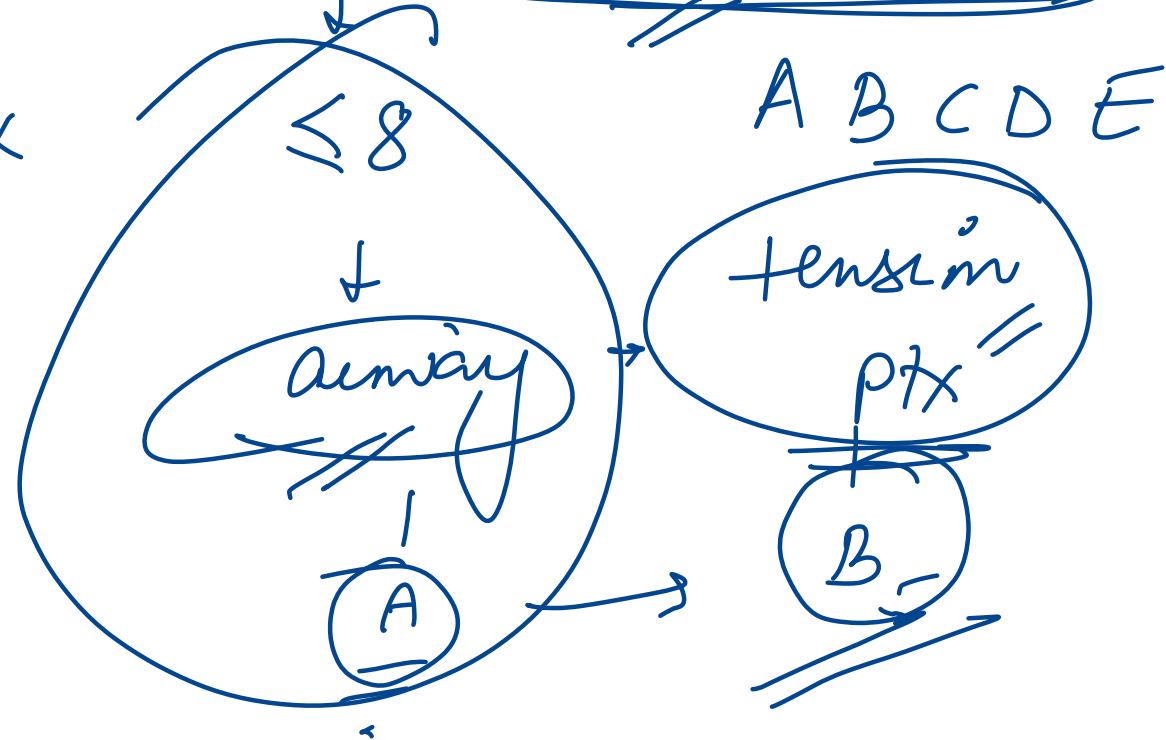
- Age >65
- Coagulopathy (e.g. aspirin, warfarin or rivaroxaban use)
- Dangerous mechanism of injury (e.g. fall from a height, RTA)
- Retrograde amnesia >30 minutes

/ Canadian head CT/
NEXUS



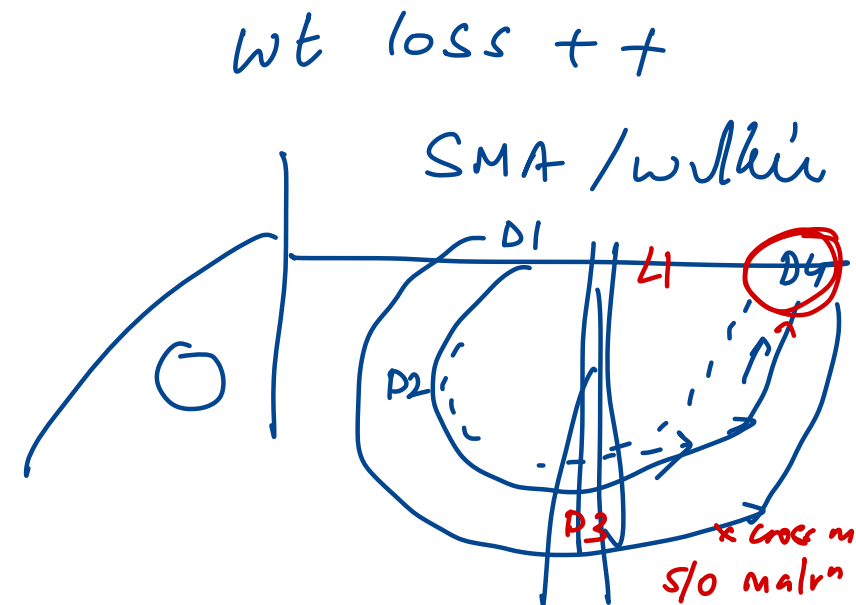
2. A 27-year-old patient is brought into the casualty with maxillofacial trauma following a road traffic accident (RTA). He is unconscious with a GCS of 7/15 and his SpO2 is dropping with absent breath sounds on right side. JVP is raised. What is the next step?

- A. Bag and mask ventilation ~~x~~
- B. Cricothyrotomy 1st
- C. Needle thoracostomy
- D. Nasotracheal intubation ~~x~~



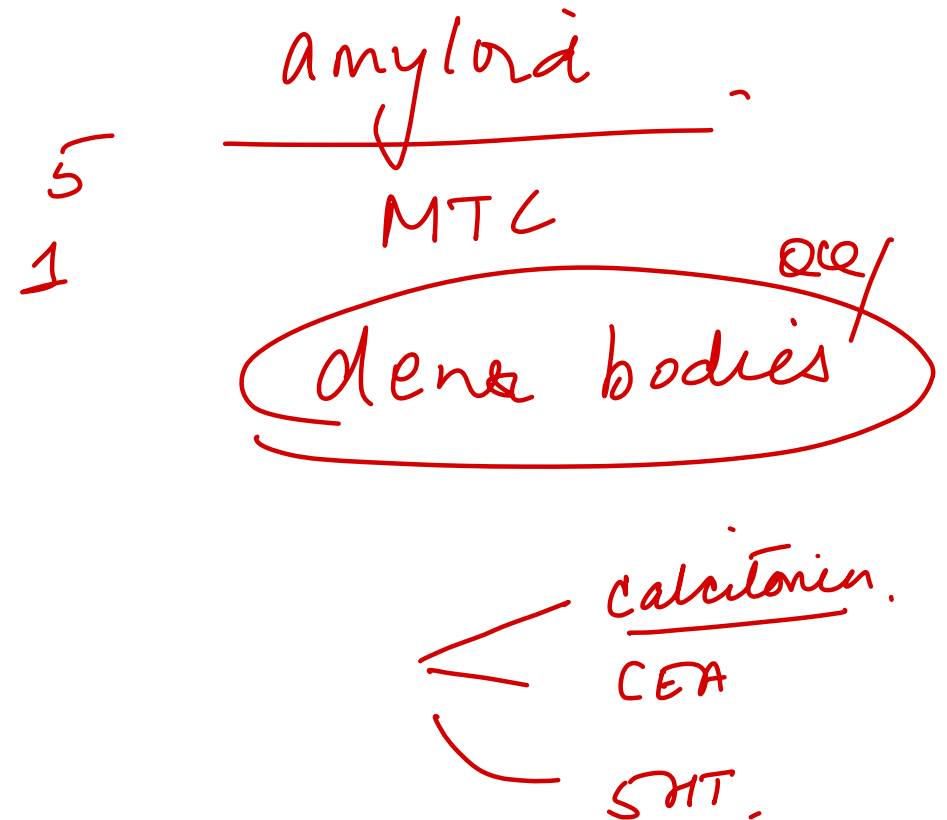
4. A 32-year-old female presents to your OPD with severe nausea and recurrent bilious vomiting. Her symptoms initially began as postprandial epigastric pain and early satiety, but have progressed over the last two weeks. She works as an actress, and tells you that her symptoms only started when she "landed a role in a TV serial" and was inspired to lose 15kgs, on a "crash diet". On physical exam, her abdomen is tender and slightly distended with high-pitched bowel sounds. A laparotomy is performed, and it is observed that the angle between her superior mesenteric artery and her aorta is significantly decreased. Which of the following structures is most likely to be obstructed by the artery?

- A. Ascending portion of the duodenum D4
- B. Descending portion of the duodenum D2
- C. Duodenal bulb D1
- D. Transverse portion of the duodenum**



5. A 50-year-old man presents to the clinic with a gradually enlarging neck mass over the past 2 months. Neck ultrasonography confirms a hypoechoic nodule with microcalcifications. Fine-needle aspiration (FNA) biopsy shows spindle-shaped cells in eosinophilic amorphous background. Which of the following genetic mutations is most likely responsible for this patient's condition?

- A. BRAF gene mutation → Pap Ca
- B. Activation of RET** MEN 2a/2b
- C. Inactivation of p53
- D. Overexpression of PTC gene = pap Ca



6. A 65-year-old woman comes to the emergency department due to a 5-day history of left lower abdominal pain, nausea, and poor appetite. Although she has a history of chronic constipation, she has been having 2–3 loose, nonbloody bowel movements daily. History is notable for hysterectomy and bilateral salpingo-oophorectomy 15 years ago. Rectal and pelvic examinations elicit exquisite left-sided tenderness. Stool testing for occult blood is negative. Laboratory results include a white blood cell count of $16,500/\text{mm}^3$. Which of the following is the best next step in diagnosis?

- A. CT scan of the abdomen
- B. Flexible sigmoidoscopy ~~XX~~
- C. Stool culture - infectious colitis
- D. Stool PCR testing for Clostridioides difficile ~~XX~~

Diverticulitis

r/o PID

r/o cancer

h/o antibiotics

Azile LLQ pain

Diverticulitis

Epiploric appendicitis

7. Which of the following is the embryologic explanation for the malformation shown in the image?

- A. Expansion of the foramen cecum ✗
- B. Failure of fusion of the maxillary and mandibular processes ✗
- C. Failure of fusion of the maxillary and medial nasal processes
- D. Failure of fusion of the lateral palatine processes (CP)

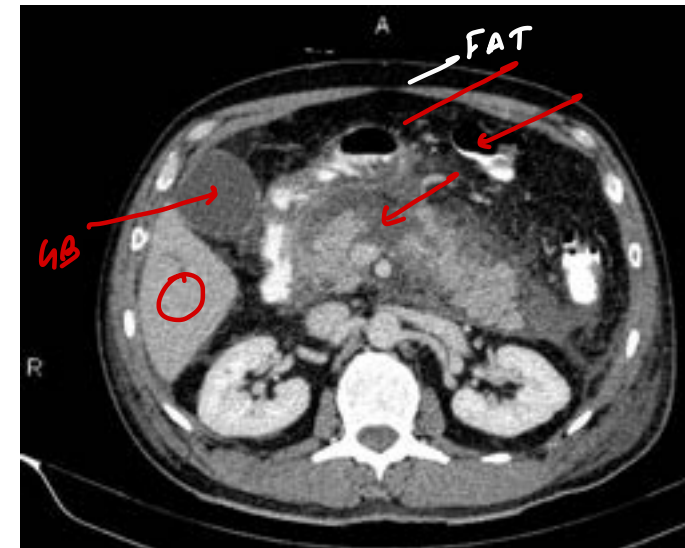


CL

8. A 56-year-old male presents to the emergency with abdominal pain and an episode of binge drinking, in shock with a BP of 70/50 mm Hg and HR of 115/min. The oxygen saturation of the patient is 70 mm Hg. The serum creatinine level was 2.4 mg/dL. What is the likely diagnosis based on the CT image shown below?

MODS

- A. Liver abscess
- B. Necrotising Acute pancreatitis ^{90%}
- C. Pneumoperitoneum
- D. Interstitial acute pancreatitis



CECT



2/3 + C/F Biochem USG/radiol

Ind: CECT
 ↓
 necrosis
 > 48-72 hrs

9. All of the following are minimum standards for monitoring of a patient in shock except?

- A. ECG
- B. Pulse oximetry
- C. Urine output
- D. Base deficit

Monitoring for patients in shock

Minimum

- ECG
- Pulse oximetry
- Blood pressure
- Urine output

Additional modalities

- Central venous pressure
- Invasive blood pressure → radial A
- Cardiac output
- Base deficit and serum lactate

10. Identify the likely pathology from the thyroid scan pattern shown in the figure:

A. Hypersecreting adenoma XX

B. Cold nodule

C. Grave's disease

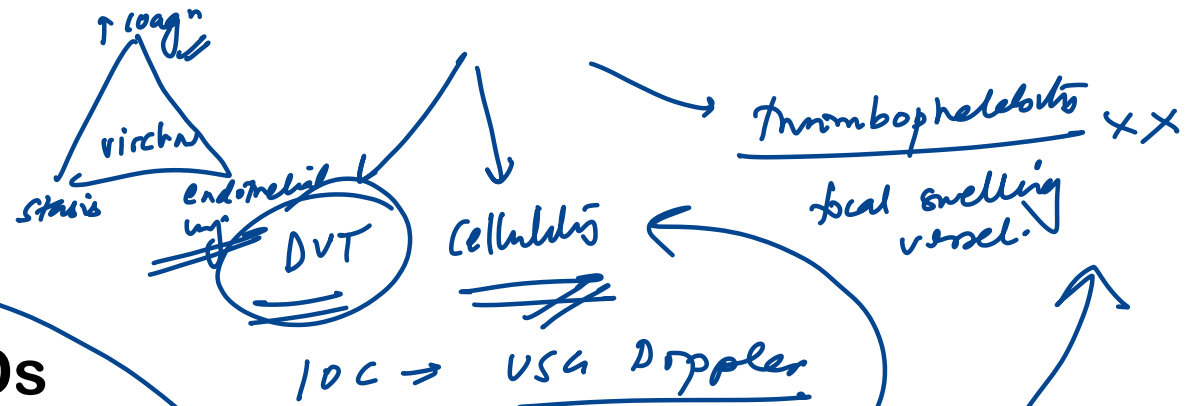
D. Plummer disease



11. A 60-year-old man comes to the office due to pain, redness, and swelling in his right arm. The patient was recently diagnosed with unresectable lung cancer. He received the first cycle of chemotherapy 2 weeks ago through a right-sided peripherally inserted central catheter (PICC). Temperature is 36.9°C (98.4°F), blood pressure is 130/80 mm Hg, pulse is 78/min, and respirations are 14/min. Oxygen saturation is normal. Examination shows right arm swelling and mild erythema. Capillary refill is normal. No discharge is seen around the PICC line. The remainder of the examination is normal.

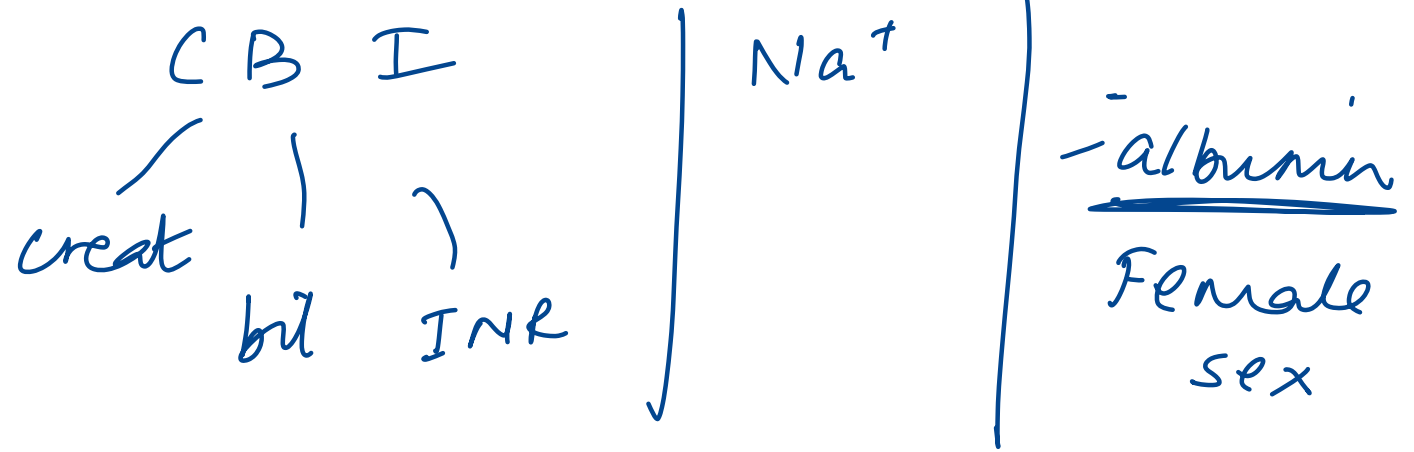
Which of the following is the most appropriate next step in management?

- A. Chest MRI ~~xx~~
- B. ~~Duplex ultrasonography~~
- C. Empiric antibiotics
- D. Warm compresses and NSAIDs



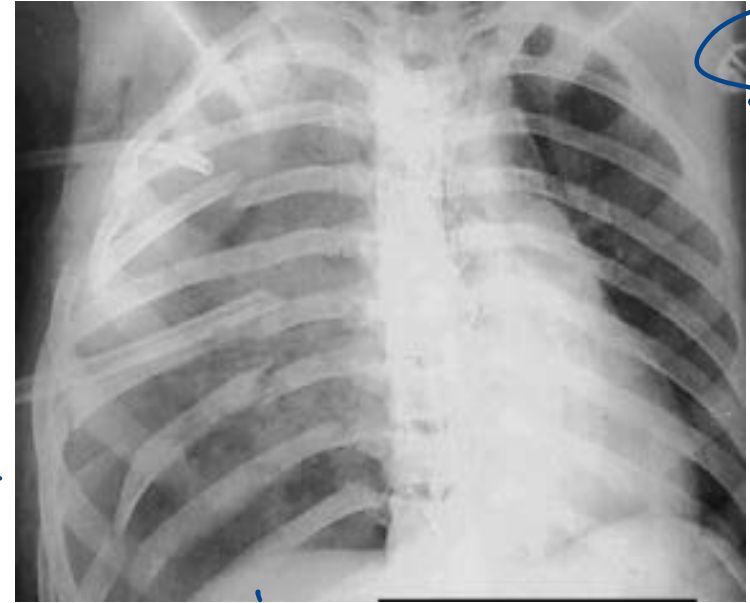
12. All are components of MELD 3.0 score, except:

- A. INR ✓
- B. Female sex ✓
- C. Platelet count
- D. Creatinine ✓



13. A man presented to the emergency department following a road traffic accident with complaints of chest pain and difficulty breathing. An X-ray was taken and is displayed below. Based on the findings, which type of breathing pattern is most likely observed in this patient?

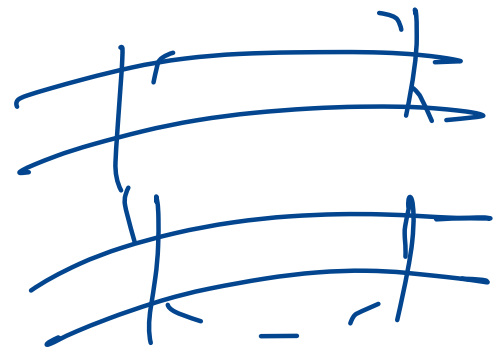
- A. Cheyne-Stokes respiration ✓ CVS
- B. Paradoxical respiration
- C. Biot's respiration ✓ brain
- D. Kussmaul respiration ✓ MA



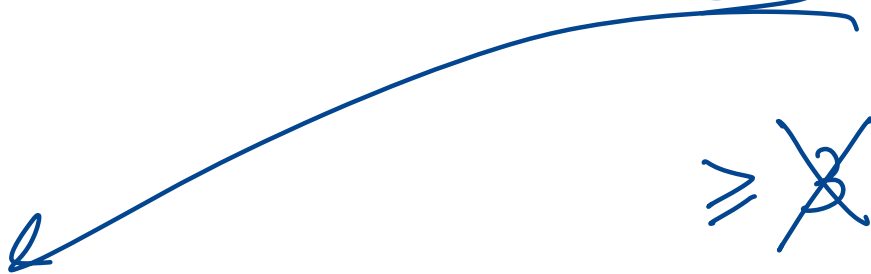
flail chest

≥ 2 #
2

- 2 conse ribs =



R: NCAADs → sat ↓↓
 $PaO_2 \leq 60mm$
 PPV



14. A 30-year-old man is brought to the emergency department after being struck by a car while he was crossing the street one hour ago. He did not lose consciousness. He has pain in his right arm, forehead, and pelvis. He also has an urge to urinate but has been unable to do so since the accident. His temperature is 37.1°C (98.9°F), pulse is 72/min, respirations are 18/min, and blood pressure is 118/82 mm Hg. He is alert and oriented to person, place, and time. Musculoskeletal examination shows tenderness and ecchymosis over the right distal forearm with intact pulses, sensation, and capillary refill. Abdominal examination shows suprapubic tenderness. A scant amount of blood is present at the urethral meatus. A CT scan of the abdomen and pelvis shows a fracture of both ipsilateral pubic rami. Which of the following is the most appropriate next step in management?

