



Cerebellum

Get the balance right

BTR RADIOLOGY

06-09-2025

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1. A 25-year-old male was brought to the emergency department after being struck on his head by the house door and temporarily fainting. On examination, his sensorium was intact. NCCT head was performed and is shown below. What is the most likely diagnosis?

- A. Extradural hemorrhage**
- B. Concussion**
- C. Diffuse axonal injury**
- D. Contusion**



2. All of the following are correctly paired with HU on CT except:

A. Fat: 0-20

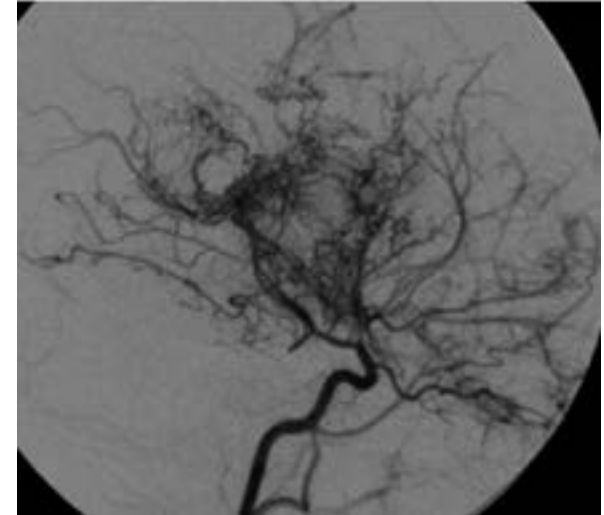
B. Contrast: 130

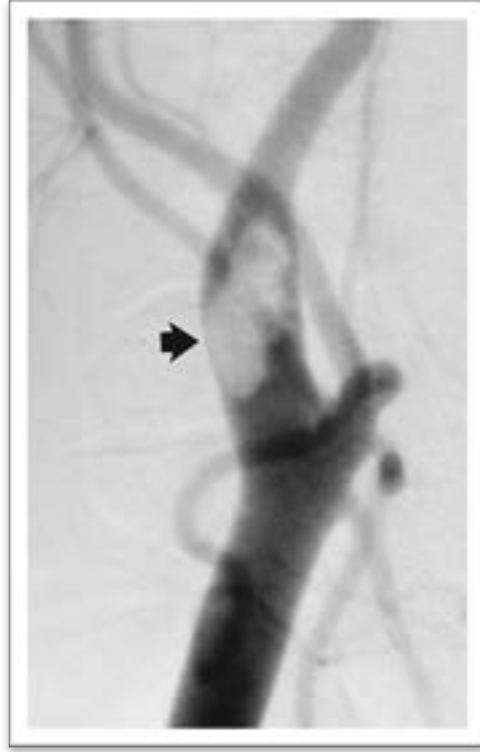
C. Acute hemorrhage: 60-70

D. Calcification: 800-1000

3. A 6-year-old child with a history of transient ischemic attacks and several episodes of weakness is referred for diagnostic evaluation. On physical examination, there is a noticeable murmur around the child's temple. Digital Subtraction Angiography (DSA) is performed, revealing the characteristic imaging shown. The following appearance of DSA is seen in:

- A. ICA aneurysm**
- B. Moya-Moya disease**
- C. Cerebral infarction**
- D. Carotid artery thrombosis**





4. Identify the marked structure:

- A. Superficial temporal artery
- B. Posterior auricular artery
- C. Middle meningeal artery
- D. Occipital artery



5. During a radiology department seminar, a discussion focuses on the properties and safety of gadolinium-based contrast agents. Which of the following statements about gadolinium is false?

- A. It can cross the blood-brain barrier (BBB)**
- B. Paramagnetic material which can shorten the T1 relaxation time**
- C. Long-term studies show gadolinium deposition in the basal ganglia at high doses**
- D. Injected as gadolinium chelates**

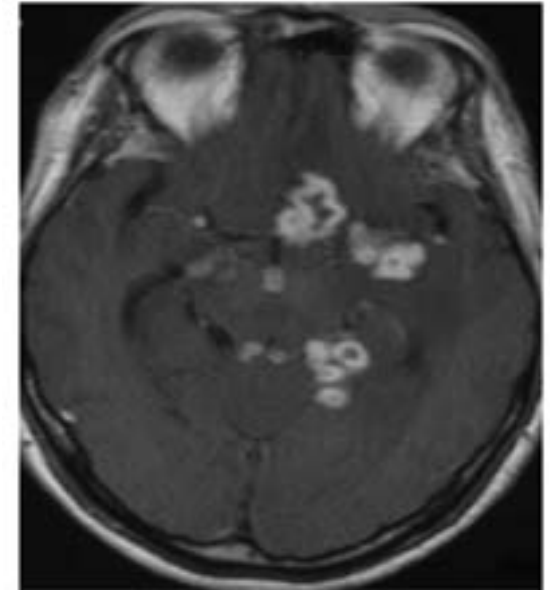
6. In a male child having recurrent urinary problems, an imaging as done was shown. What is the management?

- A. Endoscopic Ablation**
- B. Dilation of urethra**
- C. Dilation of urethra and bladder**
- D. Excision of verumontanum**



7. A 20-year-old male patient presented with a headache and altered sensorium. MRI was performed, which revealed multiple ring-enhancing lesions. What will be the next step to confirm the diagnosis?

- A. MR spectroscopy**
- B. CBNAAT of CSF**
- C. Biopsy**
- D. Susceptibility weighted imaging (SWI)**



8. A 4-year-old child presents with a history of progressive weakness, irritability, and delayed growth. He was started on appropriate treatment at a CHC. A repeat wrist X-ray is performed, as shown. Based on the clinical features and radiographic findings, what is the most likely diagnosis?

- A. Non-healing rickets**
- B. Scurvy**
- C. Healing Rickets**
- D. Osteopetrosis**



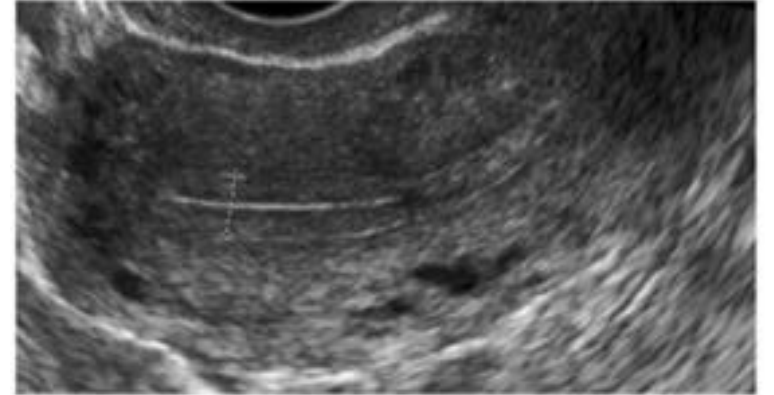
9. A patient who was diagnosed with prostate cancer is being investigated. The bone scan is shown below. What does it indicate?

- A. Increased uptake due to diffuse metastasis**
- B. Co-existing multiple myeloma**
- C. Normal scan**
- D. Osteoporosis**



10. An ultrasound of a 24-year-old woman shows an endometrium with a classic trilaminar appearance, as seen in the image provided. Which phase of the menstrual cycle does this ultrasound image most likely represent?

- A. Secretory
- B. Early proliferative
- C. Menstrual
- D. Late Proliferative



	<p><u>Early proliferative phase endometrium</u></p>	<ul style="list-style-type: none"> •Thin •Linear •Echogenic
	<p><u>Late proliferative phase endometrium</u></p>	<ul style="list-style-type: none"> •Thick •<u>Trilaminar appearance:</u> <ol style="list-style-type: none"> 1. Central thin, echogenic line 2. Darker echolucent rim in the middle 3. Surrounding echogenic basilar layer
	<p><u>Secretory phase endometrium</u></p>	<ul style="list-style-type: none"> •Thick •Hyperechoic •Homogeneous

11. Which of the following will be avid on FDG PET scan?

- A. Typical carcinoid**
- B. Mucinous adenocarcinoma**
- C. Atypical carcinoid**
- D. Calcified TB granulomas**

12. A 70-year-old man comes to the casualty after 3 episodes of sudden loss of vision in his right eye like a curtain falling down, each of which resolved spontaneously` after about 2 minutes. He has a history of hypertension and diabetes. Neurological examination of the patient is normal. What investigation would aid in the management of this patient?

- A. Doppler of the neck**
- B. MRI Diffusion-weighted imaging of the brain**
- C. Non-contrast head CT**
- D. Ocular B scan**

13. Identify the fracture site in the X-ray shown below.

- A. Right posterior end of 5th rib**
- B. Right posterior end of 6th rib**
- C. Right posterior end of 7th rib**
- D. Right anterior end of 6th rib**



14. A 46-year-old male presented to the clinic with a persistent cough, fatigue, weight loss. Xray of the patient is as given below. What is the most likely diagnosis?

- A. Aspergilloma**
- B. TB**
- C. Carcinoma lung**
- D. Sarcoidosis**



15. Which of the following isn't considered a benefit of USG compared to Mammography?

- A. Can be used for screening mammographically undetectable or clinically non palpable breast mass**
- B. Useful in young females with dense breast**
- C. Differentiates between solid and Cystic lesions in the Breast**
- D. Guided biopsy can be done**

16. Cardiac output can be determined using the following except?

- A. Pulmonary arterial catheterisation**
- B. Coronary angiography**
- C. Cardiac MRI**
- D. Echocardiography**

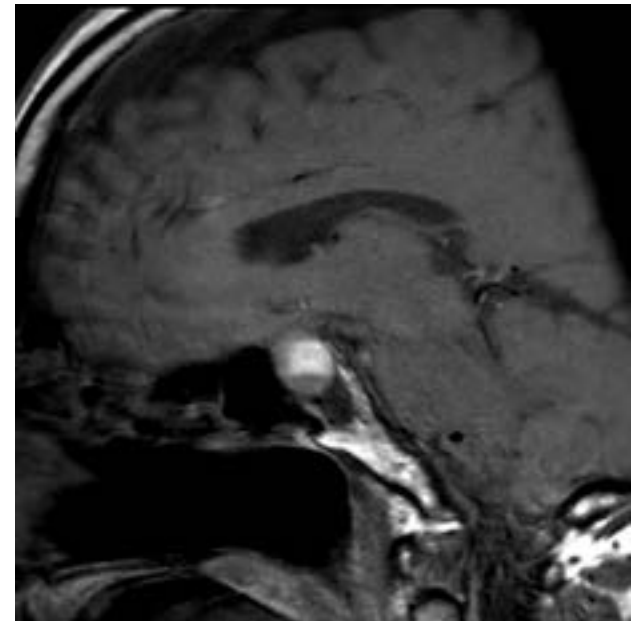
17. A child presents with breathlessness. On chest X-ray, the following object is seen. Identify?

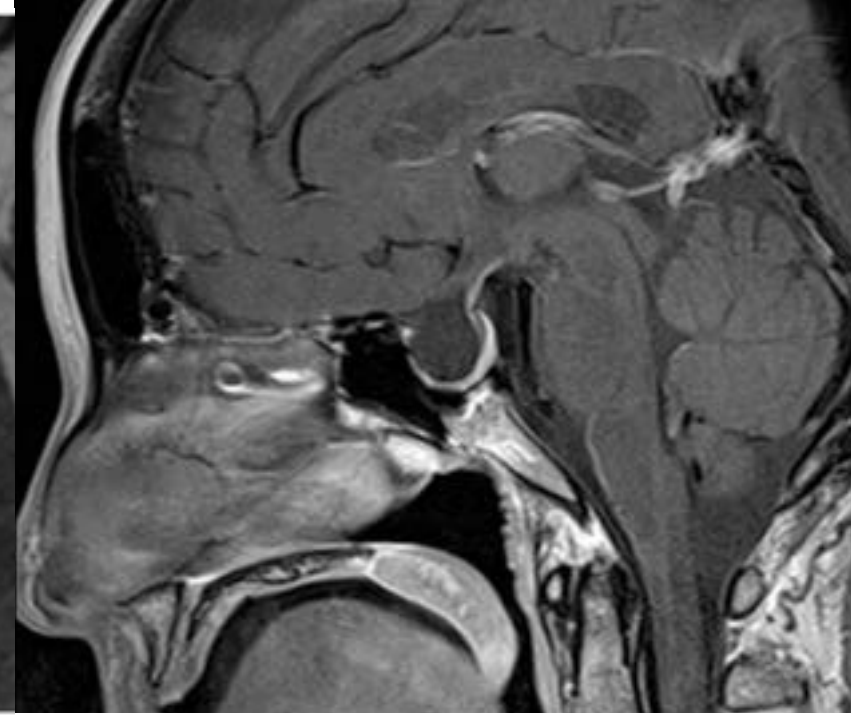
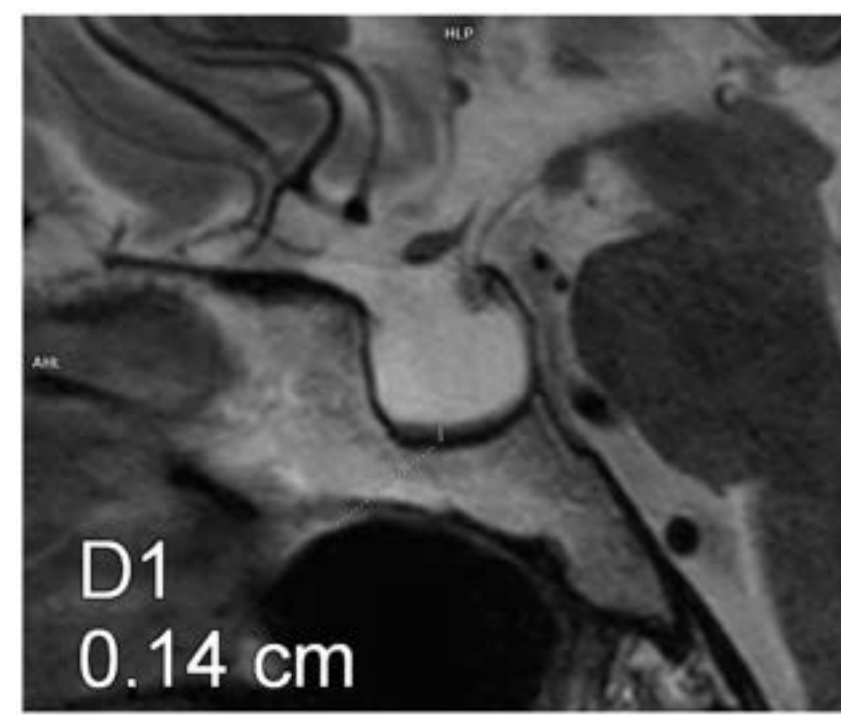
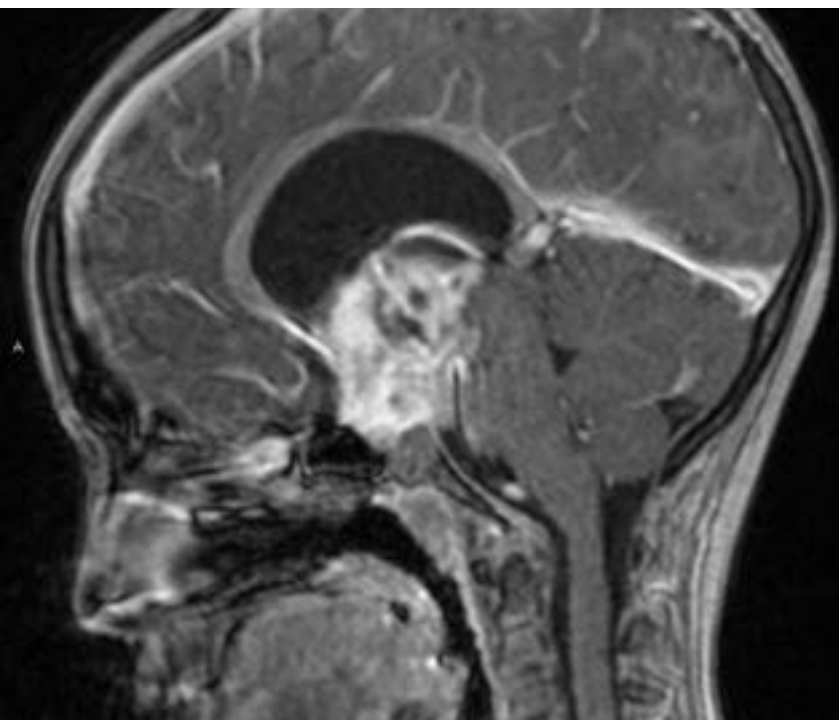
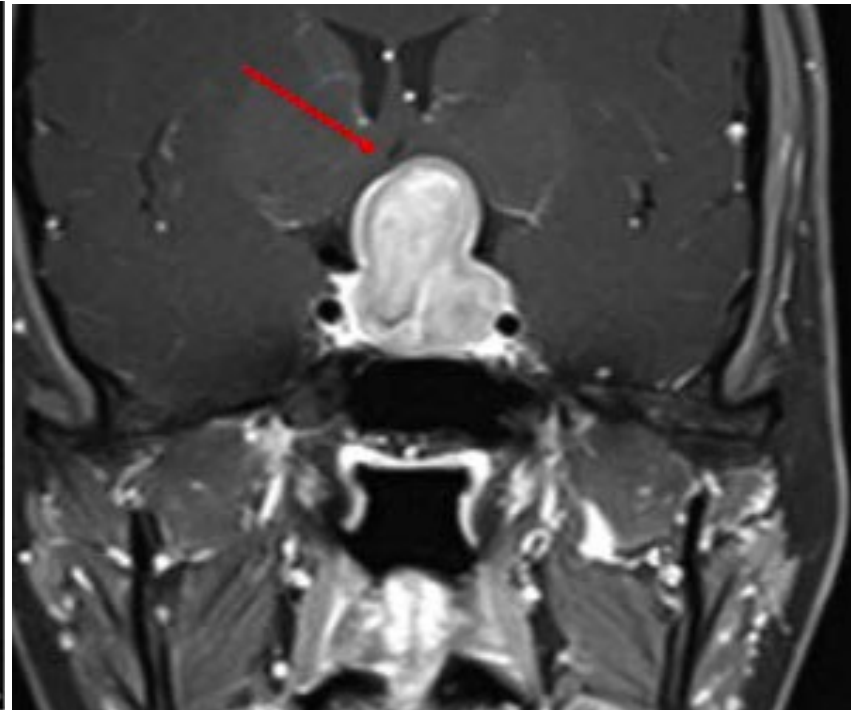
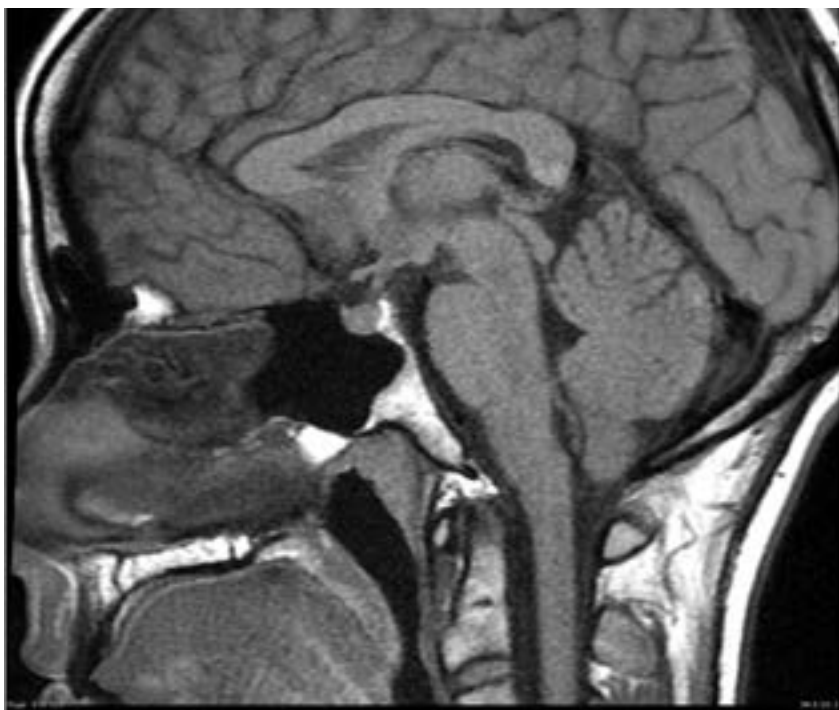
- A. Button battery**
- B. Coin**
- C. Ball**
- D. Bottle cap**



18. A 42-year-old woman presents with a severe, sudden-onset, throbbing headache and double vision for the past 30 minutes. She has a history of migraine and reports frequent headaches. She has not had her period for several months. On examination, her blood pressure is 95/61 mm Hg, and visual field testing reveals decreased visual acuity and loss of peripheral vision in both eyes. MRI of brain is shown below. Which of the following is the most likely diagnosis?

- A. Transient ischemic attack**
- B. Pituitary apoplexy**
- C. Sheehan syndrome**
- D. Migraine with aura**





19. A 35-year-old male presents to the trauma center after RTA with shortness of breath. The supine CXR is shown below. The BP is 109/88mm Hg and pulse is 98/min. What is the next step?

- A. Needle thoracocentesis**
- B. ICD insertion**
- C. ET Intubation**
- D. NG tube insertion**



20. A 56-year-old male presents with sudden onset altered sensorium. What is the likely diagnosis?

- A. Hypertensive hemorrhage**
- B. Berry aneurysm rupture**
- C. Pontine hemorrhage**
- D. EDH**



21. What is the most likely cause of the condition depicted in the HRCT below?

- A. Aspergillus niger**
- B. Staphylococcus aureus**
- C. Aspergillus fumigatus**
- D. Candida albicans**



22. A 60-year-old male presents to the casualty with chest pain radiating to the back. He is diagnosed with a type A aortic dissection and undergoes emergent open repair. During the postoperative period, he develops thoracic back pain and an inability to move his bilateral lower extremities. Pinprick testing reveals bilateral loss of pain and temperature sensation below the level of the xiphoid process. Injury to which of the following arteries most likely explains this patient's clinical presentation?

- A. Artery of Adamkiewicz**
- B. Anterior thoracic epidural artery**
- C. Posterior spinal arteries**
- D. Middle meningeal artery**

23. A patient presents to emergency department with chronic ear discharge and head ache with ear pain. CT revealed the following findings. What is the most probable diagnosis?

- A. Temporal abscess**
- B. Occipital abscess**
- C. Cerebellar abscess**
- D. Subdural abscess**



24. What is the investigation of choice for PTH adenoma?

- A. Tc99-Sestamibi scan**
- B. Tc99-Pertechnate scan**
- C. Pertechnate SPECT scan**
- D. CT**

25. A 15-year-old male with pain and swelling in the thigh since last one month. Xray is shown below. What is the likely diagnosis?

- A. Osteoclastoma**
- B. Ewing sarcoma**
- C. Brodie abscess**
- D. Osteosarcoma**





26. What is the likely diagnosis based on the Xray ?

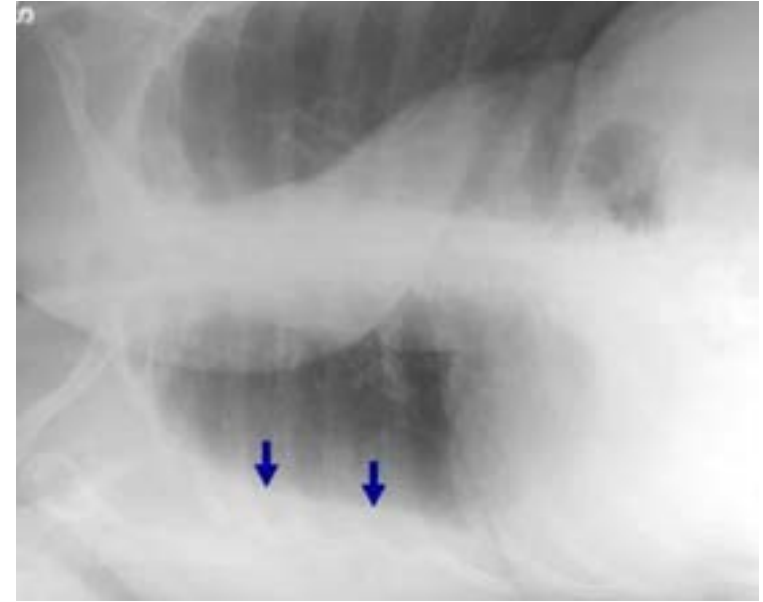
- A. Erosive OA
- B. Rheumatoid arthritis
- C. Hyperparathyroidism
- D. Psoriatic arthritis





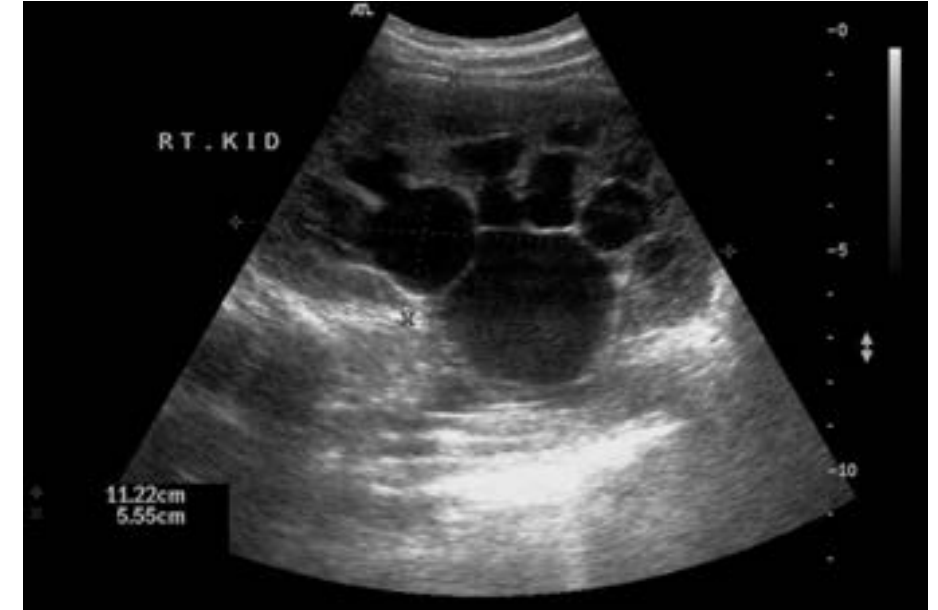
27. What is the minimum amount of fluid to be detected by this X-ray?

- A. 25ml**
- B. 5ml**
- C. 75ml**
- D. 250ml**



28. What could be the possible diagnosis of a 35-year-old male patient with a palpable flank lump whose ultrasound abdomen is shown below?

- A. Multicystic dysplastic kidney**
- B. Autosomal dominant polycystic kidney disease**
- C. Congenital PUJ obstruction**
- D. Autosomal recessive polycystic kidney disease**

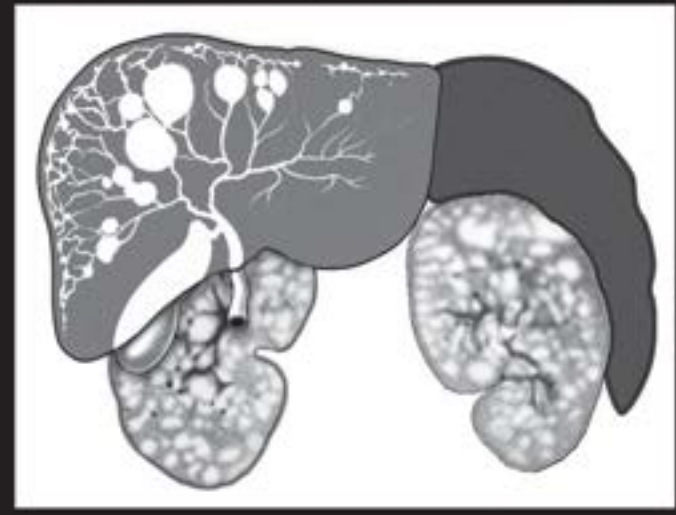
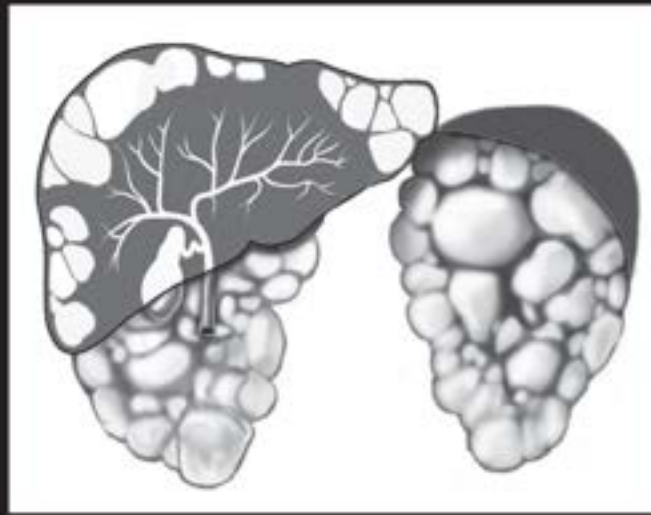




ADPKD



ARPKD



29. A lady was incidentally diagnosed with a 0.5 cm solid mass in her gall Bladder on USG as shown. What is the next step in the management?

- A. Reassure the patient and follow up**
- B. Laparoscopic Cholecystectomy**
- C. Open Cholecystectomy**
- D. CECT Abdomen**



30. A 4-month-old girl is diagnosed with a febrile urinary tract infection. A voiding cystourethrogram is shown in the image. Which of the following is the most likely cause of this infant's presentation?

- A. Congenital short intravesical ureter length**
- B. Damage to the rectovaginal septum**
- C. Obstruction due to a renal stone**
- D. Presence of a posterior urethral valve**



31. A 13-year-old boy presents to trauma center after skid injury, with lower abdominal pain and blood at meatus. The bladder is not palpable. What is the next step?

