



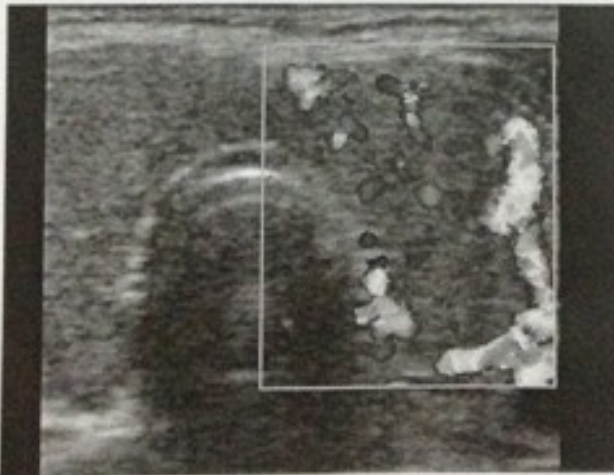


1. A 14 year old boy presents with severe acute scrotal swelling over the past two hours. The most appropriate urgent imaging modality is Tutor
- a. Ultrasound
 - b. Ultrasound with colour Doppler 
 - c. MRI
 - d. Plain radiograph of the scrotum ^X
 - e. CT of the pelvis
2. A 40 year old female presents with features of hyperthyroidism. An ectopic parathyroid tissue is suspected. Which of the following is most appropriate imaging modality
- a. Radionuclide imaging 
 - b. MRI
 - c. Plain radiography
 - d. CT
 - e. Ultrasound ??
3. A 20 year old seeks your advice regarding screening for breast cancer. Her mother and two aunts have been diagnosed with breast cancer at the ages of between 28 and 35. Which imaging modality is most appropriate for her screening
- a. Breast MRI
 - b. Breast ultrasound 
 - c. Mammography
 - d. Ductography
 - e. CT
- 28-18
35-25
~



4. What is the image demonstrated above 
- a. MRI
 - b. Ultrasound
 - c. Angiogram
 - d. Mammogram
 - e. CT Scan



5

This image was acquired from a patient who most likely presented with which symptom?

- a. Breast lump
- b. Exophthalmos
- c. Acute scrotal pain *X*
- d. Right iliac fossa pain *+ hydro*
- e. Vomiting

6. Which one of the following signs will point to small bowel obstruction

- a. Few long air fluid levels *Navy*
- b. Haustral markings *X*
- c. Air within the large bowel *X*
- d. Centrally placed loops
- e. Few dilated bowel loops *??*

7. Regarding GIT contrast studies

- a. Air is negative contrast media *✓*
- b. Double contrast is used in infantile enema studies *X*
- c. The mortality rate from barium peritonitis is less than 1% *X*
- d. No preparation is needed for barium meal *X*
- e. Air is introduced via nasogastric tube during a double contrast barium meal study *✓*

8. Ultrasound examination is most appropriate in suspected

- a. Diverticulitis *X CT, Bar*
- b. Bowel perforation *✓ CT*
- c. Cholecystitis *✓*
- d. Bowel obstruction *✓ ray*
- e. Colorectal carcinoma *-Ba enema*

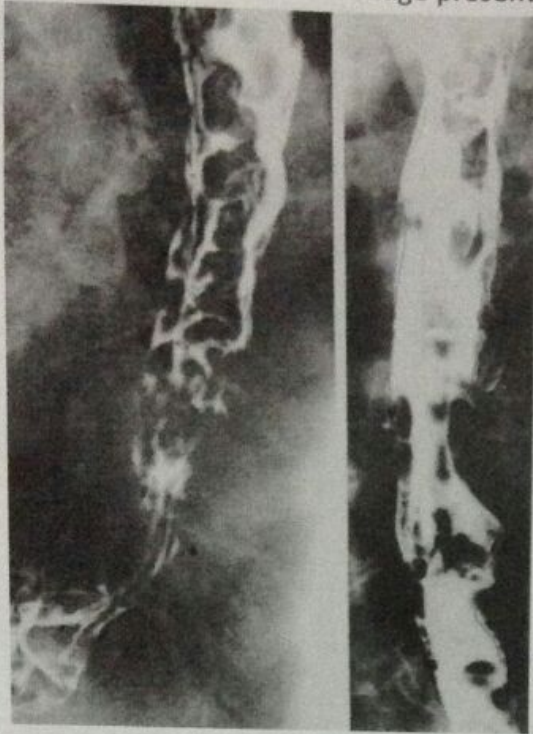


X 9.