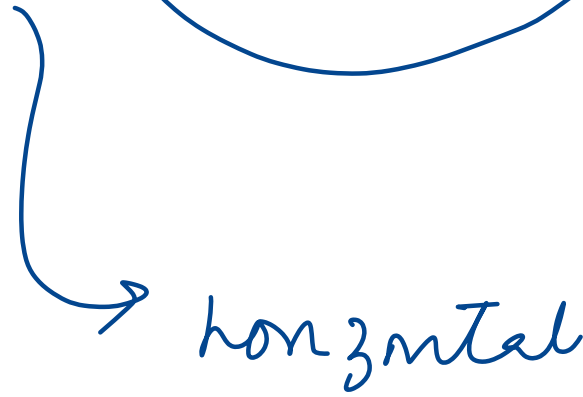
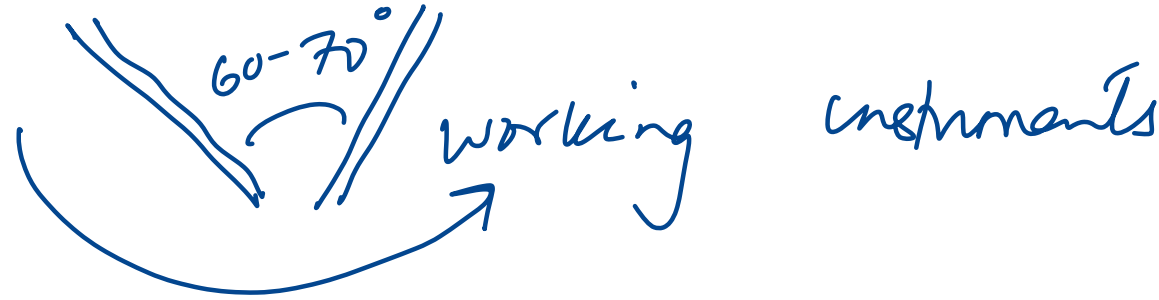
- A. CT cystography → UB
- B. Retrograde urethrography
- C. Foley catheterization
- D. Intravenous pyelography

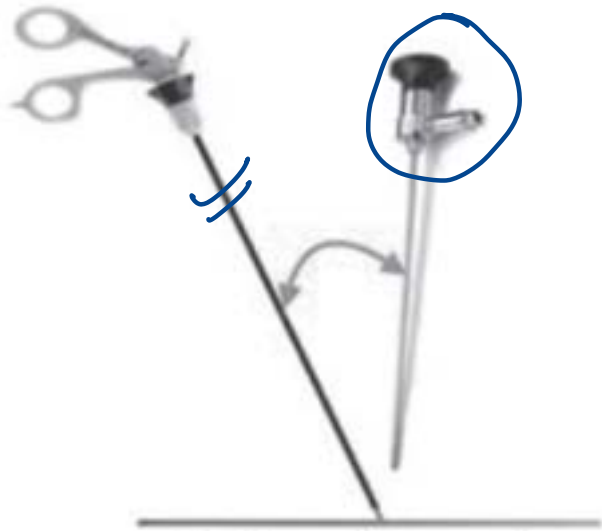
Urethral trauma
↓

15. What is the angle between the telescope and a working instrument in a laparoscopy defined as?

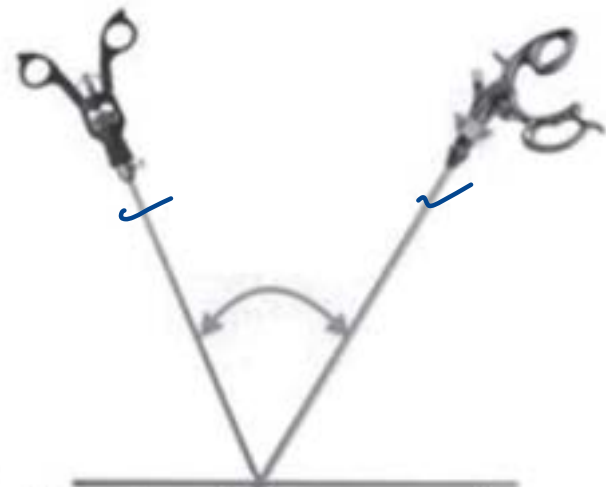
Pyq

- A. Azimuth angle
- B. Manipulation angle
- C. Elevation angle
- D. ~~Verees~~ angle





Azimuth angle



Manipulation angle



Elevation angle

16. A 60-year-old man with a history of nonalcoholic fatty liver disease resulting in cirrhosis comes to the emergency department due to worsening abdominal distension, pain, fatigue, and dyspnea for the past 3 days. Medical history includes gastrointestinal reflux disease and hypertension. The abdomen is distended with shifting dullness and tenderness. There is 2+ pedal edema. Laboratory results show thrombocytopenia and mildly elevated PT. Prompt diagnostic paracentesis is recommended, and risks and benefits of the procedure are discussed with the patient. The patient provides informed consent, and the medical team makes appropriate preparations for the procedure. Immediately prior to inserting the paracentesis needle, a time-out is called.

Which of the following information is most essential to include during the time-out?

- A. Indication for performing the procedure X
- B. Medications currently taken by the patient *sign in*
- C. Names of team members and associated roles
- D. Type of procedure being performed

D > C

Surgical safety checklist

Before induction of anesthesia	Before skin incision	Before patient leaves operating room
Sign In ✓ anes th ✓ nurse	Time Out Surgeon	Sign Out
<ul style="list-style-type: none"> PATIENT HAS CONFIRMED IDENTITY ✓ SITE PROCEDURE CONSENT 	<ul style="list-style-type: none"> CONFIRM ALL TEAM MEMBERS HAVE INTRODUCED THEMSELVES BY NAME AND ROLE ✓ 	<p>Nurse verbally confirms with the team:</p> <ul style="list-style-type: none"> The name of the procedure recorded That instrument, sponge and needle counts are correct (or not applicable) How the specimen is labelled (including patient name)
<ul style="list-style-type: none"> SITE MARKED/NOT APPLICABLE ✓ 	<ul style="list-style-type: none"> Surgeon, anesthesia professional and nurse verbally confirm <u>Patient</u> <u>Site</u> <u>Procedure</u> 	
<ul style="list-style-type: none"> ANAESTHESIA SAFETY CHECK COMPLETED ✓ 	<u>Anticipated Critical Events</u>	
<ul style="list-style-type: none"> PULSE OXIMETER ON PATIENT AND FUNCTIONING ✓ 	<ul style="list-style-type: none"> Has antibiotic prophylaxis been given within the last 60 minutes? ✓ 	<ul style="list-style-type: none"> Surgeon, anesthesia professional and nurse review the key concerns for recovery and management of this patient
DOES PATIENT HAVE A: KNOWN ALLERGY? DIFFICULT AIRWAY? RISK OF >500ML BLOOD LOSS?		

OT ZONES

Zone 1:

-Protective reception, waiting, trolley bay, change rooms

Zone 2:

-clean area –preoperative, recovery, plaster room, staff lounges, stores

Zone 3:

-Sterile area-Operating room, Anesthesia room

Zone 4:

-Disposal area –dirty utility, disposal corridor

17. A 65-year-old man is brought to the emergency department due to nausea, vomiting, and increasing abdominal pain over the last 3 hours. Four weeks ago he was discharged from the hospital following an inpatient admission for acute myocardial infarction. His other medical problems include type 2 diabetes mellitus, hypertension, hypercholesterolemia, and peptic ulcer disease. His temperature is 37.8°C (100°F), blood pressure is 150/90 mm Hg, pulse is 110/min and irregular, and respirations are 22/min. The patient appears to be in severe distress due to pain. There is diffuse abdominal tenderness, but it is more pronounced over the lower right quadrant.

Liver function studies:

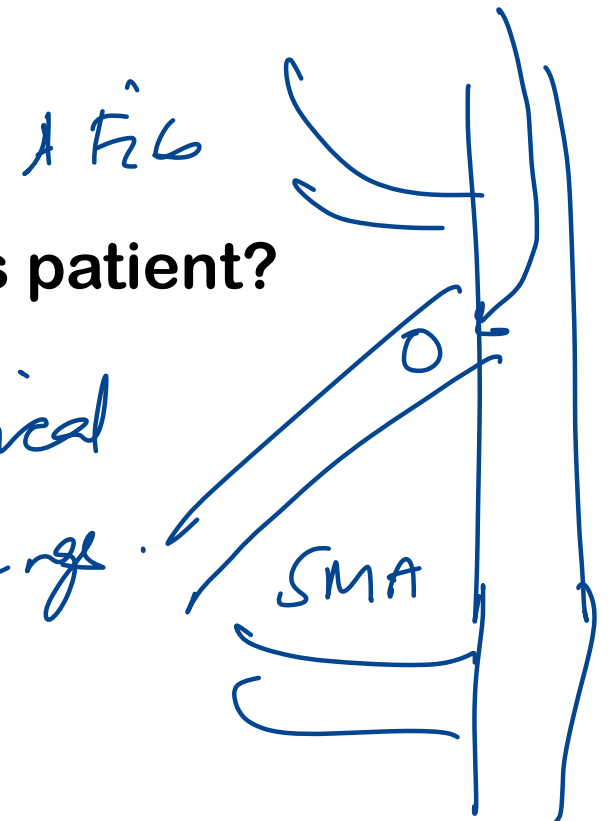
Amylase: 275 U/L

Lipase: 80 U/L (normal, 0-160 U/L)

Which of the following is the most likely diagnosis in this patient?

- A. Acute appendicitis
- B. Acute pancreatitis
- C. Bowel ischemia
- D. Diabetic ketoacidosis

pain >> physical findings



↓ ↓ BP

Gr/M



recto
Sigmoid

int iliac

acute
MI

emboli

acute pain >>
physical

chronic
MI

thrombosis

↓

{ postprandial
pain }

18. As per the ANDI classification of benign breast disorders, all of the following would be considered under disorders of early reproductive years, except

A. Adolescent hypertrophy

B. Nipple eversion

C. Fibroadenoma

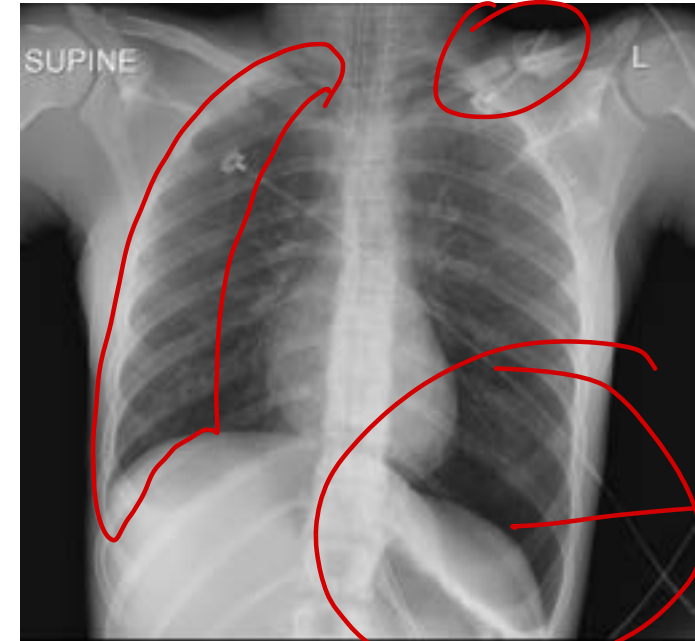
D. Nipple inversion

Age group	Normal	Disorder	Disease
Early reproductive years (age 15–25 y)	Lobular development	Fibroadenoma ✓	Giant fibroadenoma
	Stromal development	Adolescent hypertrophy ✓	Gigantomastia
	Nipple eversion	Nipple inversion ✓	Subareolar abscess, Mammary duct fistula
Later reproductive years (age 25–40 y)	Cyclical changes of menstruation	Cyclical mastalgia, Nodularity	Incapacitating mastalgia
	Epithelial hyperplasia of pregnancy	Bloody nipple discharge ✓	—
Involution (age 35–55 y)	Lobular involution	Macrocysts, Sclerosing lesions	—
	Duct involution	Duct ectasia	Periductal mastitis
	Dilatation	—	—
	Sclerosis	Nipple retraction	—
	Epithelial turnover	Epithelial hyperplasia	Epithelial hyperplasia with atypia

Ref diary
 vit E
 Dil of immune
 NSAID
 Scale : Lucknow - Cardiff
 Fibrolytic D

19. A 25-year-old male patient presented with sudden onset breathlessness and a sharp pain in his left chest after a road traffic accident. His BP is 85/69mm Hg and HR is 110bpm. The chest X-ray is given below. What is the next step for this patient? GLS

- A. eFAST ✓ XX
- B. Insert IV cannula and start IV fluids
- C. Needle thoracostomy → ICD
- D. Intubate the patient



deep sulcus sign → xbv

C

C

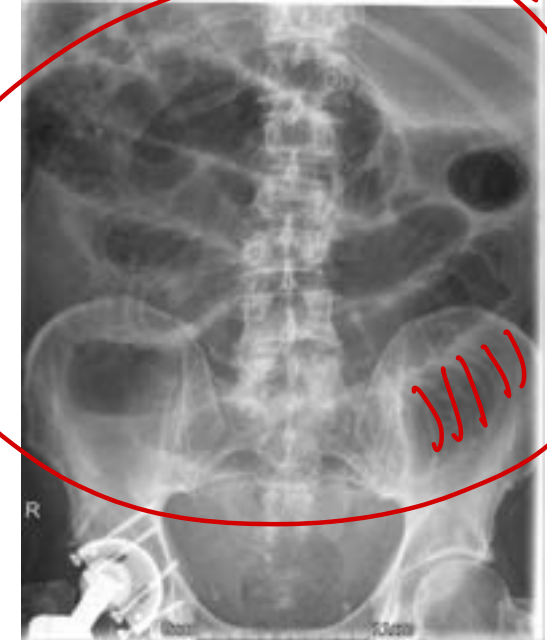
→ ICD

B

20. A young female presents with pain in lower abdomen and vomiting in the ER. Clinical examination reveals a swelling, lateral and below the pubic tubercle. X-ray is shown below. What is the most probable diagnosis?

- A. Adhesions
- B. Strangulated inguinal hernia
- C. Strangulated femoral hernia**
- D. Direct hernia

femoral



21. Identify the correct statements

1. Liposarcoma is the most common retroperitoneal tumor. (F)

2. M3 midline hernia refers to epigastric ~~hernia~~ *umbilical*

3. A mesenteric cyst shows mobility perpendicular to line of mesenteric attachment. (T)

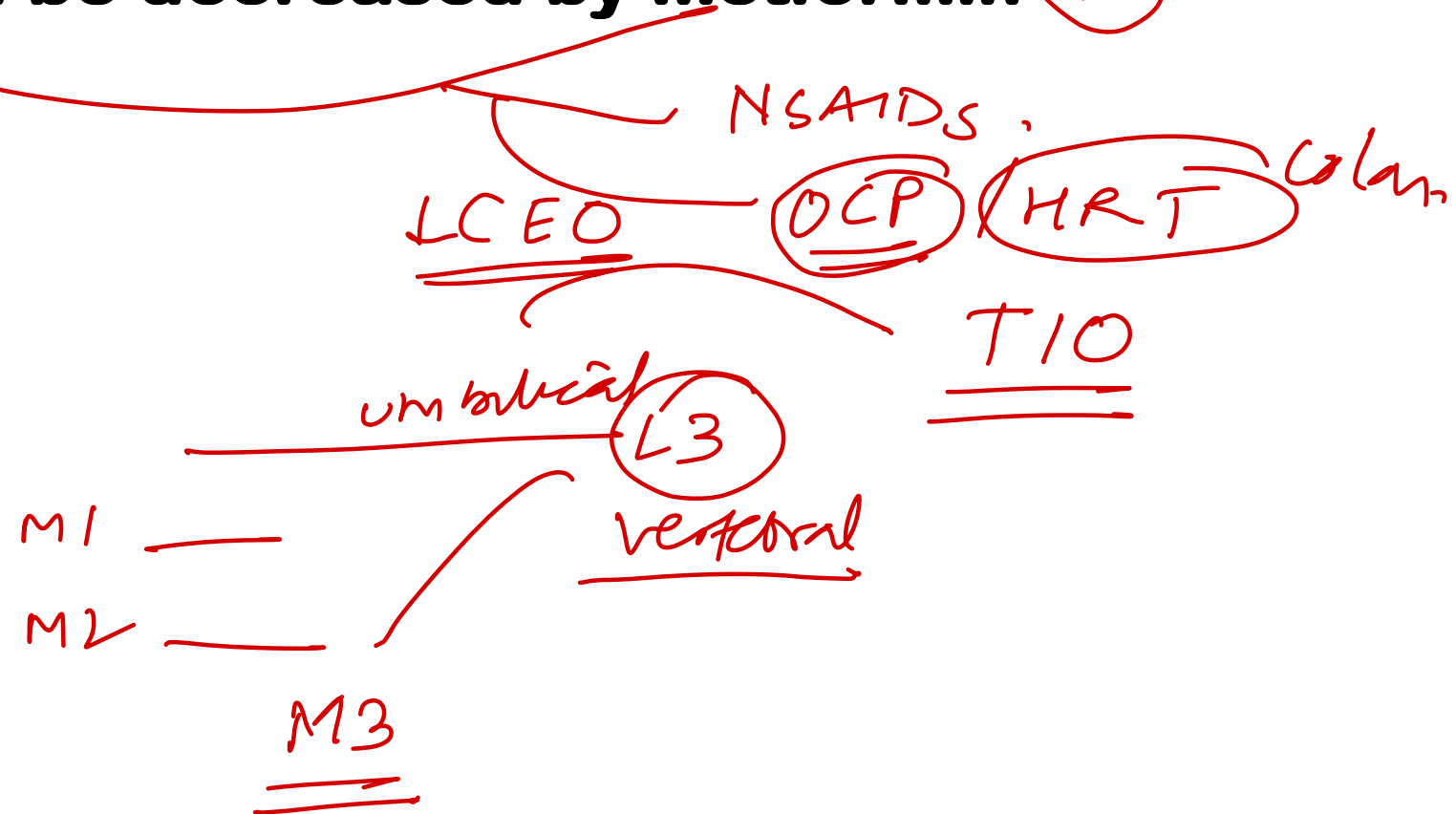
4. Colon cancer risk can be decreased by metformin (T)

A. 1, 2, 3, 4

B. 1, 3, 4

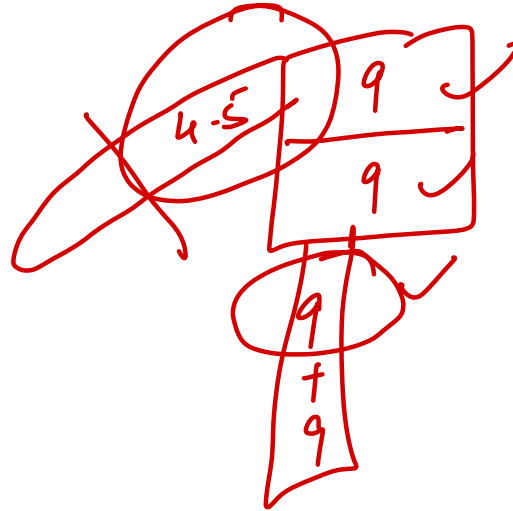
C. 2, 3

D. 1, 4



22. Calculate for Burn Surface Area (BSA) for a patient with burn involving the anterior torso, upper right arm and circumferential right thigh:

- A. 45%
- B. 27%
- C. 36%
- D. 31.5%



23. A 59-year-old man comes to the OP for a postoperative follow-up. He underwent a partial gastrectomy for a perforated peptic ulcer 3 weeks ago. For the last 10 days, he has had intermittent abdominal cramps and diarrhea. Symptoms begin 25-30 minutes after eating and are associated with nausea, weakness, palpitations, lightheadedness, and diaphoresis. On examination, the abdomen is soft and nontender with normal bowel sounds. The surgical wound is healing well without erythema or discharge. Which of the following is the most appropriate next step in management of this patient?

- A. Dietary modification
- B. Endoscopy
- C. Trial of octreotide
- D. Upper gastrointestinal contrast study

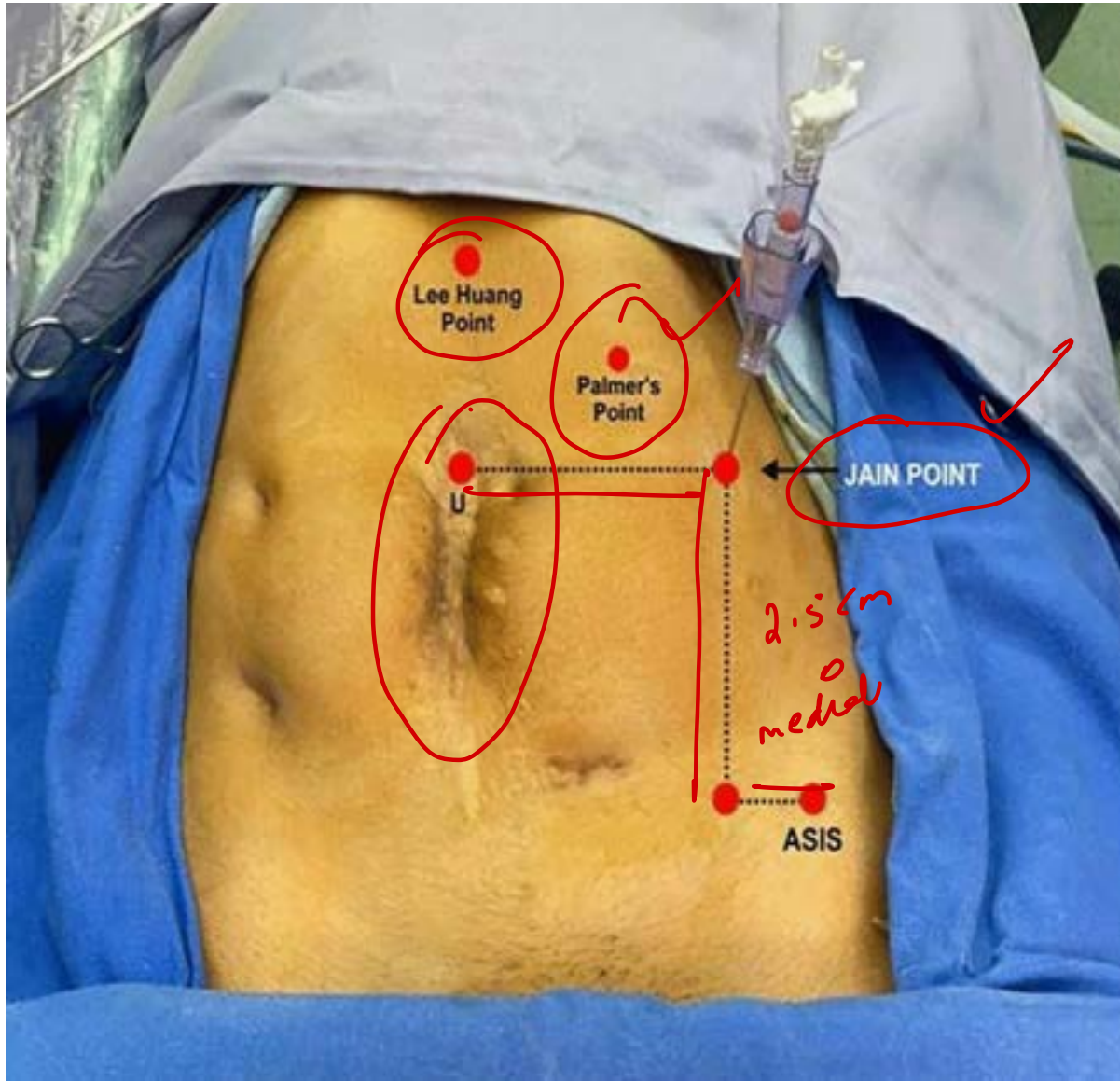
early
~ 10-15 min
~~|||||~~

late
~ 45 min
↑ insulin

24. Palmer's point is the point where you would insert the Veress needle. Identify it

- A. 3 cm below the left costal margin at the mid-clavicular line
- B. 7 cm below the left costal margin at the mid-clavicular line
- C. 3 cm below the right costal margin at the mid-axillary line
- D. 7 cm below the right costal margin at the mid-clavicular line

Veress'



The benefits of laparoscopic surgery

- Less postoperative pain
- Better cosmesis
- Earlier return to normal physiology
- Shorter hospital stays
- Fewer intraoperative adhesions created
- Better perception of anatomy as image is often magnified

Drawback - \uparrow Thermal burns
 \uparrow CABD inj

Open Hasson's technique for laparoscopic primary trocar insertion

In most cases, the umbilicus is the preferred site for a 10–12-mm initial port placement (Figure 7.10a–e).