- A. SPC**
- B. Foley's catheterization**
- C. Wait and watch**
- D. RGU**

32. A 3-month-old baby presents to you with jaundice. USG of the liver shows the following abnormality. What is the best investigation to confirm the diagnosis?

- A. Tc99m sulfur colloid scan**
- B. Intra-operative cholangiography**
- C. MIBG**
- D. MRCP**



33. A 45-year-old woman comes to the emergency department following a fall with severe back pain, vomiting, and hypotension. CT findings are given below. What is the diagnosis?

- A. Grade 4 renal injury**
- B. Renal cell carcinoma**
- C. Aortic aneurysm rupture**
- D. Wunderlich phenomenon**



34. 8-month-old boy is brought to the emergency department due to respiratory distress. Severe cough and wheezing began an hour ago while the patient was playing at his cousin's house. Chest radiograph is shown in the image below. Which of the following is the most likely cause of this patient's symptoms?

- A. Anaphylaxis**
- B. Asthma**
- C. Bronchiolitis**
- D. Foreign body aspiration**



35. Which of the following statements are false regarding X Rays?

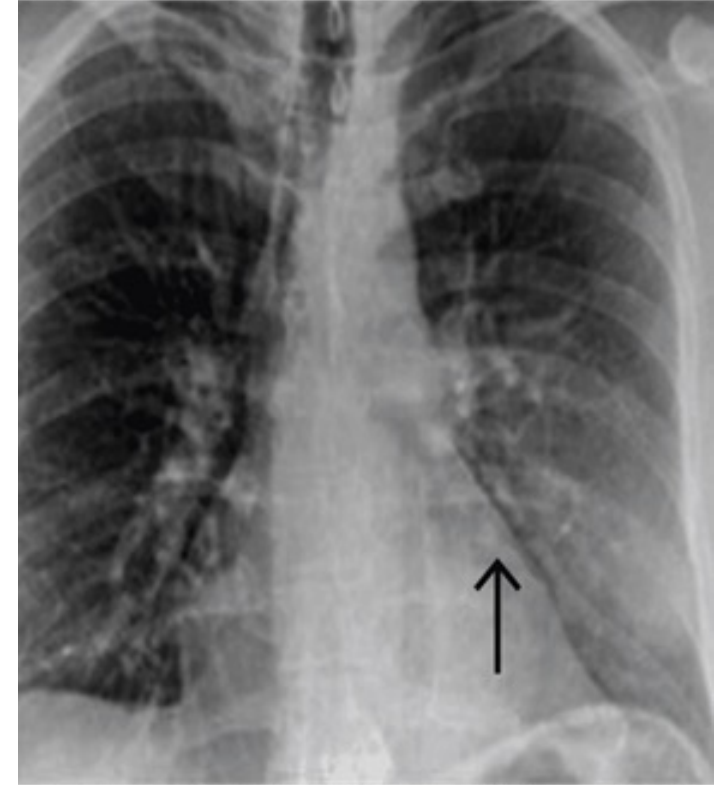
- A. Loss of soft tissue planes is the earliest X-ray change of infection**
- B. Glass pieces can be seen as radiopaque in X-ray images**
- C. Cartilage is not visualized on X-ray.**
- D. Live bone is more radio-opaque than dead bone on X- Ray images**

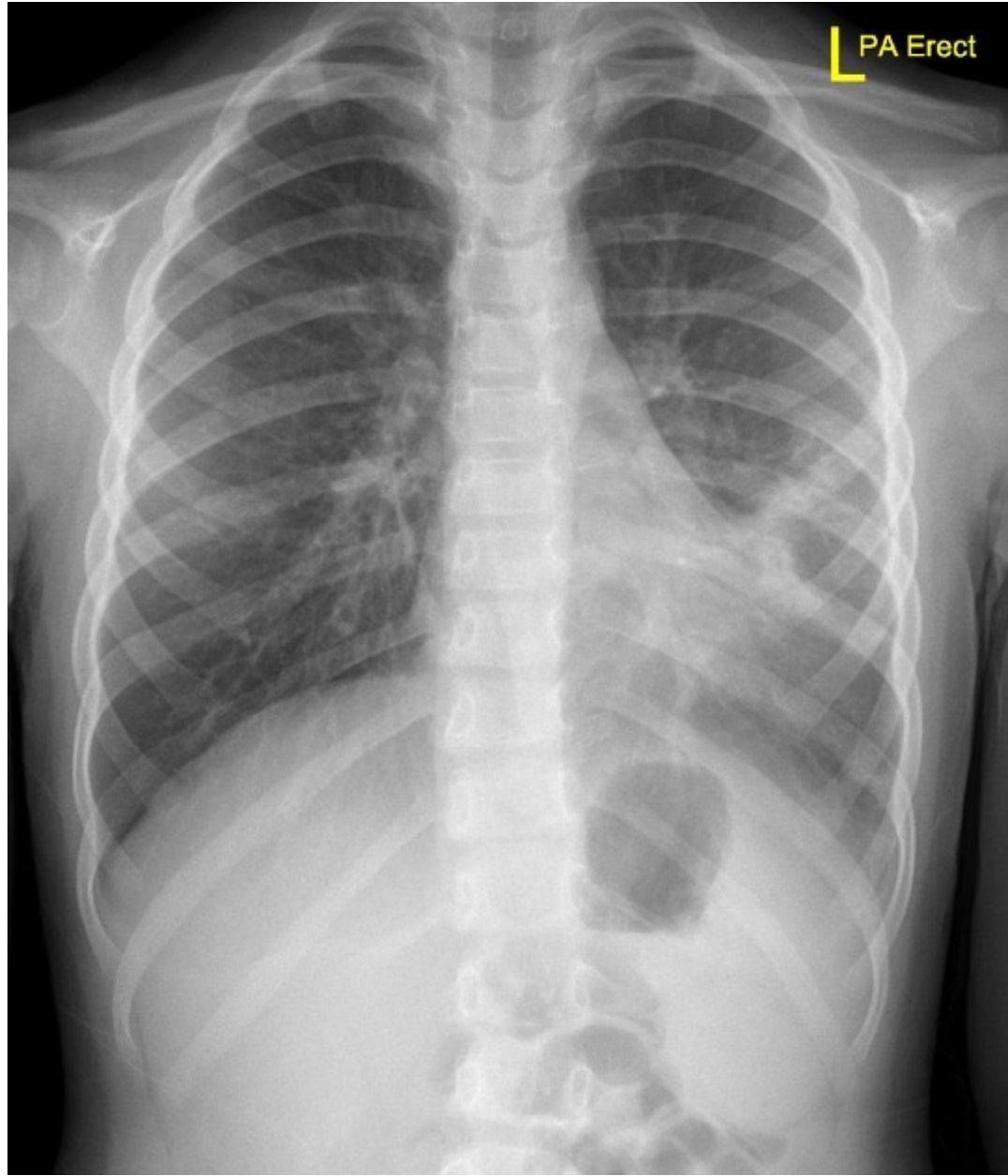
36. 22-year-old man presents to the emergency department after RTA. His blood pressure is 80/60mmHg, his pulse is 110 bpm, and his respiratory rate is 18 breaths per minute. Which of the following will be the next step in this case?

- A. eFAST**
- B. CECT**
- C. NCCT**
- D. DPL**

37. A 28-year-old man presents with the history of cough for one week. He also gives a history of hemoptysis for 1 month and fever for 4 days. The X-ray is given below. What is the diagnosis?

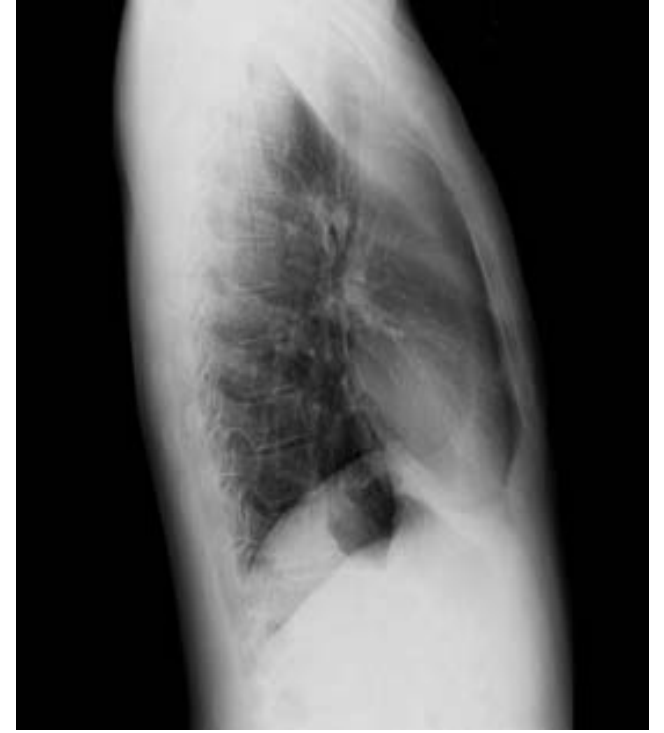
- A. LLL consolidation**
- B. Lingula consolidation**
- C. LUL consolidation**
- D. Pericardial effusion**





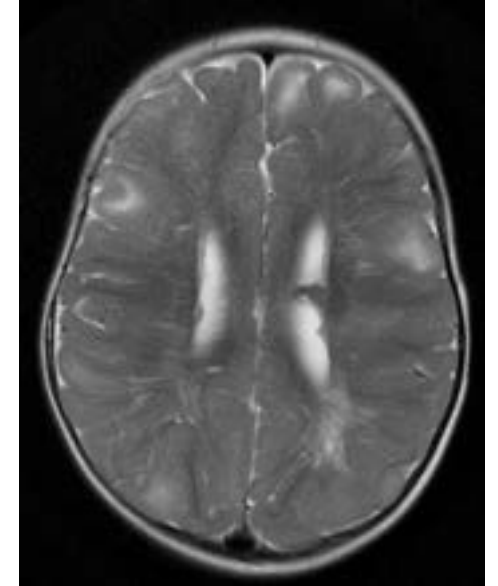
38. An 28-year-old man presents with the history of cough for one week. He also gives a history of hemoptysis for 1 month and fever for 4 days. The X-ray is given below. What is the diagnosis?

- A. RML consolidation**
- B. LLL collapse**
- C. LUL collapse**
- D. Pericardial effusion**



39. A 6-month-old infant presents with a history of multiple seizures and developmental delay. On physical examination, you notice facial lesions, hypopigmented macules on the skin, and unguinal fibromas. MRI brain is shown. What is the likely diagnosis?

- A. TSC
- B. NF1
- C. VHL
- D. Birt-Hogg-Dube syndrome



40. A 30-year-old male presents with chronic sinusitis and recurrent respiratory tract infections since childhood. CXR is shown below. Which of the following is the most likely diagnosis?

- A. Cystic fibrosis**
- B. Kartagener syndrome**
- C. Primary ciliary dyskinesia**
- D. Asthma**



41. What should be done to improve the contrast of an X-ray film in a morbidly obese patient?

A. Decrease KVP

B. Increase KVP

C. Increase mAs

D. Increase both KvP and mAs

42. An 45 year old lady presents with acute abdominal pain and distension. What is the most likely diagnosis?

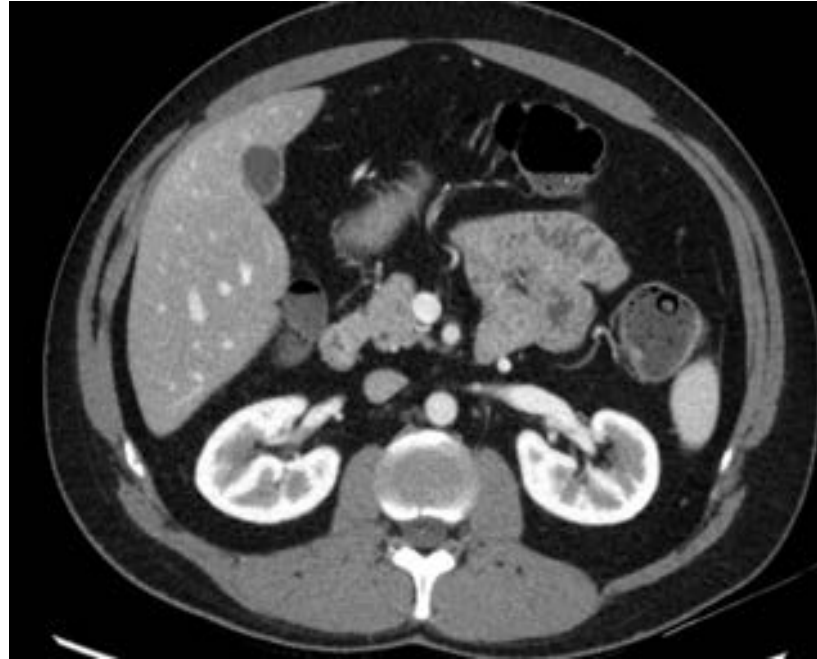
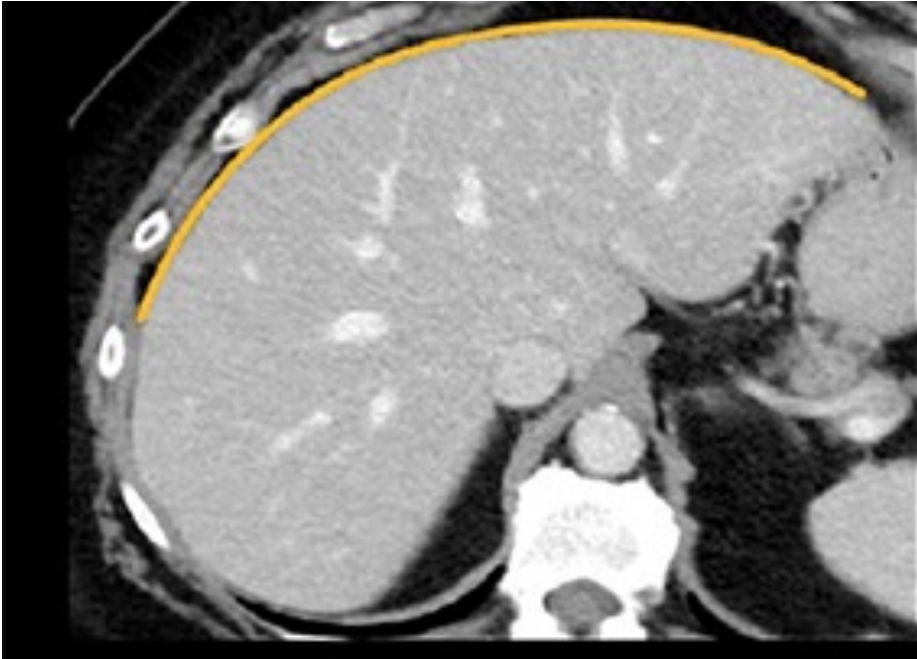
- A. Sigmoid volvulus**
- B. Large bowel obstruction due to fecolith**
- C. Cecal volvulus**
- D. Small bowel obstruction due to bowel perforation**



43. Identify the marked segment of liver.

- A. V**
- B. VII**
- C. III**
- D. IV**



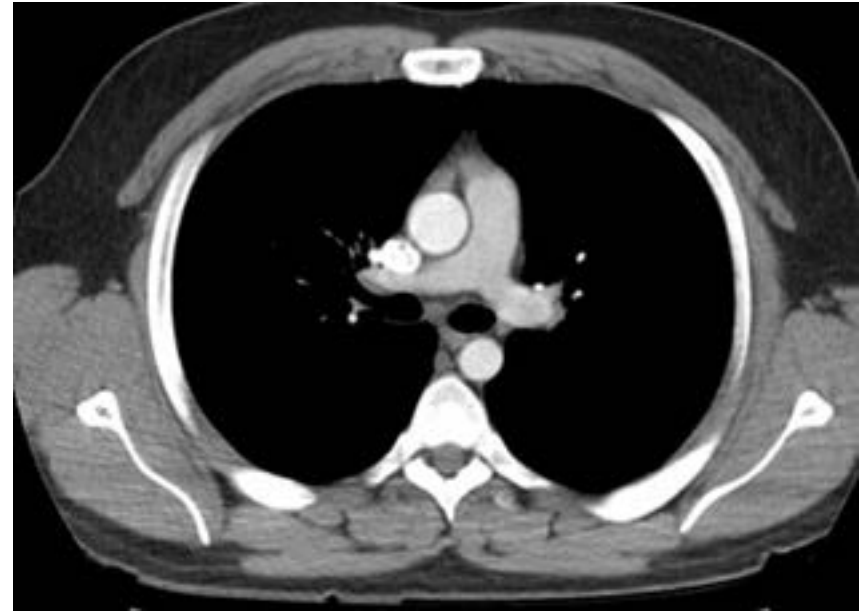


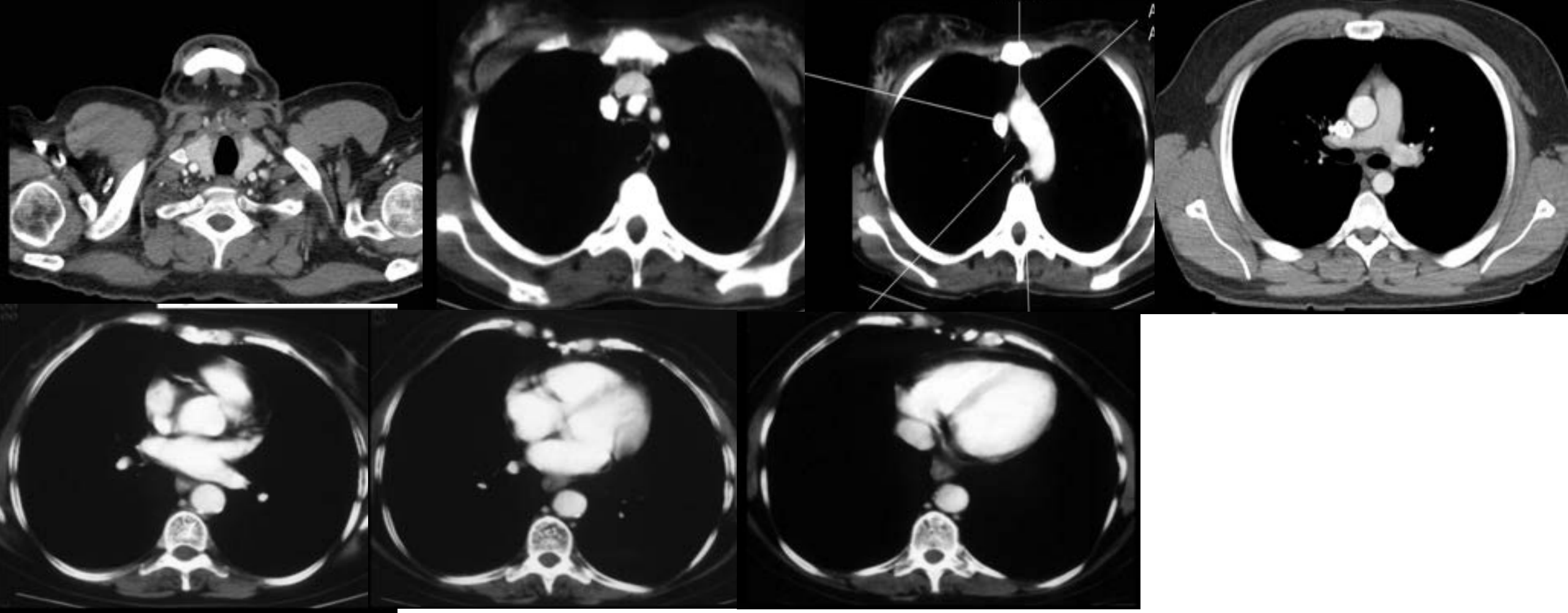
44. Which of the following contrast media is ionic monomer?

- A. Iohexol**
- B. Onmiscan**
- C. Diatrizoate**
- D. Iodixanol**

45. Identify the structure marked in the CT scan shown below:

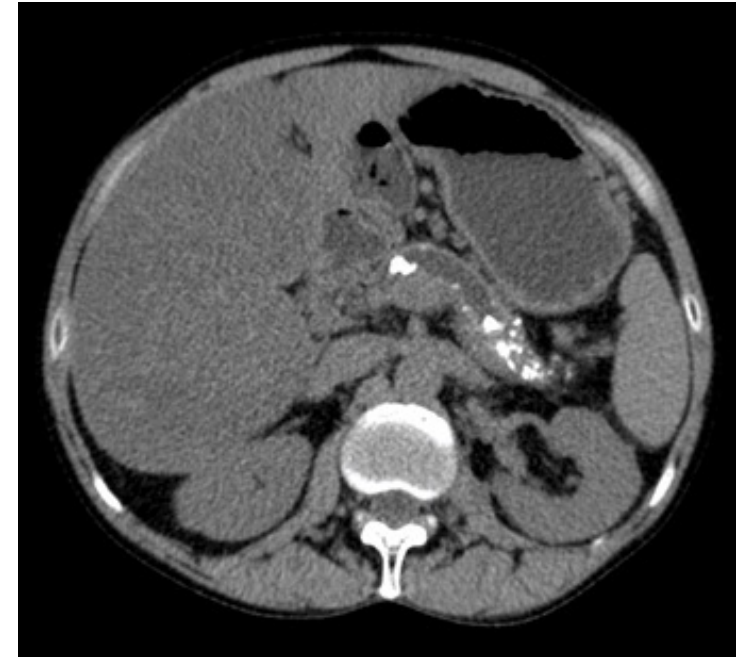
- A. Descending aorta**
- B. Superior vena cava**
- C. Ascending aorta**
- D. Right pulmonary artery**





46. A 65-year-old man who had multiple episodes of pain abdomen and passage of foul-smelling greasy stools for the past 5 months shows the following CT findings. The TIGAR-O system used in the assessment of the underlying condition is related to which of the following?

- A. Severity**
- B. Etiology**
- C. Prognosis**
- D. Clinical features**

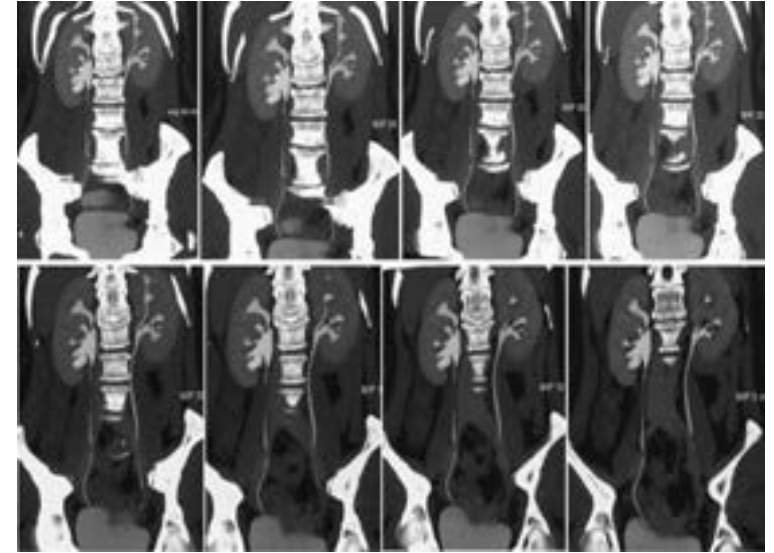


47. 40-year-old female presents with jaundice and pain abdomen. LFT reveals raised bilirubin and GGT. USG reveals scleroatrophic GB with dilated CDB with impacted calculi. What is the next step of management?

- A. Cholecystectomy**
- B. ERCP**
- C. PET scan**
- D. MRCP**

48. During rounds, your senior was discussing the given image. The following is an image of which of the following investigations?

- A. Contrast study**
- B. IVP**
- C. CT urography**
- D. NCCT**





49. Identify the structure marked by the arrow?

- A. Superior mesenteric artery**
- B. Superior mesenteric vein**
- C. Celiac artery**
- D. IVC**



50. A 20-year-old child presents to the emergency with sudden onset of vision loss in the bilateral temporal fields. MRI was done. What is the likely diagnosis?

- A. Pituitary adenoma
- B. Craniopharyngioma
- C. Rathke cleft cyst
- D. Meningioma



51. A 3-day-old newborn baby boy is brought to the hospital with difficulty breathing, cyanosis and coughing whenever he is fed. The baby was born full-term via vaginal delivery, and his mother had an uneventful pregnancy. He had a birth weight of 2.8 kg and was discharged from the hospital after 48 hours of observation. On examination, the baby appears to be in respiratory distress, with increased work of breathing and decreased oxygen saturation levels. What would be the best contrast of choice for study?

- A. Iohexol**
- B. Gastrograffin**
- C. Water**
- D. Barium**

52. A patient presents to the casualty following blunt trauma to the chest. A chest X-ray was done. Among the following radiographs, in which case would you further evaluate the patient before putting a chest tube?



1.



2.



3.



4.

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

53. What is the best imaging study for diagnosis of cerebral infarct?

A. FLAIR MRI

B. Non-contrast CT

C. Diffusion weighted MRI

D. CECT

54. A 28-year-old woman with a severe headache is scheduled to undergo a CT scan. During history taking, which of the following will you definitely ask for before the commencement of the scan?

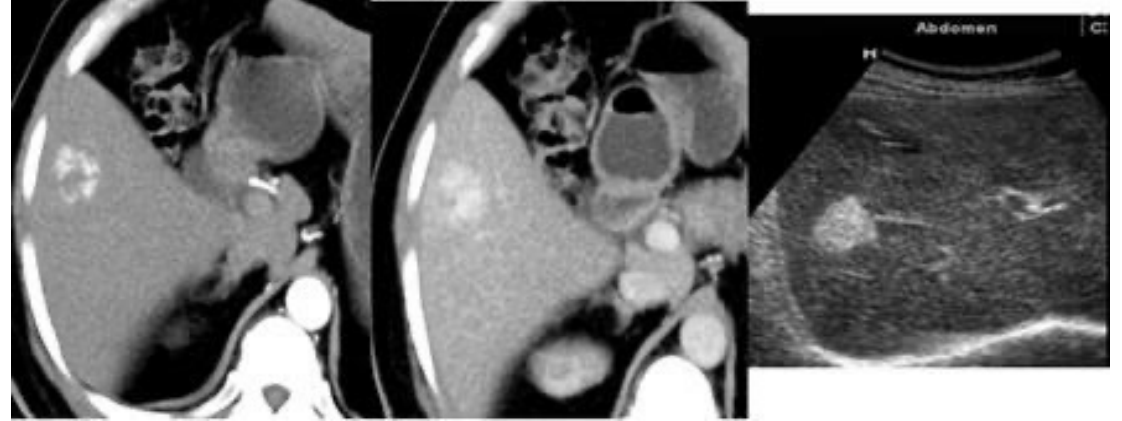
- A. Use of cochlear implant**
- B. LMP**
- C. History of fall**
- D. History of hypertension**

55. Which of the following findings are seen in a high-resolution CT scan of fungal pneumonia?

- A. Kerley lines**
- B. Hilar lymph nodes**
- C. Pleural effusion**
- D. Cavitary lesions with surrounding ground glass opacities**

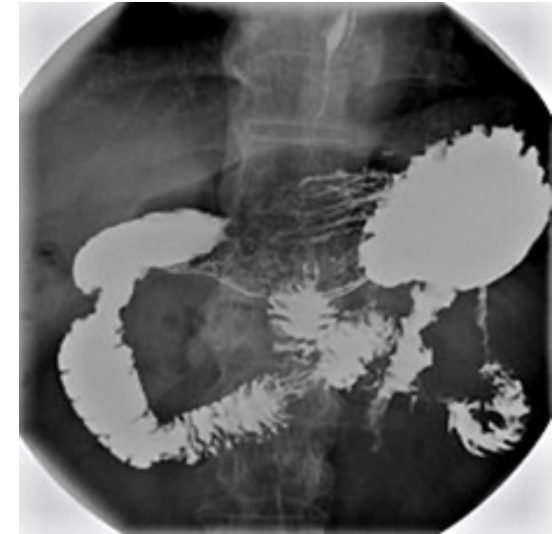
56. A 28-year-old female has been taking oral contraceptive pills (OCPs) for the past 5 years. She presents with abdominal pain and CT scan was done. The most likely diagnosis is:

- A. Hepatocellular carcinoma**
- B. Metastatic infiltrates**
- C. Hepatic adenoma**
- D. Hemangioma**



57. Identify the given image:

- A. Barium meal**
- B. BMFT**
- C. Barium enteroclysis**
- D. Cannot say**



58. Which of the following is the best method for detecting and localization of tumors associated with pheochromocytomas?

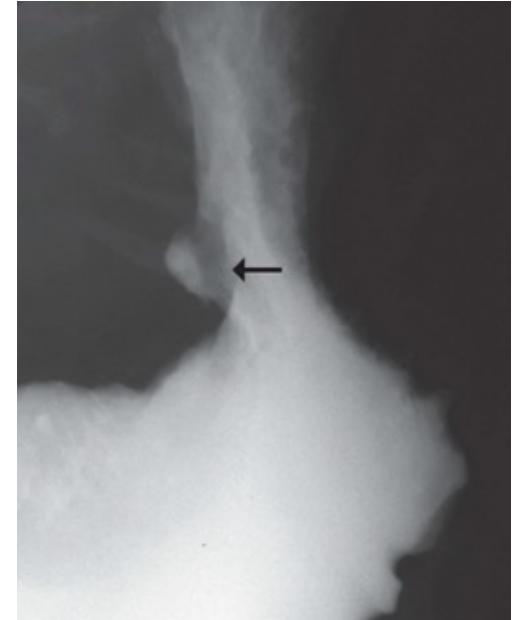
- A. Abdominal CT**
- B. Fluorodopa-PET**
- C. MIBG scintigraphy**
- D. Abdominal MRI**

59. A middle-aged woman who is being treated for rheumatoid arthritis, presented with muscle weakness and rigidity in her upper limbs. Which of the given X-ray views should be performed to evaluate her condition?

