- Q1 A skull radiograph shown here is performed to assess frontal sinuses. What is the name of this view:
- (A) Waters' view
- (B) Caldwell view
- (C) Towne's view
- (D) Pierre's view



## Ans. b) Caldwell view.

It is the angled PA view (15 to 20°) that shows the frontal sinuses clearly.



- Q2 A 32 year old male with progressive difficulty in swallowing both solids and liquids is subjected to Barium swallow study. The image is shown here. What is the next step in management of this patient?
- (A) Upper GI endoscopy and CECT
- (B) Upper GI endoscopy and Manometry
- (C) Upper GI endoscopy and 24 hrs pH monitoring

Relatively young age, dysphagia to both solids and

(D) Upper GI endoscopy and PET



liquids, and

the smooth narrowing of esophagus at the gastro-esophageal junction suggest the diagnosis of Achalasia. The next step for this would be Upper GI endoscopy and Manometry.

4 days after a lap cholecystectomy, a patient presents with pain abdomen. Ultrasound upper abdomen shows collection in Morrison's pouch, suggesting the possibility of biliary leak. What is the most sensitive investigation to diagnose this biliary leak?



- (A) ERCP
- (B) MRCP
- (C) HIDA Scan
- (D) CECT

### Ans. c) HIDA Scan

HIDA (hydroxy iminodiacetic acid) scan is considered to be the most sensitive investigation to detect biliary leak. So the correct answer is HIDA scan. But nowadays most of the medical centres would opt for MRCP, wherever available.

- Q4 Which of the following investigations may be used in the diagnosis of osteoporosis?
  - Bone scan
    DEXA scan
    Quantitative CT scan
    Chemical analysis
- (A) 1, 2
- (B) 2, 3, 4
- (C) 1, 2, 4
- (D) 1, 2, 3, 4

# Ans. b) DEXA scan,

Quantitative CT scan and Chemical analysis can be used to diagnose osteoporosis. Bone scan has no role in osteoporosis.

- Q5 A young male presented with intermittent pain in calf. On examination, a painful ulcer is noted at the big toe, surrounded by discolored skin. What is the best initial investigation in this case?
- (A) Duplex scan
- (B) CT angiography
- (C) Digital Subtraction Angiography (DSA)
- (D) MR angiography

### Ans a) Duplex scan.

Doppler study or Duplex scan is the initial investigation of choice since this is a case of peripheral vascular disease. It is inexpensive, readily available and non-invasive.



- Q6 A 45 year old patient of known peptic ulcer disease was having pain abdomen since many days. For the last two hours he has been complaining of distention abdomen and worsening of pain. An X ray was performed which is shown here. What is the further management?
- (A) Observation
- (B) IV fluids and emergency laparotomy
- (C) Ultrasound abdomen
- (D) CT scan abdomen

### Ans b) IV fluids and emergency laparotomy

This chest X ray shows free gas under



diaphragm

indicating pneumoperitoneum secondary to perforation of peptic ulcer. Since it is a case of perforation peritonitis, emergency laparotomy should be performed.

- Q7 A young male with RTA is brought to the emergency in unconscious state. He has features of raised ICT and low Glassgow coma scale. NCCT brain and spinal imaging are normal. What is the likely diagnosis
- (A) Diffuse axonal injury
- (B) Posterior circulation stroke
- (C) Post concussion syndrome
- (D) Posterior reversible encephalopathy syndrome

### Ans a) Diffuse axonal injury

Diffuse axonal injury a.k.a. traumatic axonal injury is a frequent result of traumatic acceleration—deceleration injuries. The patient is unconscious. It is characterized by multiple focal lesions at the grey—white matter junction but CT scan is not very sensitive to demonstrate the changes and is often normal. MRI is the modality of choice.



- Q8 A 24 year old male patient comes to the emergency after RTA. He is unable to speak complete sentences. A hyper-resonant note is heard on right side of chest on auscultation. Chest X ray is shown here. What is the initial management of this patient?
- (A) Shift the patient to OT for thoracotomy
- (B) HRCT chest
- (C) Needle thoracotomy in 5th ICS
- (D) Large bore needle in 5th ICS followed by ICD in 5th ICS

## Ans d) Large bore needle in 5th ICS followed by ICD in 5th



ICS

The history and X ray chest findings suggest presence of tension pneumothorax. It is an emergency and requires immediate intervention by needle thoracotomy followed by ICD.

- Q9 A 42 year old male is suffering from back stiffness and difficulty in bending forwards. His CT scan image is shown. What is the diagnosis?
- (A) Fluorosis
- (B) Rheumatoid Arthritis
- (C) Ankylosing Spondylitis
- (D) Reiter's disease

### Ans. c) Ankylosing Spondylitis

Stiff spine and ossification of anterior longitudinal scan suggest ankylosing spondylitis. Fluorosis is by increased bone density.



ligament on CT characterized

- Q10 A 45 year old patient with history of mucopurulent cough for 2 years got a CT chest done. The image is shown here. What is the likely diagnosis?
- (A) Sarcoidosis
- (B) Bronchiectasis
- (C) Cystic fibrosis
- (D) Pulmonary hydatidosis

### Ans b) Bronchiectasis

CT scan shows dilated bronchi, their caliber exceeding that of vessels, lack of peripheral tapering suggesting bronchiectasis.



- Q11 In eFAST, which of the following body parts is included apart from abdomen
- (A) Pelvis
- (B) Thoracic cavity
- (C) Peripheral blood vessels
- (D) Dural and subdural vessels

### Ans. b) Thoracic cavity.

The traditional FAST is a point of care ultrasound protocol for patients of trauma and is used to detect any fluid in peritoneal, pleural and pericardial cavity. The pleural fluid is assessed through the costophrenic angles. e FAST is extended FAST and includes assessment of thorax to rule out pneumothorax. It is performed in the upper intercostal spaces.

- Q12 A 6 year old child presented with cervical lymphadenopathy. X ray skull was done which is shown here. What is the preferred drug for treatment?
- (A) Vincristine
- (B) Vinblastine
- (C) Methotrexate
- (D) Cyclosporin

# Ans. b) Vinblastine

Skull x ray of a child with Langerhans cell histiocytosis

or Eosinophilic granuloma shows solitary or multiple well defined lytic lesions. Thus this is a case of Langerhans cell histiocytosis. Drug of choice for chemotherapy is Vinblastine.