~~PHN 5x~~

- 1 A 10-mm incision in Palmer's point (3 cm below the left costal margin, in the mid-clavicular plane) is the location preferred by many surgeons for Veress needle insertion.
- 2 The needle is advanced until it reaches the muscle. The abdominal wall is then lifted and the needle advanced through the oblique muscles.
- 3 Classically, a 'pop' is heard and a 'give' felt on successful insertion into the peritoneal cavity.
- 4 The intraperitoneal placement is confirmed using a combination of the following techniques.
 - The hanging drop method, wherein a drop of water is placed in the hub of the needle; on elevating the abdominal wall the resultant loss of intra-abdominal pressure would result in the drop emptying into the abdominal cavity.
 - Free flow of saline into the peritoneal cavity and no return of bowel content or blood on aspiration.
 - Abdominal pressure reading of less than 10 mmHg.
- 5 Once the position is confirmed CO₂ insufflation at a slow pace is commenced until the target pressure is reached. The needle is now removed.

CO₂ pressure

<20mmHg

ideal: 12-15mmHg

25. Which of the following is not a component of Triple H therapy used in the management of vasospasm following subarachnoid hemorrhage?

A. Hypertension ✓

B. Hypervolemia ✓

C. Hypothermia

D. Hemodilution ✓

delayed cerebral
ischemia

in 2004

~~_____~~

26. Reynold's pentad includes all except?

- A. Jaundice
- B. Hypotension
- C. Altered sensorium
- ~~D. Hematemesis~~

Charcot Δ - cholangitis

RUQ pain

fever

Reynold's

+
RUQ pain
+
Jaundice

Quincke's Δ

Hemobilia



27. During the secondary survey of a trauma patient, an AMPLE history is taken to gather critical information. Which of the following is not a part of the AMPLE history?

- A. Allergies
- B. Medications
- C. Past illness or pregnancy
- ~~D. Lucid interval~~

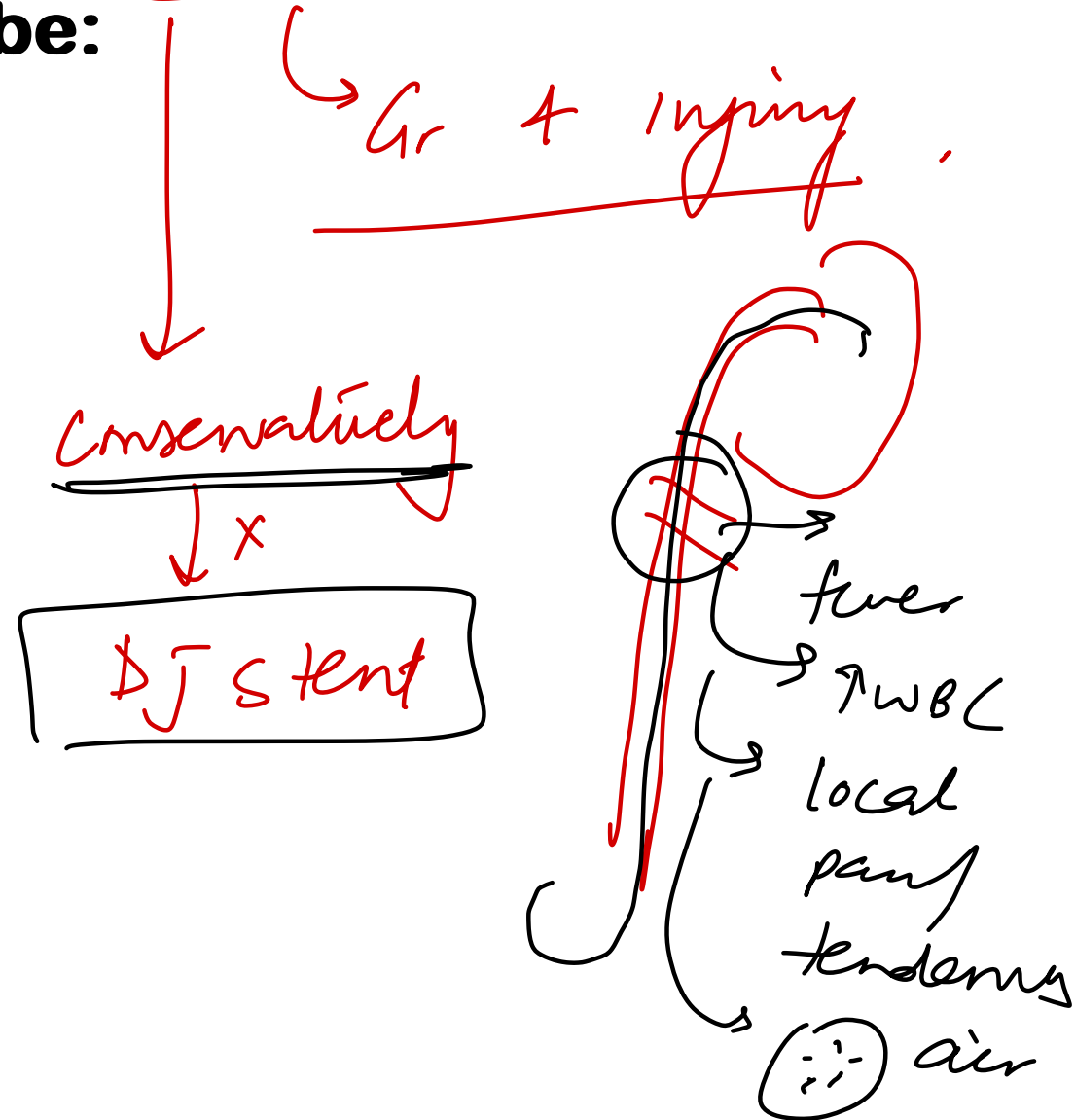
Events l/t trauma

Last meal

28. A trauma patient suffered a renal laceration with urine extravasation. He was managed conservatively. However, after a few days, he presented with a urinoma. The next best management for this patient would be:

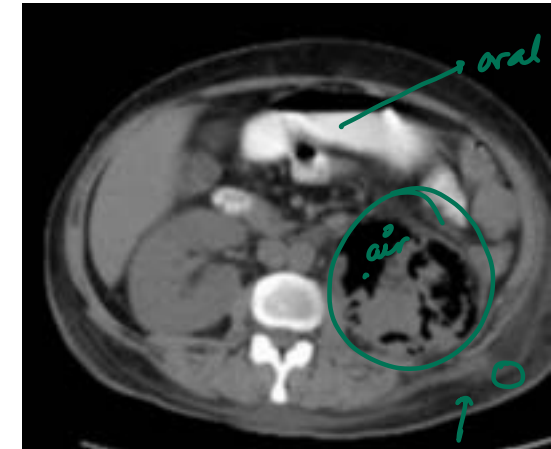
- A. Ureteral stenting
- B. Surgical repair and exploration
- C. Observation
- D. Pigtail drainage of collection

absent ↑ infection



29. A diabetic patient presented with acute onset fever and dysuria. Urine examination revealed plenty of leukocytes with glycosuria. A CT scan of the abdomen was done. What is the most likely diagnosis?

- A. Acute pyelonephritis ~~XX~~
- B. Emphysematous pyelonephritis GNB
- C. Perinephric abscess ~~X~~
- D. Renal abscess ~~X~~



N/CCT

30. A 35-year-old male presented to the clinic with complaints of pain and swelling in the right side of his face. Upon examination, the physician noted swelling in the submandibular gland. The patient also reported that his symptoms worsened when he ate food, and he had lost his appetite due to the discomfort. USG is shown below. What is the most likely diagnosis?

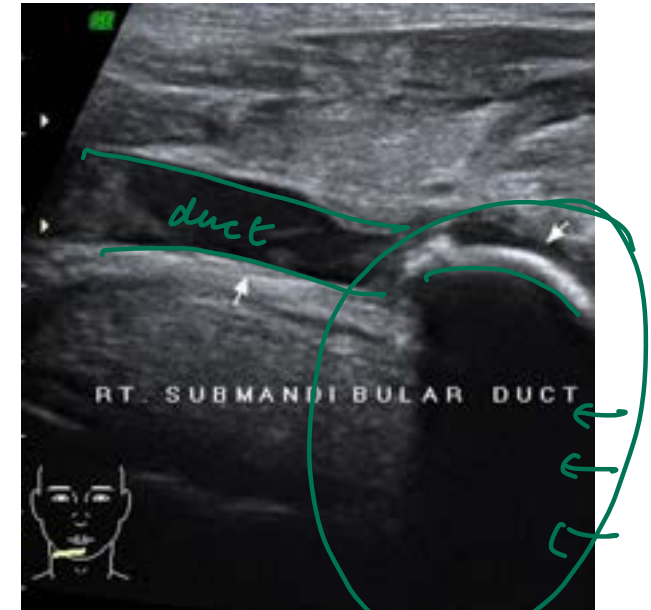
A. Sialolithiasis

IOC: NCCT

B. Pleomorphic adenoma ~~XX~~

C. Osteoma of floor of mouth ~~XX~~

D. Cervical lymphadenopathy ~~XX~~



31. A 7-month-old baby boy is brought to the clinic by his mother due to "empty scrotum". On examination, hemiscrotum on right side is not developed and testis is not palpable in the inguinal region. What is the next step?

- A. HCG test dose ~~XX~~ B/L
- B. Diagnostic laparoscopy
- C. Reassurance ~~XX~~
- D. Inguinal exploration

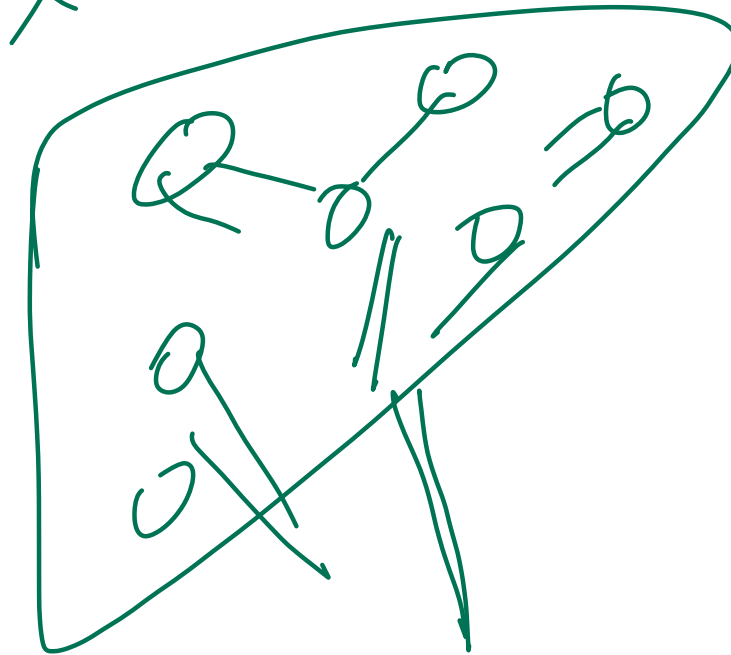
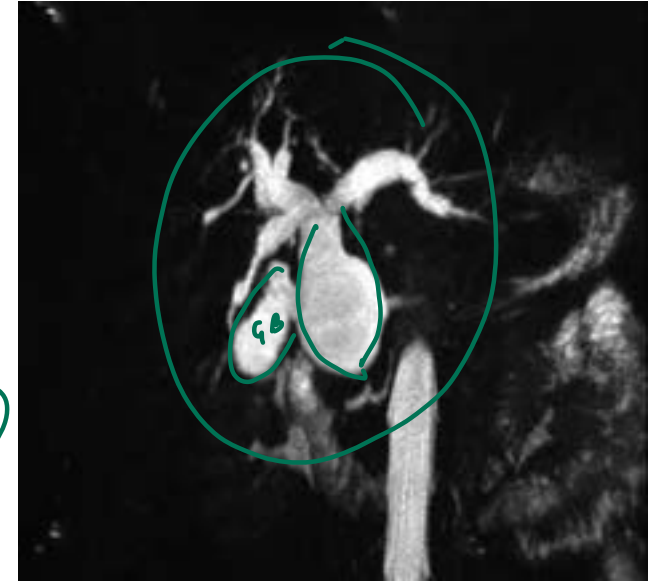
32. What is the likely diagnosis based on the MRCP image?

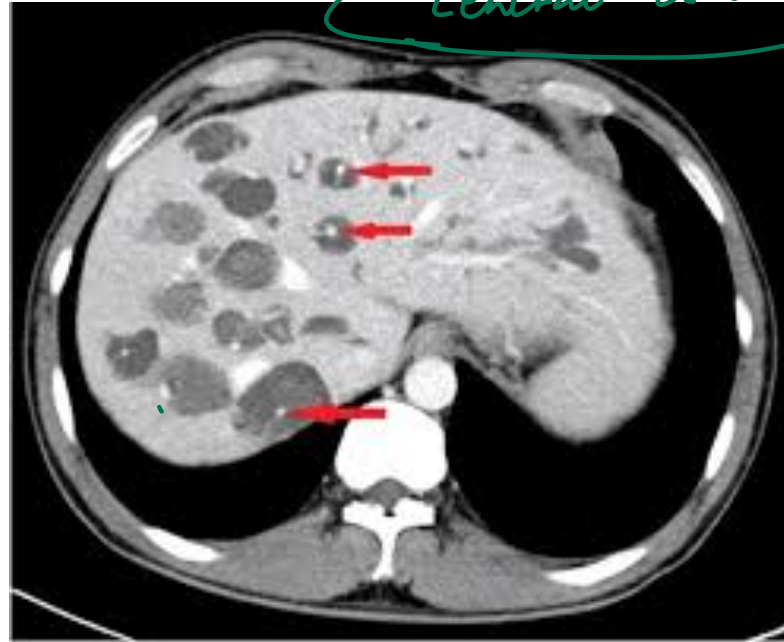
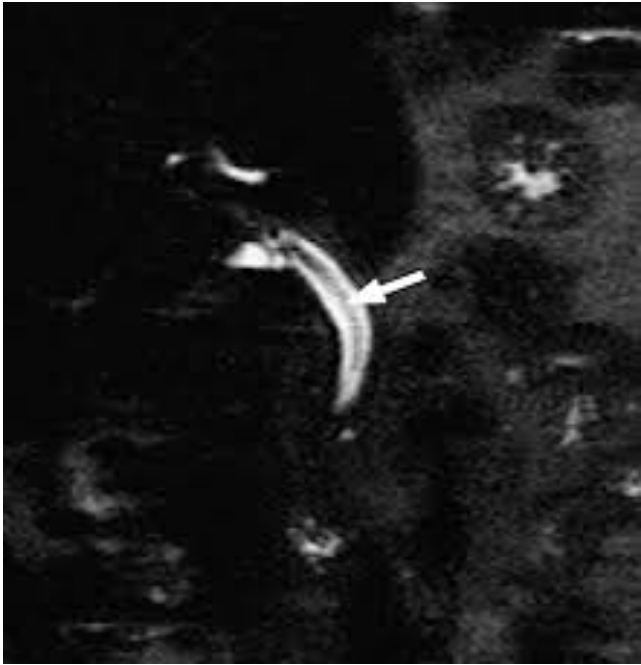
A. Choledochal cyst

B. Biliary ascariasis

C. Caroli disease ~~X~~

D. Choledocholithiasis ~~X~~





Central dot

Caroli's

IH

33. A 14-year-old boy presented to the OPD with a scald injury on his arm. The lesion was pink, oozing, and painful to moving air and touch. Which of the following would be the most appropriate management?

A. Silver sulphadiazine cream dressing $\times \times 1^{\circ}$

B. Excision and grafting $\times \times 3^{\circ}$

C. Paraffin gauze dressing

D. Collagen dressing

Controversial

2° superficial

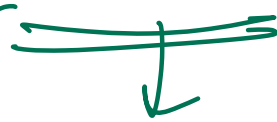
best
prevents dehydr.
 2° deep / severe burns
expensive

C/D

34. A 27-year-old woman presents with a thyroid nodule. Serum TSH is normal. Ultrasound of her thyroid reveals a 1.5-cm hypoechoic nodule in her right thyroid lobe with irregular margins, internal microcalcifications, and internal vascularity. FNAC is performed which is reported as Thy3 Bethesda grade. Which of the following is the next most appropriate step in management of this patient?

- A. Repeat FNAC
- B. MRI of the neck
- C. Hemi-thyroidectomy
- D. RAIU scan

Follicular



Hemi

Hypert thyroid

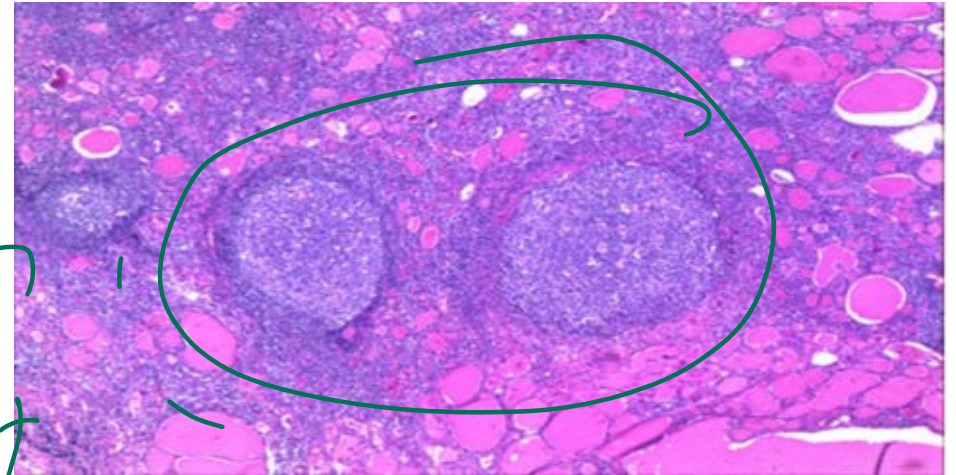
TABLE 55.2 Classification of fine-needle aspiration cytology reports.

Thy1	<u>Non-diagnostic</u>
Thy1c	Non-diagnostic cystic
Thy2	<u>Non-neoplastic</u>
Thy3 →	Follicular
Thy4 ✓	Suspicious of malignancy
Thy5 ✓	Malignant

35. A 35-year-old woman complains of fatigue, weight gain, and increased sensitivity to cold. On physical examination, she has noticeable swelling in her neck the histological image is shown below. Additionally, an ultrasound examination shows that her thyroid gland is diffusely enlarged and has an uneven texture. Which of the following conditions is most likely the cause of her symptoms?

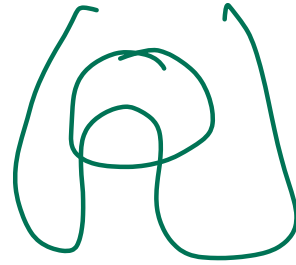
- A. MTC ~~XX~~
- B. deQuervian thyroiditis
- C. Grave's disease ~~XX~~
- D. Hashimoto's thyroiditis

viral URTI
PAIN
giant cells



36. A surgeon returns the entire hernial sac into the abdominal cavity of a patient with an inguinal hernia without reducing its contents. What is this known as?

- A. Maydl's hernia
- B. Reduction en masse**
- C. Sliding hernia
- D. ~~Incarcerated~~ hernia



Pyq

Sigmoid

37. A 3-day-old neonate presented with recurrent bilious vomiting. An X-ray erect abdomen is shown below. What is the next best step in managing this condition?

pyo

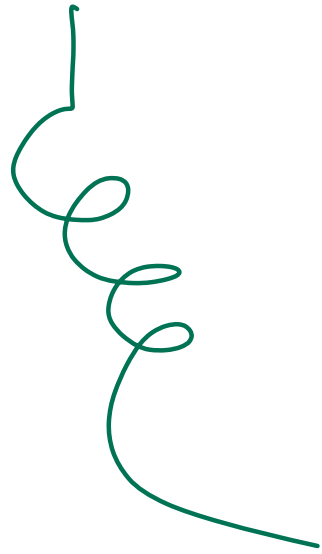
A. Upper GI endoscopy ~~XX~~

B. Gastrograffin follow-through

C. Air enema ~~XX~~

D. Explorative laparotomy

Ba CI



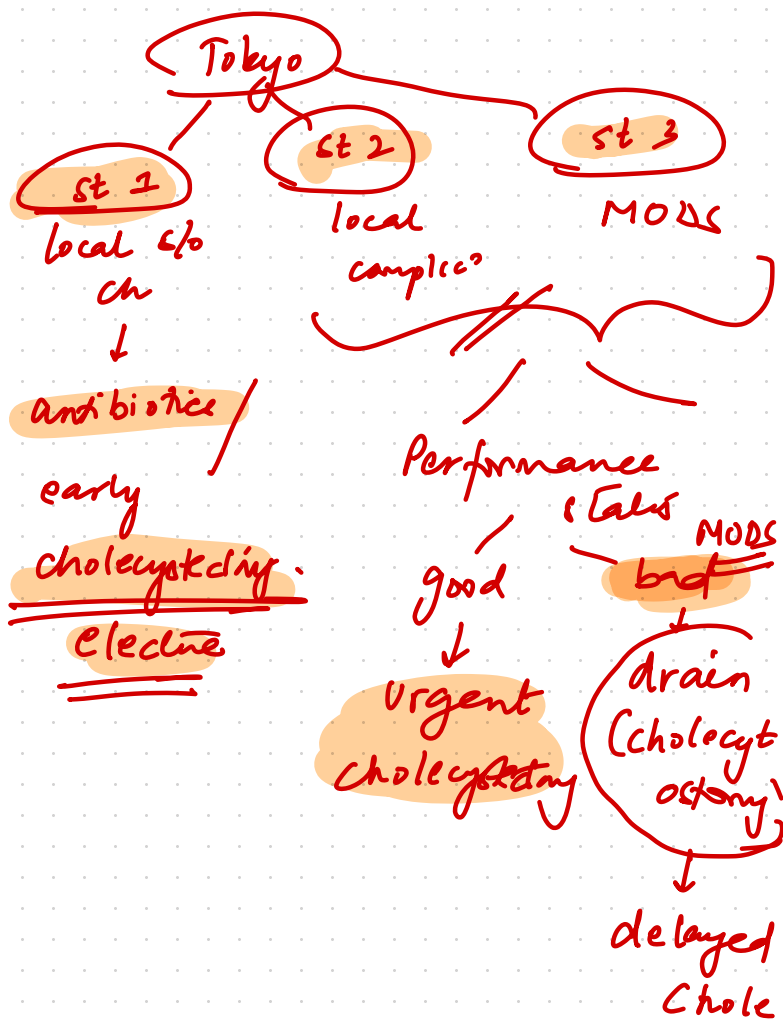
jejunal atresia /
midgut
volvulus

38. 75-year-old woman comes to the emergency department due to fever, chills, abdominal pain, nausea, and vomiting for the past 2 days. Medical issues include type 2 diabetes melitus, hypertension, obstructive sleep apnea, and coronary artery disease. There is marked tenderness over the epigastrium and right upper quadrant with guarding. Bowel sounds are decreased. CECT abdomen is shown below. Which of the following additional intervention is most appropriate in the management of this patient?