- A. Spine in lateral flexion & extension view**
- B. Open mouth view**
- C. Swimmer's view**
- D. Schuller's view**

60. A 45-year-old man is being evaluated for epigastric pain and burning sensation for the past few weeks. A barium study was done for the patient. Which of the following findings on barium study would indicate that the ulcer is benign?

- A. Hampton's line**
- B. Carman meniscus**
- C. Ulcer projecting in the lumen**
- D. Interruption of rugae at ulcer edge**





61. Patient with history of tachyarrhythmias is on implantable cardioverter defibrillator. He develops shock. Best method to know the position and integrity of ICD is:

A. CECT

B. MRI

C. USG

D. Plain radiograph

62. Eggshell calcification is seen in all the following, except?

A. Silicosis

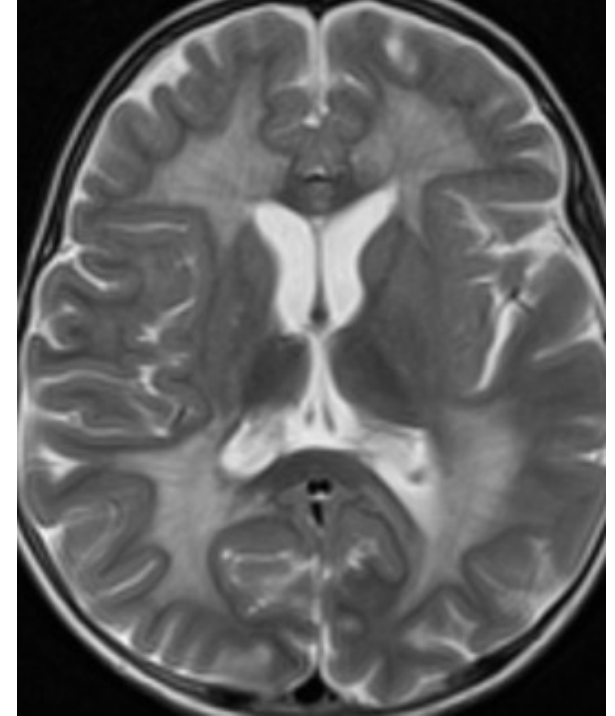
B. Sarcoidosis

C. Post-radiation therapy lymph nodes

D. Metastatic lymph nodes

63. A 2-year-old child with delayed developmental milestones presents to the OPD. A T2 weighted MRI is performed, and the imaging result is shown. What is the likely diagnosis?

- A. Canavan disease**
- B. Alexander's disease**
- C. X linked adrenoleukodystrophy**
- D. Metachromatic leukodystrophy**



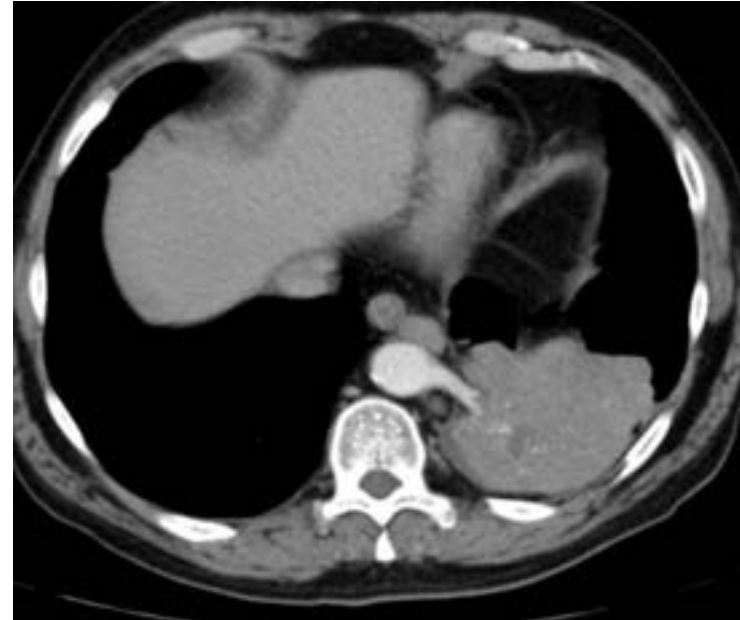
64. What is the likely diagnosis?

- A. ICH**
- B. Lacunar stroke**
- C. MCA embolic stroke**
- D. MCA thrombotic stroke**



65. A 19-year-old college student who had a history of frequent respiratory infections as a child presents to the OPD. He has been experiencing recurrent episodes of coughing and shortness of breath over the past few months. He also complains of fatigue and chest pain, particularly on the left side. The CT scan reveals a mass in the lower lobe of his left lung as shown. What is the likely diagnosis?

- A. Hamartoma**
- B. Lobar pneumonia**
- C. Sequestration**
- D. Squamous cell carcinoma**



66. What is the appearance of CSF on T1 weight MRI-T2 weighted MRI -FLAIR respectively?

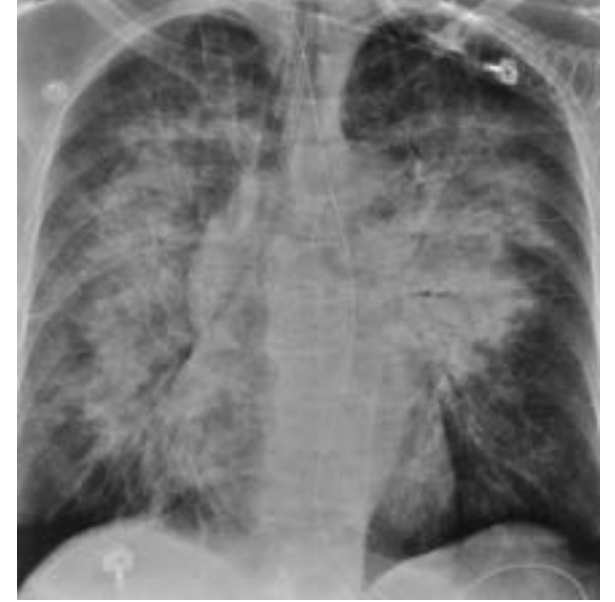
- A. Isointense- Hypointense - Hypointense**
- B. Hypointense-Hyperintense-Hyperintense**
- C. Hypointense -Hyperintense-Hypointense**
- D. Hyperintense-Isointense-Hypointense**

67. Which of the following is not a true statement about CT?

- A. MDCT offers a better 3D reconstruction**
- B. The higher the pitch, the lower will be the CT quality**
- C. Helical CT is faster than non-helical CT**
- D. The higher the pitch, the higher will be the radiation dose**

68. The following CXR appearance is seen in:

- A. Pulmonary embolism**
- B. Pulmonary edema**
- C. Pneumoconiosis**
- D. Sarcoidosis**



69. The imaging shows a detailed cross-sectional view of the esophageal wall and surrounding structures. All of the following are uses of this imaging modality except:

- A. Biliary microlithiasis**
- B. Staging of esophageal cancer**
- C. Drainage of pancreatic pseudocyst**
- D. Evaluation of gastroesophageal reflux disease (GERD)**



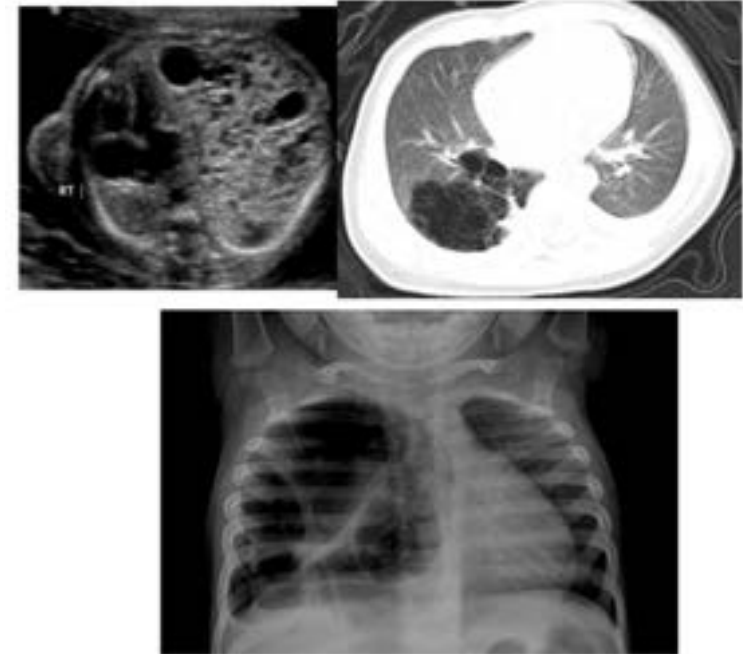
70. Identify what is depicted in the abdominal X-Ray.

- A. IVU**
- B. Retrograde pyelogram**
- C. Ureteric stent**
- D. MCU with vesico-ureteric reflux**



71. A 6-year-old child presenting with recurrent respiratory infections. What is the likely diagnosis?

- A. Pyopneumothorax**
- B. CPAM**
- C. CDH**
- D. Lung abscess**



72. A child was intubated, and post-intubation X-ray is shown below. What would be the presenting symptom?

- A. Right sided tracheal deviation**
- B. Gastric distension**
- C. Drooling on feeding**
- D. Absent breath sounds on the left side**



73. In patients with renal failure, which imaging technique is appropriate for visualizing vessels without causing further renal impairment?

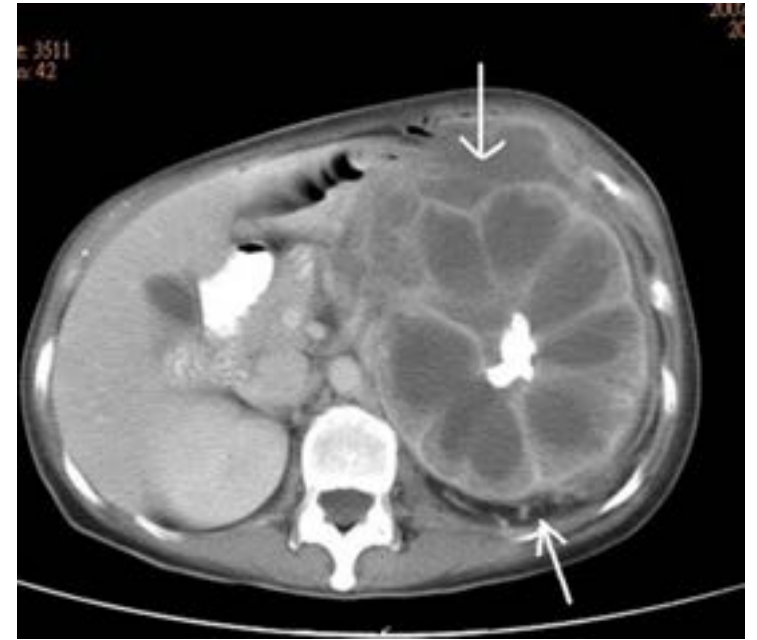
- A. CT angiography**
- B. DSA**
- C. MRI Contrast-enhanced angiography**
- D. Time-of-flight MRI angiography**

74. Which imaging modality is typically used to diagnose dysphagia lusoria?

- A. Chest X-ray**
- B. Barium swallow**
- C. Echocardiogram**
- D. Computed tomography angiography**

75. What is the likely diagnosis based on the given image?

- A. AD PCKD**
- B. PUJ obstruction**
- C. Xanthogranulomatous pyelonephritis**
- D. Putty kidney**

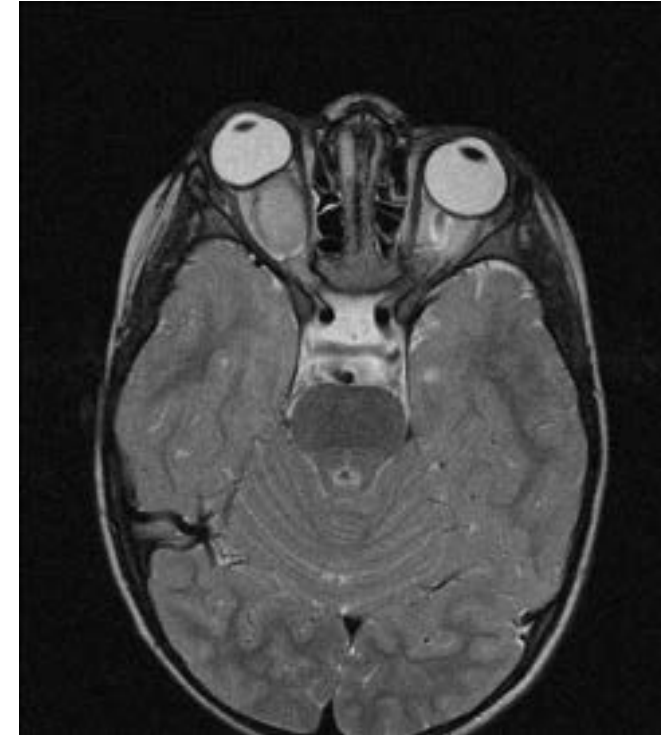


76. Identify the incorrect statement:

- A. The basis of USG is piezoelectric principle**
- B. Higher frequency probe is used to see more superficial structures**
- C. USG contrast is excreted through the renal route.**
- D. Fibroscan for liver cirrhosis uses USG as a modality**

77. A 50-year-old female presents with a history of progressive vision loss in her right eye. An MRI of the orbit reveals a lesion with a characteristic appearance. Which of the following is the most likely diagnosis based on the MRI findings?

- A. Optic nerve sheath meningioma**
- B. Optic nerve glioma**
- C. Choroidal melanoma**
- D. Optic neuritis**



78. All of the following are considered radioprotectors, except:

- A. Zinc oxide**
- B. Amifostine**
- C. Melatonin**
- D. Cisplatin**

79. All of the following are correct differences between normal radiography and mammography, except:

- A. Radiography uses tungsten as the target, while mammography uses molybdenum**
- B. Beryllium is used as the exit window in mammography**
- C. Mammography uses Bremsstrahlung radiation for better tissue contrast**
- D. Aluminum filter is used in radiography, while molybdenum is used in mammography**

80. What is the likely diagnosis based on the skeletal survey of a 10-year-old boy with recurrent fractures?

- A. Osteogenesis imperfecta**
- B. Osteopetrosis**
- C. Osteoporosis**
- D. Non-accidental injury**



Thank You



Cerebellum

Get the balance right

BTR RADIOLOGY

06-09-2025

Dr. Zainab Vora

1. A 25-year-old male was brought to the emergency department after being struck on his head by the house door and temporarily fainting. On examination, his sensorium was intact. NCCT head was performed and is shown below. What is the most likely diagnosis?

A. Extradural hemorrhage

~~B. Concussion~~

C. Diffuse axonal injury

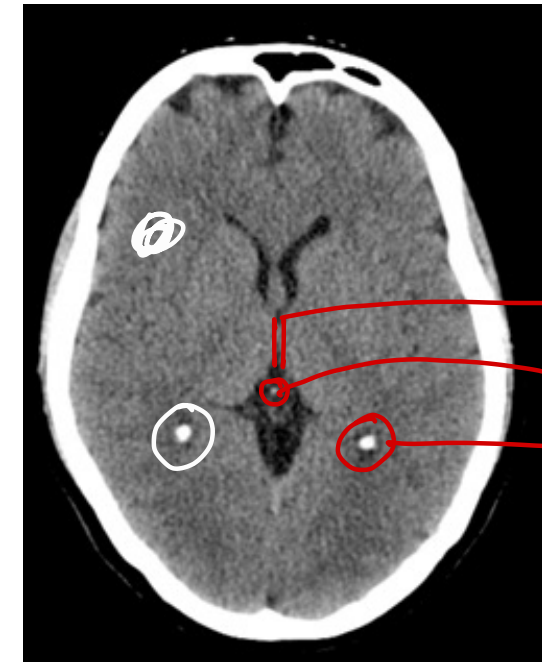
D. Contusion

(N) CT

GCS ↓

High energy trauma

Hge



FOM

Pineal gland

CP Ca²⁺

2. All of the following are correctly paired with HU on CT except:

~~A. Fat: 0-20~~ -10 to -100

Avr: -1000

B. Contrast: 130

C. Acute hemorrhage: 60-70

D. Calcification: 800-1000

ref: HU = 0
water

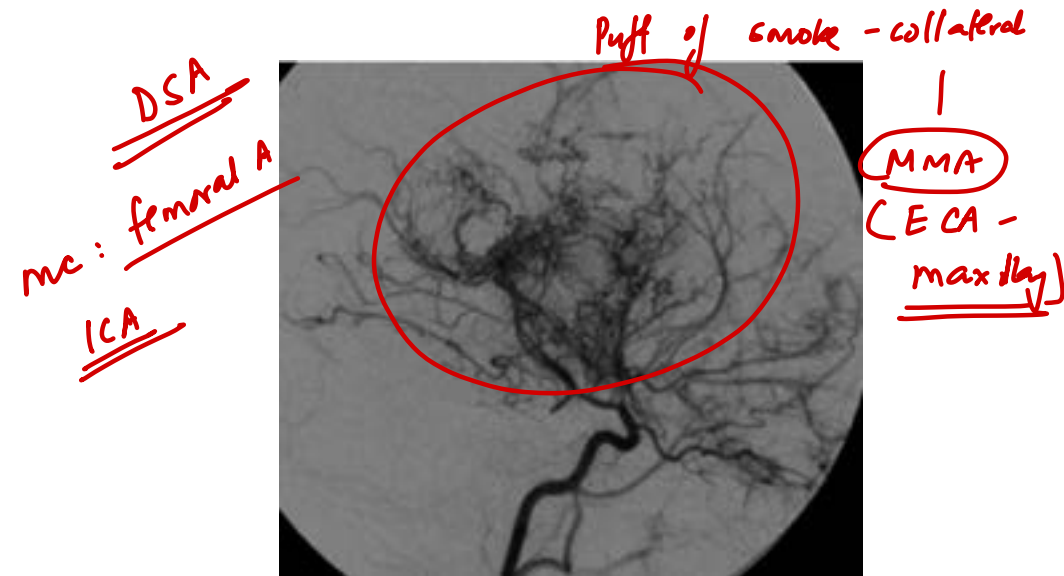
3. A 6-year-old child with a history of transient ischemic attacks and several episodes of weakness is referred for diagnostic evaluation. On physical examination, there is a noticeable murmur around the child's temple. Digital Subtraction Angiography (DSA) is performed, revealing the characteristic imaging shown. The following appearance of DSA is seen in:

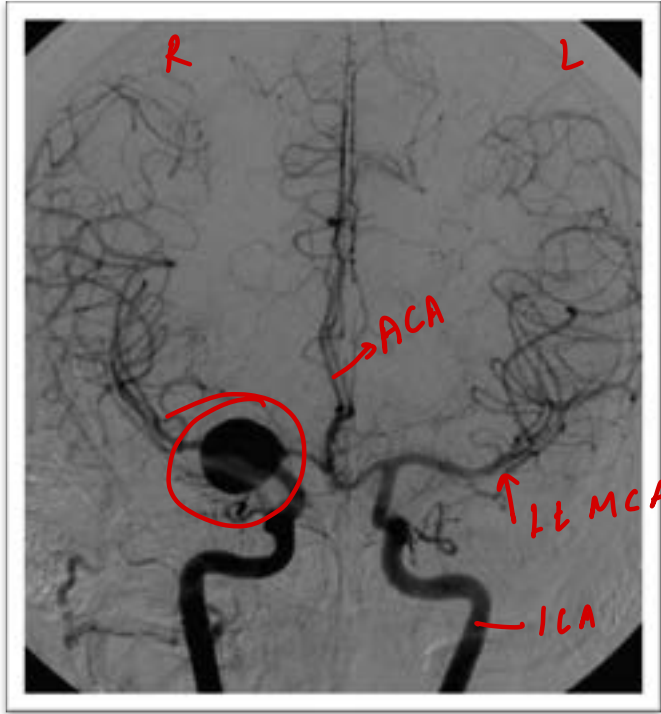
A. ICA aneurysm

B. Moya-Moya disease - ICA stenosis

C. Cerebral infarction

D. Carotid artery thrombosis





RE MCA aneurysms.

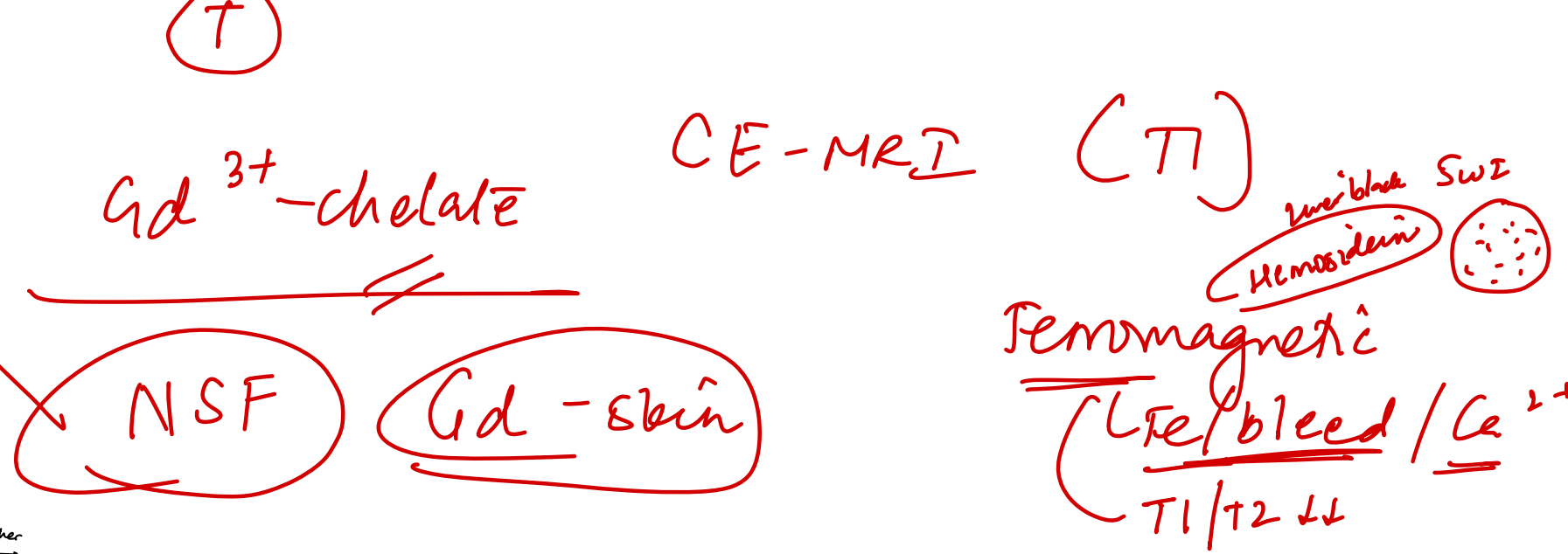


5. During a radiology department seminar, a discussion focuses on the properties and safety of gadolinium-based contrast agents. Which of the following statements about gadolinium is false?

- ~~A.~~ It can cross the blood-brain barrier (BBB) \times BBB MRI inf. enh (tumors)
- B. Paramagnetic material which can shorten the T1 relaxation time (T1 ↑)
- C. Long-term studies show gadolinium deposition in the basal ganglia at high doses (↑)
- D. Injected as gadolinium chelates (↑)



eye of the tiger
 PKAN = Hallowoodan
 Spitz
 NB 1A
 MLD
 Pegglen Mergbacher
 Tugend



6. In a male child having recurrent urinary problems, an imaging as done was shown. What is the management?

A. Endoscopic Ablation

B. Dilation of urethra

C. Dilation of urethra and bladder

D. Excision of verumontanum

X } stricture -

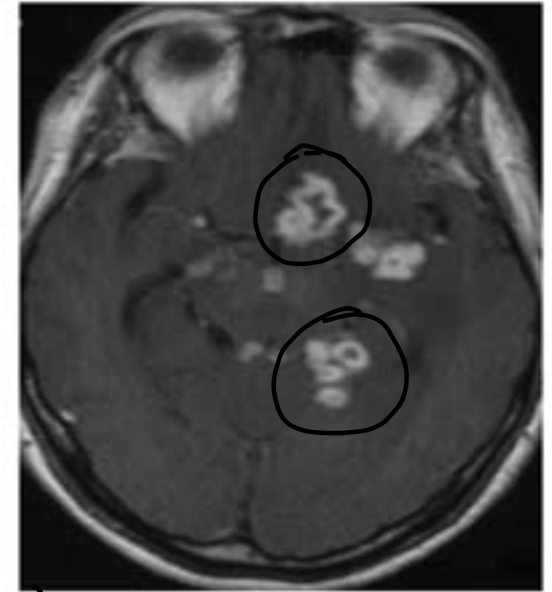


PUV

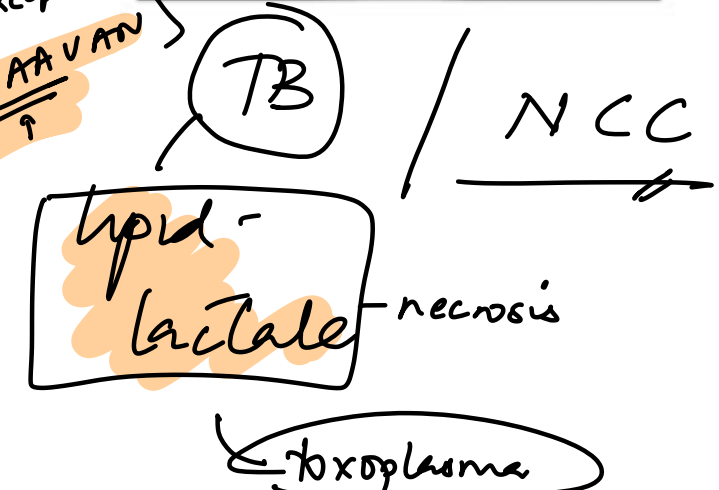
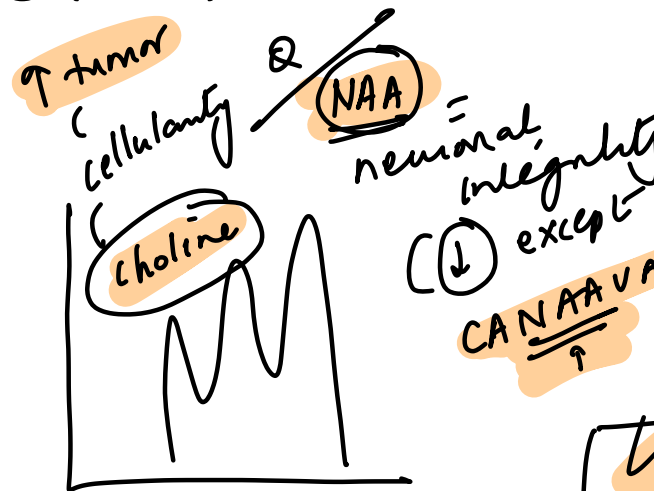
7. A 20-year-old male patient presented with a headache and altered sensorium. MRI was performed, which revealed multiple ring-enhancing lesions. What will be the next step to confirm the diagnosis?

- A. MR spectroscopy
- B. CBNAAT of CSF
- C. Biopsy
- D. Susceptibility weighted imaging (SWI)

pyo



confirmatory



8. A 4-year-old child presents with a history of progressive weakness, irritability, and delayed growth. He was started on appropriate treatment at a CHC. A repeat wrist X-ray is performed, as shown. Based on the clinical features and radiographic findings, what is the most likely diagnosis?

- A. Non-healing rickets
- B. Scurvy ××
- C. Healing Rickets
- D. Osteopetrosis



*irregularly
+
white*

9. A patient who was diagnosed with prostate cancer is being investigated. The bone scan is shown below. What does it indicate?

- A. Increased uptake due to diffuse metastasis
- B. Co-existing multiple myeloma
- C. Normal scan
- D. Osteoporosis

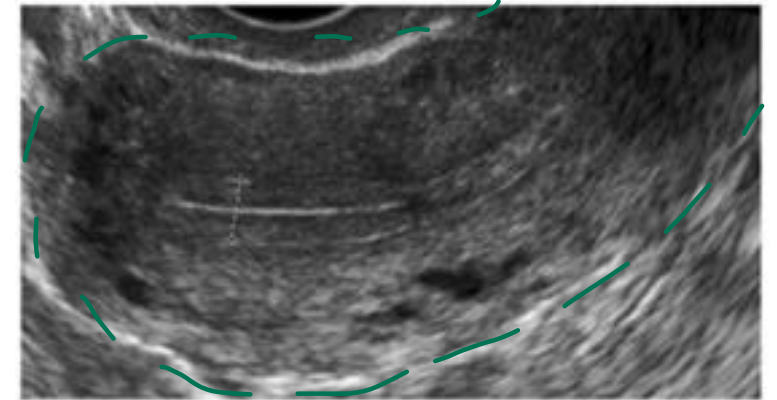
Py2

metab bone disease

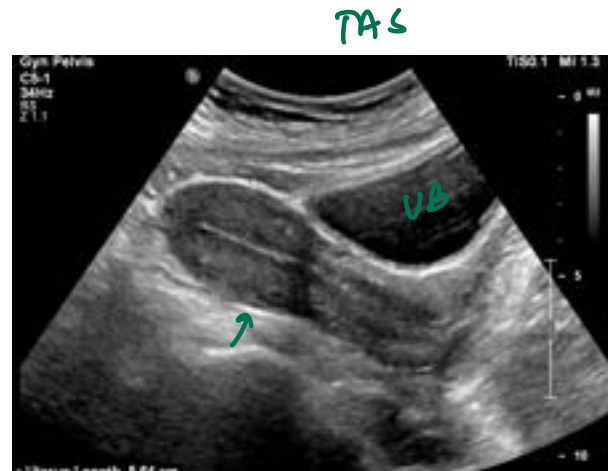
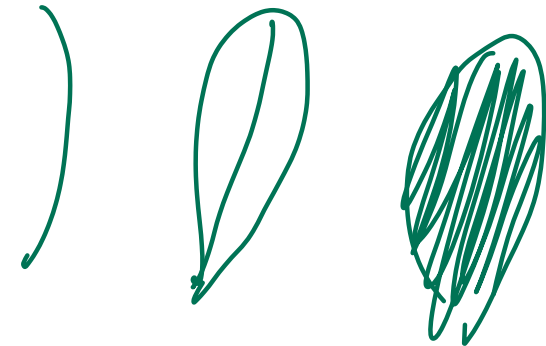


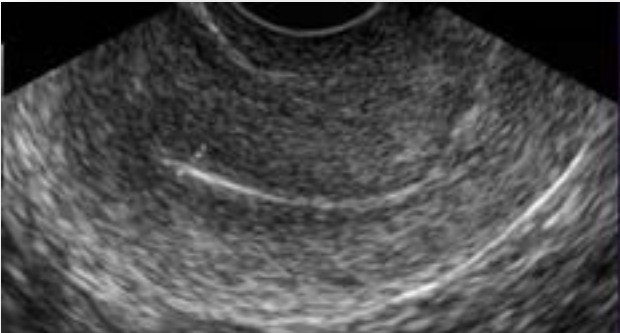


10. An ultrasound of a 24-year-old woman shows an endometrium with a classic trilaminar appearance, as seen in the image provided. Which phase of the menstrual cycle does this ultrasound image most likely represent?

- A. Secretory
- B. Early proliferative
- C. Menstrual
- D. Late Proliferative**



TVS



	<p><u>Early proliferative phase endometrium</u></p>	<ul style="list-style-type: none"> •Thin •Linear •Echogenic
 <p>Ut Endom, III</p>	<p><u>Late proliferative phase endometrium</u></p>	<ul style="list-style-type: none"> •Thick •<u>Trilaminar appearance:</u> <ol style="list-style-type: none"> 1. Central thin, echogenic line 2. Darker echolucent rim in the middle 3. Surrounding echogenic basilar layer
	<p><u>Secretory phase endometrium</u></p>	<ul style="list-style-type: none"> •Thick •<u>hyperechoic</u> •Homogeneous

11. Which of the following will be avid on FDG PET scan?

- A. Typical carcinoid - false -ve
- B. Mucinous adenocarcinoma false -ve
- C. Atypical carcinoid
- D. Calcified TB granulomas xxx
- E. Active TB granulomas (false +ve)

✓ PET
uptake



12. A 70-year-old man comes to the casualty after 3 episodes of sudden loss of vision in his right eye like a curtain falling down, each of which resolved spontaneously after about 2 minutes. He has a history of hypertension and diabetes. Neurological examination of the patient is normal. What investigation would aid in the management of this patient?

A. Doppler of the neck

B. MRI Diffusion-weighted imaging of the brain

C. Non-contrast head CT

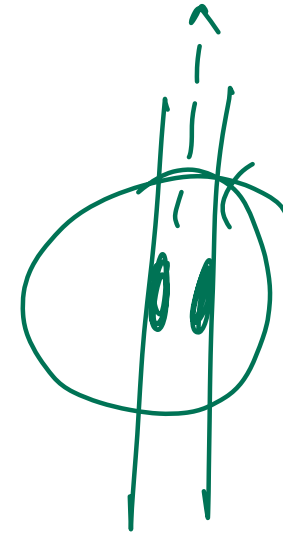
D. Ocular B scan

x RD

TIA

XX
stroke

= Amaurosis fugax



Carotid A stenosis:

stenting /
end -
arterectomy

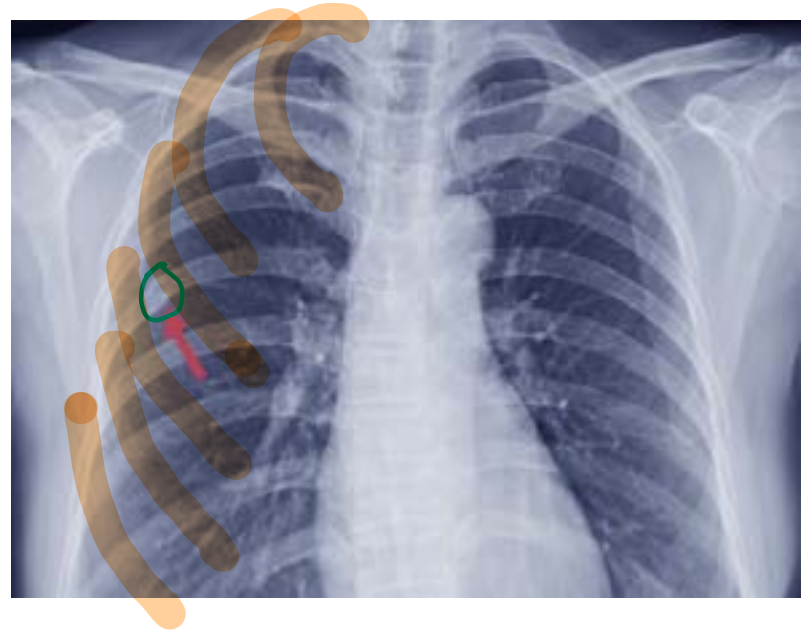
13. Identify the fracture site in the X-ray shown below.

A. Right posterior end of 5th rib

B. Right posterior end of 6th rib

C. Right posterior end of 7th rib

D. Right anterior end of 6th rib



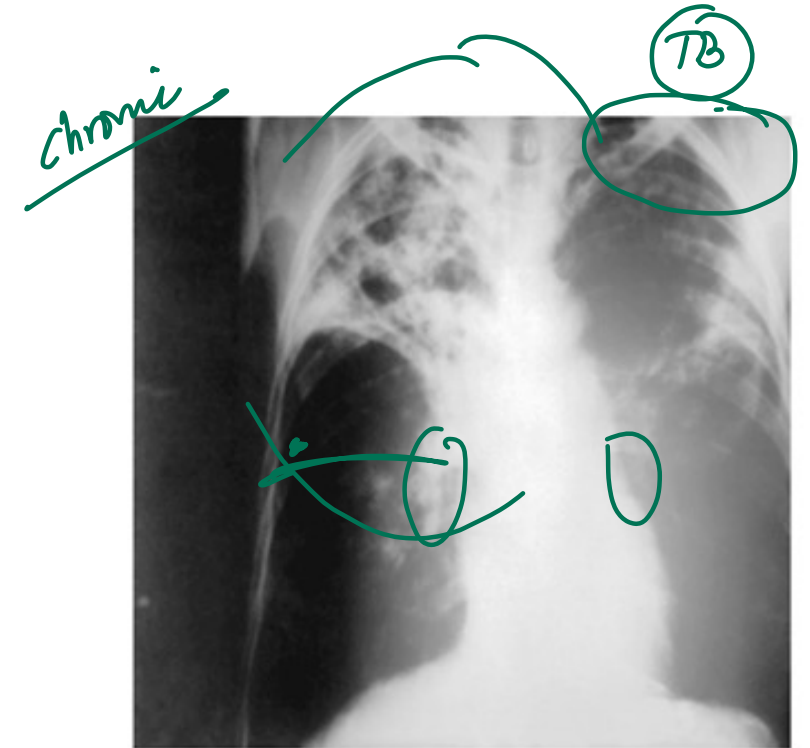
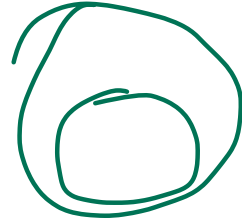
14. A 46-year-old male presented to the clinic with a persistent cough, fatigue, weight loss. Xray of the patient is as given below. What is the most likely diagnosis?

A. Aspergilloma X

B. TB

C. Carcinoma lung X

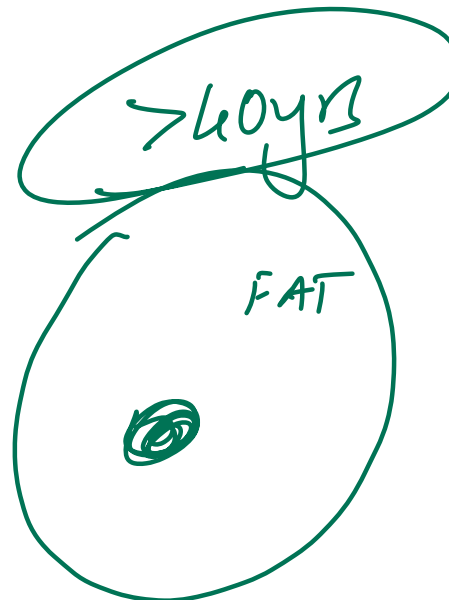
D. Sarcoidosis X



15. Which of the following isn't considered a benefit of USG compared to Mammography?

- ~~A. Can be used for screening mammographically undetectable or clinically non palpable breast mass~~
- ~~B. Useful in young females with dense breast~~
- ~~C. Differentiates between solid and Cystic lesions in the Breast~~
- D. Guided biopsy can be done

Pyg



16. Cardiac output can be determined using the following except?

A. Pulmonary arterial catheterisation ✓

→ Fick's law

B. Coronary angiography

C. Cardiac MRI ✓

→ 10L for Q for

D. Echocardiography ✓

E. MUGA scan

18F FDG PET - ♥ viability

17. A child presents with breathlessness. On chest X-ray, the following object is seen. Identify?

~~A. Button battery~~

B. Coin

C. Ball

D. Bottle cap



Pyq



double ring

esophagus

VQIE

alkali

Remove immediately

18. A 42-year-old woman presents with a severe, sudden-onset, throbbing headache and double vision for the past 30 minutes. She has a history of migraine and reports frequent headaches. She has not had her period for several months. On examination, her blood pressure is 95/61 mm Hg, and visual field testing reveals decreased visual acuity and loss of peripheral vision in both eyes. MRI of brain is shown below. Which of the following is the most likely diagnosis?

A. Transient ischemic attack

B. Pituitary apoplexy

C. Sheehan syndrome

D. Migraine with aura

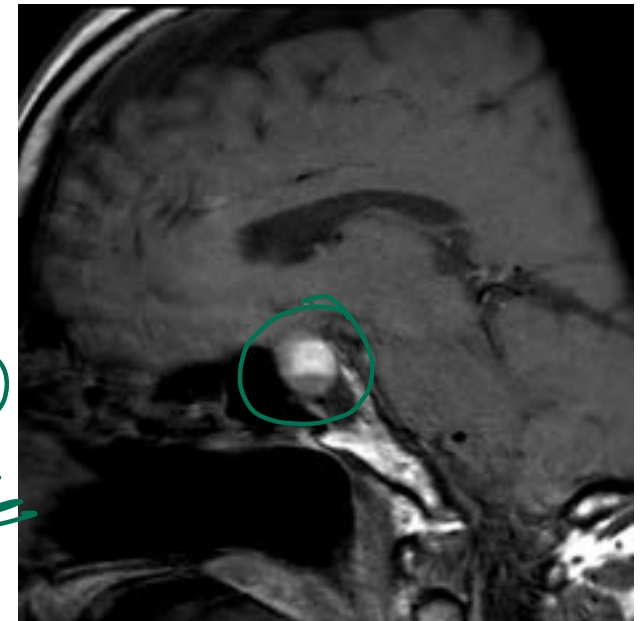
pit adenoma + bleed

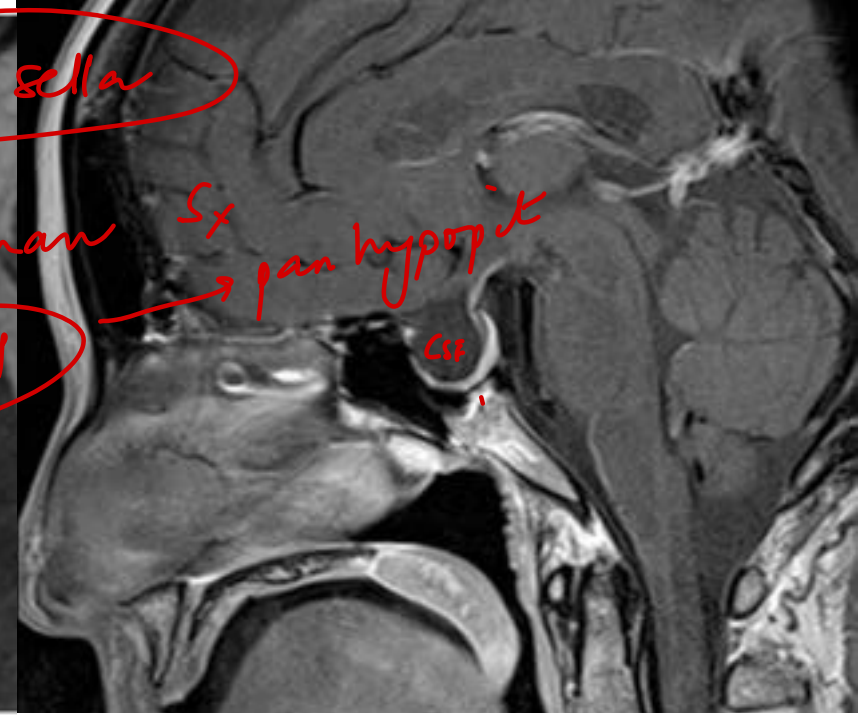
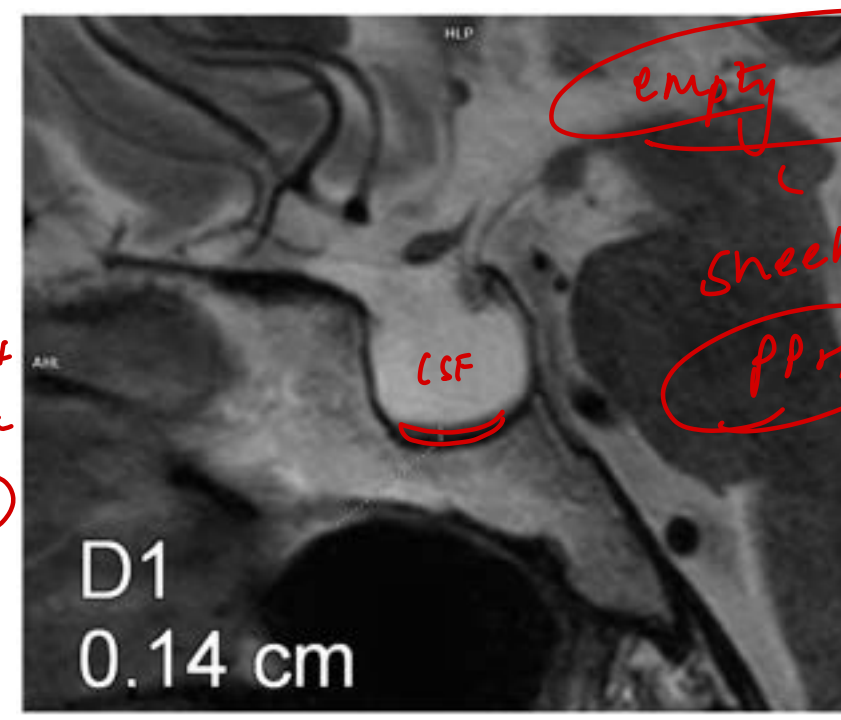
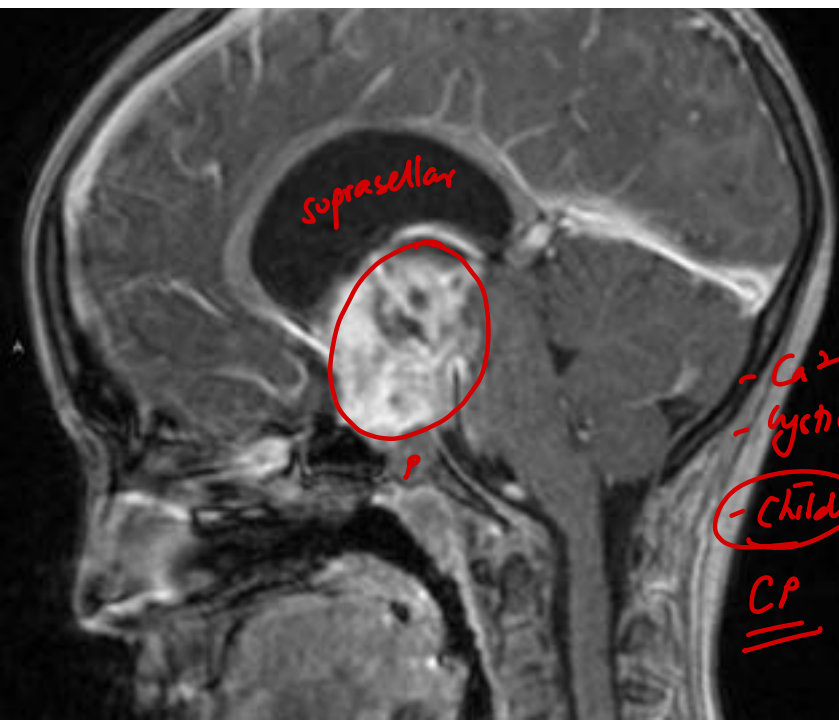
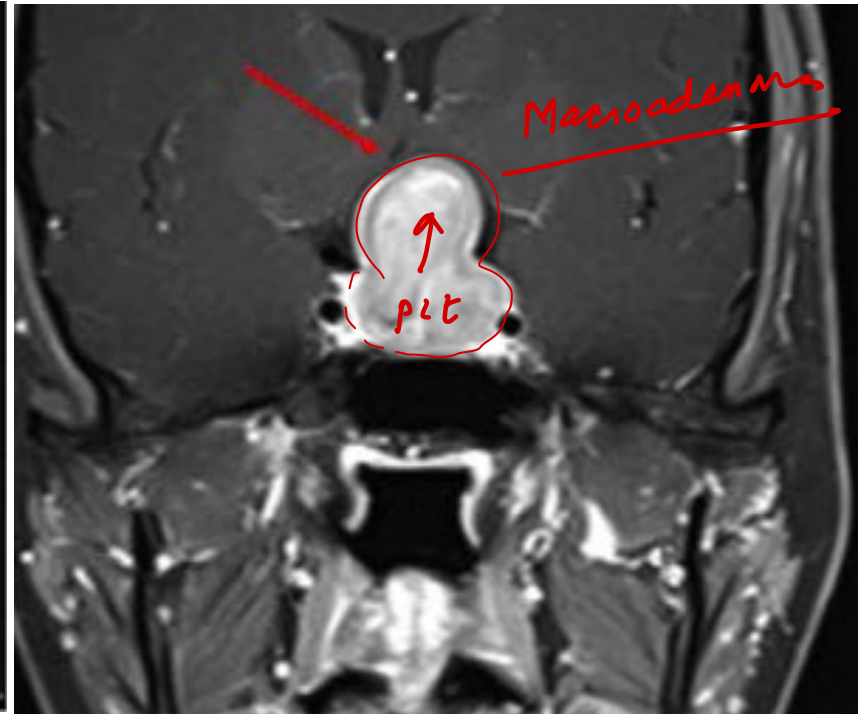
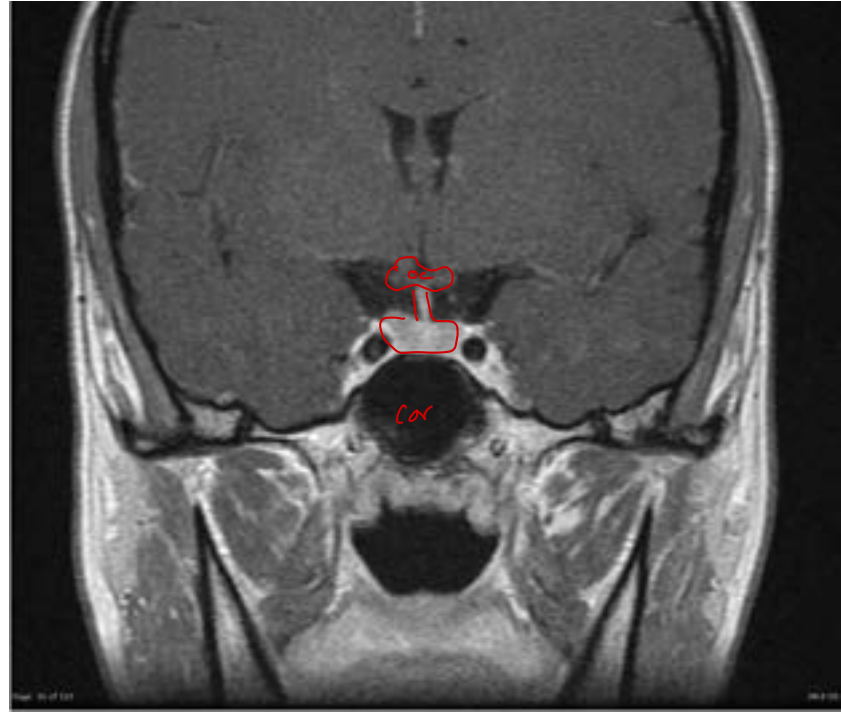
acute shock f

bitemp H.

T1↑

bleed





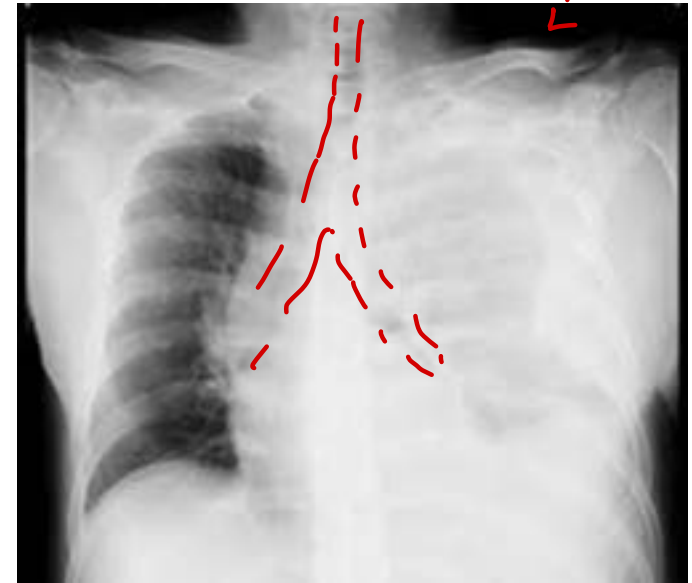
19. A 35-year-old male presents to the trauma center after RTA with shortness of breath. The supine CXR is shown below. The BP is 109/88mm Hg and pulse is 98/min. What is the next step?

A. Needle thoracocentesis → *pneumothorax*

B. ICD insertion

C. ET Intubation

D. NG tube insertion



A B C D E

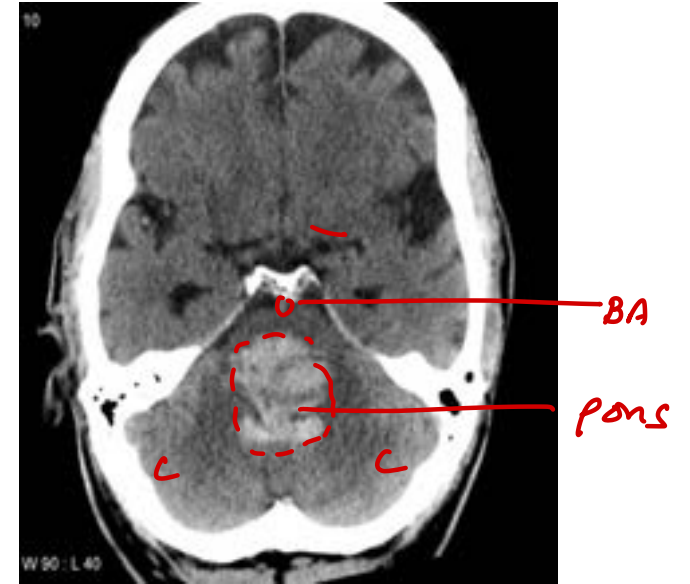
20. A 56-year-old male presents with sudden onset altered sensorium. What is the likely diagnosis?

A. Hypertensive hemorrhage — Putamen

B. Berry aneurysm rupture → SAH

C. Pontine hemorrhage

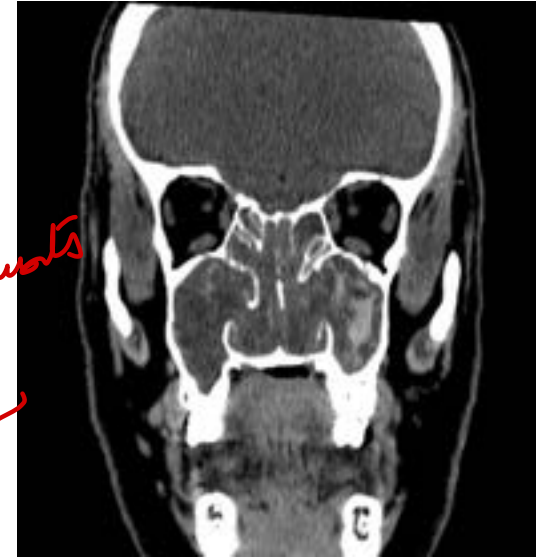
D. EDH XX



21. What is the most likely cause of the condition depicted in the HRCT below?

- A. Aspergillus niger → *otomycosis*
- B. Staphylococcus aureus X
- C. Aspergillus fumigatus
- D. Candida albicans X

*Allergic
fungal
rhinosinuitis
or*



*double
density
signs*

22. A 60-year-old male presents to the casualty with chest pain radiating to the back. He is diagnosed with a type A aortic dissection and undergoes emergent open repair. During the postoperative period, he develops thoracic back pain and an inability to move his bilateral lower extremities. Pinprick testing reveals bilateral loss of pain and temperature sensation below the level of the xiphoid process. Injury to which of the following arteries most likely explains this patient's clinical presentation?

A. Artery of Adamkiewicz

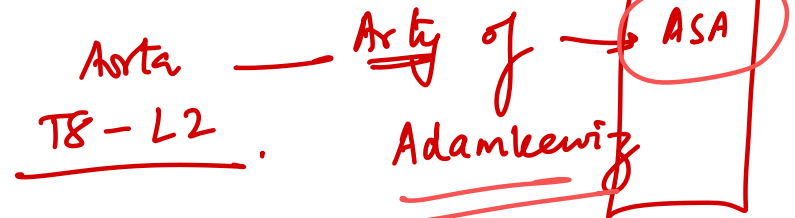
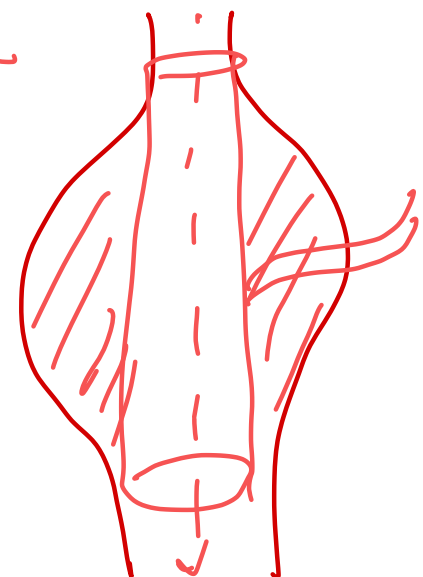
B. Anterior thoracic epidural artery

C. Posterior spinal arteries

D. Middle meningeal artery

- Aortic

ACA - VA



23. A patient presents to emergency department with chronic ear discharge and head ache with ear pain. CT revealed the following findings. What is the most probable diagnosis?

- A. Temporal abscess
- B. Occipital abscess
- C. Cerebellar abscess
- D. Subdural abscess



C

24. What is the investigation of choice for PTH adenoma?

~~A. Tc99-Sestamibi scan~~

B. Tc99-Per technate scan

C. Per technate SPECT scan

D. CT

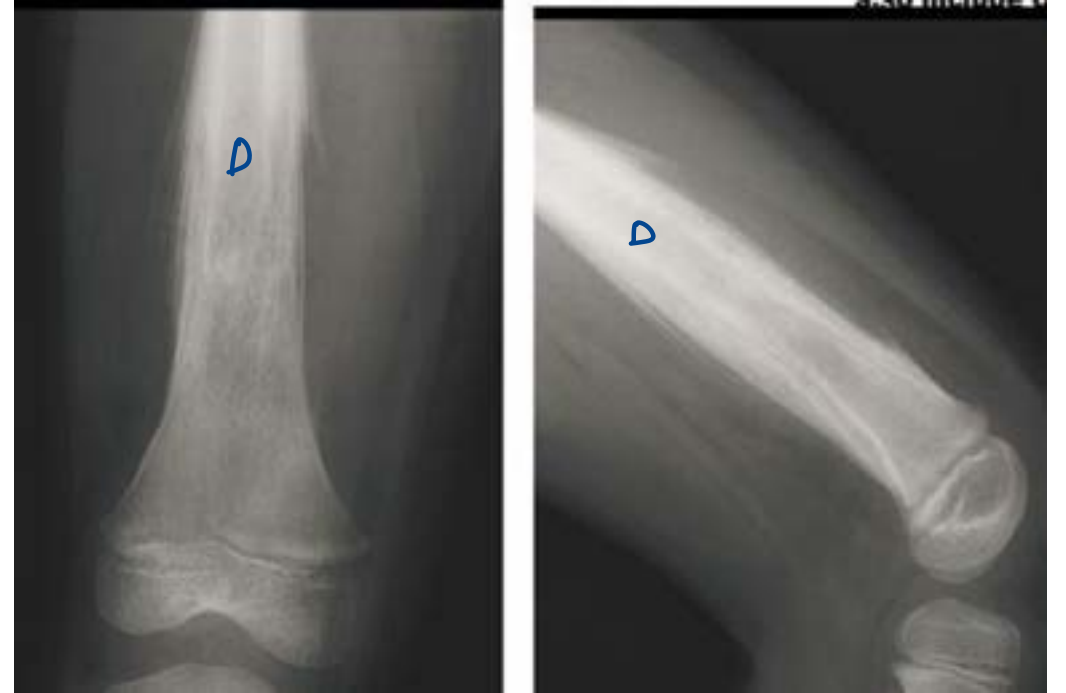
→ Meckel's

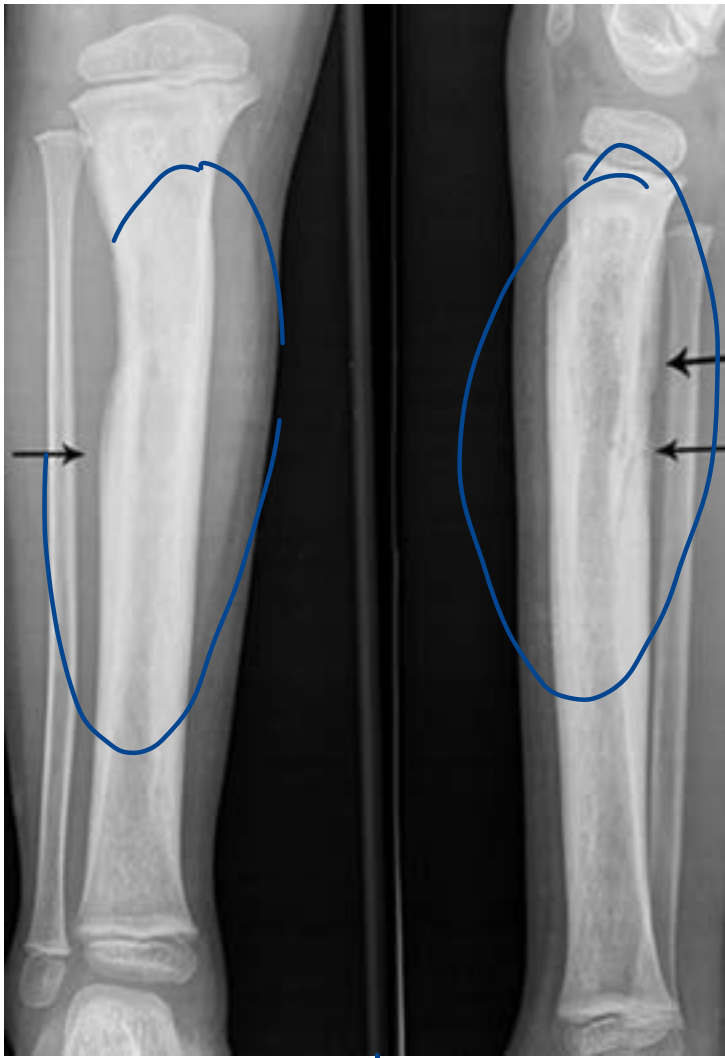
SPECT > Tc99

25. A 15-year-old male with pain and swelling in the thigh since last one month. Xray is shown below. What is the likely diagnosis?

- A. Osteoclastoma
- ~~B. Ewing sarcoma~~
- C. Brodie abscess
- D. Osteosarcoma

D / *onion peel*

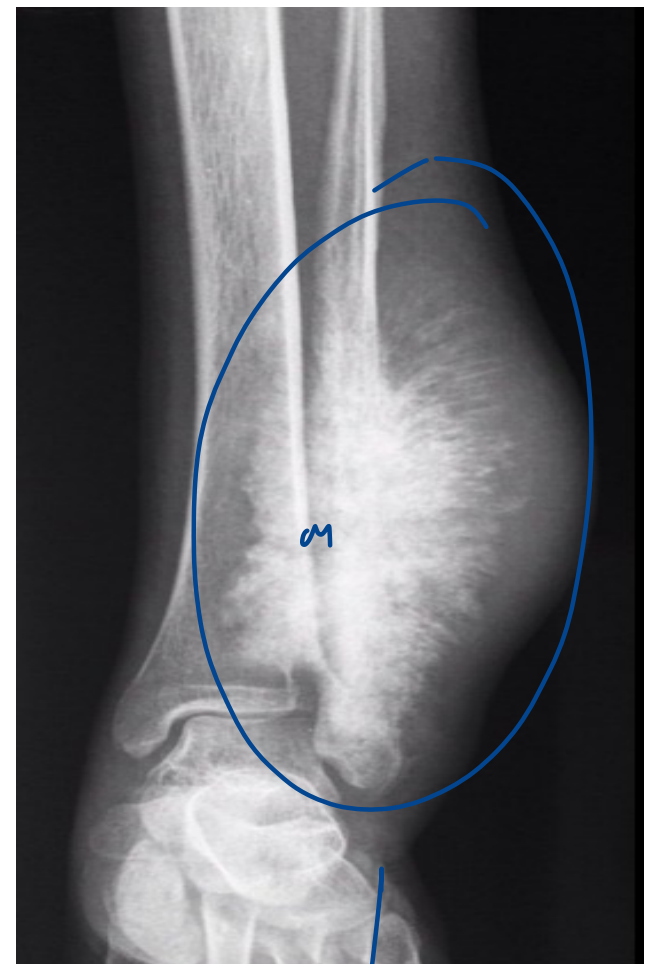




chronic OM



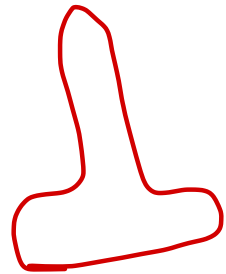
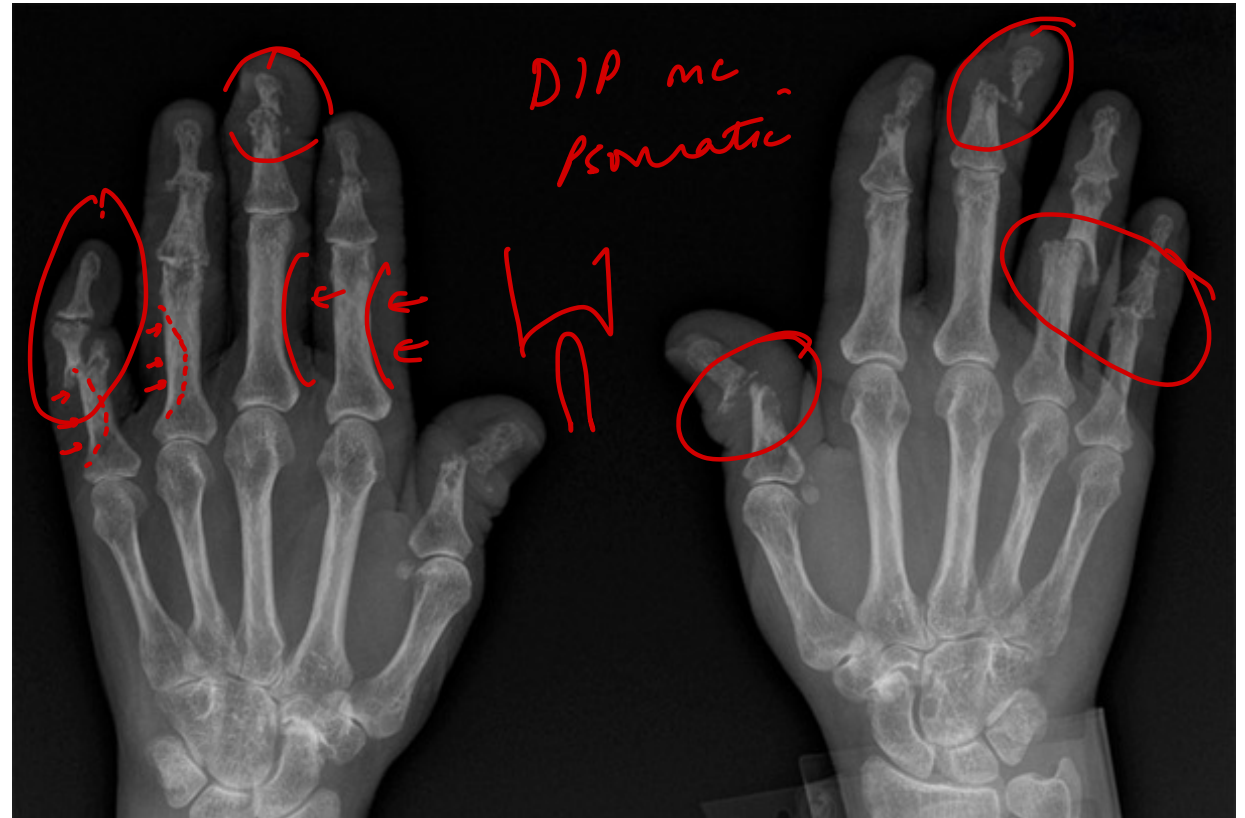
subacute OM
Brodie's



osteosarcoma

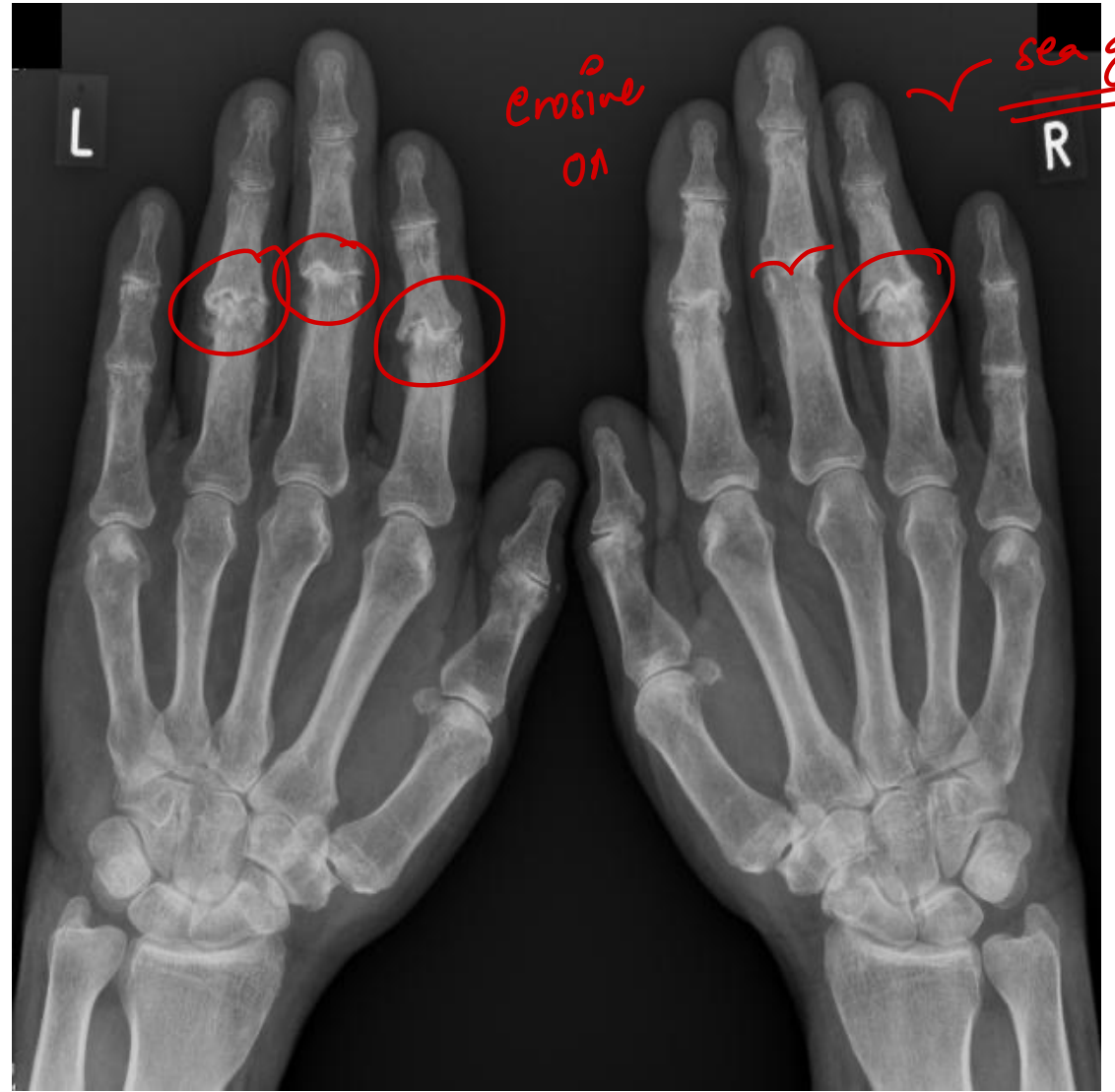
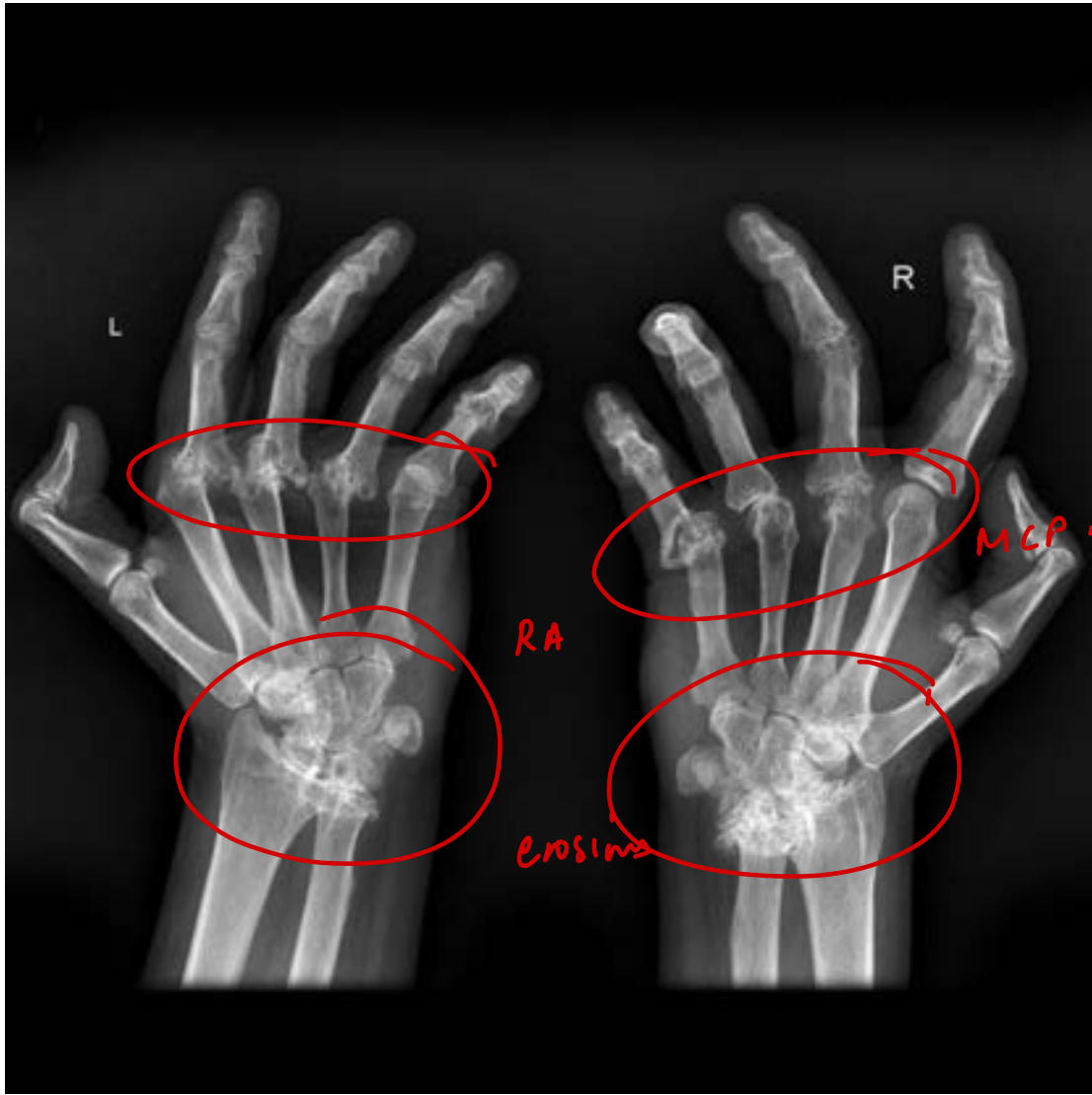
26. What is the likely diagnosis based on the Xray ?

- A. Erosive OA X
- B. Rheumatoid arthritis X
- C. Hyperparathyroidism
- D. Psoriatic arthritis



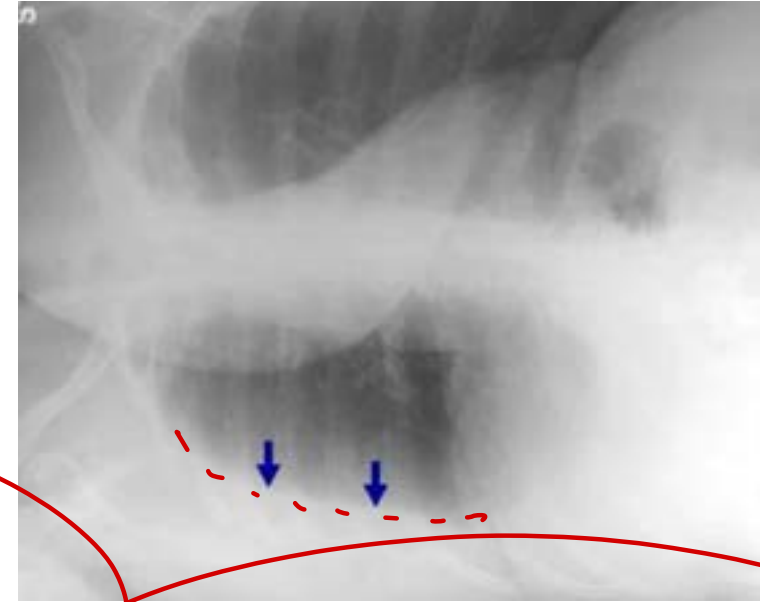
Spade

acromegaly



27. What is the minimum amount of fluid to be detected by this X-ray?

- A. 25ml
- B. 5ml → USG
- C. 75ml → Lateral
- D. 250ml → Erect

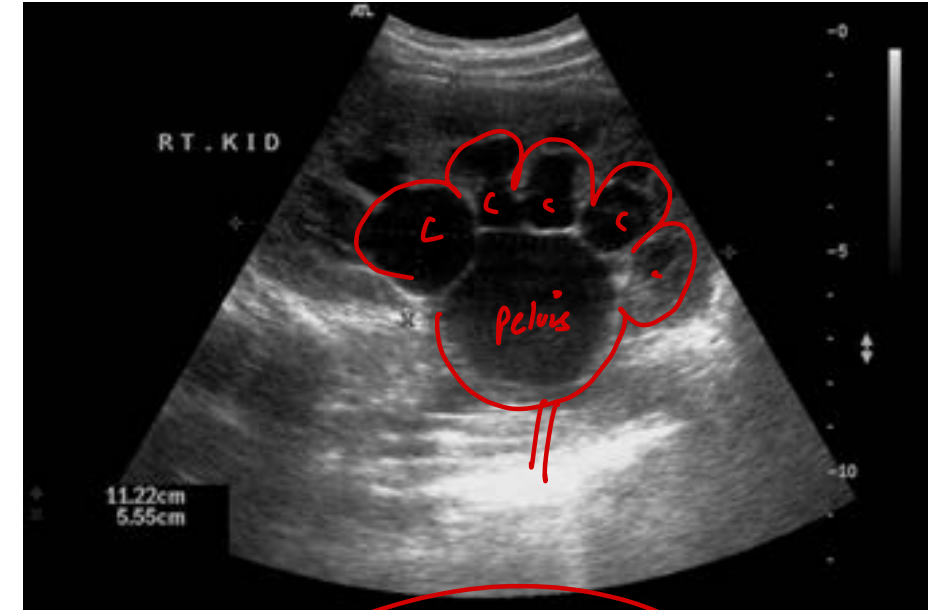


USG > Lat^{l/L} dec > Lat > erect > supine Lat decubitus

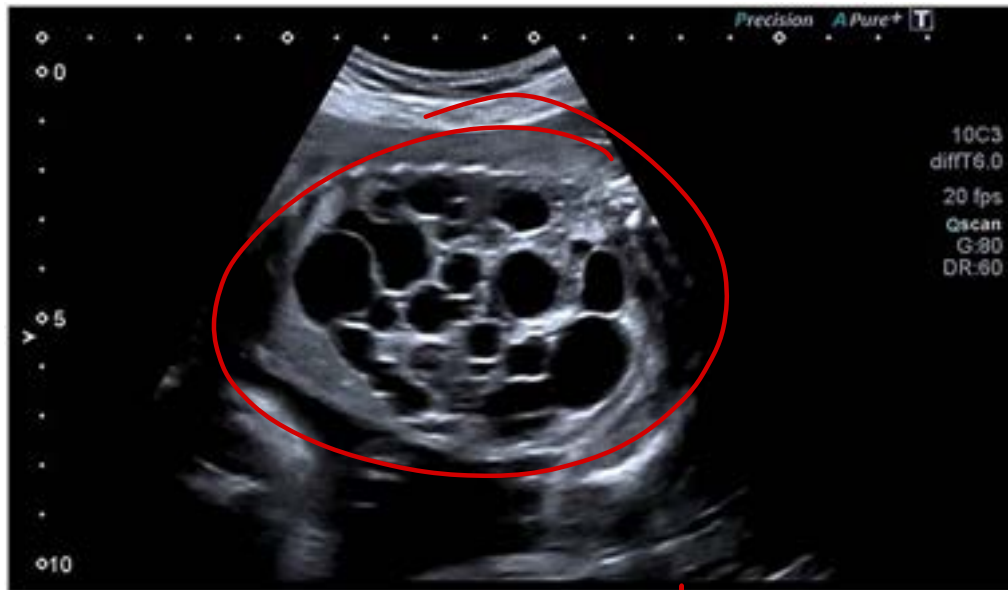
↓
25ml

28. What could be the possible diagnosis of a 35-year-old male patient with a palpable flank lump whose ultrasound abdomen is shown below?

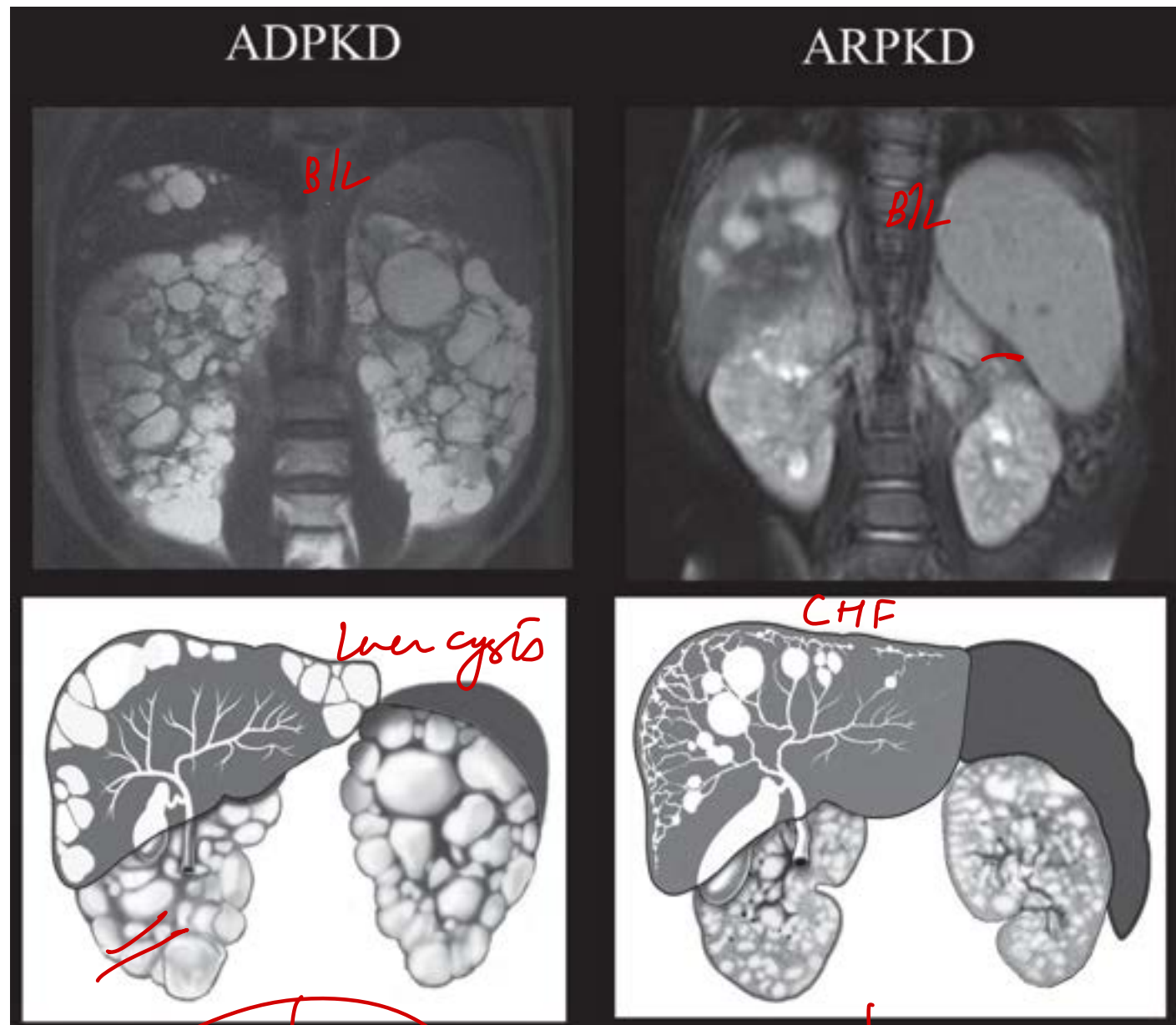
- A. Multicystic dysplastic kidney ~~X~~
- B. Autosomal dominant polycystic kidney disease ~~X~~
- C. Congenital PUJ obstruction
- D. Autosomal recessive polycystic kidney disease ~~X~~



PUJO



MCDK → V/L



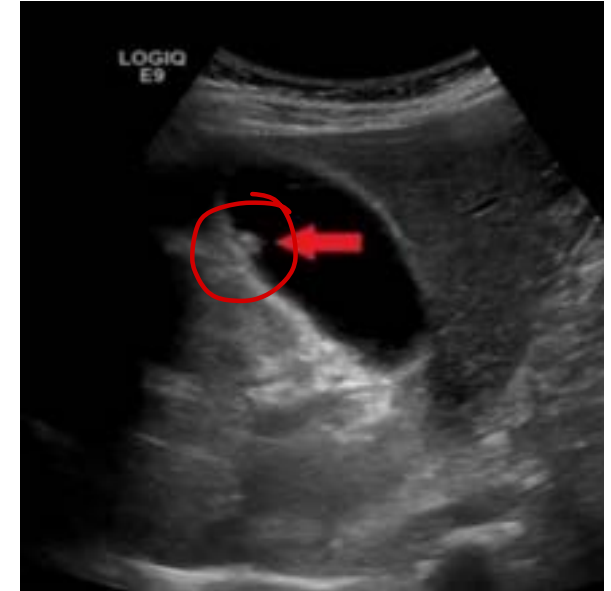
adult

infant

29. A lady was incidentally diagnosed with a 0.5 cm solid mass in her gall Bladder on USG as shown. What is the next step in the management?

- A. Reassure the patient and follow up
- B. Laparoscopic Cholecystectomy
- C. Open Cholecystectomy
- D. CECT Abdomen

>1cm



30. A 4-month-old girl is diagnosed with a febrile urinary tract infection. A voiding cystourethrogram is shown in the image. Which of the following is the most likely cause of this infant's presentation?

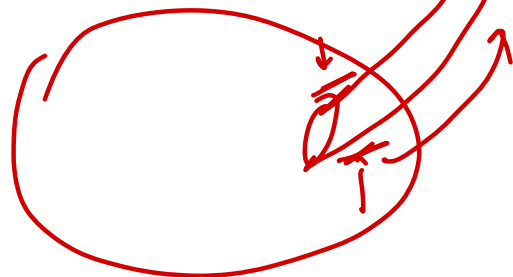
A. Congenital short intravesical ureter length

B. Damage to the rectovaginal septum ~~XX~~ ARM

C. Obstruction due to a renal stone ~~XX~~

D. Presence of a posterior urethral valve ~~XX~~

VUR



VCOG

MCU



31. A 13-year-old boy presents to trauma center after skid injury, with lower abdominal pain and blood at meatus. The bladder is not palpable. What is the next step?

A. SPC

B. Foley's catheterization ~~xy~~

C. Wait and watch

D. RGU

1
urethral trauma

32. A 3-month-old baby presents to you with jaundice. USG of the liver shows the following abnormality. What is the best investigation to confirm the diagnosis?

A. Tc99m sulfur colloid scan

~~B. Intra-operative cholangiography~~

C. MIBG

D. MRCP

best / gold st

Triangular
Cord
Sign



Intra op > HIDA > USG .

EHBA

33. A 45-year-old woman comes to the emergency department following a fall with severe back pain, vomiting, and hypotension. CT findings are given below. What is the diagnosis?