the ultrasonic image above demonstrates

- a. Testicular torsion
- b. Appendicitis
- c. Intussusception *✓*
- d. Biliary stone *?? aortic knot*
- e. Liver metastasis *X*

✧ 10. From the barium swallow image presented below the most likely diagnosis is



→ candida
→ varices

- a. Oesophageal carcinoma ✗
- b. Candidiasis ✓
- c. Achalasia ✗
- d. Hiatal hernia ✗
- e. Oesophageal varices ✓

✧ 11. The most current radiological modality of screening for rickets is

- a. Plain radiography ✓
- b. Radionuclide imaging
- c. CT Scan
- d. MRI
- e. Ultrasound

12. Hip fractures are best evaluated on which imaging modality?

- a. MRI ✓
- b. CT Scan
- c. Plain radiography ✓
- d. Ultrasound
- e. Contrast arthrography ✓

13. A 23 year old rugby player sustains a left knee injury. Plain radiograph reveals soft tissue swelling with no fracture or dislocation demonstrated. What is the next most appropriate imaging modality to further evaluate this patient?

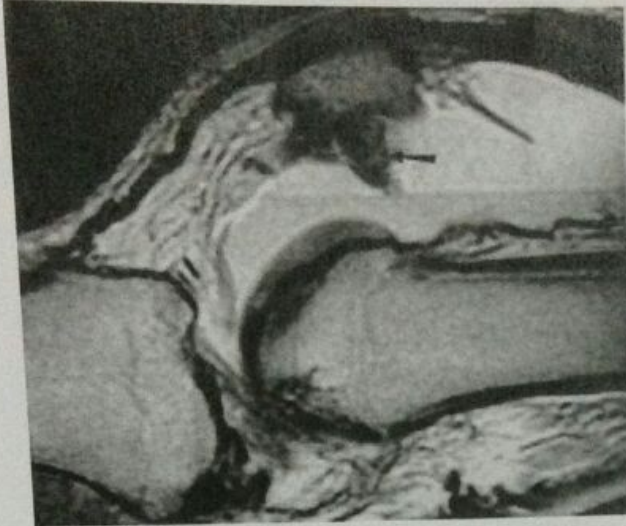
- a. Ultrasound
- b. CT scan
- c. MRI ✓
- d. Arthrography ✓
- e. Digital subtraction angiography (DSA) ☰

14. Which one of the following is not a feature of rheumatoid arthritis

- a. Commonly affects the distal interphalangeal joints
- b. Tends to spare the distal interphalangeal joints ✓
- c. Accompanied soft tissue swelling
- d. Periarticular osteopenia ✓
- e. Erosive arthropathy

✓

15. Name the imaging modality demonstrated in the image below



- a. CT scan
- b. MRI
- c. Ultrasound
- d. DSA
- e. Scintigraphy

16. Ultrasound was introduced into medical imaging

- a. Just before ^{2nd} second world war ✓
- b. Before the discovery of x-rays ✗
- c. After the discovery of computed tomography ✗
- d. In mid twentieth century ✓
- e. Ten years after the discovery of x-rays ✗

M/S

17. The following is one of the newer imaging modalities

- a. Radionuclide scanning
- b. Digital subtraction angiography
- c. Ultrasonography
- d. Digital radiography
- e. Endoscopic retrograde cholangio-pancreatography

swallow →

duoden

GI

18. During a barium meal examination ^{upto duodenum}

- a. Image is generally viewed on a fluorescent screen ✓ ^{Fluoroscopy}
- b. Negative contrast is administered ✗
- c. Cathode ray oscilloscope system is used to view the image
- d. No films are taken in the first ten minutes ✗
- e. Contrast is ingested the day before ✗