- A. Delayed cholecystectomy ~~prior~~ to the hospital discharge
- B. Elective cholecystectomy 2 weeks after complete recovery
- C. Urgent cholecystectomy
- D. Conservative management ~~XX~~
- E. PigTail



emphysematous chol



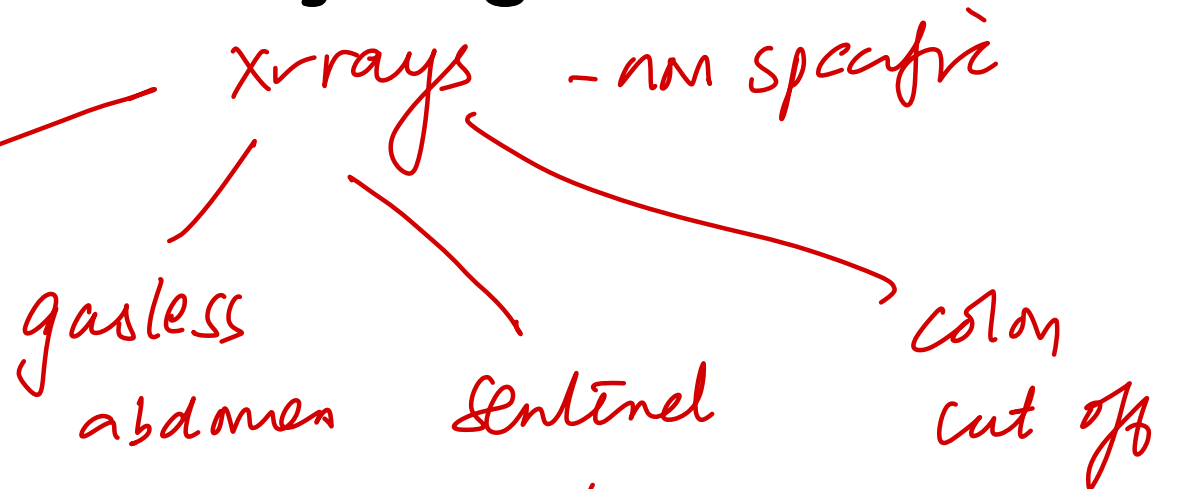
39. An 8-year-old child is brought to the emergency department with severe abdominal pain and vomiting. The child's parents mention that the pain has been increasing over the past few hours. On examination, the child appears distressed and has abdominal tenderness. An X-ray is ordered, and it reveals a gasless abdomen. What is the most likely diagnosis?

A. Appendicitis *XX*

B. Intussusception *XX*

C. Acute pancreatitis

D. Crohn's disease *XX*



40. A young male presents to surgery OPD with a verrucous lesion over the penis as shown in the image. On examination, inguinal lymph nodes are not enlarged. What is the management of choice in this patient?

- A. CO2 laser ablation ~~XX~~
 - B. Podophylline ~~XX~~
 - C. Topical 5-Fluoro uracil ~~XX~~
 - D. Partial penectomy
- Warts*

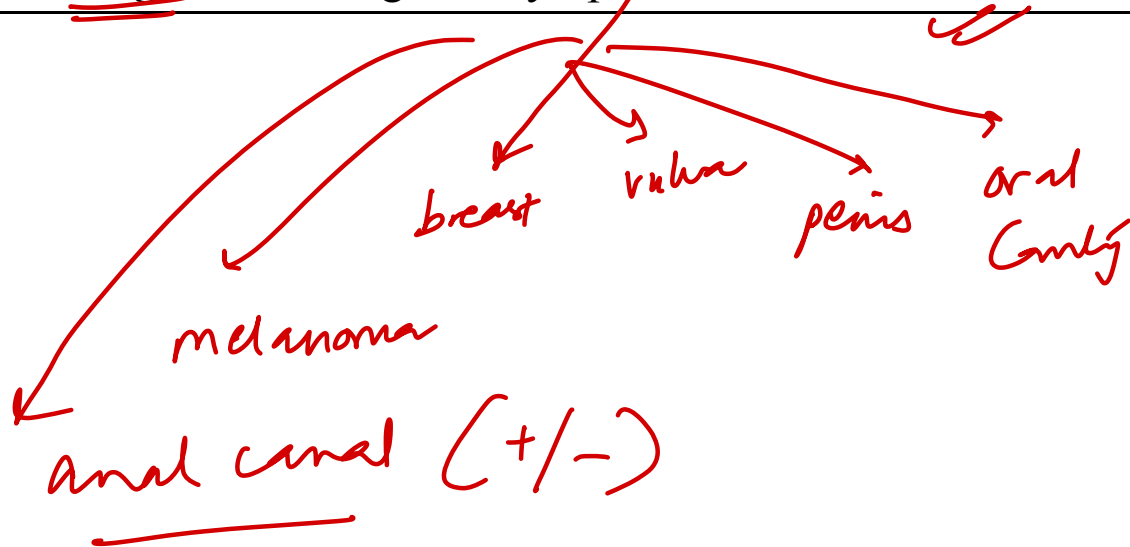


Tumor management

- **A. In situ carcinoma** → Topical 5-FU / Laser
- **B. Distally placed** → Partial penectomy (if residual stump ≥ 2 cm)
- **C. Proximally placed** → Total amputation + Perineal urethrostomy *oo//*

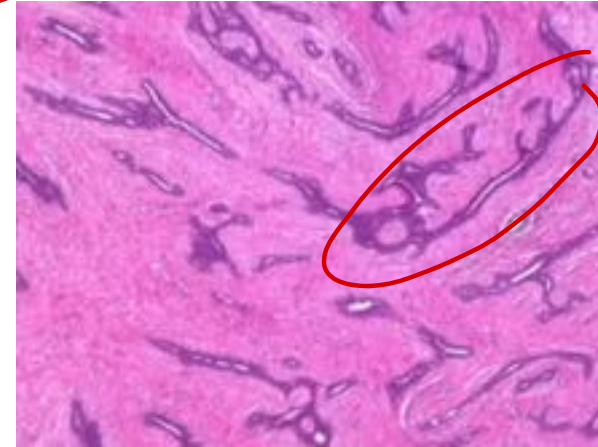
Lymph node management

- **Not enlarged** → Sentinel lymph node biopsy *oo*
- **T3, T4** → Prophylactic superficial inguinal lymph node dissection
- **Enlarged** → Ilioinguinal lymph node clearance or radiotherapy

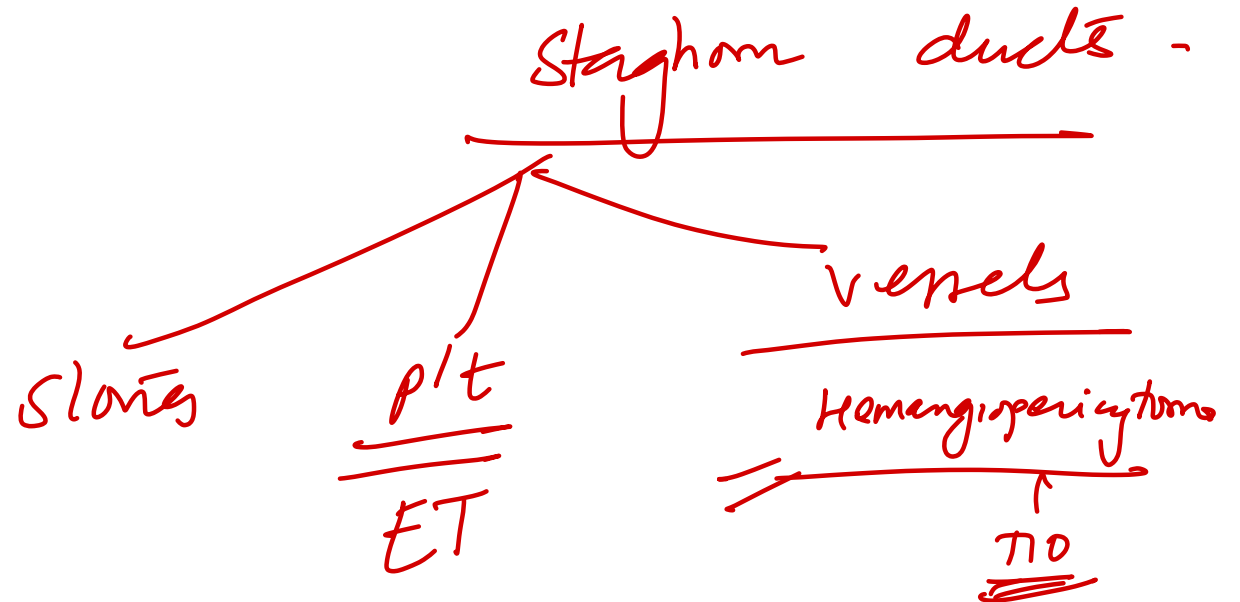


41. A 35-year-old female presents with a mobile, rubbery mass in her left breast. A histological image is provided. What is the most likely diagnosis for the given image?

- A. Invasive ductal carcinoma ~~XX~~
- B. Fibroadenoma**
- C. Phyllodes tumor ~~XX~~
- D. Lobular carcinoma in-situ

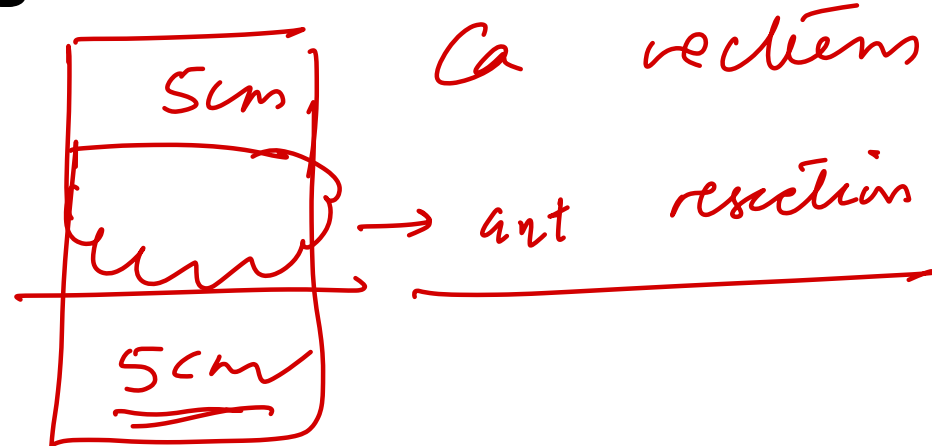
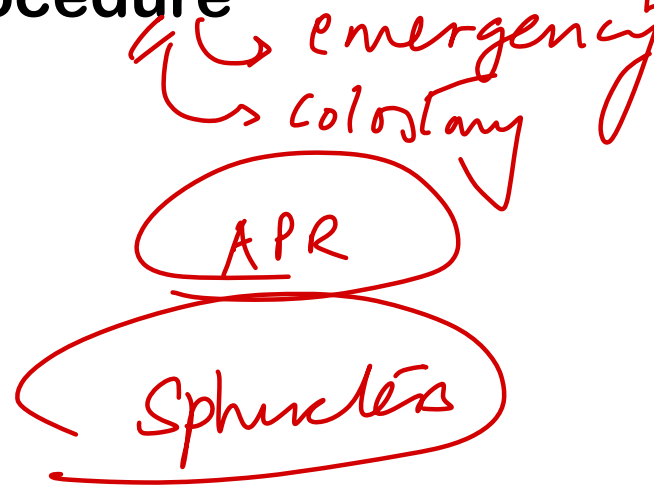
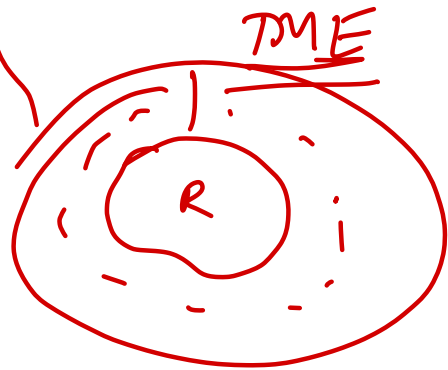


py 8



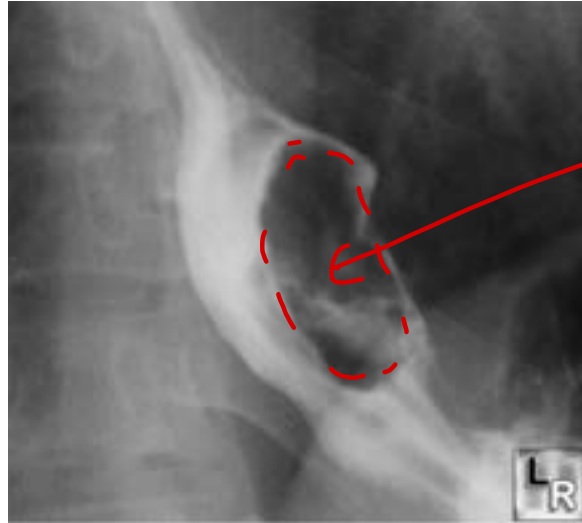
42. A 50-year-old male presents with rectal bleeding, a change in bowel habits, and tenesmus for 6 months. Examination reveals a mass in the rectum 2 cm from the anal verge extending to the anal sphincters, and biopsy confirms adenocarcinoma. What surgical intervention is most appropriate?

- A. Total mesorectal excision
- B. Low anterior resection
- C. Abdominoperineal resection**
- D. Hartmann's procedure



43. A young woman presented to the OPD with dysphagia and regurgitation of food. She was diagnosed with iron deficiency anemia 3 months back. Barium swallow was done and is shown below. What is the most probable diagnosis?

- A. Shatzki ring
- B. Zenker's diverticulum
- C. Esophageal leiomyoma
- D. Plummer-Vinson syndrome



Handwritten notes in red ink: "web" and "Hyalal ker" (likely referring to Plummer-Vinson syndrome).

44. A 35-year-old man came with complaints of dark-colored tarry stools to the OPD. Which of the following structures is the likely site of the bleed?

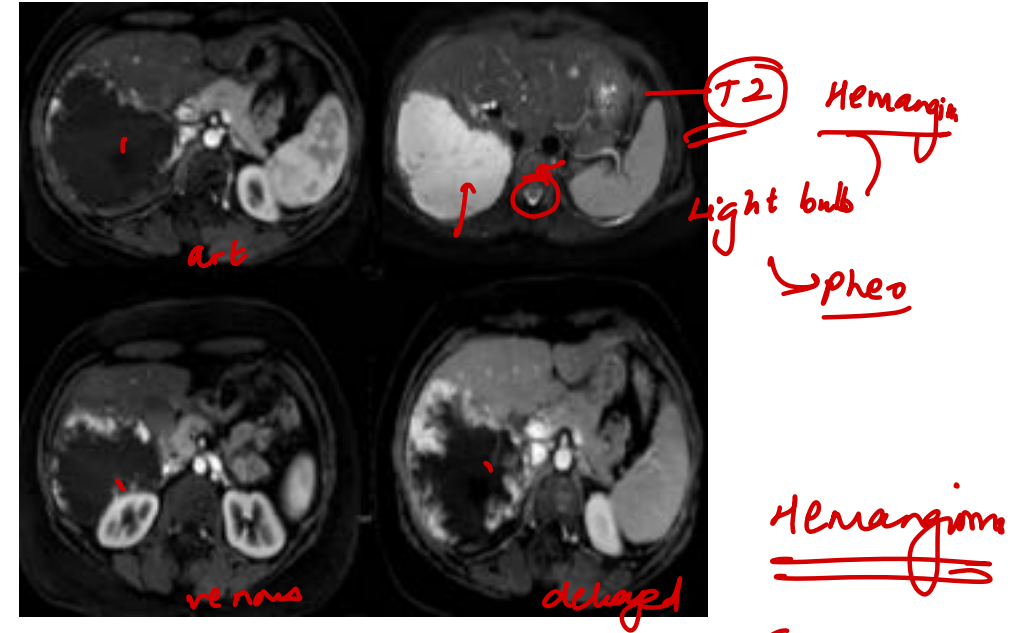
- A. Proximal to Ligament of Treitz
- B. Distal to Ligament of Treitz
- C. Anal canal
- D. Sigmoid diverticulosis



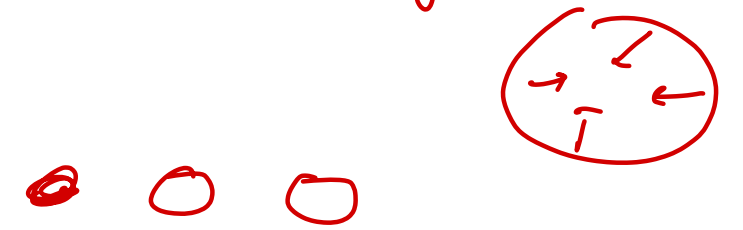
Melena

45. A 45-year-old male with carcinoma colon underwent USG of the abdomen that showed a hyperechoic lesion in the liver. MRI was performed as shown here. Identify the liver lesion shown on MRI sequence.

- A. Solitary metastasis - Hypovascular
- B. Hydatid cyst X X
- C. Amoebic liver abscess
- D. Hemangioma liver - MC benign



HIC
 ↳ art - enhanced
 ↳ venous - washout
 ↳ delayed - capsule



46. All of the following are components of UW solution except

:

A. Thymine

B. Allopurinol

C. Glutathione

D. Lactobionate

TRANSPLANT SURGERY

UW solution :

Adenosine

Allopurinol

Glutathione

Lactobionate

Hydroxyethyl starch (HES)

Warm Ischemia time:

~30min

Cold ischemia time:

Min (3-6hrs)-

♥ > lung

Max(24-36hrs)-

☺

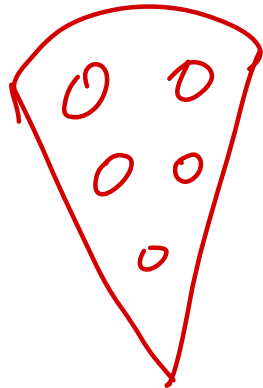
Warm ischemia time (WIT) is defined as the period during which an organ remains at body temperature after its blood supply has been reduced but before it is cooled.

Cold ischemia time (CIT) refers to the time an organ is preserved in a cold environment after being flushed with cold preservation solution and before it is transplanted and reperfused.



47. A 67-year-old man comes to the emergency department due to abdominal discomfort and distension. Five days ago, he began having large-volume watery stools 6-8 times daily after eating at a new restaurant. He self-treated with increased oral fluids and the stool frequency and consistency began to improve. However, his bowel movements abruptly stopped yesterday, and the diffuse abdominal discomfort and distension worsened. The abdomen is distended, tympanic, and mildly tender to palpation with no guarding or rebound tenderness. Bowel sounds are decreased. Abdominal CT scan shows diffuse colonic dilation with nondilated small bowels. Which of the following most likely contributed to this patient's current condition?

- A. Adhesions ~~xx~~
- B. Colonic hypoperfusion ~~xx~~
- C. Electrolyte abnormality
- D. Colonic mass ~~xx~~



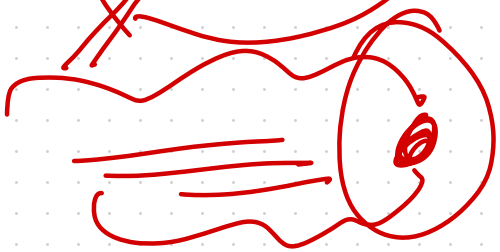
Paralytic ileus
Ogilvie's
colonic pseudo-obstruction

Transition zone

~~mech~~

post-op
electrolyte
↓ K⁺
opioids

~~adynamic~~



↑ pensilator
↑ bs

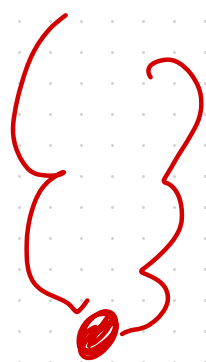
↓ bs

small

large

paralytic
ileus

agilvie



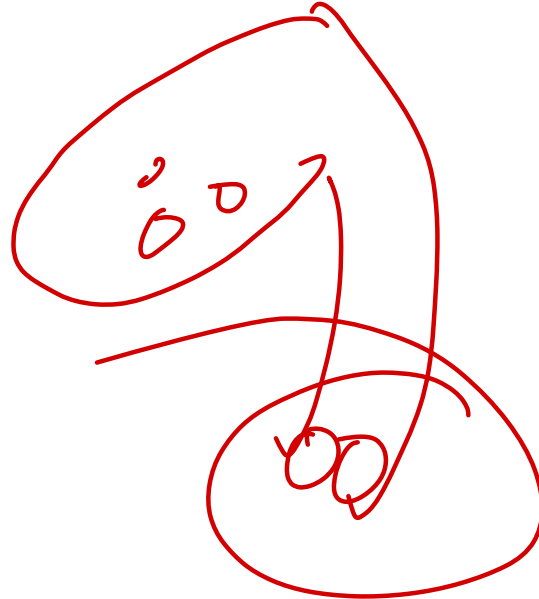
48. An 45-year old female comes to your clinic reporting feelings of constant fatigue. Upon performing USG, you discover that she has a scleroatrophic gallbladder containing impacted stones. In addition, a 6mm stone is detected within the common bile duct, causing dilation of the biliary tree. What should be the subsequent course of action in her treatment?

A. Immediately take up patient for cholecystectomy

B. ERCP

C. Elective cholecystectomy

D. MRCP



49. A patient who sustained blunt abdominal trauma after a road accident is admitted to the ICU overnight. He is hemodynamically stable. On abdominal examination, he now has tenderness, rigidity, and rebound tenderness. Which is the next best step?

- A. Laparotomy ✓
- B. Conservative ~~XX~~
- C. eFAST ~~XX~~
- D. Diagnostic peritoneal lavage ~~XX~~

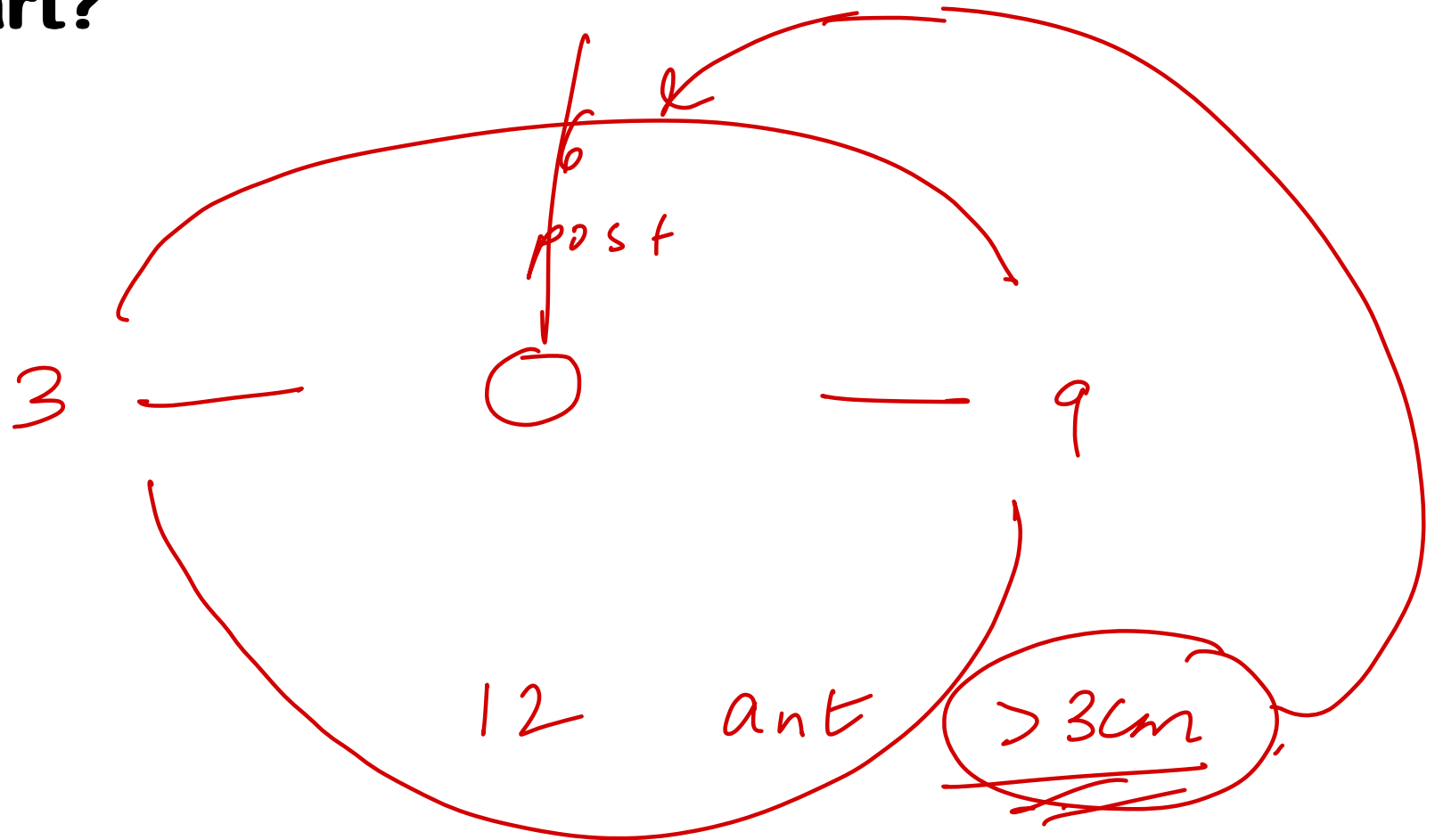
E. CXR-PA erect

peritonitis perforation
pneumoperitoneum

eFAST

50. An elderly male patient presented with purulent discharge from an opening located in the perianal region. The patient is put in a lithotomy position and the opening is located at the 11 o'clock position, 4 cm from the anal margin. What will be the likely position of the internal opening and where does the internal opening start?

- A. 12 o'clock
- B. 11 o'clock
- C. 9 o'clock
- D. 6 o'clock



52. A 45-year-old male patient suffering from leprosy presents with an ulcer on his foot. What is the next step in management?

A. Debridement and antibiotics

B. Start multi-drug therapy (MDT)

C. Foot care, limb rehabilitation

D. Deformity correction

← infected

XX

XX



trophic ulcer

53. A dye factory worker with a history of benzidine exposure undergoes cystoscopy. What is the appropriate management?

- A. IV BCG ~~xx~~
- B. Cystoscopy with removal of tumor**
- C. TURP ~~X~~
- D. Radical cystectomy

*iv BCG /
sup muscle, CT*

T3/T4



Ta

54. A 46-year-old female patient undergoes a mammography for a lump in the right breast. Based on the imaging report, she is advised to undergo a biopsy. Which of the following could have been reported?

A. BIRADS 1 or BIRADS 2

B. BIRADS 2 or BIRADS 3

C. BIRADS 3 or BIRADS 4c

D. BIRADS 4b or BIRADS 5

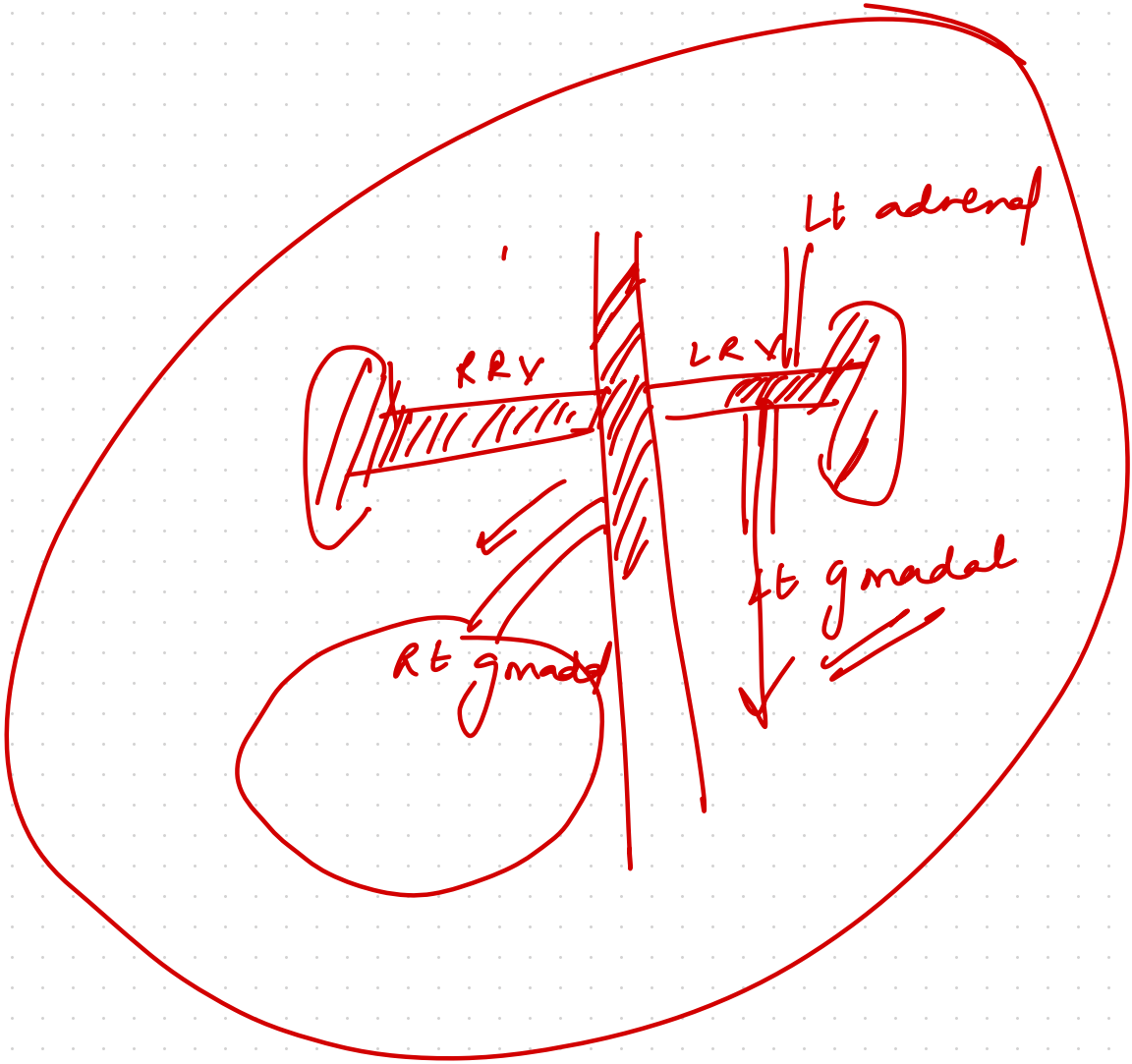
F/U x bmn

55. A 55-year-old man comes to the physician because of swelling and unusual heaviness of his scrotum that he first noticed a few weeks ago. The symptoms improve when he is lying in bed. He also reports a 5-kg weight loss and increasing fatigue over the past 6 months. He has smoked 1 pack of cigarettes daily for the past 15 years. Physical examination shows tenderness to palpation of his right flank. There are soft strands palpable in the right hemiscrotum superior of the right testis. The strands increase with Valsalva maneuver. Applying a bright light to the right hemiscrotum shows no transillumination. Obstruction of venous drainage into which of the following vessels is most likely responsible for this patient's scrotal enlargement?

- A. Right internal iliac vein
- B. Right inferior rectal vein
- C. Right renal vein
- D. Inferior vena cava

varicocele

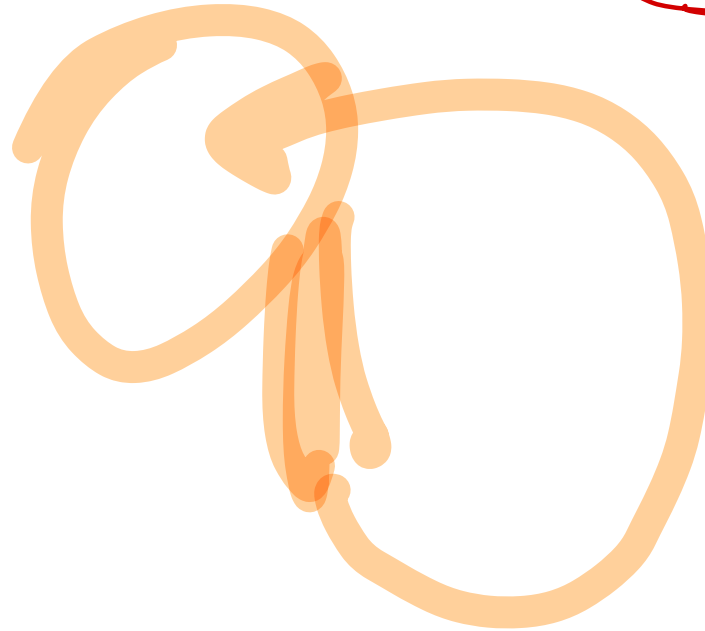
Rt



56. A 55-year-old male presents with complaints of pain in the calf muscles after walking for a certain distance. The pain is relieved by rest and reoccurs upon resuming walking. Based on Boyd's classification, what is the most likely grade?

- A. Grade I
- B. Grade II
- C. Grade III**
- D. Grade IV

Pyq



Grade	Pain
I	Pain relieved on continued walking
II	Walks in pain
III	Compelled to take rest
IV	Pain at rest

Boyd

Stage	Symptoms <i>Fontaine</i>	Category	Symptoms <i>Rutherford + ABI</i>
I	Asymptomatic	0	Asymptomatic
IIa	Intermittent claudication >200m	1	Mild claudication Exercise AP drop > 20 mm Hg, <u>AP > 50 mm Hg</u>
IIb	Intermittent claudication <200m	2	Moderate claudication
		3	Severe claudication Cannot complete treadmill, <u>AP < 50 mm Hg</u>
III	Ischaemic rest pain	4	Ischaemic rest pain <i>for pressure</i> <u>Rest AP < 40 mm Hg, TP < 30 mm Hg</u>
IV	Ulceration or gangrene	5	Minor tissue loss
		6	Major tissue loss

57. Identify the correct statements

1. Annual risk of adenocarcinoma in Barrett's esophagus with low grade dysplasia is 0.7% per year. T

2. The iliohypogastric nerve is most commonly injured during Rutherford-Morrison incision T

3. Replaced left hepatic artery arising from ~~superior~~ LGA mesenteric artery is the most common vascular anomaly of the liver.

4. Malignant melanoma in the last 5 years is a contraindication to T

renal transplant

A. 1, 2, 3, 4

B. 2, 4

C. 1, 2, 4

D. 1, 3

Replaced RHA → SMA

Category	Diagnosis
1	Negative for neoplasia
2	Indefinite for neoplasia
3	Mucosal low grade neoplasia
	Low grade adenoma or dysplasia
4	Mucosal high grade neoplasia
	4-1 High grade adenoma or dysplasia
	4-2 Noninvasive carcinoma (carcinoma in situ)
	4-3 Suspicious for invasive carcinoma
	4-4 Intramucosal carcinoma (lamina propria invasion)
5	Submucosal invasion by carcinoma

VIENNA

} → 0.4% → F/U 3-5yrs
 } → 0.7-1% → F/U 1-2yrs
 } → 5% → RFA
Carcinoma

Absolute	Relative
Untreated malignancy ✓	Co-morbidities, e.g. diabetes mellitus
Active infection ✓	Age >65 years
Untreated HIV infection or AIDS ✓	Obesity
Any condition with a life expectancy <2 years ✓	HBV or HCV infection
Malignant melanoma within the previous 5 years	Previous malignancy (depending on type)

Table 1 - Contraindications to renal transplantation

58. Which of the following is correct regarding the treatment of a patient who presented with the following as shown in the image? Earlier the abdominal mass was reducible, but now it has become irreducible.

- A. Umbilical excision
- B. Umbilical excision with herniorrhaphy**
- C. Antibiotics
- D. Incision and drainage



59. Which of the following is not a component of Thoracoscoring?

- A. Performance status
- B. Complication of surgery**
- C. ASA grading
- D. Priority of surgery

Thoracoscoring
Age (years)
Gender (male)
ASA
Performance status
Dyspnoea score
Priority of surgery
Procedure class
Diagnosis group

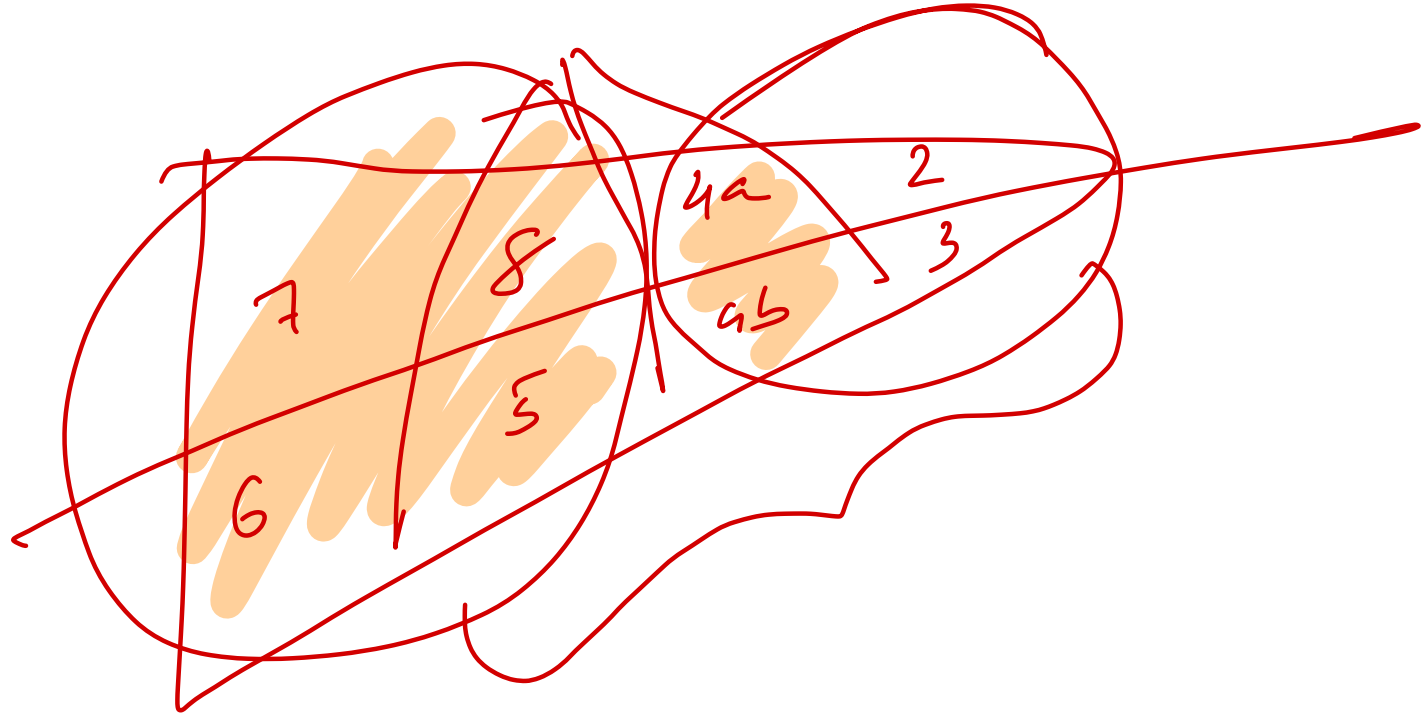
60. A 35-year-old female patient presents to the hospital with complaints of abdominal pain and discomfort for the past few months. On evaluation, a mass is palpable in the upper abdomen, and an endoscopy shows an ulcerated lesion in the stomach. A biopsy of the lesion is taken and sent for immunohistochemistry. The biopsy sample is found to be positive for CD117 and negative for LCA, cytokeratin, and S100. CT is shown below. What is the most likely diagnosis?

- A. GIST
 - B. Adenocarcinoma
 - C. Hodgkin's lymphoma
 - D. Squamous cell carcinoma
- CKIT

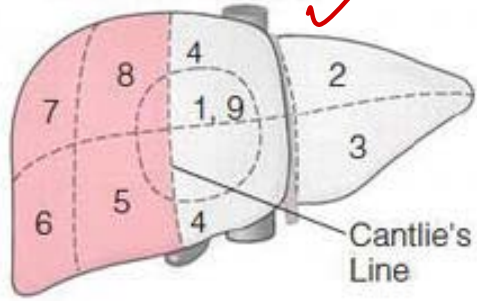


61. In extended right hemi-hepatectomy, the liver segments resected are:

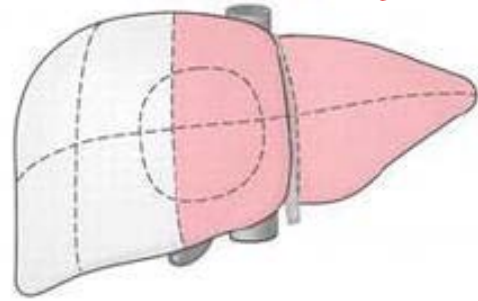
- A. 4-8
- B. 5-8
- C. 2-8
- D. 4, 5, 7, 8



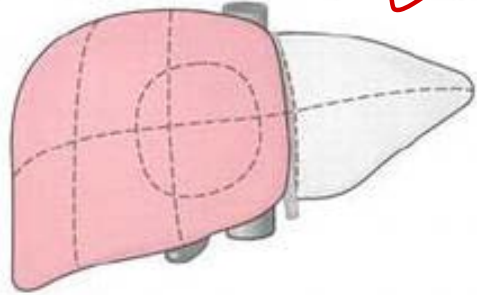
a Right Hepatectomy



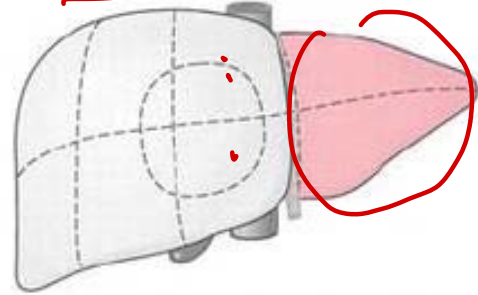
b Left Hepatectomy



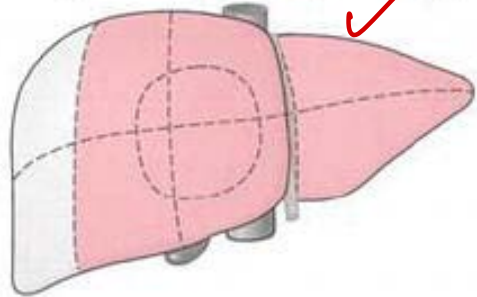
c Right Trisectionectomy (Extended Right Hepatectomy)



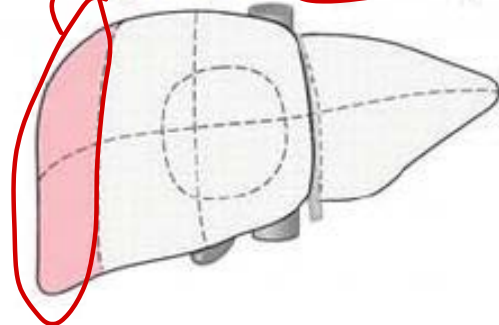
d Left Lateral Sectionectomy



e Left Trisectionectomy (Extended Left Hepatectomy)



f Right Posterior Sectionectomy



62. A 32-year-old man comes to the physician because of a 3-week history of recurrent thumb pain that worsens with exposure to cold temperatures. Examination shows a 6-mm, blue-red papule under the left thumbnail. The overlying area is extremely tender to palpation. The thumbnail is slightly pitted and cracked. This lesion most likely developed from which of the following types of cells?

- A. Dysplastic melanocytes
- B. Capillary endothelial cells
- C. Modified smooth muscle cells**
- D. Osteoclasts

Glomus tumor

63. When considering a patient with lung cancer, the imaging studies have measured the tumor size at 2.5 cm not invading into the main bronchus. According to the TMN staging system, which stage would be appropriate for this patient?

A. T2b

B. T1

C. T3

D. T2a

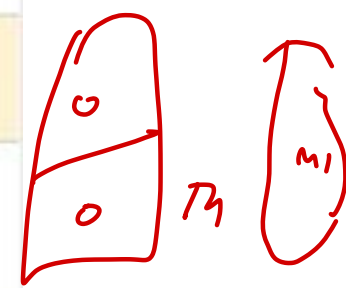
Ca lung

< 3 cm

TNM 8th - Primary tumor characteristics

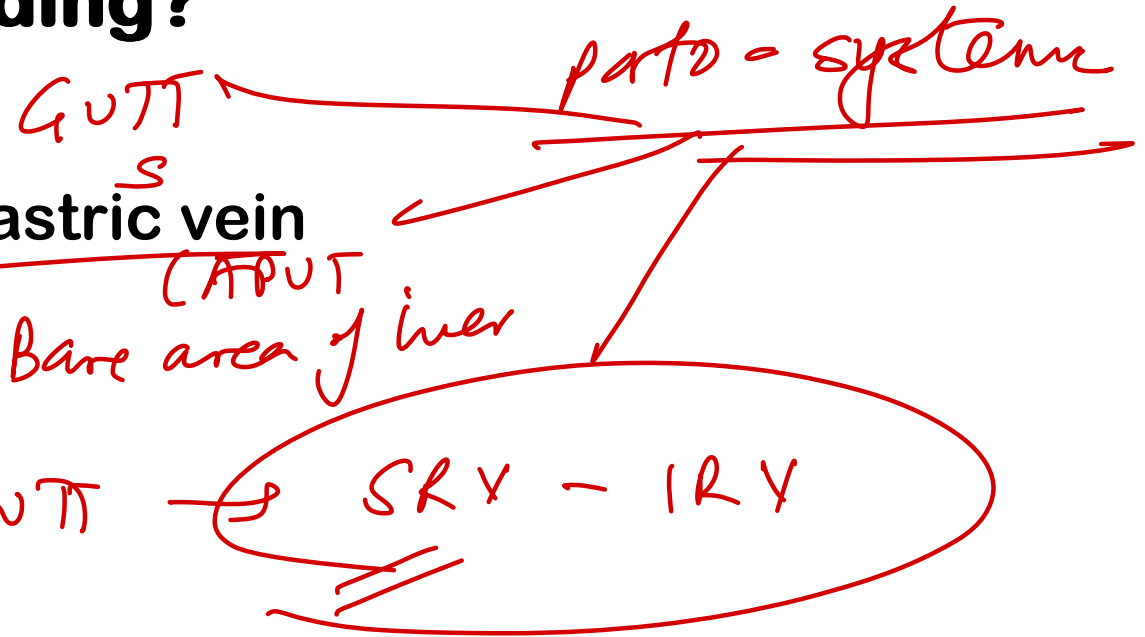
T_x	Tumor in sputum/bronchial washings but not be assessed in imaging or bronchoscopy
T₀	No evidence of tumor
T_{is}	Carcinoma in situ
T₁	≤ 3 cm surrounded by lung/visceral pleura, not involving main bronchus
T_{1a(mi)}	Minimally invasive carcinoma
T_{1a}	≤ 1 cm
T_{1b}	> 1 to ≤ 2 cm
T_{1c}	> 2 to ≤ 3 cm
T₂	> 3 to ≤ 5 cm or involvement of main bronchus without carina, regardless of distance from carina or invasion visceral pleural or atelectasis or post obstructive pneumonitis extending to hilum
T_{2a}	>3 to ≤4cm
T_{2b}	>4 to ≤5cm
T₃	>5 to ≤7cm in greatest dimension or tumor of any size that involves chest wall, pericardium, phrenic nerve or satellite nodules in the same lobe
T₄	> 7cm in greatest dimension or any tumor with invasion of mediastinum, diaphragm, heart, great vessels, recurrent laryngeal nerve, carina, trachea, oesophagus, spine or separate tumor in different lobe of ipsilateral lung
N₁	Ipsilateral peribronchial and/or hilar nodes and intrapulmonary nodes
2	Ipsilateral mediastinal and/or subcarinal nodes
3	Contralateral mediastinal or hilar; ipsilateral/contralateral scalene/supraclavicular
M₁	Distant metastasis
M_{1a}	Tumor in contralateral lung or pleural/pericardial nodule/malignant effusion
M_{1b}	Single extrathoracic metastasis, including single non-regional lymphnode
M_{1c}	Multiple extrathoracic metastases in one or more organs

CPP



64. A 57-year-old white man is brought to the emergency department by ambulance because of sudden-onset, bright red emesis. His blood pressure is 80/40 mm Hg and heart rate is 124/min. Physical examination is notable for jaundice and an enlarged abdomen that is dull to percussion and positive for a fluid wave. Which of the following vessel anastomoses is responsible for the patient's bleeding?

- A. Left gastric vein and azygos vein
- B. Paraumbilical vein and inferior epigastric vein
- C. Portal vein and inferior vena cava
- D. Splenic vein and left renal vein



Warren shunt

Wedge hepatic pressure .

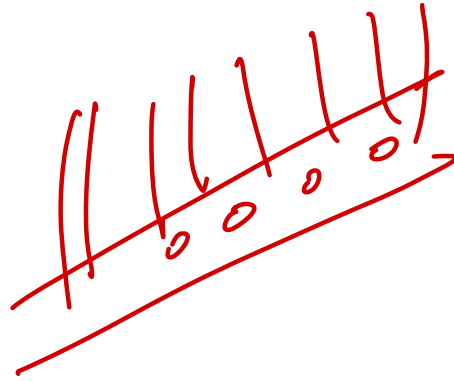
Measurement	Significance
1–5 mm Hg	Normal
6–10 mm Hg	Preclinical sinusoidal portal HTN
≥10 mm Hg	Clinically significant portal HTN → Variceal formation
≥12 mm Hg	↑ Risk for rupture of varices

65. Millard's Rule of 10 for indications of cleft lip surgery include all except

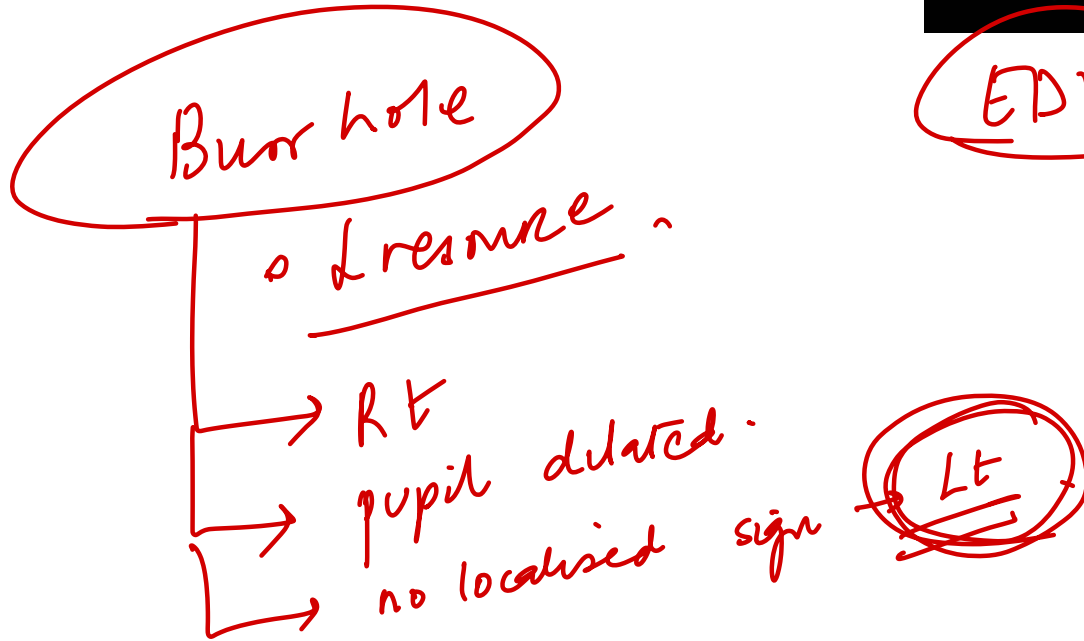
- A. Infant is at least 10 weeks old
- B. Infant weighs around 10pounds
- C. Hemoglobin level of 10 grams per deciliter
- D. ~~Defect is 10mm~~

66. A patient following head injury with altered consciousness, vomiting, and GCS of 10/15 undergoes CT scan as shown. What is the next step?

- A. IV Mannitol ~~XX~~
- B. Wait and watch ~~XX~~
- C. Decompression
- D. IV thrombolytic ~~XX~~



EDH



67. An intra-operative image of scrotal exploration in a 18 year old male with acute scrotal pain is shown. Identify the pathology.

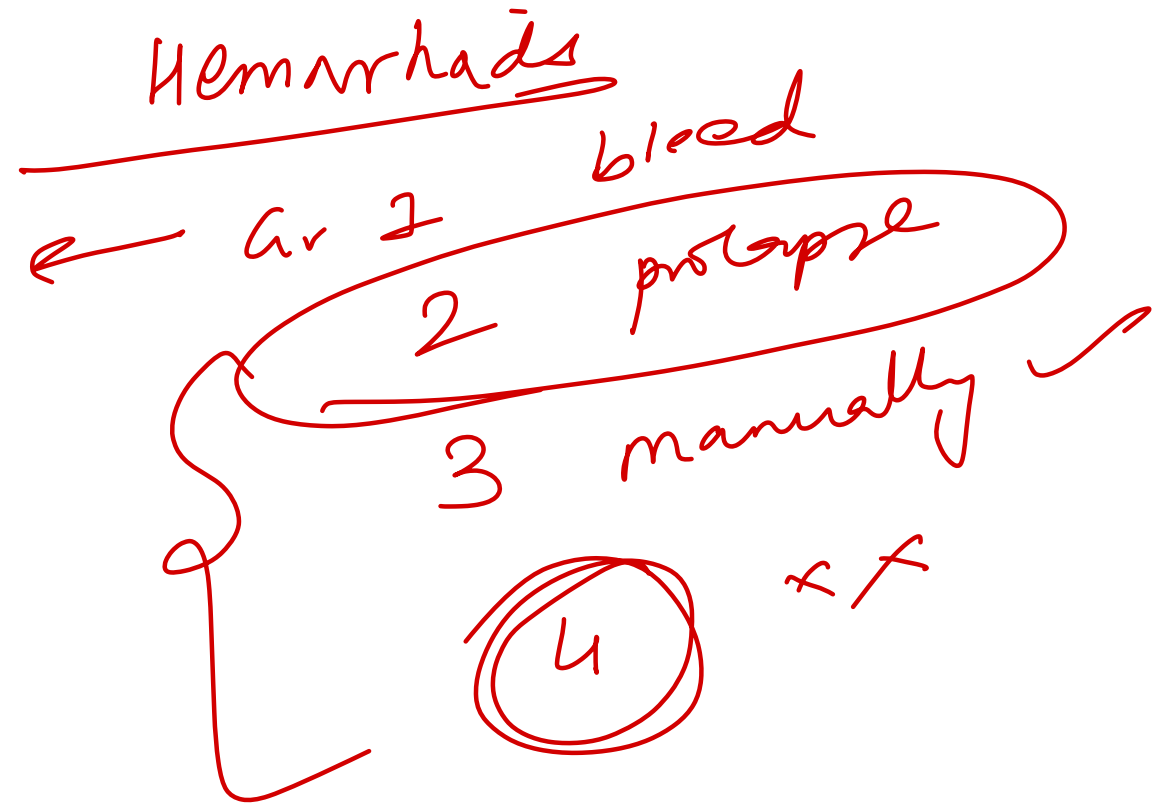
- A. Testicular torsion
- B. Torsion of Hydatid of Morgagni**
- C. Epididymoorchitis
- D. Testicular hematoma



blue dot ,

68. A 35 Y/f presents with bleeding during defecation and straining. Examination reveals pile mass which appears on straining, at 7 and 11 O'clock, which reduces spontaneously. Preferred treatment:

- A. Barron's Banding
 - B. Stapled hemorrhoidopexy
 - C. Milligan Morgan procedure
 - D. Sitz bath
- Handwritten notes: A red circle around 'Barron's Banding' with an arrow pointing to 'x'. A red arrow points from 'Sitz bath' to 'Sitz'.*



69. A 60-year-old patient has been diagnosed with proximal transverse colon carcinoma. The physician recommends an extended right colectomy as a treatment option. Which arteries should be resected during an extended right colectomy to prevent the spread of cancer in proximal transverse colon carcinoma?

- A. Ileocolic, right colic and branch of middle colic
- B. Ileocolic, right colic, stem of middle colic, left colic
- C. Ileocolic, right colic and trunk of middle colic**
- D. Middle colic only

PyQ

right

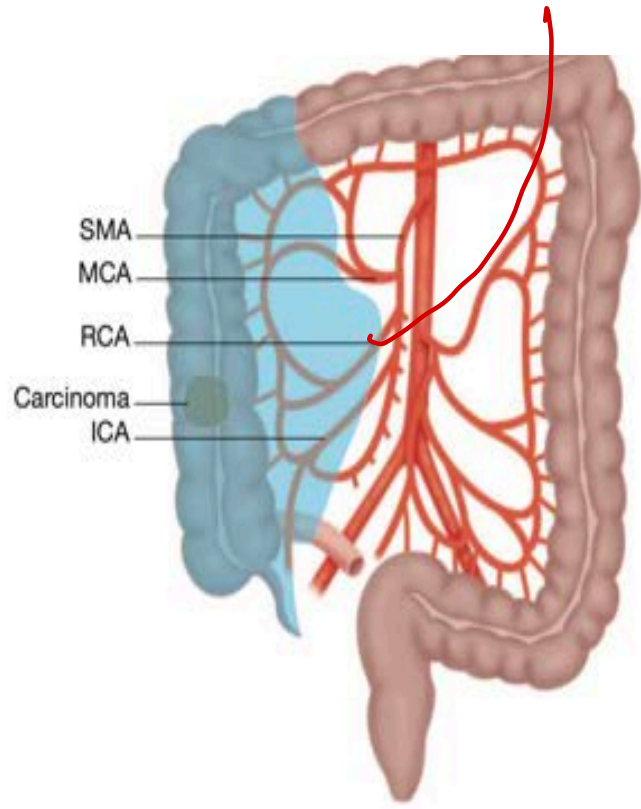


Figure 77.8 Schematic showing right hemicolectomy. This shows the basic plane of dissection for a complete mesocolic excision. ICA, ileocolic artery; MCA, middle colic artery; RCA, right colic artery; SMA, superior mesenteric artery.

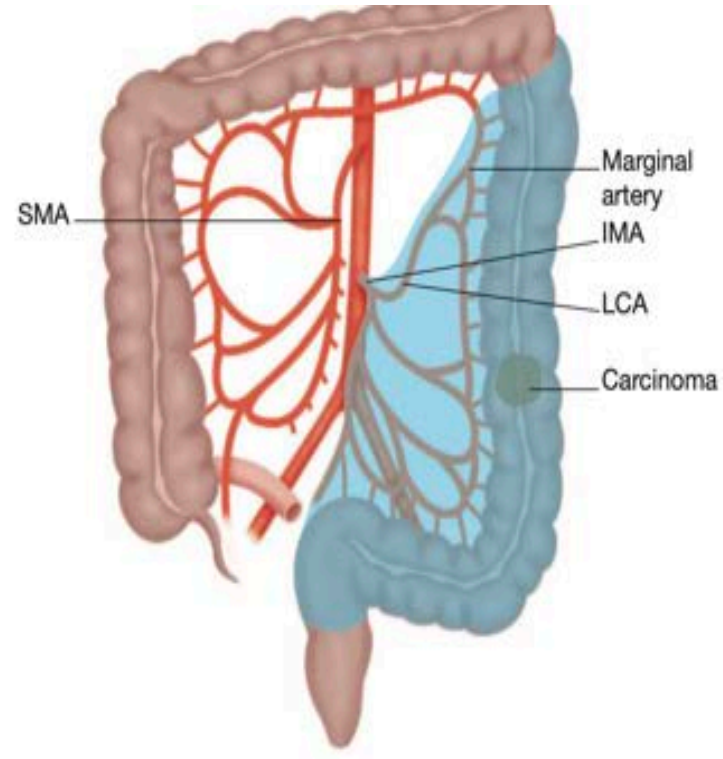


Figure 77.9 Schematic showing left hemicolectomy. This shows the basic plane of dissection for a complete mesocolic excision. IMA, inferior mesenteric artery; LCA, left colic artery; SMA, superior mesenteric artery.

70. A 80-year-old male patient presents with a PSA level of 7 ng/mL and a small tumor focus in prostate with a Gleason score of 6, what would be the most appropriate course of action for management?

- A. Radical prostatectomy
- B. External beam radiation
- C. Brachytherapy
- D. Active surveillance

pyr

>10yr

<10yr

/// =

71. All of the following are components of ERAS Protocol (Enhanced Recovery After Surgery) except:

- A. Avoid Active IV fluid resuscitation (T)
- ~~B.~~ Start prophylactic LMWH to avoid risk of DVT ××
- C. Use regional anesthetics and nonopioid analgesics (P)
- D. Avoid prolonged fasting before surgery and prewarm fluids (T)

A proactive ERAS approach to prevent unnecessary aspects of the surgical stress response

- Minimal access techniques ✓
- Blockade of afferent painful stimuli (e.g. epidural analgesia, spinal analgesia, wound catheters) ✓
- Minimal periods of starvation ✓
- Early mobilisation ✓

Nausea vomiting prophylaxis (at least 2 classes) ✓

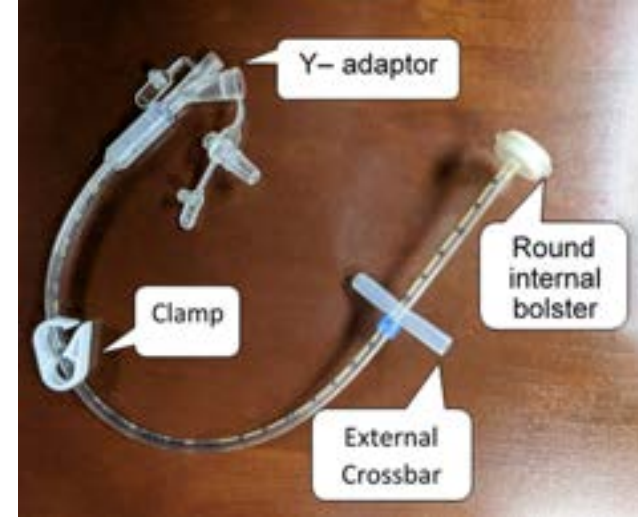
Early oral fluids post-op within 24hrs ✓

Avoid drains

Avoid opioids ✓

72. Identify the device in the image:

- A. PEG tube
- B. NJ tube
- C. NG tube
- D. Chest drain tube



73. A 32-year-old female patient arrives at the emergency department with a history of stabbing injury to her arm. Upon examination, there is a noticeable hematoma, and the patient reports not feeling any radial or ulnar pulses in the affected arm. Imaging reveals a 3cm longitudinal tear in the brachial artery. The medical team is faced with deciding the best treatment option for the patient. Which option should they choose?

PyQ

- A. Primary repair with end-to-end anastomosis
- B. Repair with great saphenous vein graft
- C. Repair with prosthetic graft
- D. Repair with IMA

CABG



74. Which of the following statements about inguinal hernias are true?

1. Medial border of the triangle of doom is bound ~~by~~ gonadal vessels

2. Lateral border of the triangle of pain is bound by Iliopubic tract.

3. Medial border of myopectineal orifice is bound by rectus abdominis.

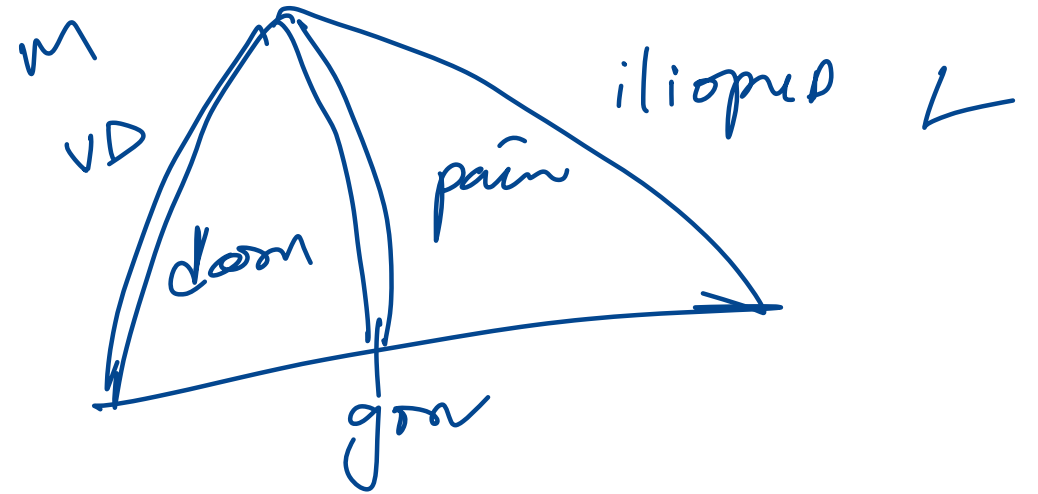
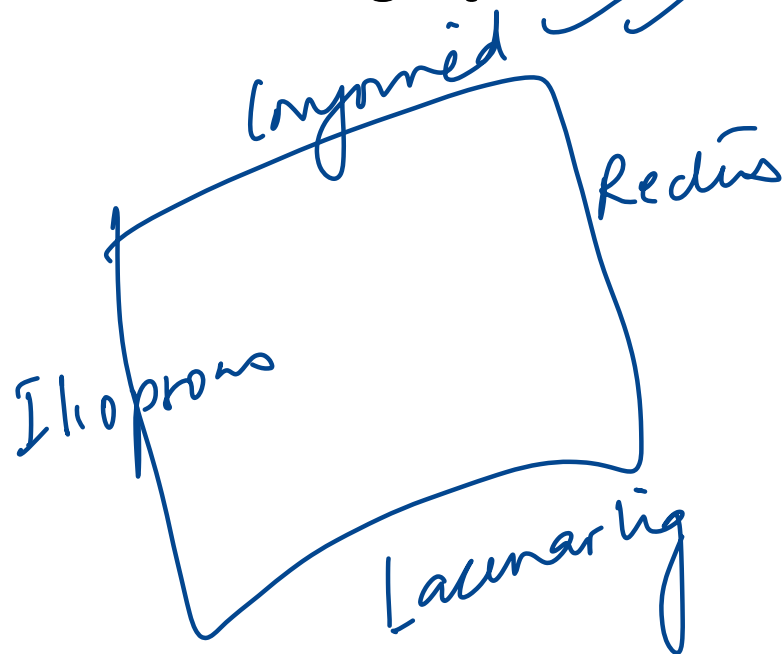
4. Lateral border of myopectineal orifice is bound by iliopsoas

A. ~~1,2,3,4~~

B. 2,3,4

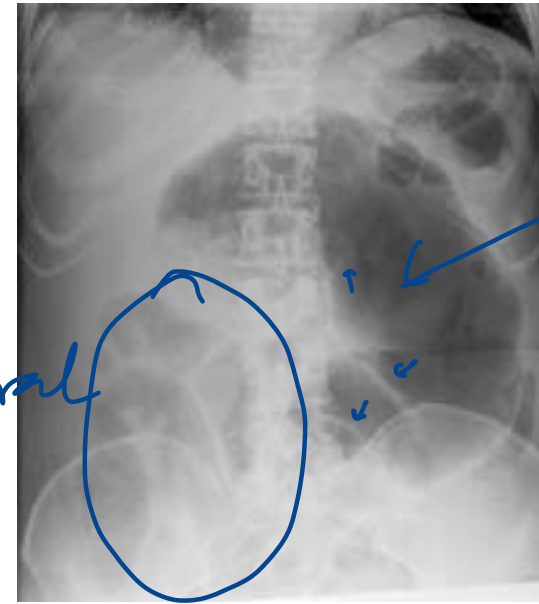
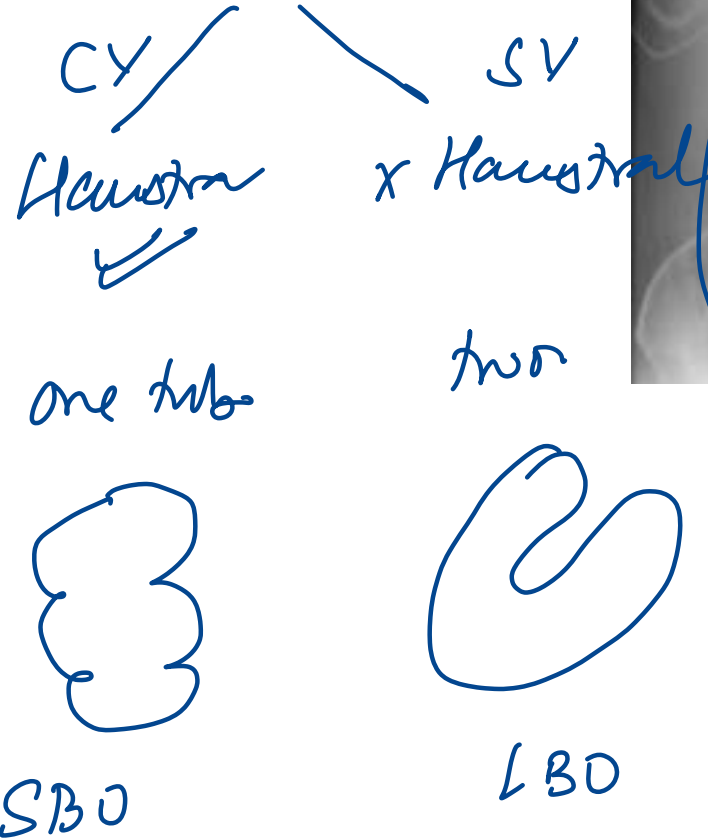
C. 2, 3

D. ~~1,4~~



75. A 52-year-old man presents with severe abdominal distension, pain for the past two days. Physical examination reveals a distended, tympanic abdomen. What is the most likely diagnosis?

- A. Small bowel volvulus
- B. Intestinal obstruction
- C. Sigmoid volvulus
- D. ~~Caecal volvulus~~



76. All of the following are correct about ACS guidelines for average-risk population for colorectal carcinoma except

- A. Begin screening at 50yrs (45yrs)
- B. Annual faecal occult blood test (FOBT) ✓
- C. Flexible sigmoidoscopy every 5 years ✓
- D. Colonoscopy every 5 years ~~5~~ 10yrs ✓

77. During total thyroidectomy for papillary thyroid cancer, which of the following steps will not lead to hoarseness of voice?

- A. Dissection of Beahr's triangle
- B. Dissection of Zuckerkandl tubercle
- C. Dissection of Berry ligament
- D. Ligation of Superior thyroid artery

~~E~~ strap muscle dissecⁿ

ELN

RN

78. A 63-year-old female patient presented with a 5x1 cm lump in the left upper outer quadrant, with no axillary lymph node involvement. Mammography revealed BIRADS 4b staging. She underwent breast conservation surgery, and the final HE reports showed high nuclear grade DCIS with 7 mm margin clearance. What is the further management?

A. Adjuvant radiotherapy

B. Adjuvant chemotherapy

C. Follow up 6 monthly for 2 years and then yearly follow up

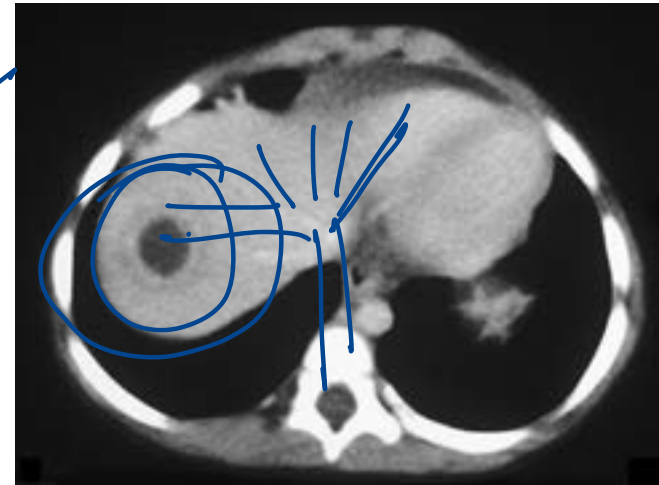
D. Trastuzumab therapy

Van Nuyts

BIS → RT

79. A 25-year-old man presents with weight loss and fever. The patient reports a history of blood in the stool and vomiting two weeks ago. Upon examination, tenderness is noted in the right hypochondrium along with an enlarged liver. An abdominal CT scan is shown below. What is the next step?

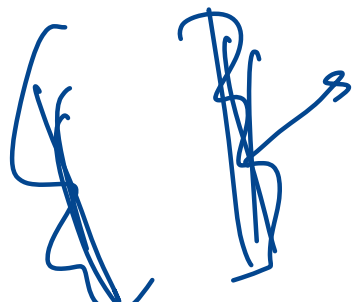
- A. Start metronidazole
- B. Broad spectrum antibiotics to cover GNB
- C. PAIR
- D. Pigtail drainage



Liver abscess

amebic
solitary
- mc RE

pyogenic
cholangitis
- multifocal



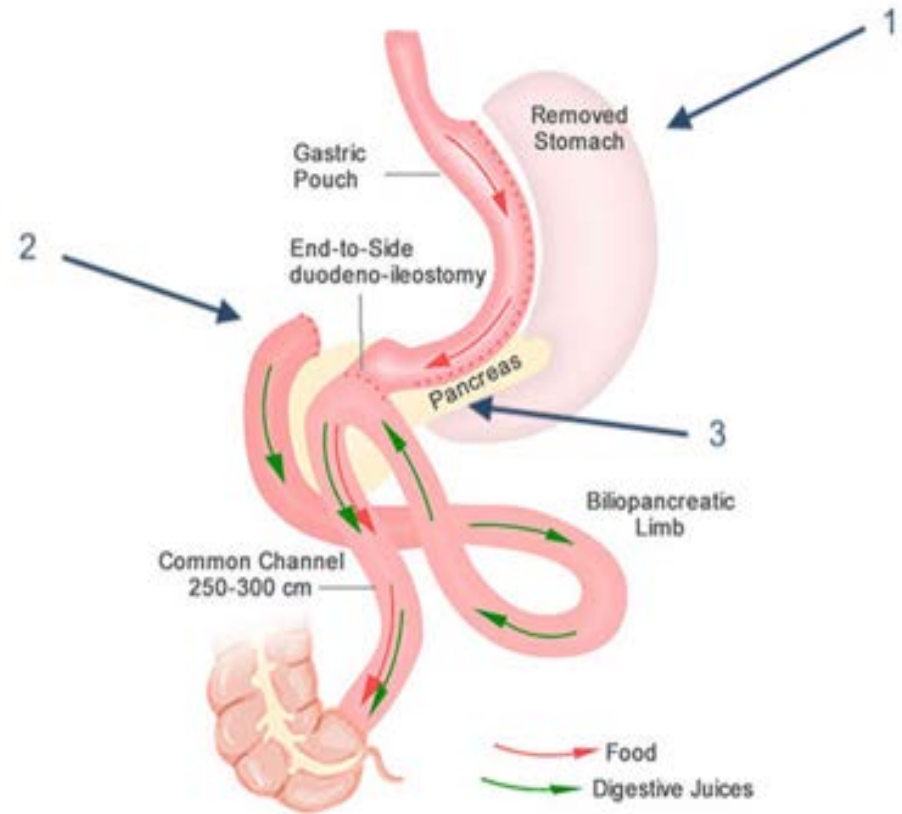
80. Identify the procedure shown

A. SADI-S

B. Sleeve gastrectomy

C. Roux-en-Y gastric bypass

D. Biliopancreatic diversion with duodenal switch

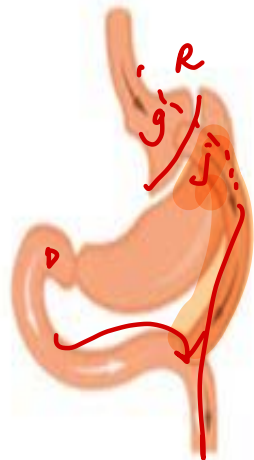




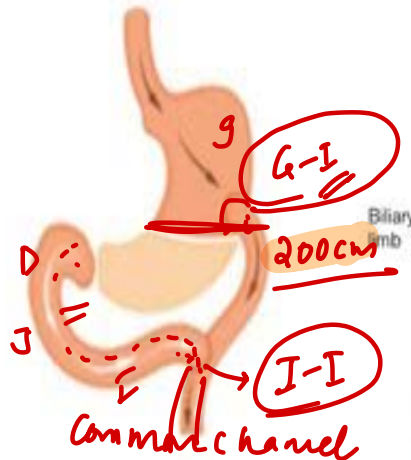
Adjustable Gastric Band (AGB)



Vertical Sleeve Gastrectomy (VSG)

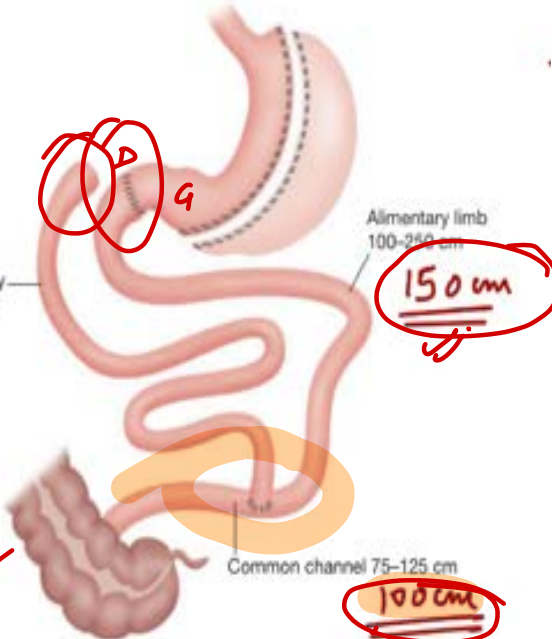


Roux-en-Y Gastric Bypass (RYGB)

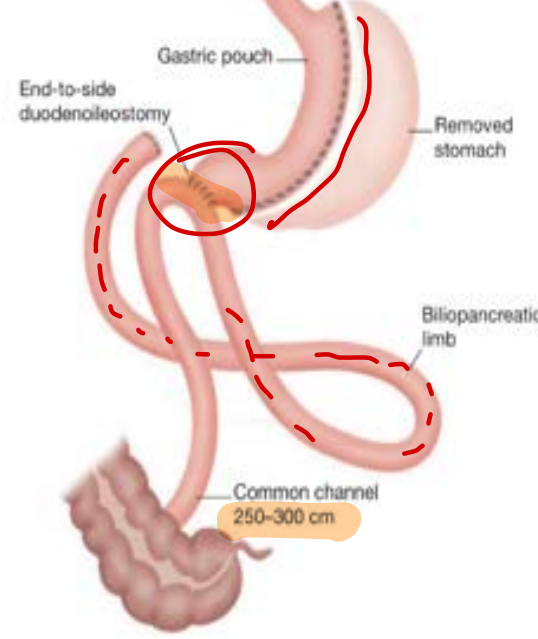


Biliopancreatic Diversion (BPD)

BPD



BPD + DS



SADI-S

- max wt loss
- max complicⁿ

Classification	
Restrictive	<ul style="list-style-type: none"> Vertical band gastroplasty Adjustable band gastroplasty Sleeve gastrectomy (Banded sleeve gastrectomy)
Malabsorptive and restrictive (ideal balanced)	<ul style="list-style-type: none"> Roux en Y gastric bypass
Mainly malabsorptive and mildly restrictive	<ul style="list-style-type: none"> Biliopancreatic diversion Duodenal switch (DS - BPD) SADI- S (Single anastomosis duodenal ileal - sleeve gastrectomy)

NOTES

Acronym	Full Form
POSE	Primary Obesity Surgery Endoluminal
ROSE	Restorative Obesity Surgery Endoluminal
ESG	Endoscopic Sleeve Gastroplasty
TOGA	Transoral Gastroplasty

95. What is the procedure being shown below?

- A. Billroth-I reconstruction
- B. Billroth II reconstruction**
- C. Braun anastomosis
- D. Roux-en Y gastrojejunostomy



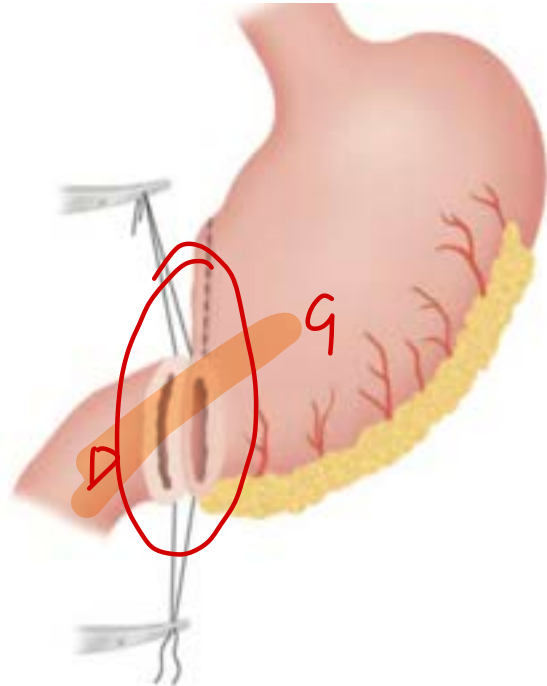


Figure 67.14 Billroth I gastrectomy. The lower half of the stomach is removed and the cut stomach anastomosed to the first part of the duodenum.

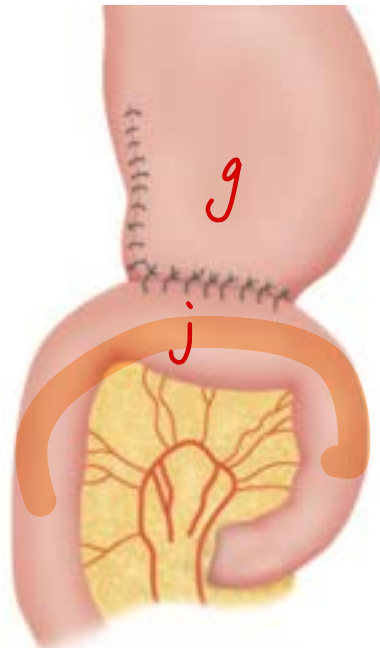


Figure 67.15 Billroth II. Two-thirds of the stomach is removed, the duodenal stump is closed and the stomach anastomosed to the jejunum.

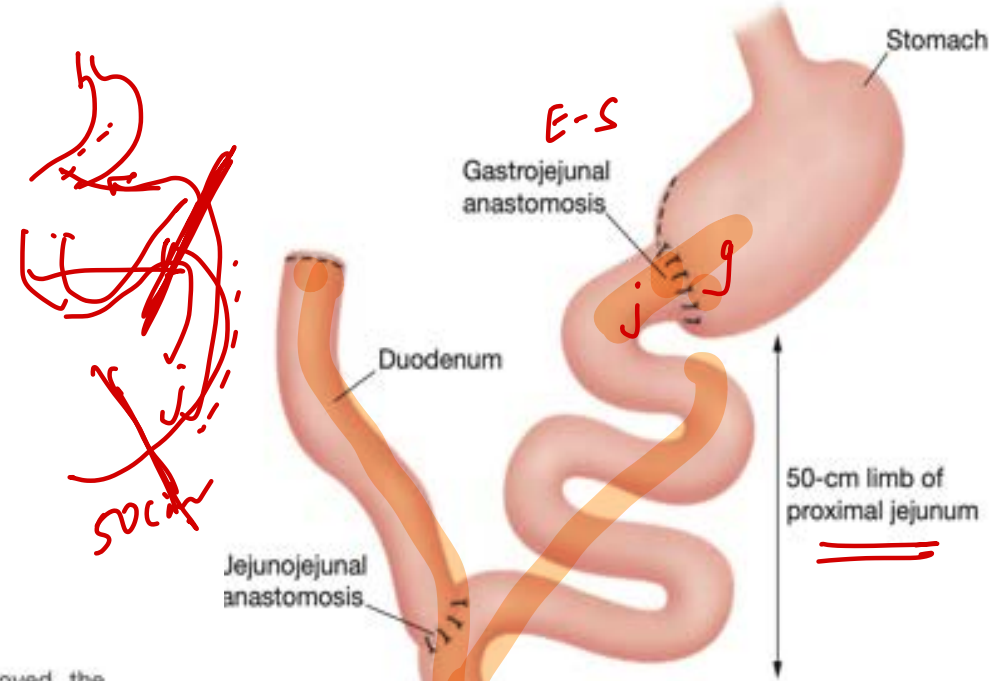


Figure 67.20 Roux-en-Y reconstruction following Billroth I gastrectomy. Note the length of the proximal jejunal limb required to minimise bilious reflux.

Nutritional deficiencies

- **Most common:** Iron deficiency
- **Other deficiencies:** Vitamin B12, Vitamin D3

Internal hernia

- **Petersen's hernia:** Bowel loop herniates behind Roux limb

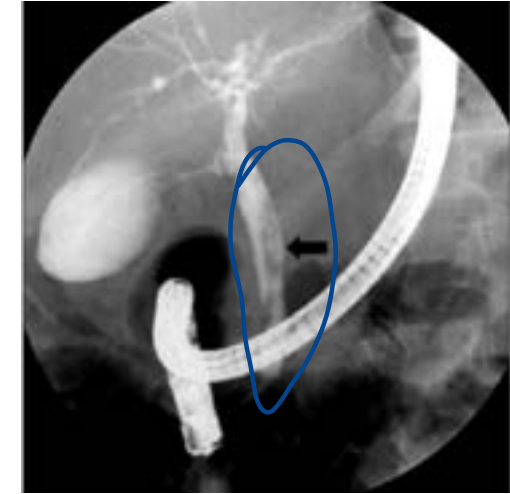
Antecolic reconstruction

- **Stemmer hernia:** Bowel loops herniate through the transverse mesocolon

Retrocolic reconstruction

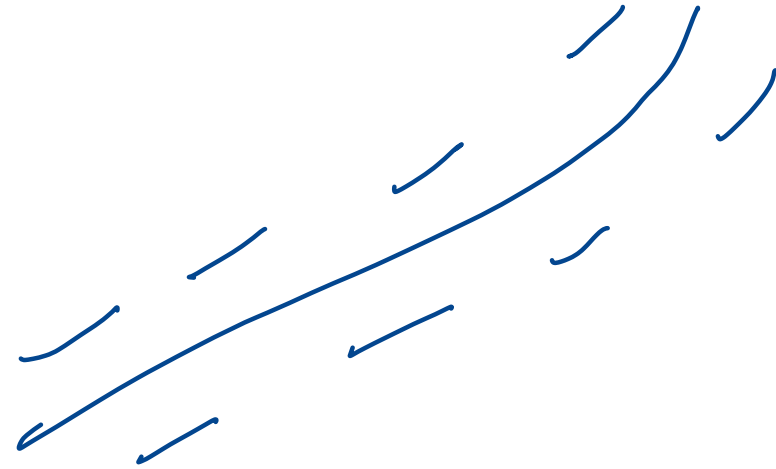
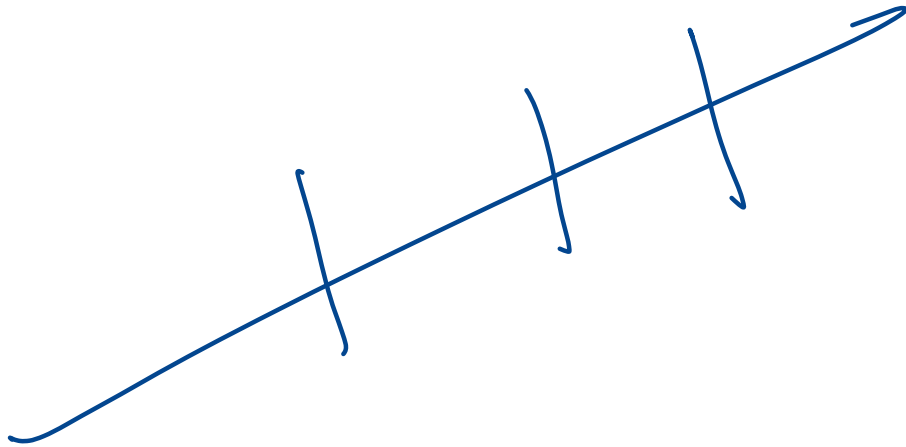
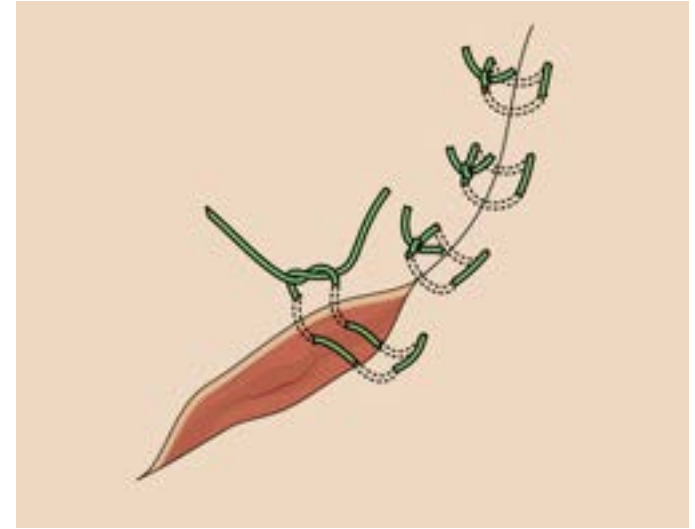
81. What is the likely diagnosis based on the ERCP image?

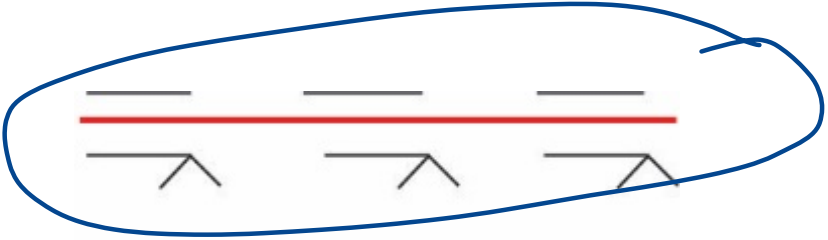
- A. Choledochal cyst
- B. Biliary ascariasis**
- C. Caroli disease
- D. Choledocholithiasis



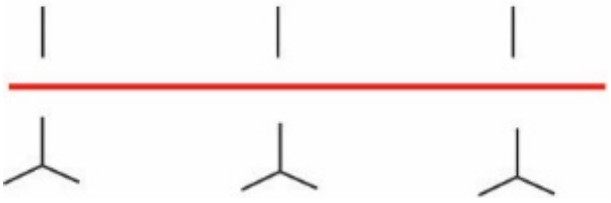
82. Identify the suture

- A. Horizontal mattress
- B. Vertical mattress
- C. Interrupted
- D. Continuous





H



V

83. A 34-year-old male patient presented with pain and tightness on the glans penis and pigmentation with difficulty in urination. Examination finding is shown below. What is the most likely diagnosis?

- A. Balanitis xerotica B x O
- B. Condyloma acuminata xx
- C. Erythroplasia of Queyrat (EQ)
- D. Peyronies disease



penile
urethral
structure

urethritis

Phimosis

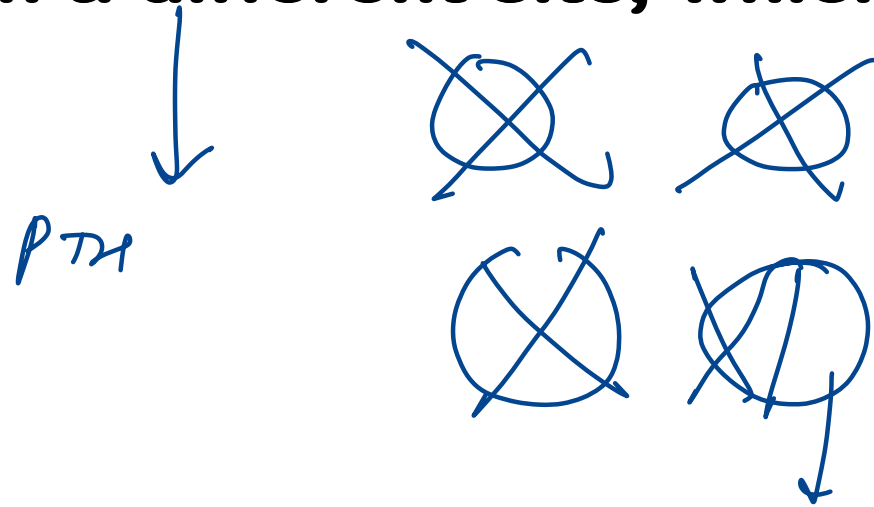
meatal stenosis

meatal
stenosis

pre malign
Ca²⁺
Streakline xx

84. In a patient with hyperplasia of all four parathyroid glands who undergoes total parathyroidectomy followed by implantation of parathyroid tissue in a different site, which term best defines this procedure?

- A. Isograft
- B. Auxiliary
- C. Heterotopic
- D. Orthotopic



1/2

accidental removal

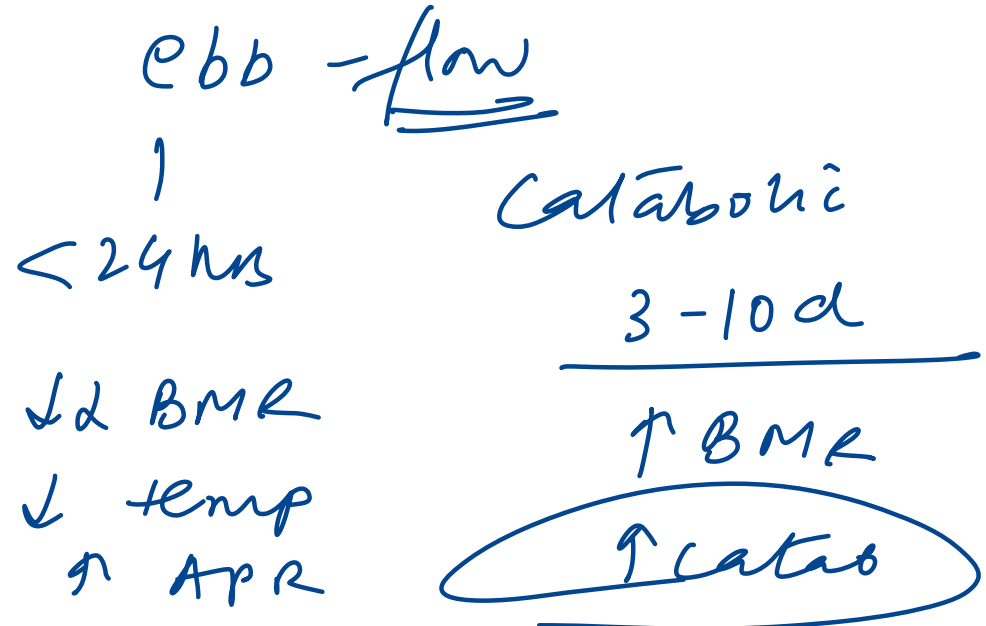
PTH

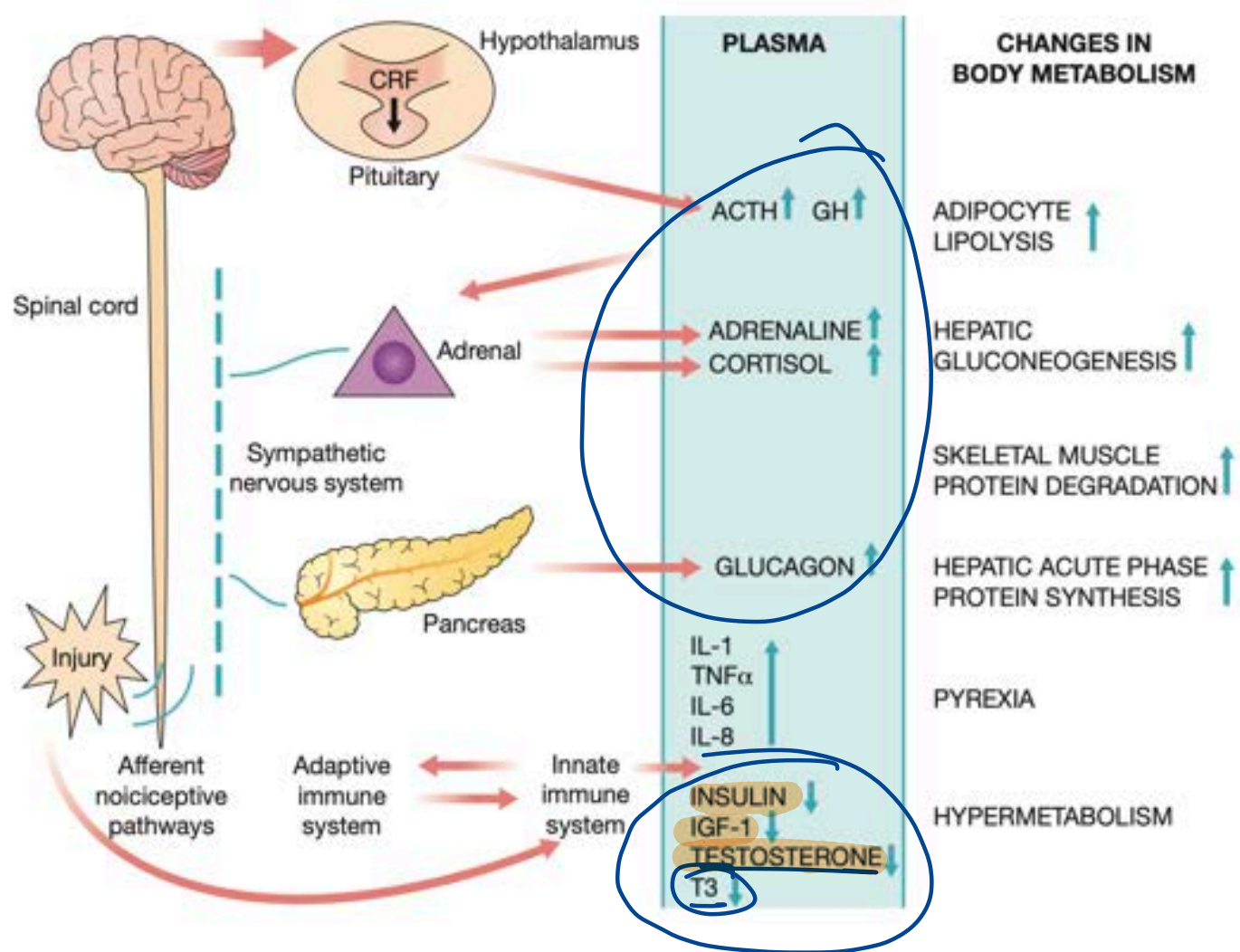
strap muscles

1/2 -> brachioradialis

85. All of the following are true regarding the metabolic and hormonal response to surgical stress/trauma except:

- A. Increased ACTH and cortisol levels are characteristic findings ✓
- ~~B. Insulin levels are elevated in the ebb phase of stress~~
- C. There is increased hepatic gluconeogenesis and lipolysis
- D. Growth hormone (GH) and TNF- α levels are elevated





86. All of the following are contraindications for PAIR (Puncture, Aspiration, Injection, Re-aspiration) in hydatid cyst except:

A. Honeycomb cysts with multiple septae

B. Cysts communicating with bile duct

C. WHO type CE1 cyst

D. Pulmonary hydatid cyst

E. Calcified

F. deep seated - rupture

indicⁿ

• CE 1-3 (J)

• pregn

• children

87. Which of these open inguinal hernia repairs involves double breasting of conjoint tendon with inguinal ligament?

- A. Bassini's repair
- B. Maloney's repair
- C. Shouldice's repair
- D. Desarda's repair

In **Bassini's repair**, the **conjoint tendon** is approximated to the **inguinal ligament** in a **single layer**.

Desarda's repair uses a **strip of external oblique aponeurosis**, which is sutured to the **conjoint tendon** and **inguinal ligament** to reinforce the posterior wall of the inguinal canal

Shouldice repair: **conjoint tendon** is sutured to the **inguinal ligament** in **multiple overlapping (double-breasting)** layers.

Leichtenstein — mesh tension free

88. All of the following tumor classifications are correctly matched with their associated tumors except:

- A. Bloom–Richardson grading – Carcinoma breast ✓✓
- B. Duke staging – Colorectal carcinoma ✓✓
- C. Gleason scoring – Testicular ~~cancer~~ *prostate*
- D. Masaoka staging – Thymoma ✓✓

Classification	Associated Tumor
Bloom Richardson grading	Carcinoma breast
Butchart staging	Mesothelioma
Chang staging	Medulloblastoma
Jackson	Carcinoma penis
Masaoka staging	Thymoma
Noguchi	Adenocarcinoma lung
Nevin's staging	Carcinoma gall bladder
Robson staging	Renal cell carcinoma
Reiss and Ellsworth classification, Esson prognostic index	Retinoblastoma
Shimada index	Neuroblastoma
Sullivan modification of Macfarlane system	Adrenocortical carcinoma

89. A female with ER+, PR+, HER2- breast cancer is to be treated. Which of the following is the most recently approved agent for this condition?

A. Ipatasertib

B. Buparlisib

C. Palbociclib

D. Herceptin

CC

QQQ -

Paloma trial

• **Cyclin-dependent kinase 4/6 inhibitors**

ER / PR +

- **Palbociclib:** With aromatase inhibitor (Letrozole) or SERD (Fulvestrant)
- **Ribociclib:** With aromatase inhibitor (Letrozole)
- **Abemaciclib:** With SERD (Fulvestrant)
- **mTOR pathway inhibitors**
- **Everolimus:** Approved for advanced/metastatic HR+, HER2- breast cancer
- **Phosphatidyl-inositol 3 kinase (PI3k) inhibitors-Buparlisib**
- **AKT (Protein kinase B) inhibitors-Ipatasertib**

90. Breast conservation surgery is feasible in which of the following patients with breast carcinoma?

- (1) A post-partum woman** ✓
- (2) Small breast with a large tumor** XXX
- (3) Persistently positive margin** XXX
- (4) Diffuse microcalcification on mammogram** XX
- (5) Prior chest radiation** XX RT CI

- A. Only 1** ✓
- B. 1, 3 and 4**
- C. 2, 3, 4 and 5**
- D. 2 and 3**

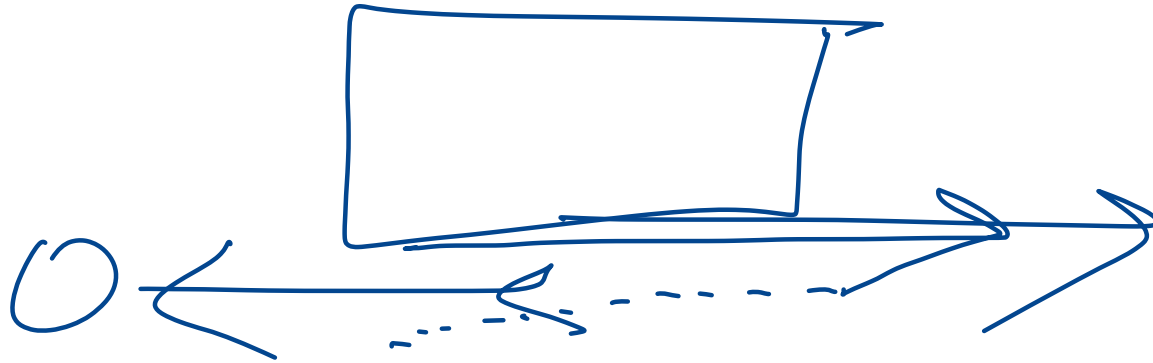
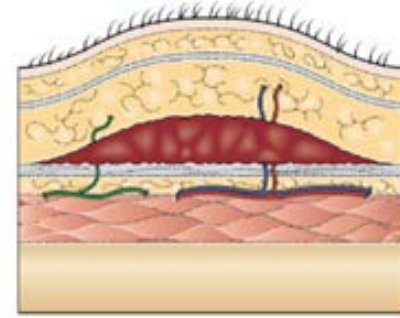
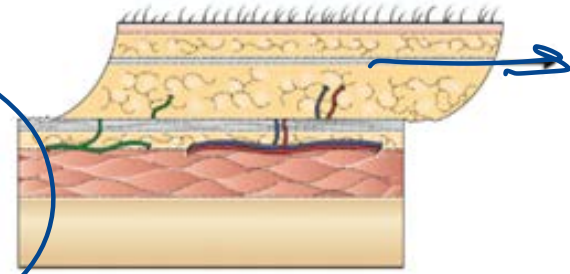
6) CTD " "

91. Identify the type of injury

- A. Closed degloving injury
- B. Incised looking laceration
- C. Subcutaneous hematoma
- D. Flaying laceration

Marelle -
Lavalle

Open degloving



92. A 65-year-old man presents with hematuria and left flank pain. Imaging studies reveal a renal mass, and a subsequent biopsy confirms the diagnosis of papillary renal cell carcinoma. Which of the following cytogenetic abnormalities is most characteristic of papillary chromophilic renal cell carcinoma?

- A. Loss of 3p
- B. Trisomy 7/17**
- C. Xp translocation
- D. Mutant VHL gene

FDH

RIF : dialysis

pediatric RCC

93. A 14-year-old boy undergoing ophthalmoscopy shows pigmentary changes. Family history reveals colon and endometrial cancers. APC gene mutation is confirmed. Which statement is incorrect about this condition?

- A. Condition is inherited in an autosomal dominant pattern
- B. Mutation is located on chromosome 15
- C. Risk of colon cancer is nearly 100%
- D. Prophylactic surgery is recommended



FAP

CHRPE

94. A 34-year-old man comes to the office due to erectile dysfunction. A palpable plaque is present on the dorsal side of the penis approximately halfway between the glans and the pubis. The testes are normal with no scrotal erythema or skin ulceration. Which of the following is the most likely diagnosis?

- A. Genital warts
- B. Penile cancer
- C. Peyronie disease
- D. Systemic sclerosis

→ Rx: Inj *A. histolyticum*
↓
Nesbitt procedure.

96. All are valid indications for surgery in asymptomatic primary hyperparathyroidism, except:

- ~~A. Age >60 years~~
- B. Vertebral fracture
- C. Serum calcium >1 mg/dL above ULN
- D. 24-hr urine calcium >400 mg/day

TABLE 56.2 Consensus guidelines for surgical intervention in asymptomatic primary hyperparathyroidism.

Measurement of serum calcium	0.25 mmol/L (1.0 mg/dL) above the upper limit of normal
Skeletal	<ul style="list-style-type: none">• BMD by DEXA; T score -2.5 at lumbar spine, total hip, femoral neck or distal one-third of radius• Vertebral fracture
Renal	<ul style="list-style-type: none">• Creatinine clearance <60 mL/min• 24-hour urinary calcium >10 mmol/dL (>400 mL/day) or increased risk of stone formation by risk analysis
Age	<50 years



97. Identify the type of suture material given in the image.

A. Monofilament

B. Braided

C. Biological

D. Polyfilament



SUTURES

Absorbable

Mechanism:

Synthetic

Natural

**Monocryl:
Polyglycaparone**

PDS: Polydioxanone

Vicryl: Polygalactin

Dexon: Polyglycolic acid

CATGUT

Non - Absorbable

Synthetic

Natural

Nylon-Polyamide/ Ethilon

Prolene - Polypropylene

Novafil - Polybutester

Polyester- Ethibond

SILK

98. A wide mouth non-indurated Meckel's diverticulum is found during surgery for acute appendicitis. What should be done?

- A. Excision
- B. Resection-anastamosis
- C. Nothing to be done**
- D. Take consent from patient and re-explore



When found in the course of abdominal surgery, a Meckel's diverticulum can safely be left alone, provided it has a wide mouth and is not thickened. When there is doubt, it can be resected. The finding of a Meckel's diverticulum in an inguinal or femoral hernia has been described as 'Littre's hernia'.

Summary box 74.4

Features of Meckel's diverticulum

- Remnant of vitellointestinal duct
- Occurs in 2% of patients, 5 cm (2 inches) long, 60 cm (2 feet) from the ileocaecal valve, 20% heterotopic epithelium
- Should be looked for when a normal appendix is found at surgery for suspected appendicitis
- If a Meckel's diverticulum is found incidentally at surgery, it can be left provided it has a wide mouth and is not thickened
- Can be a source of gastrointestinal bleeding if it contains ectopic gastric mucosa

99. The criteria for early renal graft dysfunction includes:

- A. Rise in serum creatinine of >15% baseline
- B. Rise in serum creatinine of >10% baseline**
- C. Rise in serum creatinine of >10 $\mu\text{mol/l}$
- D. Rise in serum creatinine of >15 $\mu\text{mol/l}$

INI NOV
_____ \rightarrow

Causes of early graft dysfunction

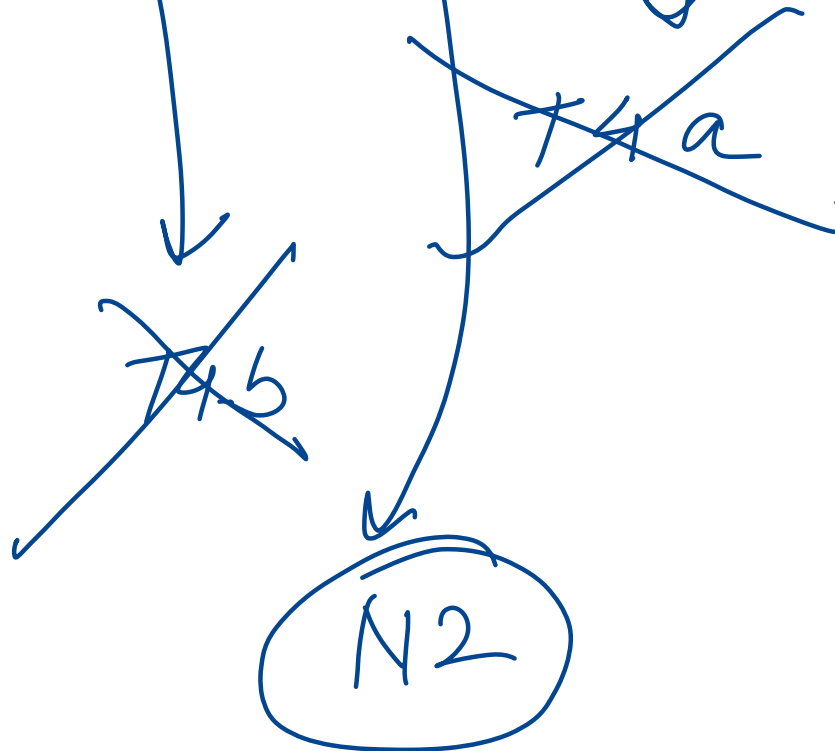
Any rise in serum creatinine of >10% of baseline or $\geq 20 \mu\text{mol/L}$ should be considered as acute allograft dysfunction that requires investigation. Possible causes are:

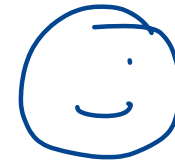
- Acute rejection (antibody mediated or cell mediated)
- Calcineurin inhibitor toxicity
- Dehydration
- Urinary tract infection or pyelonephritis
- Any other source of sepsis
- Renal vein or renal artery thrombosis
- Ureteric obstruction or urine leak

100. A 34-year-old female presents with a lump in her left breast for 2 years. On examination, a 6 x 4 cm mass is palpated. Dimpling of the skin and bloody discharge from the nipple is present. The lesion is invading the pectoralis major muscle. Ipsilateral Level I and Level II matted axillary lymph nodes and C/L Level 1 axillary nodes are present. There was no distant metastasis. What is the TNM staging.

- A. T4bN1M0
- B. T3N2M0
- C. T4aN1M0
- D. T3N2M1**

T3





Thank You