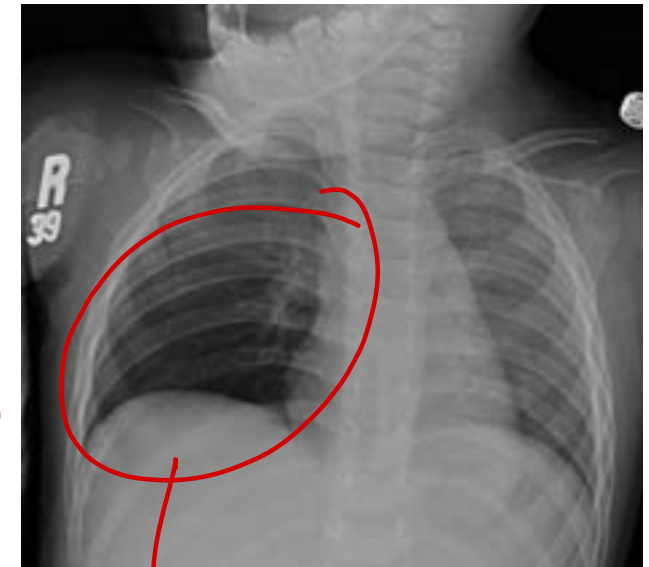
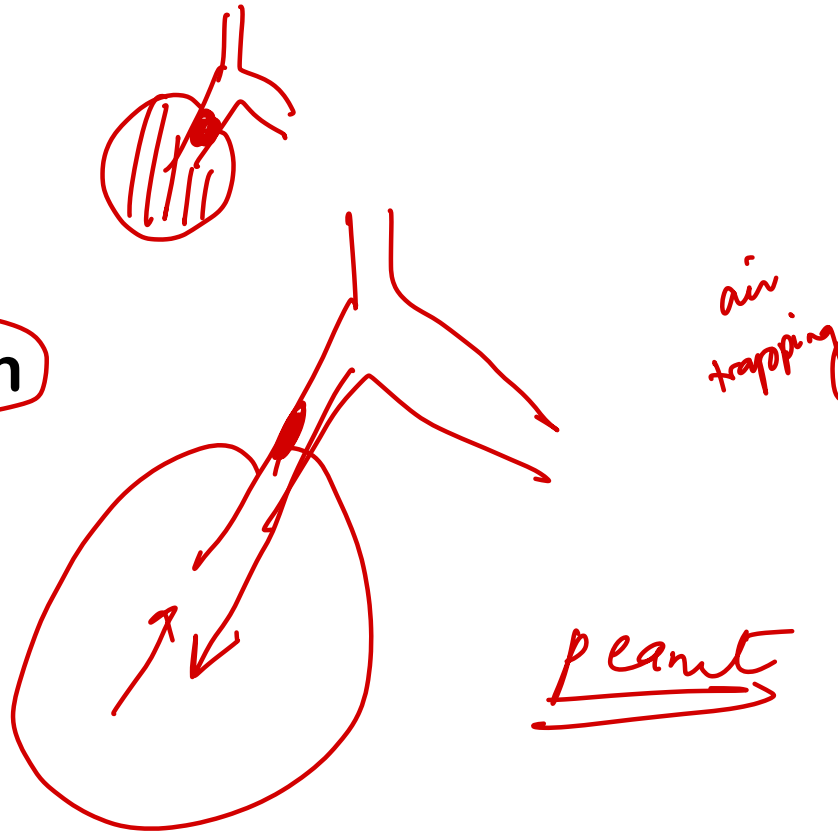
- A. Grade 4 renal injury
- B. Renal cell carcinoma
- C. Aortic aneurysm rupture
- D. Wunderlich phenomenon



AML

34. 8-month-old boy is brought to the emergency department due to respiratory distress. Severe cough and wheezing began an hour ago while the patient was playing at his cousin's house. Chest radiograph is shown in the image below. Which of the following is the most likely cause of this patient's symptoms?

- A. Anaphylaxis
- B. Asthma
- C. Bronchiolitis
- D. Foreign body aspiration



RLL (mc)

35. Which of the following statements are false regarding X Rays?

- A. Loss of soft tissue planes is the earliest X-ray change of infection (T)
- B. Glass pieces can be seen as radiopaque in X-ray images (T)
- C. Cartilage is not visualized on X-ray. (T) MEI
- ~~D. Live bone is more radio-opaque than dead bone on X-Ray images~~

sequestrum - sclerotic

dead bone



36. 22-year-old man presents to the emergency department after RTA. His blood pressure is 80/60mmHg, his pulse is 110 bpm, and his respiratory rate is 18 breaths per minute. Which of the following will be the next step in this case?

A. eFAST

B. CECT

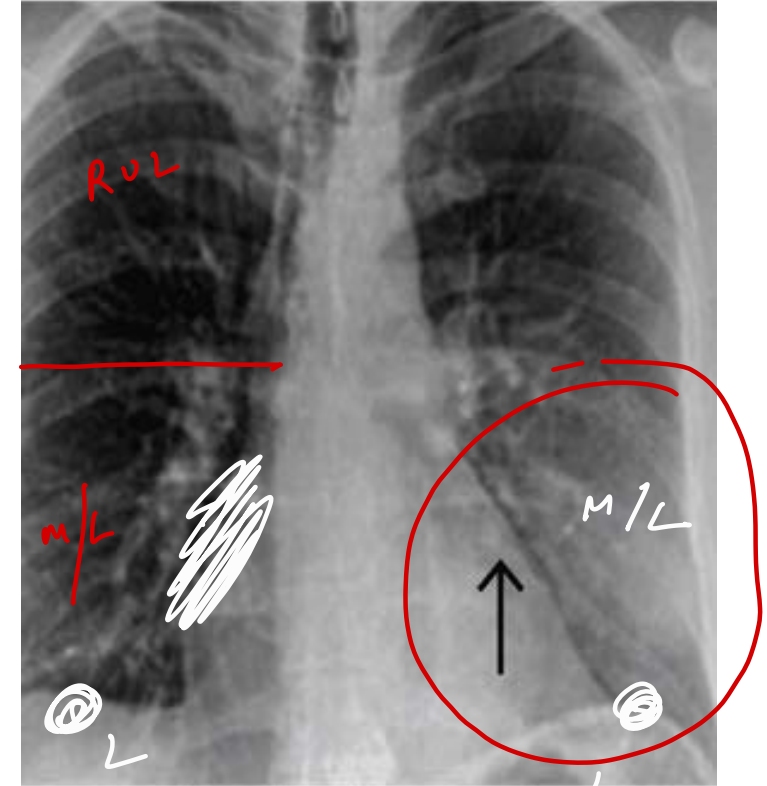
C. NCCT

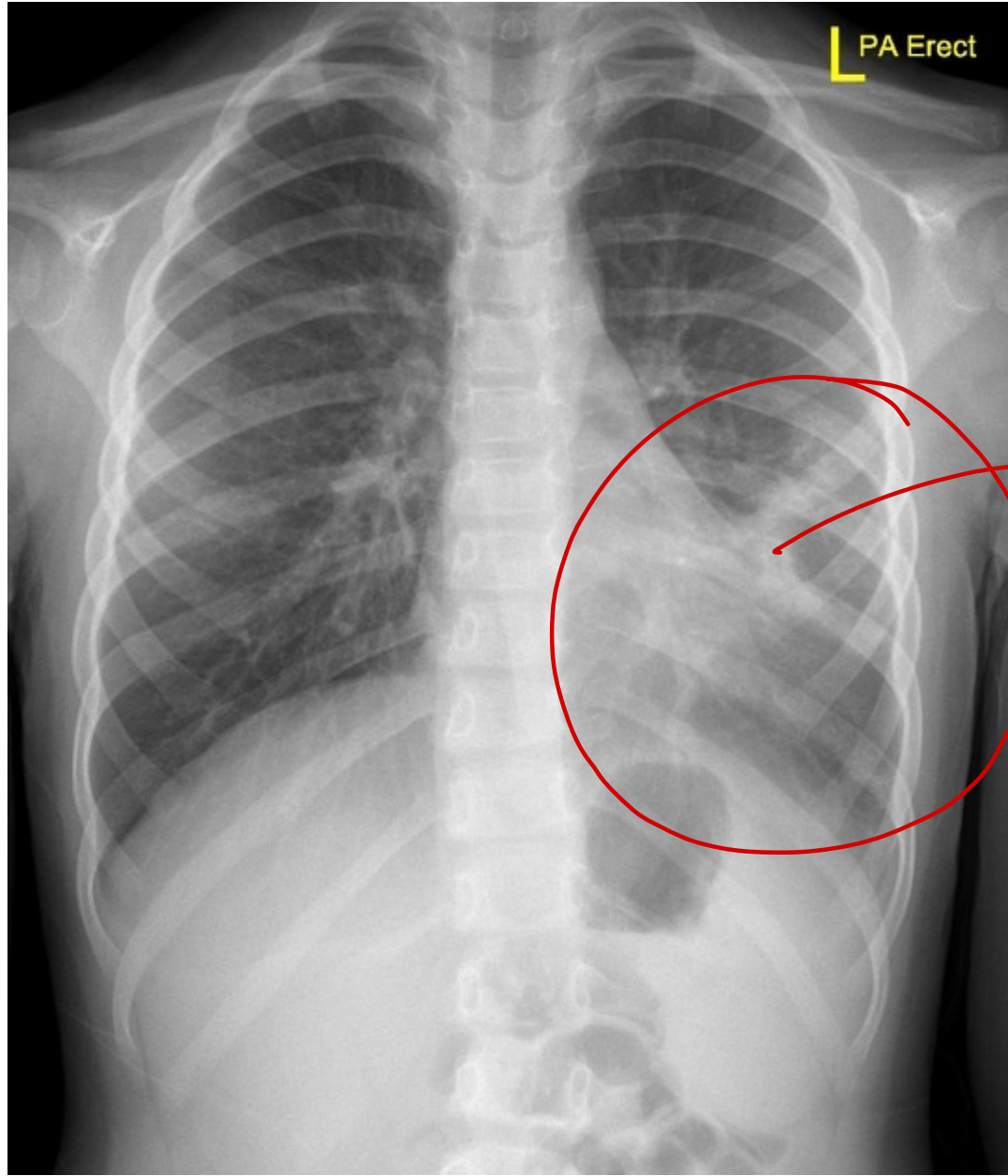
D. DPL

B 7A

37. A 28-year-old man presents with the history of cough for one week. He also gives a history of hemoptysis for 1 month and fever for 4 days. The X-ray is given below. What is the diagnosis?

- A. LLL consolidation**
- B. Lingula consolidation**
- C. LUL consolidation**
- D. Pericardial effusion**

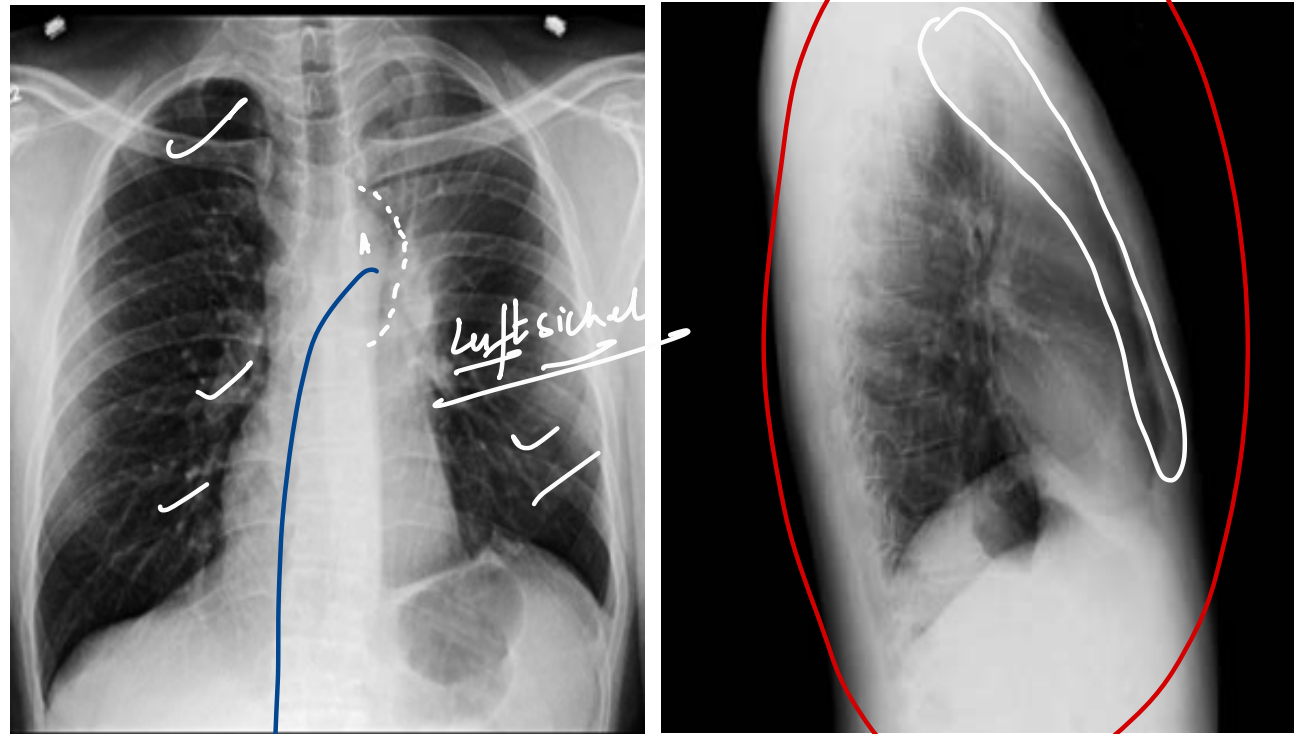




Lingula.

38. An 28-year-old man presents with the history of cough for one week. He also gives a history of hemoptysis for 1 month and fever for 4 days. The X-ray is given below. What is the diagnosis?

- A. RML consolidation
- B. LLL collapse
- C. LUL collapse**
- D. Pericardial effusion



LLL hyperinflated

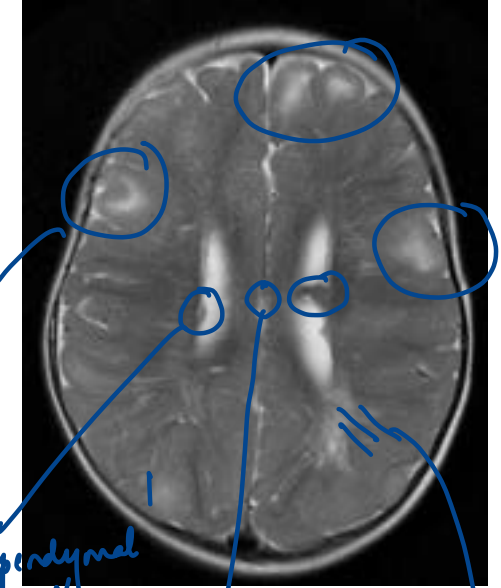
39. A 6-month-old infant presents with a history of multiple seizures and developmental delay. On physical examination, you notice facial lesions, hypopigmented macules on the skin, and unguinal fibromas. MRI brain is shown. What is the likely diagnosis?

A. TSC

B. NF1

C. VHL

D. Birt-Hogg-Dube syndrome



ash leaf

adenoma sebaceus

Cortical tubers

Subependymal nodules

major

SEGA

radial migr. lines

minor

40. A 30-year-old male presents with chronic sinusitis and recurrent respiratory tract infections since childhood. CXR is shown below. Which of the following is the most likely diagnosis?

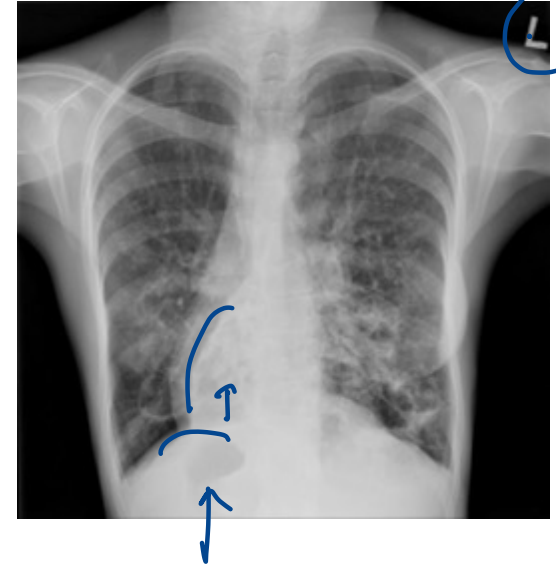
A. Cystic fibrosis

B. Kartagener syndrome

C. Primary ciliary dyskinesia

D. Asthma

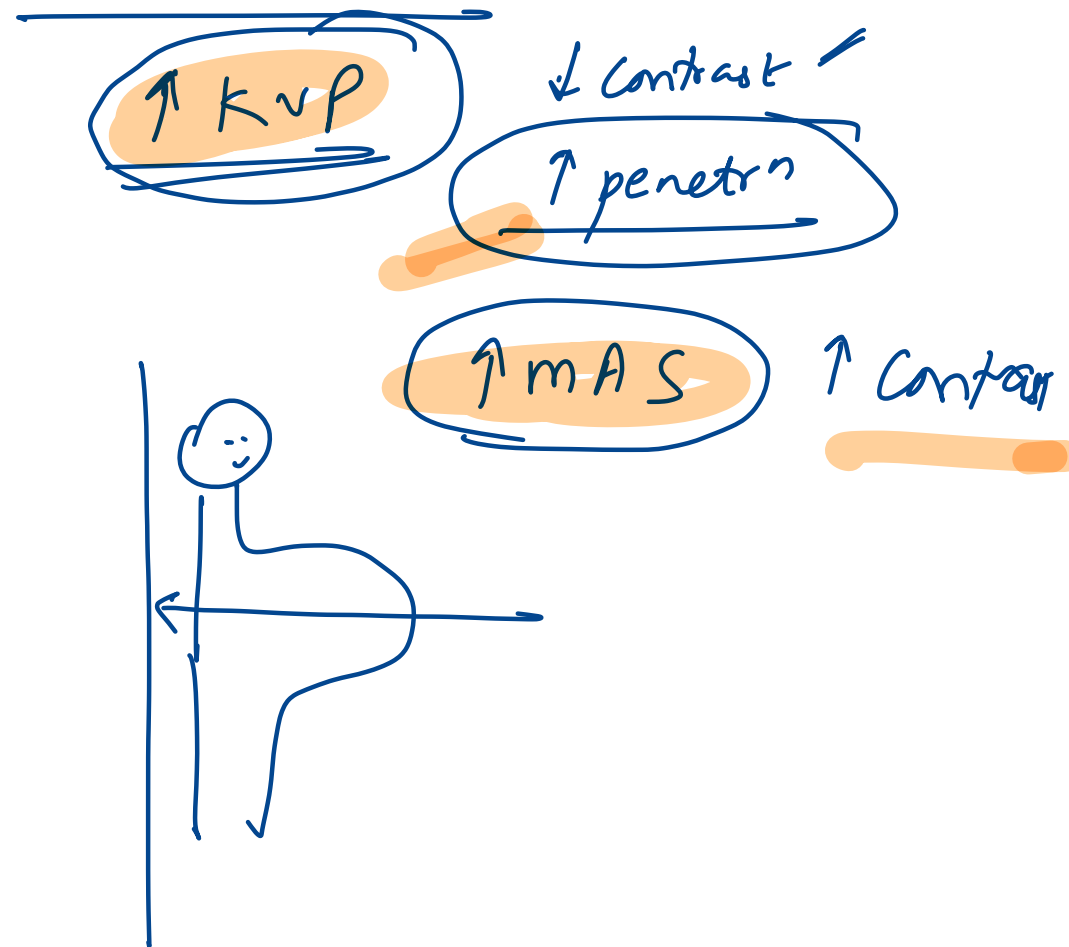
NEET 24



+ silt in

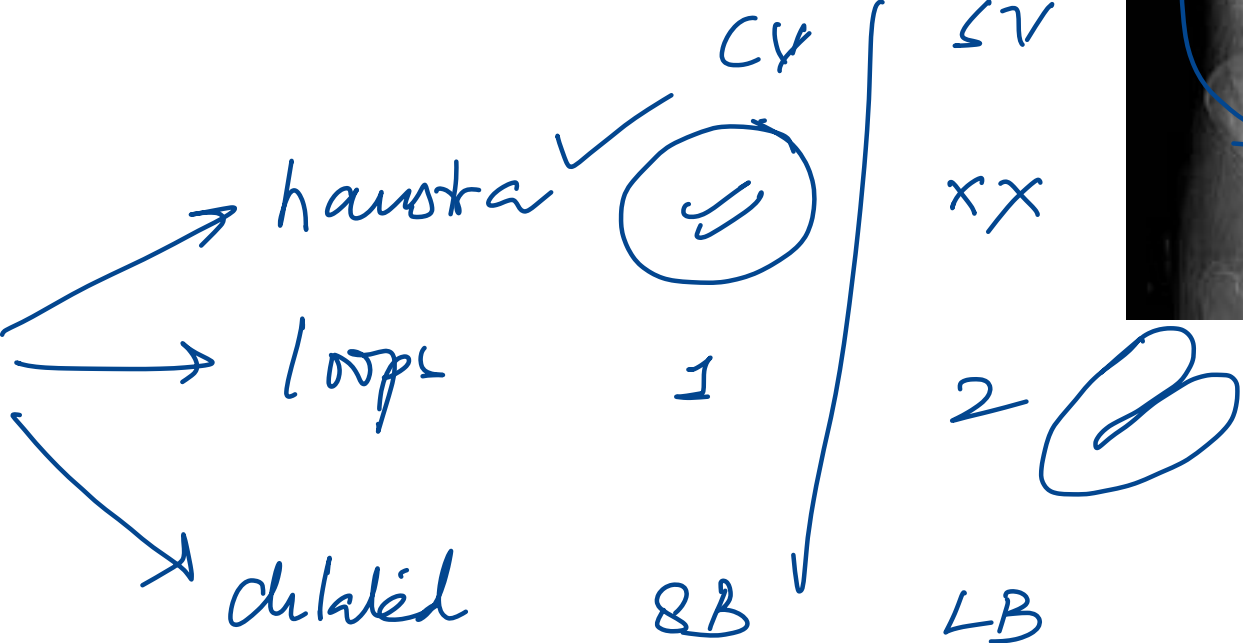
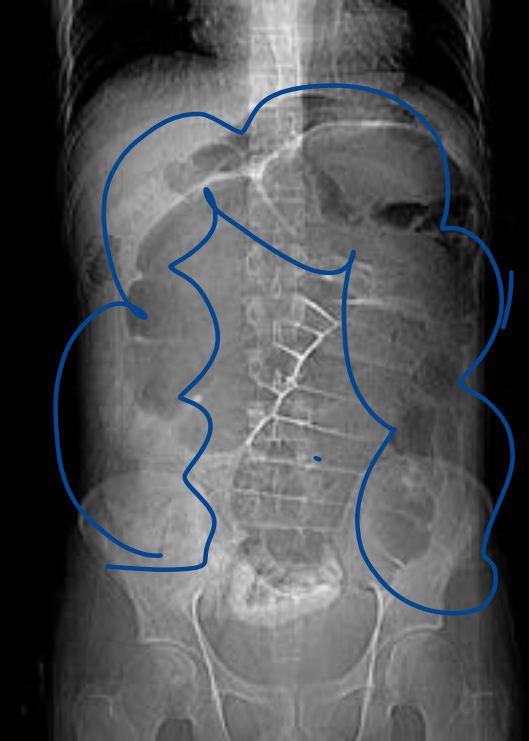
41. What should be done to improve the contrast of an X-ray film in a morbidly obese patient?

- A. Decrease KVP
- B. Increase KVP
- C. Increase mAs
- D. Increase both KvP and mAs



42. An 45 year old lady presents with acute abdominal pain and distension. What is the most likely diagnosis?

- A. Sigmoid volvulus
- B. Large bowel obstruction due to fecolith
- C. Cecal volvulus**
- D. Small bowel obstruction due to bowel perforation



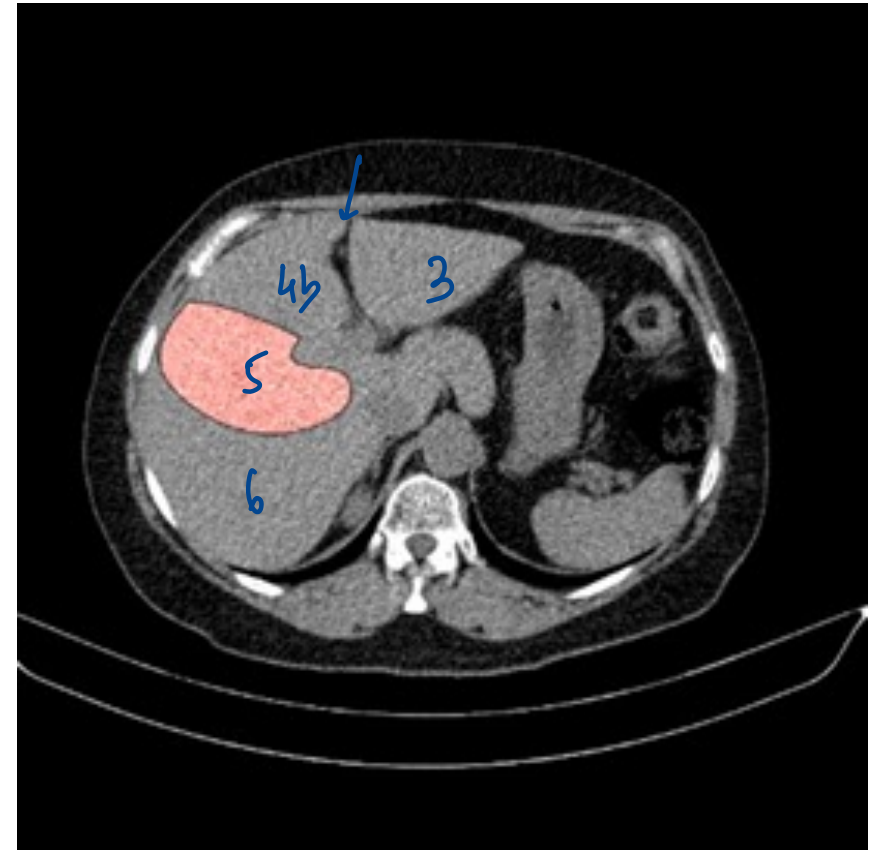
43. Identify the marked segment of liver.

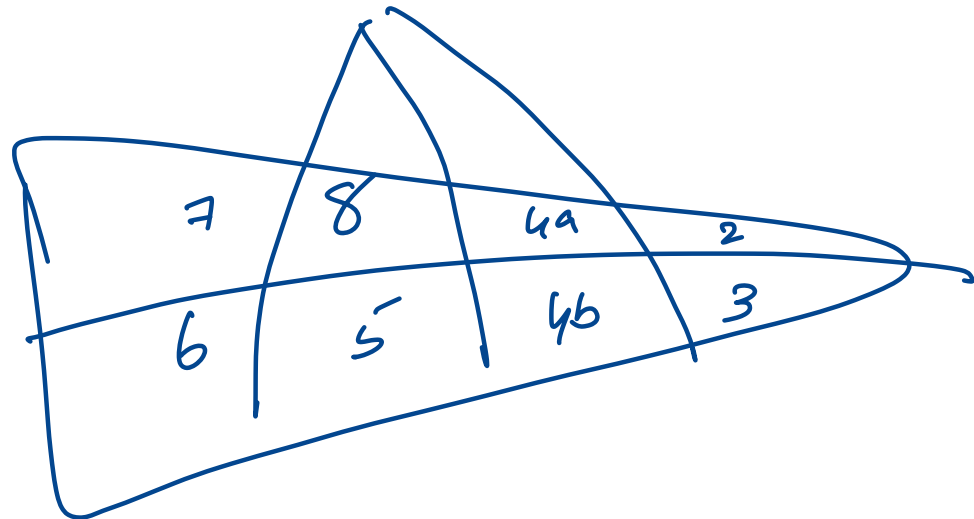
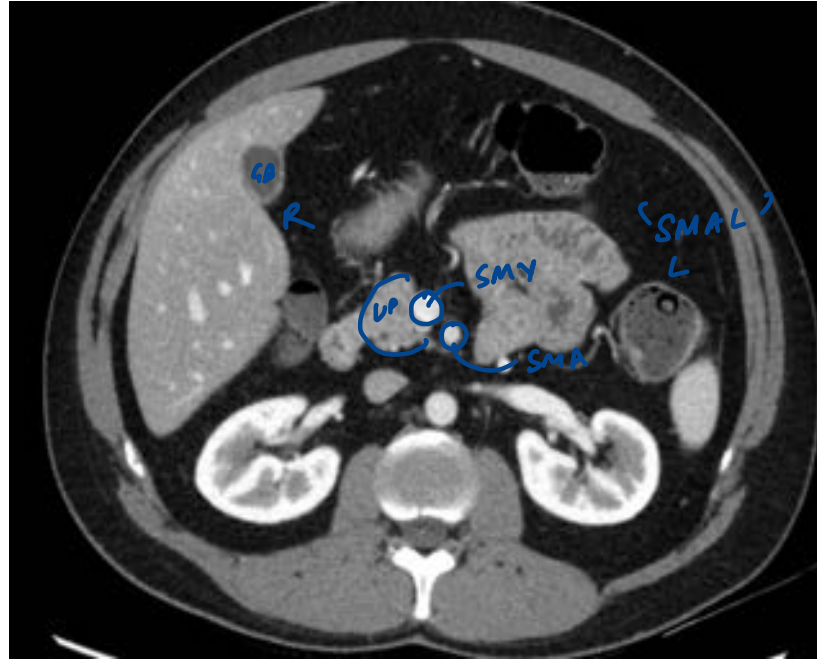
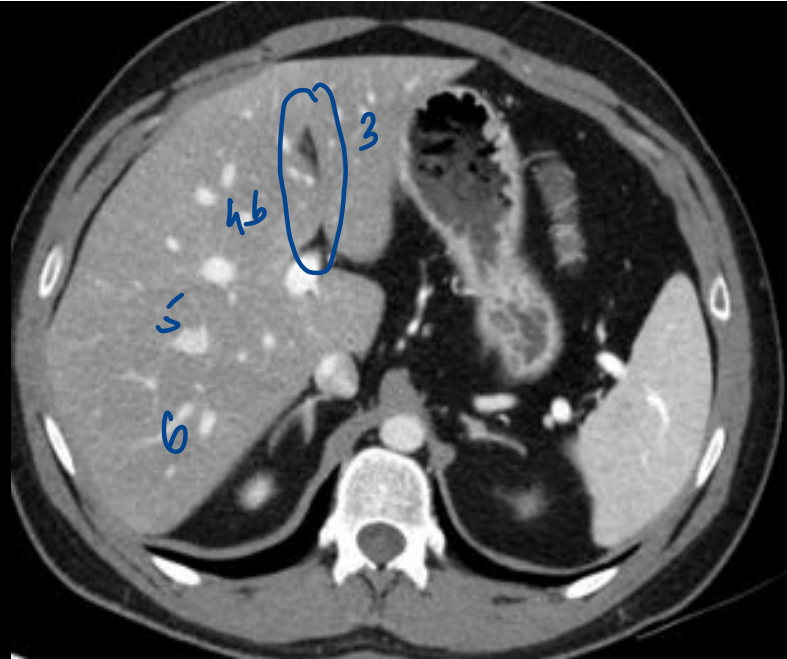
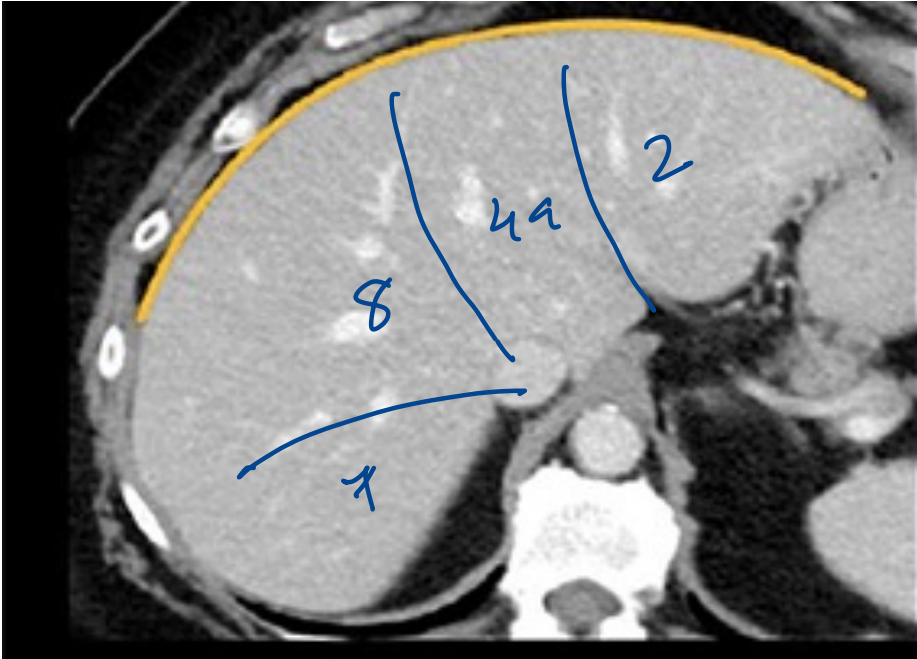
A. V

B. VII

C. III

D. IV





44. Which of the following contrast media is ionic monomer?

A. Iohexol = Omnipaque

B. Onmiscan = MR!

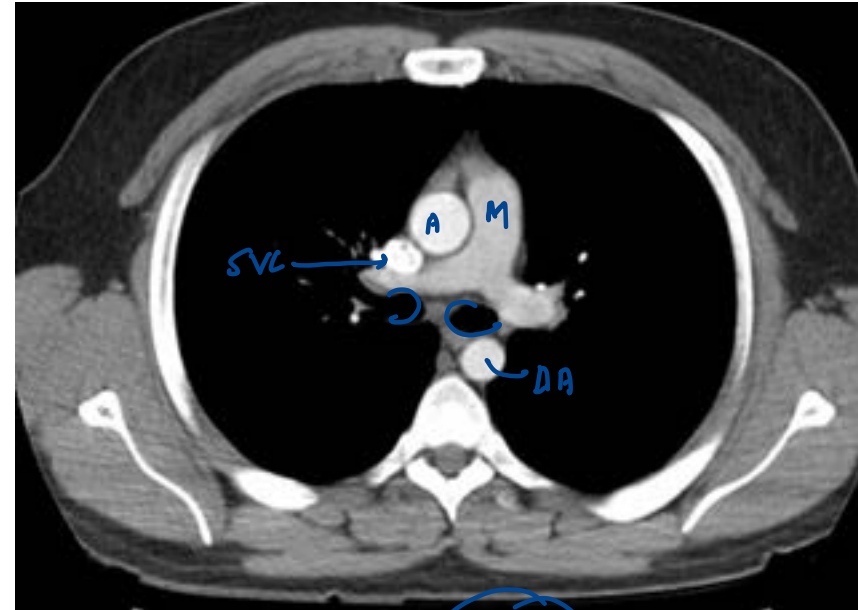
C. Diatrizoate

D. Iodixanol

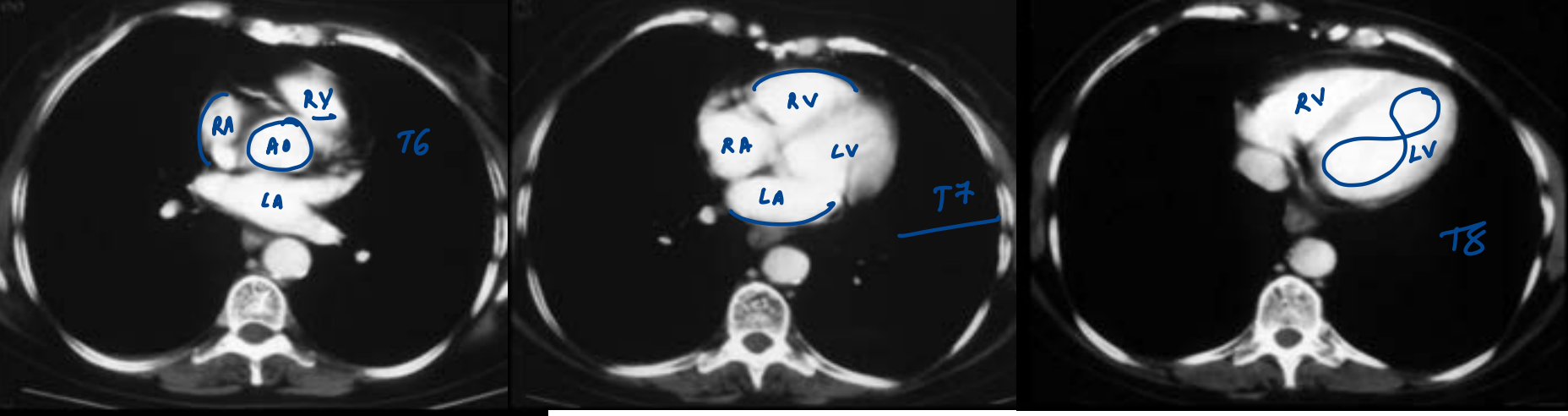
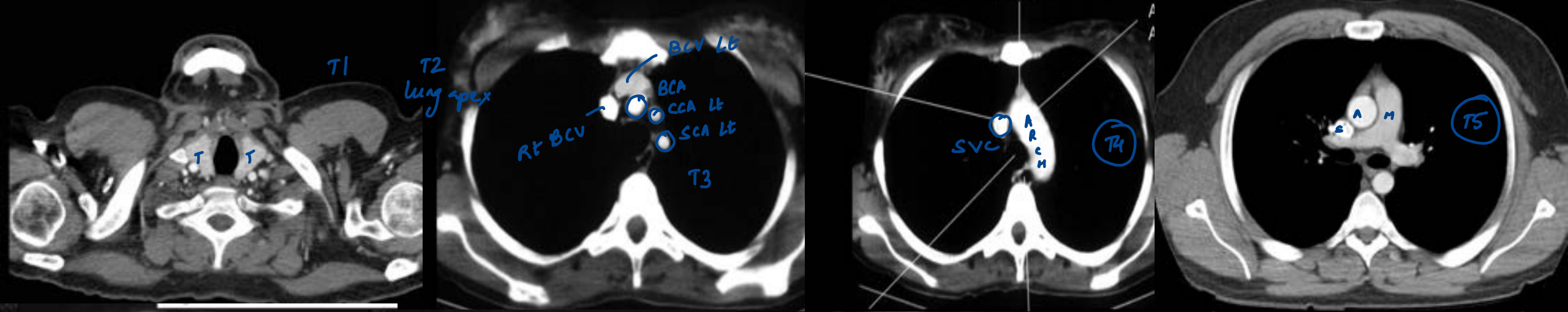
- ate

45. Identify the structure marked in the CT scan shown below:

- A. Descending aorta
- B. Superior vena cava
- C. Ascending aorta
- D. Right pulmonary artery



T5



T1 /
 T2 /
 ...
 T3 /
 T4 /

T5 /
 T6 ○
 T7 /
 T8 8

46. A 65-year-old man who had multiple episodes of pain abdomen and passage of foul-smelling greasy stools for the past 5 months shows the following CT findings. The TIGAR-O system used in the assessment of the underlying condition is related to which of the following?

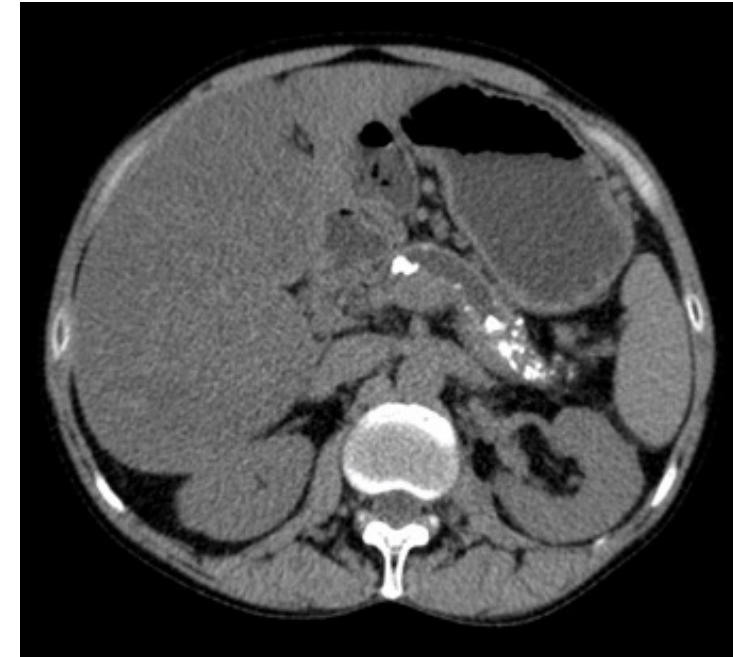
AA
toxic idiopathic genetic AI recurrent obstructive

A. Severity

B. Etiology

C. Prognosis

D. Clinical features



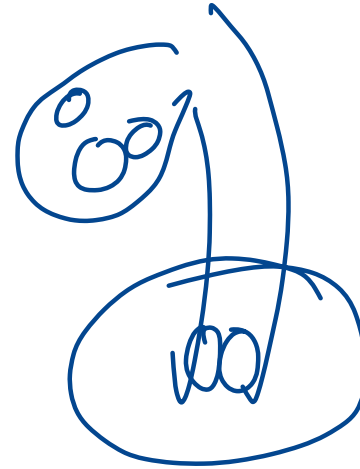
47. 40-year-old female presents with jaundice and pain abdomen. LFT reveals raised bilirubin and GGT. USG reveals scleroatrophic GB with dilated CDB with impacted calculi. What is the next step of management?

A. Cholecystectomy

B. ERCP

C. PET scan

D. MRCP



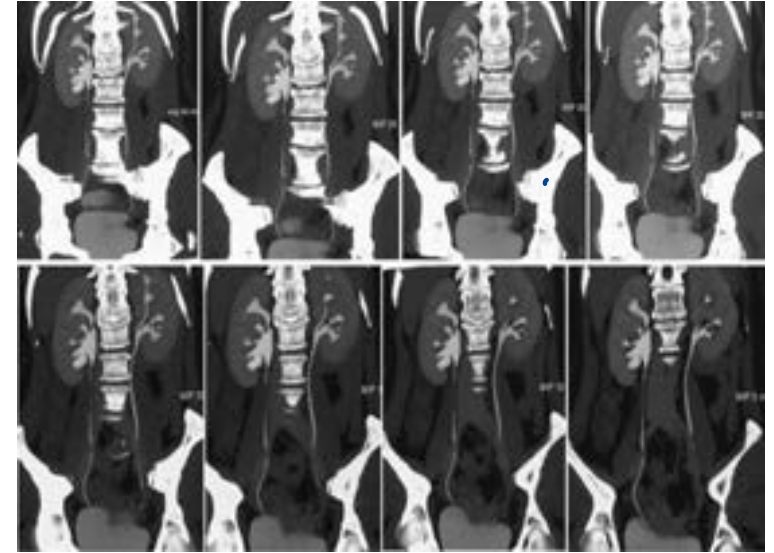
48. During rounds, your senior was discussing the given image. The following is an image of which of the following investigations?

A. Contrast study ~~XX~~

B. IVP ~~=~~

C. CT urography

D. NCCT





CT U

15min delayed CI

IVP

RGP

49. Identify the structure marked by the arrow?

A. Superior mesenteric artery

B. Superior mesenteric vein

C. Celiac artery

D. IVC



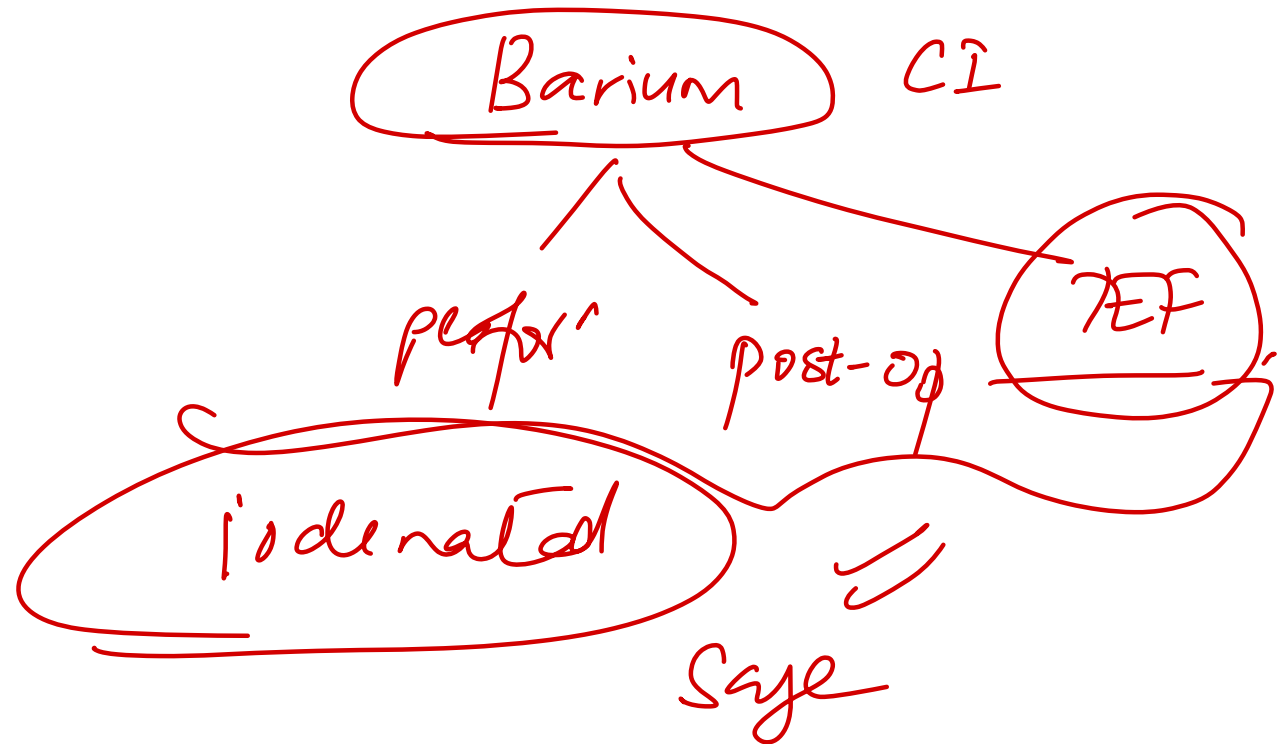
50. A 20-year-old child presents to the emergency with sudden onset of vision loss in the bilateral temporal fields. MRI was done. What is the likely diagnosis?

- A. Pituitary adenoma
- B. Craniopharyngioma
- C. Rathke cleft cyst
- D. Meningioma

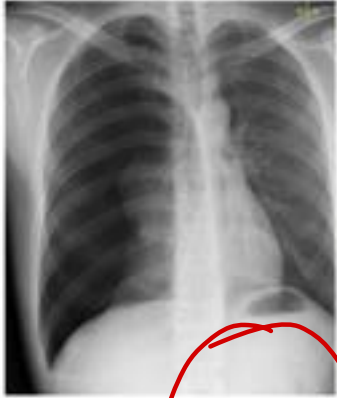


51. A 3-day-old newborn baby boy is brought to the hospital with difficulty breathing, cyanosis and coughing whenever he is fed. The baby was born full-term via vaginal delivery, and his mother had an uneventful pregnancy. He had a birth weight of 2.8 kg and was discharged from the hospital after 48 hours of observation. On examination, the baby appears to be in respiratory distress, with increased work of breathing and decreased oxygen saturation levels. What would be the best contrast of choice for study?

- A. Iohexol *Nonionic*
- B. Gastrograffin *ionic*
- C. Water ~~X~~
- D. Barium ~~X~~



52. A patient presents to the casualty following blunt trauma to the chest. A chest X-ray was done. Among the following radiographs, in which case would you further evaluate the patient before putting a chest tube?



1.

Ptx



2.

Hemothorax



3.

RML
Consolidation
x x



4.

ICD LI

P y Q

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

53. What is the best imaging study for diagnosis of cerebral infarct?

A. FLAIR MRI

B. Non-contrast CT *1st*

C. Diffusion weighted MRI

D. CECT

54. A 28-year-old woman with a severe headache is scheduled to undergo a **CT scan**. During history taking, which of the following will you definitely ask for before the commencement of the scan?

A. Use of cochlear implant → *MRI*

B. LMP

C. History of fall ✓

D. History of hypertension ✓

55. Which of the following findings are seen in a high-resolution CT scan of fungal pneumonia?

A. Kerley lines *xx p. edema*

B. Hilar lymph nodes *✓ TB / sarcoid*

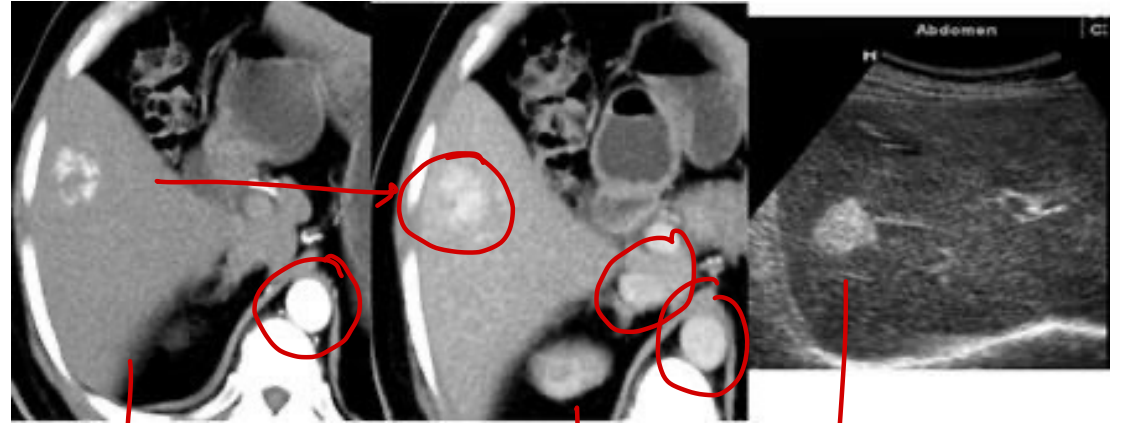
C. Pleural effusion

D. Cavitary lesions with surrounding ground glass opacities

||| Halo sign

56. A 28-year-old female has been taking oral contraceptive pills (OCPs) for the past 5 years. She presents with abdominal pain and CT scan was done. The most likely diagnosis is:

- A. Hepatocellular carcinoma
- B. Metastatic infiltrates
- C. Hepatic adenoma
- D. Hemangioma



A

v

hyperechoic



peripheral

fill-in

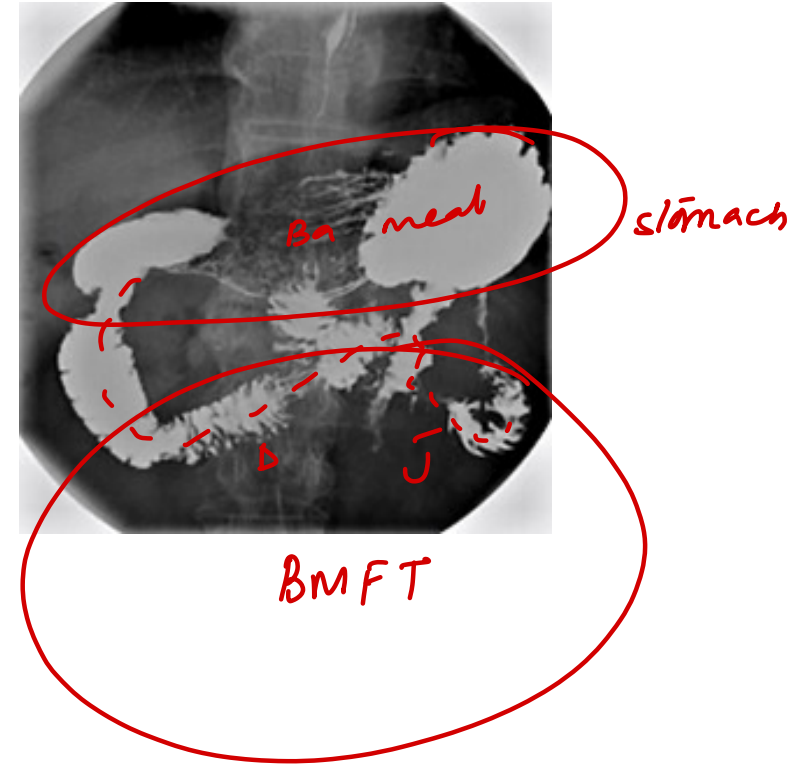
57. Identify the given image:

A. Barium meal

B. BMFT

C. Barium enteroclysis ✗

D. Cannot say ✓✓



58. Which of the following is the best method for detecting and localization of tumors associated with pheochromocytomas?

A. Abdominal CT

XX

B. Fluorodopa-PET

specific Ph_{eo}

C. MIBG scintigraphy

metastases

Ph_{eo}

D. Abdominal MRI

IOC

NB

59. A middle-aged woman who is being treated for rheumatoid arthritis, presented with muscle weakness and rigidity in her upper limbs. Which of the given X-ray views should be performed to evaluate her condition?

A. Spine in lateral flexion & extension view

B. Open mouth view

C. Swimmer's view

D. Schuller's view

RA - AAD

Waters

C7-T1

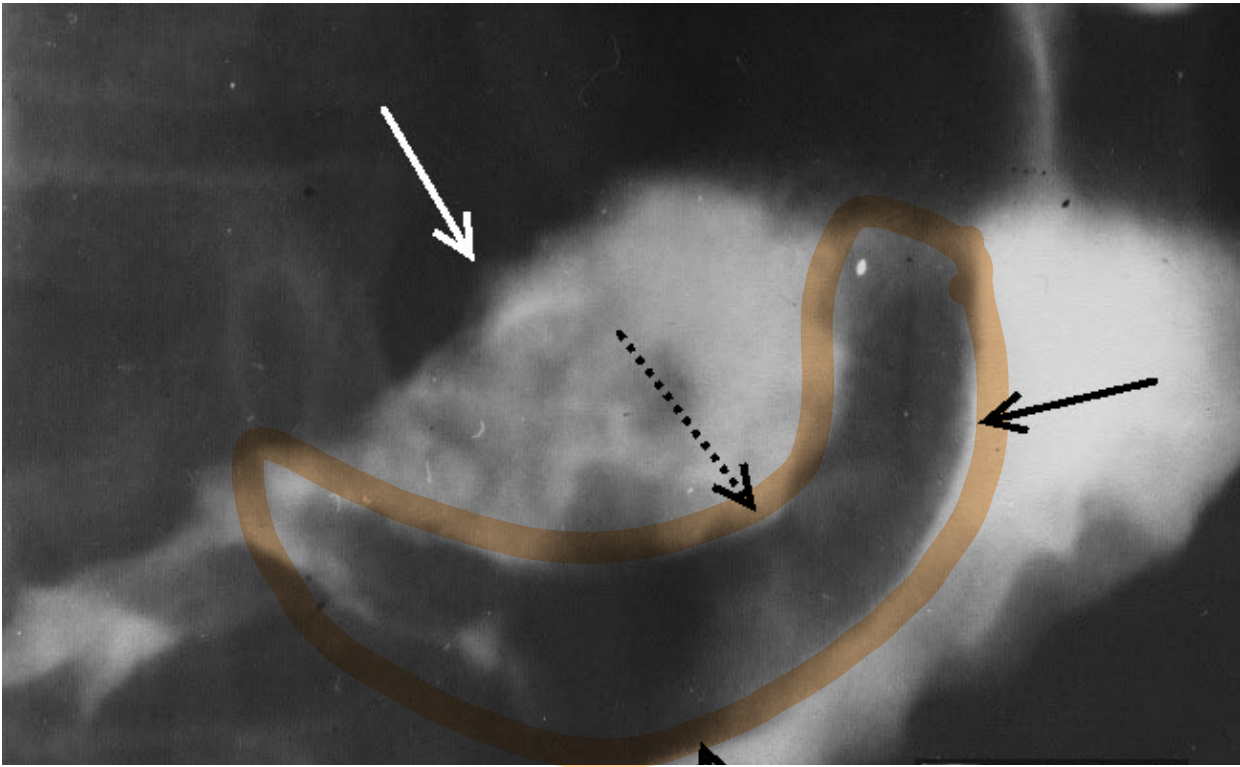
Jⁿ

PINIS

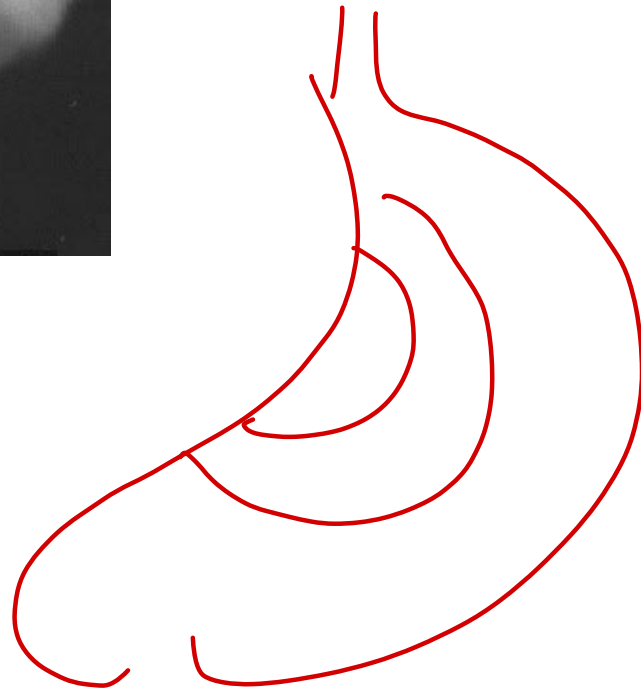
60. A 45-year-old man is being evaluated for epigastric pain and burning sensation for the past few weeks. A barium study was done for the patient. Which of the following findings on barium study would indicate that the ulcer is benign?

- A. Hampton's line *benign*
 - B. Carman meniscus
 - C. Ulcer projecting in the lumen
 - D. Interruption of rugae at ulcer edge
- } malign*





larman m



61. Patient with history of tachyarrhythmias is on implantable cardioverter defibrillator. He develops shock. Best method to know the position and integrity of ICD is:

- A. CECT
- B. MRI
- C. USG
- D. Plain radiograph



except ET tube ETCO₂

62. Eggshell calcification is seen in all the following, except?

A. Silicosis ✓

B. Sarcoidosis ✓

C. Post-radiation therapy lymph nodes ✓

D. Metastatic lymph nodes

ayz

63. A 2-year-old child with delayed developmental milestones presents to the OPD. A T2 weighted MRI is performed, and the imaging result is shown. What is the likely diagnosis?

- A. Canavan disease x NAA ↑
- B. Alexander's disease x ant WM
- C. X linked adrenoleukodystrophy → post WM
- D. Metachromatic leukodystrophy / Pelizaeus-Merzbacher's



leukod

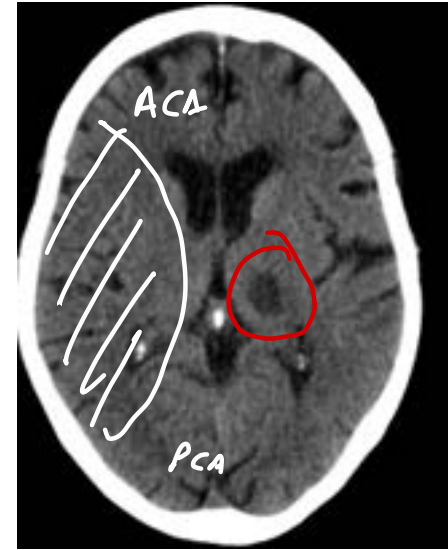
64. What is the likely diagnosis?