19. On a normal chest radiograph
- The right hilum is higher than the left
 - The right hemidiaphragm is higher than the left
 - The cardiac shadow lies in the middle of the thoracic cavity
 - The superior angle of the scapula is at the level of T3
 - The apices are more radiolucent than the bases
20. In micturating cysto-urethrography
- Non-water soluble contrast is used
 - Suprapubic introduction of contrast is contra-indicated
 - Both the bladder and the urethra are demonstrated
 - Only the urinary bladder is demonstrated
 - Vesico-ureteric reflux cannot be demonstrated
21. Which of the following statements is not true concerning normal skull variants at radiography
- Hyperostosis frontalis interna predominantly involves the inner table
 - Prominent convoluted markings are caused by brain pulsations
 - Hyperostosis frontalis interna usually extends beyond the coronal suture
 - Mendosal suture is an accessory suture
 - Wormian bones are normally found in the lambdoid suture
22. The following statement is true concerning scalp masses at CT
- Subgaleal hematomas are usually confined by cranial sutures
 - Scalp lipomas are hyperdense
 - A history of trauma will be elicited in sebaceous cysts
 - Scalp masses with associated destructive skull lesion are most likely malignant
 - Acute subgaleal hematomas are of CSF density at CT
23. Multiple lucent skull lesions are found on a skull radiograph. Which of the following is the least likely diagnosis
- Prominent convoluted markings
 - Arachnoid granulations
 - Metastases - white
 - Surgical calvarial defect
 - Osteomas - white
- Handwritten notes: here - Bone - white, Opac - white - hyperdense*
24. The following statement is true concerning intracranial hemorrhage at CT
- Acute epidural hematomas are concavoconvex and hyperdense
 - Chronic subdural hematoma is usually associated with major trauma
 - A subdural hematoma presents as a biconvex hyperdense lesion
 - Acute extradural hematoma is usually associated with a skull fracture
 - Hematomas that cross the midline are most likely subdural than extradural
- Handwritten notes: b-SDH, Epid, 95%*
25. Indications of cranial sonography include the following except
- Suspected cystic cranial lesions in a 3 yr old child
 - Monitoring progress and complications of meningitis in a 1 yr old child
 - Evaluation of intracranial haemorrhage in a neonate
 - Evaluation of the infant brain
 - Evaluation of a suspected meningocele

R L

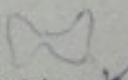
26. Regarding the right atrium

- a. Lies to the left and anterior to the right ventricle and forms the anterior heart border ✗
- b. In tetralogy of Fallot it enlarges anteriorly and to the left giving a boot shaped heart ✗
- c. When enlarged in left to right heart shunts gives a double heart shadow ✗
- d. In dextrocardia it forms the left heart border ✓
- e. It is commonly involved in ischemic heart disease

27. The following are features of congestive heart failure except

- a. Cardiomegaly ✓
- b. Dilatation of the central pulmonary vessels with peripheral pruning ✓
- c. Cephalisation of pulmonary vessels ✓
- d. Pleural effusion ✓
- e. Phantom masses commonly seen along fissures -

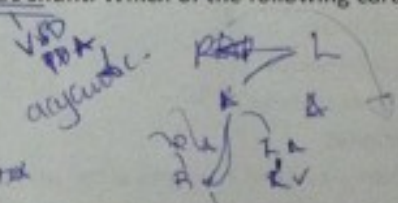
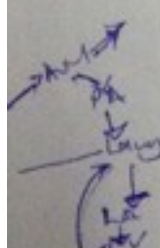
28. The following is not a feature of pulmonary oedema as seen on chest radiographs

- a. Interstitial Kerly B lines ✓
- b. Indistinct pulmonary vasculature
- c. Bilateral cotton wool opacities with bat wing's appearance 
- d. Increased pulmonary vascular markings extending to the periphery of the lung fields ✓
- e. Masking of the hilum ✓

29. A 32 year old woman presented to the cardiologist with complaints of dyspnoea.

Radiographs done at the University of Nairobi Radiology department showed cardiomegaly with features of left to right cardiac shunt. Which of the following cardiac lesions is likely to be seen at echocardiography?

- a. PDA
- b. VSD
- c. ASD
- d. Right sided aortic arch *prob*
- e. Truncus arteriosus



RK Enlarged
RV Enlarged

30. The following is an imaging feature of myocardial infarction on Thallium 201 scintiscan

- a. Anterior myocardial defect on exercise images that reversed on rest images
- b. Inferior wall and septal defects that are seen on exercise images but on rest images
- c. Apical defect on exercise but reverse on rest images
- d. Anterior and septal wall defects seen on exercise as well as rest images ✓
- e. Inferior wall defect seen on exercise images but reverse on rest images

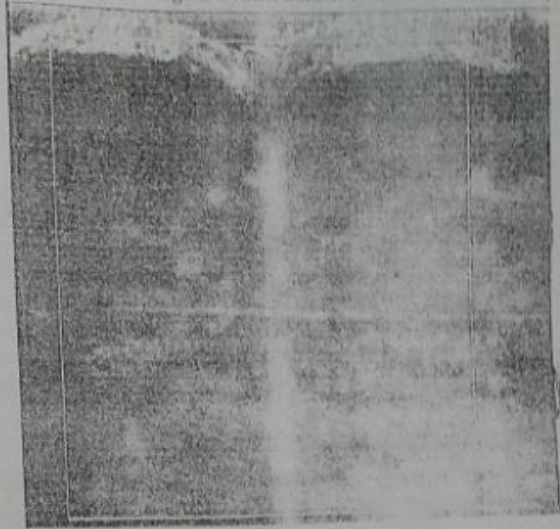
31. A 24-year old woman has marked increase in the size of her uterus between 26-30 weeks gestation. Obstetric ultrasound shows a marked increase in the amount of amniotic fluid. The fetus is normal for gestational age. Which of the following is the most likely diagnosis