A. ICH

B. Lacunar stroke

C. MCA embolic stroke X

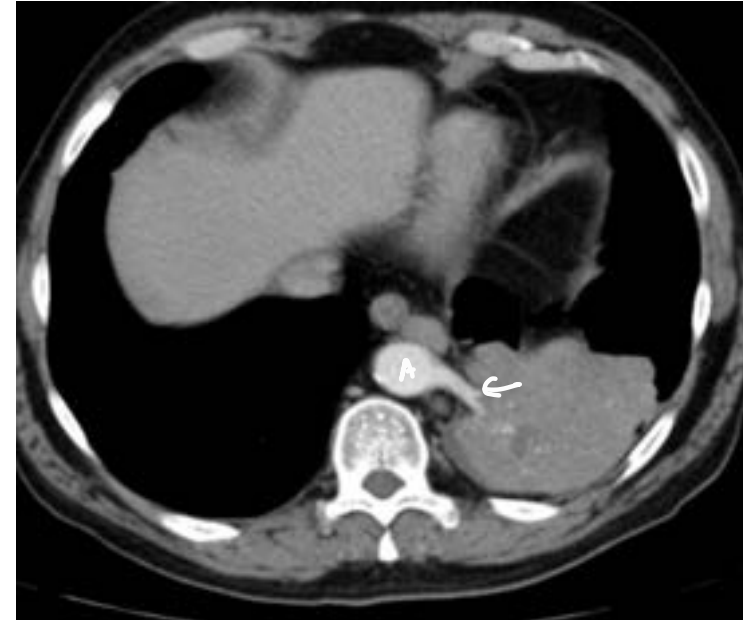
D. MCA thrombotic stroke X



< 15mm

65. A 19-year-old college student who had a history of frequent respiratory infections as a child presents to the OPD. He has been experiencing recurrent episodes of coughing and shortness of breath over the past few months. He also complains of fatigue and chest pain, particularly on the left side. The CT scan reveals a mass in the lower lobe of his left lung as shown. What is the likely diagnosis?

- A. Hamartoma
- B. Lobar pneumonia
- C. Sequestration**
- D. Squamous cell carcinoma

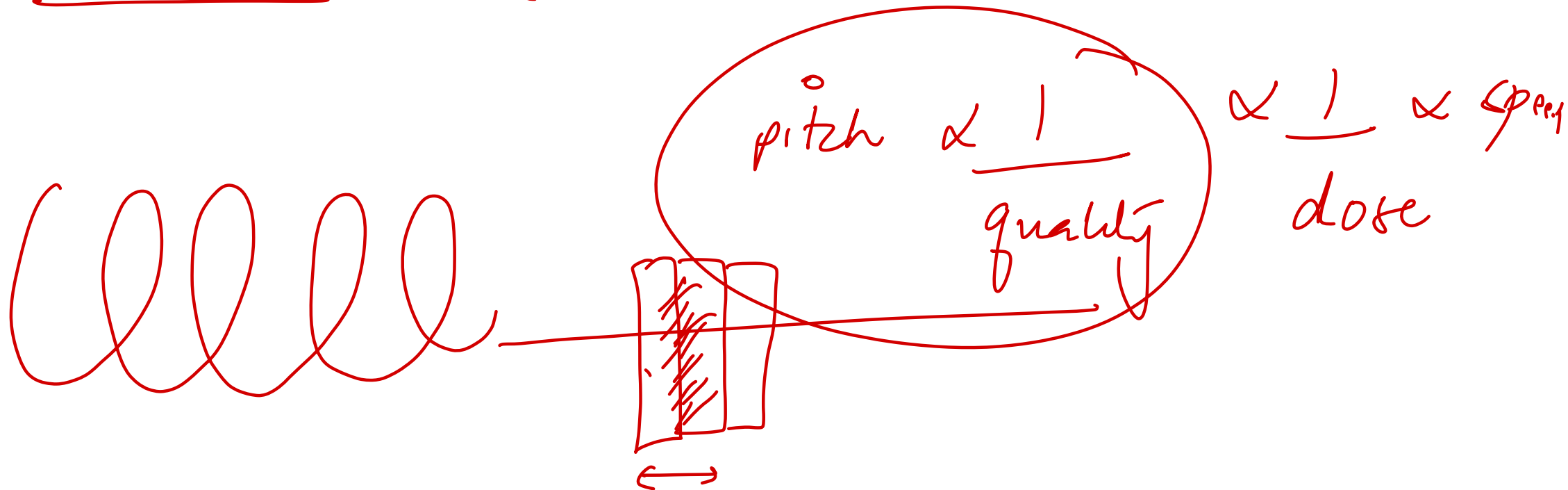


66. What is the appearance of CSF on T1 weight MRI-T2 weighted MRI-FLAIR respectively?

- A. Isointense- ~~Hypointense~~ - Hypointense
- B. Hypointense-Hyperintense-Hyperintense
- C. Hypointense -Hyperintense-Hypointense
- D. Hyperintense-~~Isointense~~-Hypointense

67. Which of the following is not a true statement about **CT**?

- A. MDCT offers a better 3D reconstruction ✓✓
- B. The higher the pitch, the lower will be the CT quality ✓✓
- C. Helical CT is faster than non-helical CT ✓✓
- D. The higher the pitch, the ~~higher~~ will be the radiation dose *lower*



68. The following CXR appearance is seen in:

- A. Pulmonary embolism
- B. Pulmonary edema**
- C. Pneumoconiosis
- D. Sarcoidosis

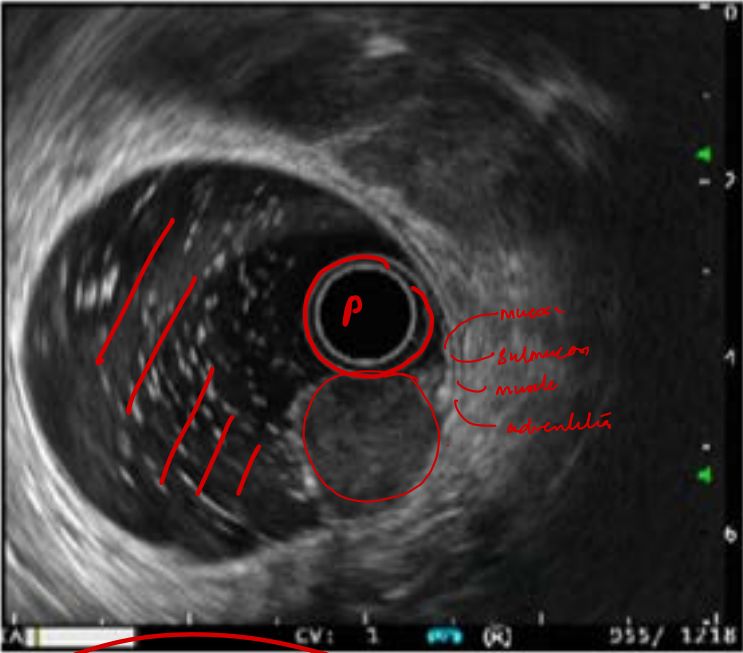


balwng

69. The imaging shows a detailed cross-sectional view of the esophageal wall and surrounding structures. All of the following are uses of this imaging modality except:

- A. Biliary microlithiasis ~~IOC = EUS~~
- B. Staging of esophageal cancer
- C. Drainage of pancreatic pseudocyst
- D. ~~Evaluation of gastroesophageal reflux disease (GERD)~~

24hr pH



EUS
IOC

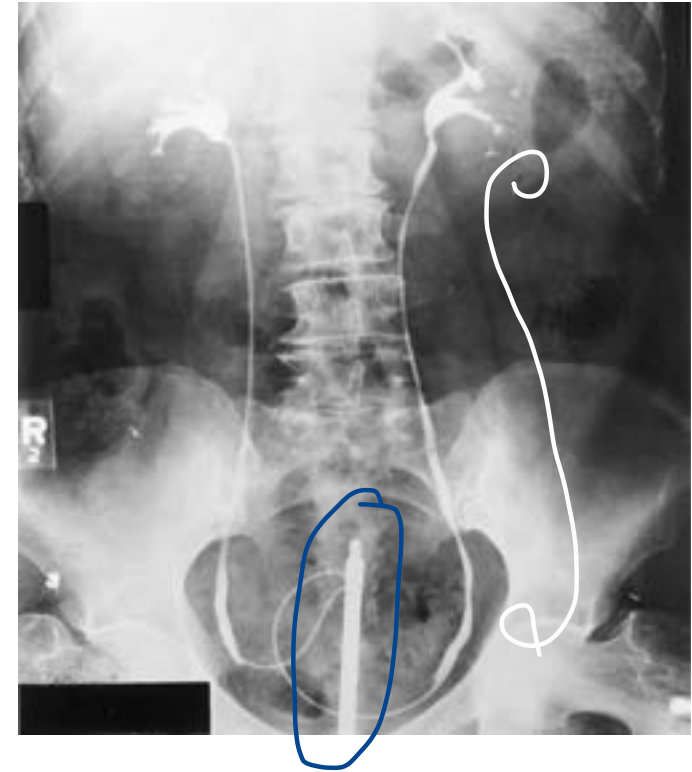
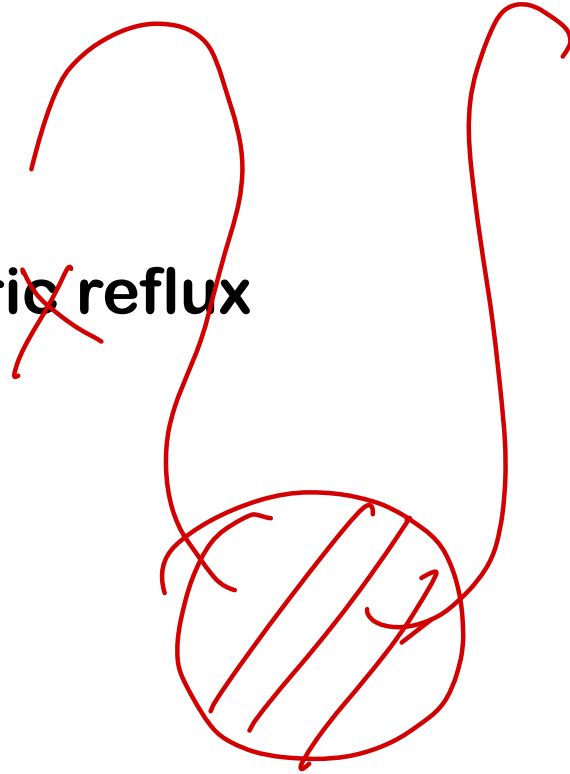
70. Identify what is depicted in the abdominal X-Ray.

A. IVU ✗

B. Retrograde pyelogram

C. Ureteric stent

D. MCU with vesico-ureteric ✗ reflux



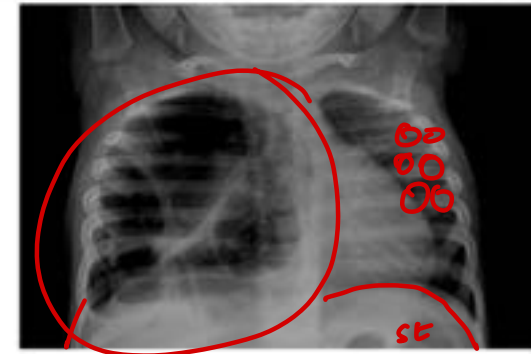
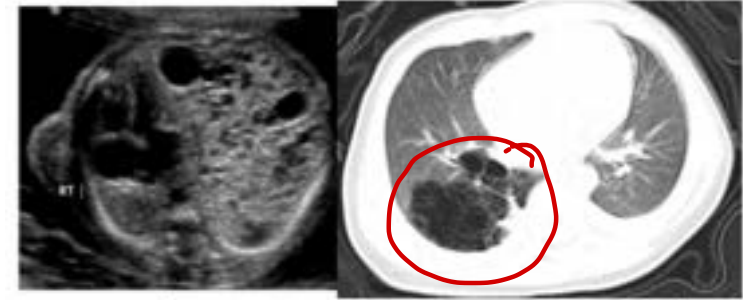
71. A 6-year-old child presenting with recurrent respiratory infections. What is the likely diagnosis?

A. Pyopneumothorax

B. CPAM

C. CDH

D. Lung abscess



72. A child was intubated, and post-intubation X-ray is shown below. What would be the presenting symptom?

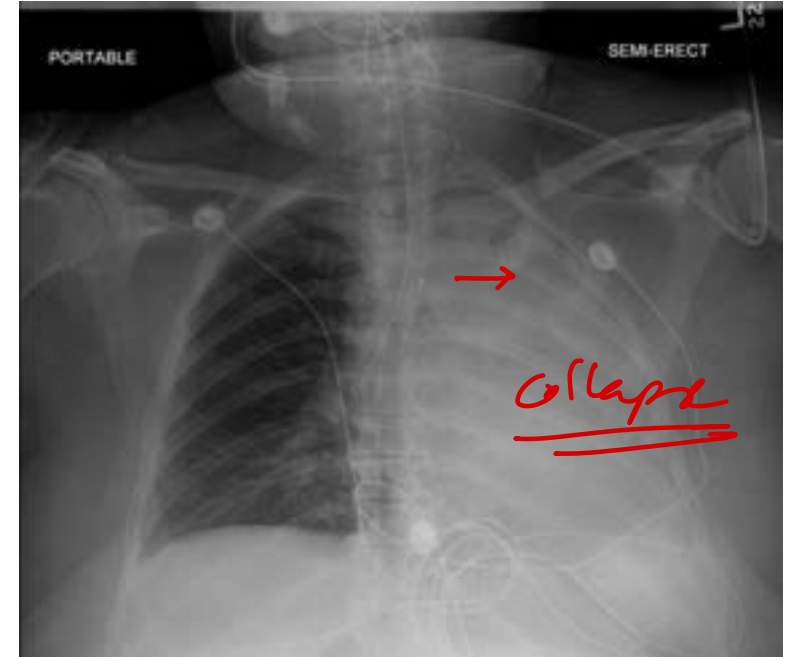
A. Right sided tracheal deviation

B. Gastric distension *esoph dist*

C. Drooling on feeding *TEF*

D. Absent breath sounds on the left side

sign



bronchial intub

73. In patients with renal failure, which imaging technique is appropriate for visualizing vessels without causing further renal impairment?

A. CT angiography

B. DSA

C. MRI Contrast-enhanced angiography

D. Time-of-flight MRI angiography

x 4d
x iodinated



74. Which imaging modality is typically used to diagnose dysphagia lusoria?

A. Chest X-ray

B. Barium swallow

- post indentⁿ //

C. Echocardiogram

D. Computed tomography angiography

ARSA

75. What is the likely diagnosis based on the given image?

QQ //

A. AD PCKD

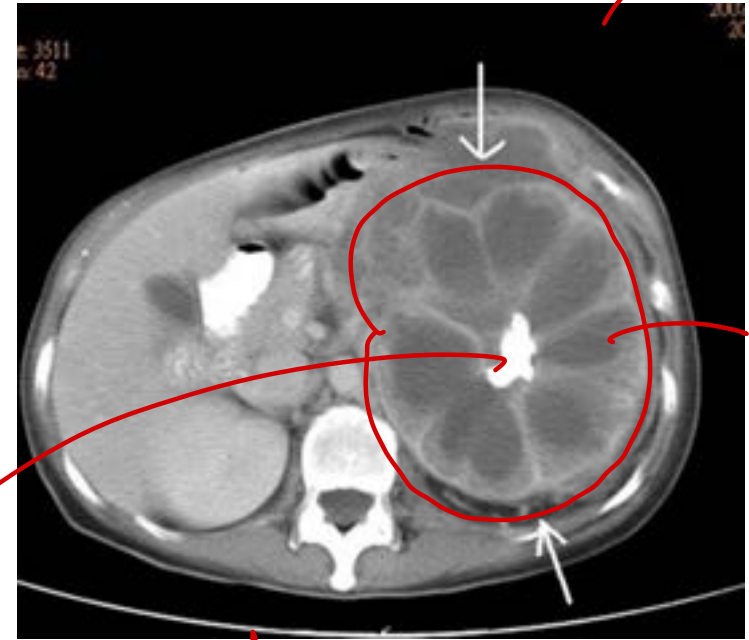
XX B/L
XX

B. PUJ obstruction

C. Xanthogranulomatous pyelonephritis

D. Putty kidney

XX



staghorn

bear paw

Pus

76. Identify the incorrect statement:

- A. The basis of USG is piezoelectric principle Pb Zirconate Titanate (T) (USG) electrical
↓
sound
- B. Higher frequency probe is used to see more superficial structures (T)
- C. USG contrast is excreted through the renal route. XX sonarue
- D. Fibroscan for liver cirrhosis uses USG as a modality (T)

USG elastography
↑ freq ↑ resolⁿ ↓ depth

77. A 50-year-old female presents with a history of progressive vision loss in her right eye. An MRI of the orbit reveals a lesion with a characteristic appearance. Which of the following is the most likely diagnosis based on the MRI findings?

- A. Optic nerve sheath meningioma
- B. Optic nerve glioma
- C. Choroidal melanoma
- D. Optic neuritis



ON
meningioma



78. All of the following are considered radioprotectors,
except:

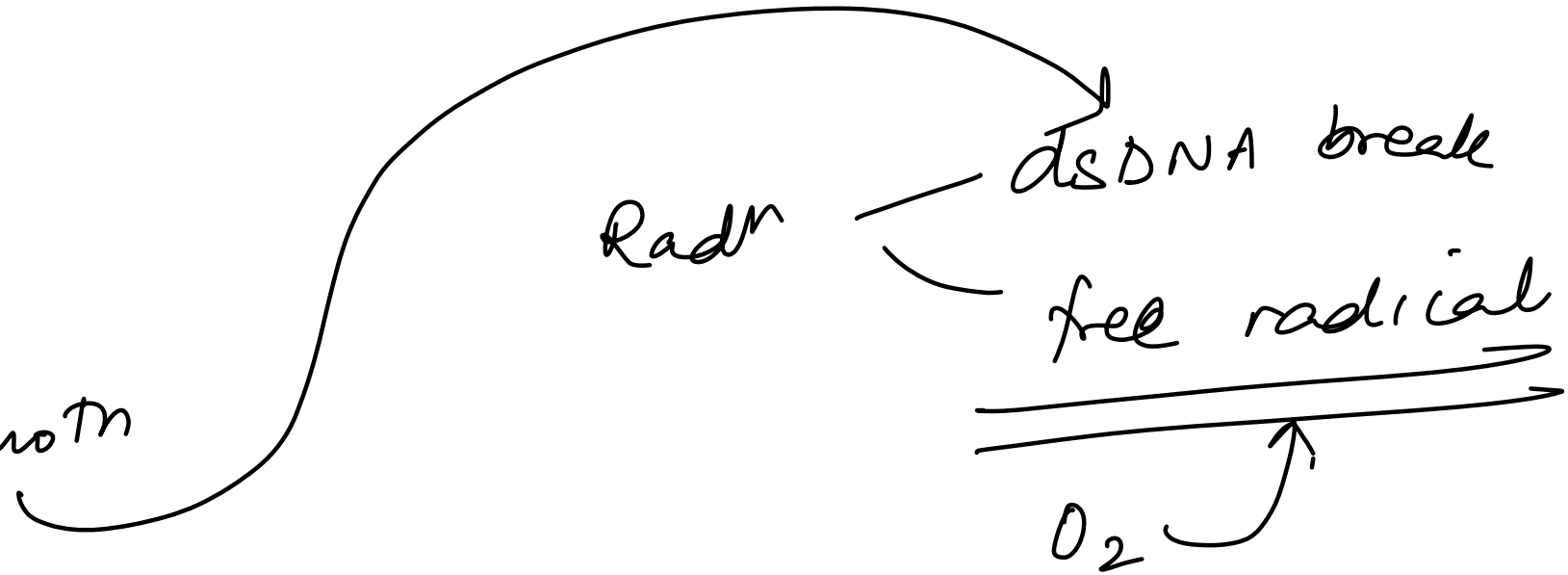
A. Zinc oxide

B. Amifostine

C. Melatonin

~~D. Cisplatin~~

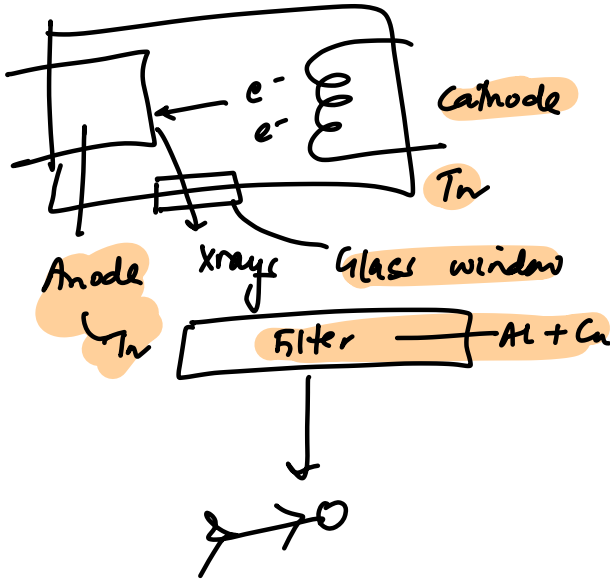
Chemother



79. All of the following are correct differences between normal radiography and mammography, except:

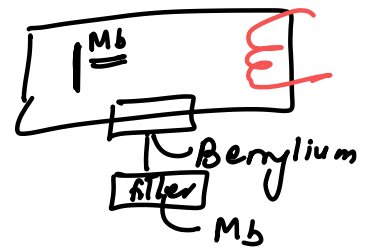
- A. Radiography uses tungsten as the target, while mammography uses molybdenum (T)
- B. Beryllium is used as the exit window in mammography (T)
- C. Mammography uses Bremsstrahlung radiation for better tissue contrast (F)
- D. Aluminum filter is used in radiography, while molybdenum is used in mammography (T)

Xray



Mammography

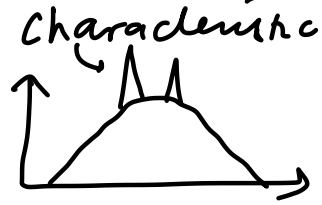
- FAT / breast
- ↓ kVp
- Characteristic radn
- ↑ soft tissue resoln



$kVp \propto 1 / \text{contrast}$

	Xray	Mammogr
Anode	Tm	Mb
window	Glass	Beryllium
Filter	Al + Cu	Mb

Bremsstrahlung



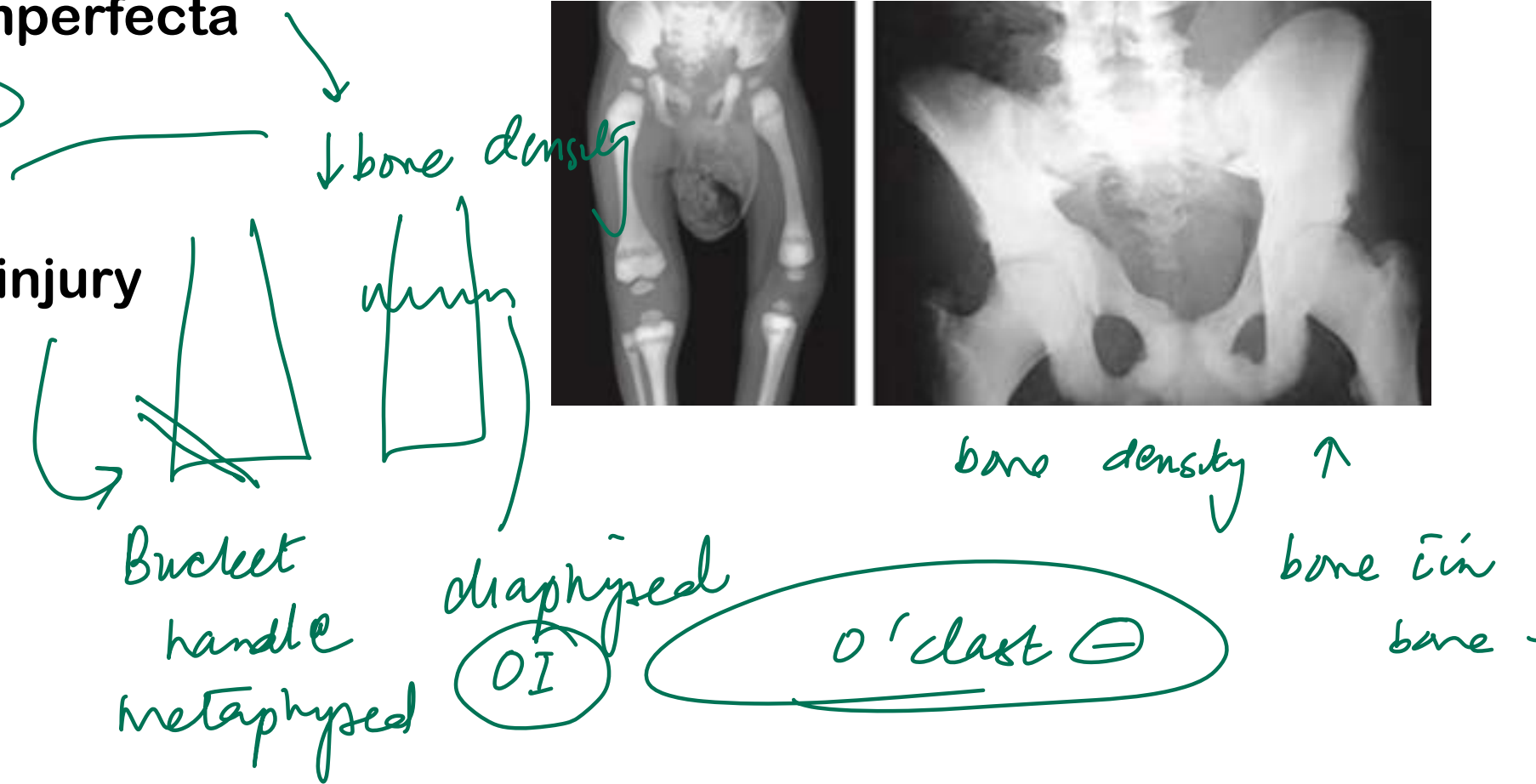
80. What is the likely diagnosis based on the skeletal survey of a 10-year-old boy with recurrent fractures?

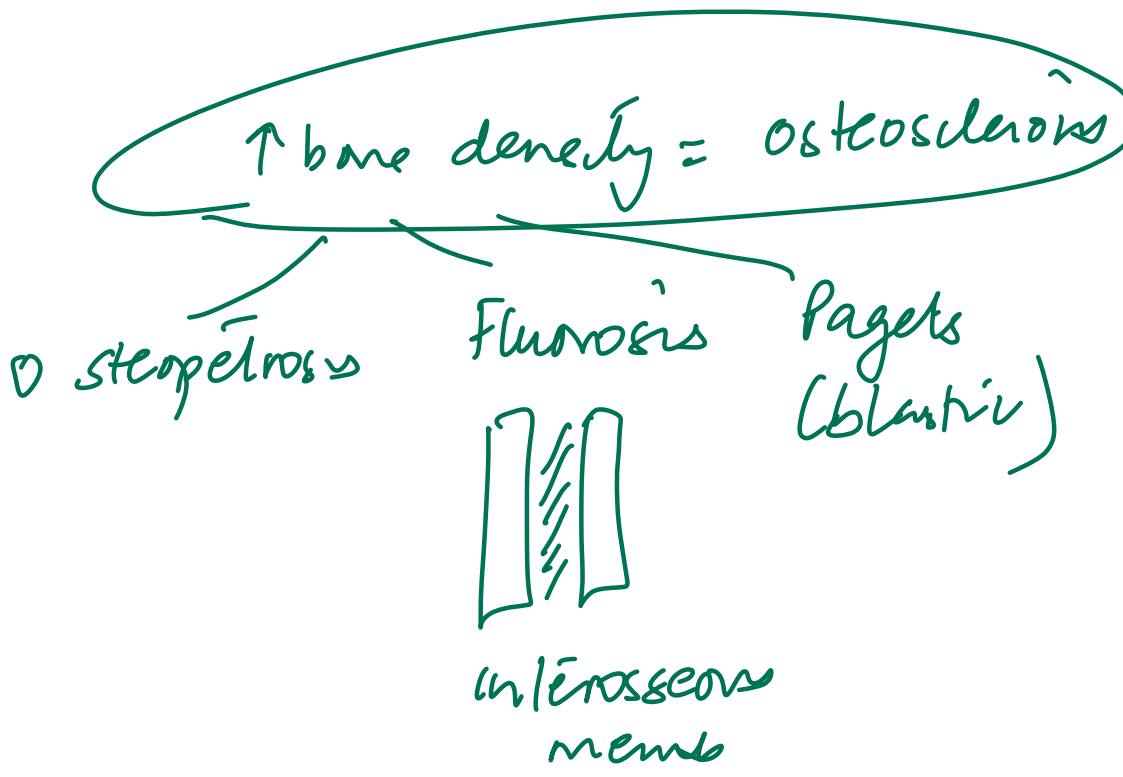
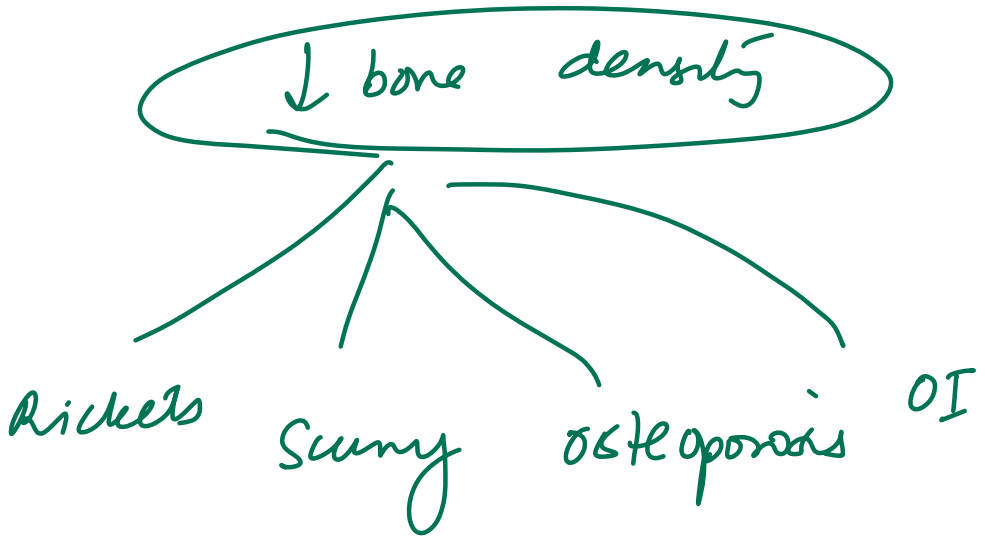
A. Osteogenesis imperfecta

B. Osteopetrosis

C. Osteoporosis

D. Non-accidental injury





Thank You