- a. Congenital heart disease
- b. Duodenal atresia
- c. Erythroblastosis fetalis
- d. Horseshoe kidney
- e. Neural tube defect

Polyhydramnios → ↑ post-renal - urine
→ ↓ exc - atresia

dup ↓ - exc
↓ - Pseudo - kidney

32. An ultrasound image is shown below. What is the most likely diagnosis?



- f
- a. Left hydrocele ✓
 - b. Right varicocele
 - c. Left inguinal hernia
 - d. left testicular torsion
 - e. normal testes
33. A 25-year old primigravida at 20 weeks of her pregnancy is found to have bacteriuria caused by E. coli in urine test. She is asymptomatic. Which of the following is the most appropriate plan of management?
- a. Reassurance without treatment
 - b. Repeat urine test at term
 - c. Commence with antibiotic treatment ✓
 - d. Ultrasonography of her urinary bladder
 - e. Ultrasonography of her kidneys
34. A 33-year old female presents with right lumbar pain radiating to the groin. Which of the following is the most appropriate initial imaging modality to request?
- a. CT scan abdomen
 - b. Transabdominal pelvic ultrasound ✓
 - c. Transvaginal pelvic ultrasound
 - d. Abdominopelvic ultrasound
 - e. Plain abdominal radiographs
35. A 23-year old man presents to his physician for seeing blood in urine. The renal functions are within normal range. No family history is noted. Which of the following is the most appropriate initial imaging to request?
- a. Abdominopelvic ultrasound
 - b. Micturating cystourethrogram
 - c. CT urogram
 - d. IVU ✓
 - e. DSMA scan
- Handwritten notes:*
- Next to question 33: "Auto", "ask", "w/ wife"
- Next to question 34: "pelvic", "ultrasound"
- Next to question 35: "hematuria", "IVU", "check"

36. During your rotations in the surgical outpatient clinic you clerk a 67-year old man who complains of hesitancy, frequency and dribbling of urine. Appropriate management includes which initial diagnostic test

- a. Micturatingcystourethrogram
- b. Abdominopelvic ultrasound**
- c. CT abdomen
- d. IVU
- e. Transrectal ultrasound

37. An ultrasound image is shown. What is the most likely diagnosis?



- a. Gravid uterus at 7 weeks
- b. Calcified uterine fibroids**
- c. Renal calculus**
- d. Glomerulonephritis
- e. Hydronephrosis

38. Imaging findings in chronic pelvic inflammatory disease include the following except:

- a. Free pelvic fluid ~~✓~~
- b. Adnexal complex mass ~~✓~~
- c. Intra-uterine pregnancy ✓**
- d. Endometrial thickening ✓
- e. Normal pelvic ultrasound ~~✓~~

PID

39. A 27 year-old man presents in the emergency department with hematuria following a fight. Which of the following is the imaging modality of choice?

- a. Abdominal ultrasound (FAST) ~~✗~~
- b. Contrast-enhanced CT abdomen
- c. CT urogram**
- d. Plain abdominal film ~~✗~~
- e. Micturatingcystourethrogram

MCU
→ Trauma
→

40. The image demonstrated below is



- a. CT scan of the brain
- b. T1W brain
- c. T2W brain
- d. Cranial ultrasound
- e. None of the above

c) T is used in eutectic mixtures T ✓
 d) T is metabolised by plasma cholinesterase F -- Hepatic ✓ F F F F F
 e) T is more toxic than lignocaine at the same dose F ✓ A wide ✓
 Equivalents ✓

Tertiary ✓
 a) Is in quaternary T ✓
 b) Is an angiotensin blocker T ✓
 c) Is excreted into bile T ✓
 d) Causes histamine release F ✓
 e) Blocks the cardioinhibitory nerve supply to the heart. T ✓
 Newer B ✓

Alpha 1 Acid (Lycoprotein)
 a) Is increased in burns, trauma, malignancy and post MI. T ✓
 b) Is decreased in neonates, pregnancy and with the oral contraceptive
 c) Is synthesised in the liver. T ✓
 d) Bind: Atenolol.
 e) Significantly modifies the free fraction of propranolol

Causes of the anticoagulant effect of a massive blood transfusion include: