



## EBIR – General Clinical Question Sample Questions

This part consists of approximately 50 multiple-choice questions.

These are standalone questions and the format is "single best answer", i.e. a question offers several possible answers, from which **the best one must be chosen**.

Important note: On the day of the examination, during this part of the assessment, candidates may return to any question, whether it has been answered or not.

The correct answers are listed at the end of the document.

**Q1.** A 65-year-old man is undergoing placement of a percutaneous radiologically inserted gastrostomy tube. During the procedure, he develops nausea, and it is decided to administer intravenous (IV) metoclopramide. He has no renal or liver impairment and weighs 75 kg. What is the most appropriate dose?

- A. 1 milligramme
- B. 10 milligrammes
- C. 20 milligrammes
- D. 4 milligrammes

**Q2.** A 45-year-old man presents to the emergency department with acute onset pain, pallor, pulselessness, paraesthesia, and paralysis at his left leg. Angiography (see figure) was performed. Which of following is the most likely diagnosis in this patient?



- A. Arterial embolism
- B. Cystic adventitial disease
- C. Popliteal artery aneurysm
- D. Popliteal artery entrapment syndrome

**Q3.** A 15-year-old woman with cystic fibrosis presents for bronchial artery embolisation following a recent haemoptysis. You are planning this procedure. Which would be the most common bronchial arterial anatomical pattern observed?

- A. One left bronchial artery and two right bronchial arteries
- B. Shared origin of right and left bronchial arteries
- C. The bronchial arteries arising above the usual level of the anterior spinal artery of Adamkiewicz
- D. Two left bronchial arteries and one right bronchial artery

**Q4.** During a planned renal angioplasty (PTA) an early branching of the renal artery is observed. By definition, early branching of the renal artery means the renal artery branches are:

- A. After the division into dorsal and ventral branches
- B. At the origin from the aorta
- C. Within 1.5-2 cm of origin in the left renal artery or in the retrocaval segment of the right renal artery
- D. Within 4 cm of origin in the right or left renal artery

**Q5.** A 54-year-old man presented with haematemesis and melaena. He was taking non-steroidal anti-inflammatory drugs because of rheumatoid arthritis. He had signs of hypovolaemia (heart rate 130 bpm, blood pressure 100/55 mmHg). Endoscopy showed a duodenal ulcer with active bleeding but endoscopic clipping was not possible. He was then referred for embolisation. A flush aortogram showed an occluded coeliac origin and active bleeding into the second part of the duodenum. What is the most likely best alternative route to achieve successful embolisation?

- A. Inferior mesenteric artery
- B. Left gastric artery
- C. Right gastroepiploic artery
- D. Superior mesenteric artery

**Q6.** A 45-year-old man presents acutely with abdominal pain and vomiting. He is known to drink excess alcohol and is also a smoker. This is the second similar presentation in 6 months. Clinical examination reveals a tender abdomen with guarding focally in the epigastrium. The white cell count and amylase are both elevated. A clinical diagnosis of recurrent acute pancreatitis is made and a CT scan is requested. This confirms pancreatitis but also demonstrates a 4 cm splenic artery pseudoaneurysm. What is the most likely cause for a pseudoaneurysm occurring in this patient?

- A. Auto-immune response with elevated immunoglobulin levels
- B. Infective complication of the pancreatitis
- C. Portal hypertension
- D. Vessel wall erosion by pancreatic enzymes

**Q7.** A 71-year-old man presents with extensive metastatic carcinoma. You are asked to obtain tissue for diagnosis. Although he has numerous lung nodules, they are relatively deep and small. He has a background of severe emphysema and little respiratory reserve. Which of the following locations is the most suitable for percutaneous biopsy to avoid causing a pneumothorax?

- A. CT-guided biopsy of 1 cm mass in the anterior fourth rib, mid-clavicular line
- B. CT-guided biopsy of 2 cm mass in the T9 vertebral body
- C. Ultrasound-guided biopsy of 1 cm left supraclavicular fossa mass
- D. Ultrasound-guided biopsy of 2 cm mass at the dome of the right lobe of the liver

**Q8.** A 28-year-old woman with subfertility is referred for fallopian tube recanalisation. What is the most common cause for an occluded fallopian tube?

- A. Chlamydia Infection
- B. Endometriosis
- C. Prior pelvic surgery
- D. Uterine fibroid

**Q9.** A 78-year-old man with a history of colorectal cancer presents with intractable pain of his left hip due to an osteolytic lesion in the posterior column of the acetabulum. He is scheduled for CT-guided percutaneous osteoplasty with polymethylmethacrylate (PMMA). During the procedure, he is placed prone on the CT table. Which of the following nerve structures is at risk of damage during the procedure?

- A. Obturator nerve
- B. Pudendal nerve
- C. Sacral plexus
- D. Sciatic nerve

**Q10.** A 71-year-old man presents with 2 colorectal metastases within the right hepatic lobe and a portal vein embolisation (PVE) procedure is planned. When you consent the patient, you inform him about the risk of complications of portal vein embolisation (PVE). What is the risk of major complications?

- A. Major complications are encountered in approximately 0.5% of cases
- B. Major complications are encountered in approximately 10% of cases
- C. Major complications are encountered in approximately 2% of cases
- D. Major complications are encountered in approximately 5% of cases

**Q11.** What is the attenuation of a 0.5 mm lead equivalent apron?

- A. 50-70% of the incident radiation
- B. 70-90% of the incident radiation
- C. 90-95% of the incident radiation
- D. 95-99% of the incident radiation

- Q12.** Regarding the popliteal artery entrapment syndrome, if at angiography the initial images are normal, which of the following manoeuvres should be performed to further test for presence of this condition?
- A. Extreme inversion of the foot
  - B. Plantar flexion of the foot
  - C. Flex the knee
  - D. Inflate a blood pressure cuff on the calf
- Q13.** After percutaneous balloon angioplasty (PTA) of the superficial femoral artery (SFA), you diagnose a flow limiting dissection. What is the most appropriate next step?
- A. Stent the dissection
  - B. Atherectomy of the dissection membrane
  - C. Prolonged balloon dilation
  - D. Repeat imaging after one week
- Q14.** A 23-year-old cystic fibrosis patient's general practitioner calls you and states the patient's portacath is no longer working. The patient has also mentioned intermittent palpitations. You are asked to perform a portogram and on initial screening you realise that the tube is disconnected and has migrated into the pulmonary artery. What would be the most appropriate next step in the management of this patient?
- A. CT angiography (CTA) of the chest
  - B. Electrocardiogram (ECG) monitoring for 24 hours
  - C. Endovascular retrieval
  - D. New portacath placement
- Q15.** A 70-year-old man presents with right upper quadrant pain, fever at 39.5°C and tachycardia at 130 bpm. CT of the abdomen shows a 6 cm rim enhancing fluid density collection in the inferior aspect of segment 3 of the liver. What is the most appropriate therapeutic management of this patient?
- A. Intravenous antibiotics
  - B. Percutaneous drainage
  - C. Percutaneous aspiration
  - D. Open surgical drainage

**Q16.** A 35-year-old man with a low-flow vascular malformation in the lower leg being treated with percutaneous absolute alcohol injection presents for biopsy of an unclear bone lesion with a permeative destruction pattern in the supracondylar portion of the femur on the same side. What is the correct course of action?

- A. Use of a high-speed drill with a coaxial needle to allow multiple core biopsies
- B. Further evaluation with MR imaging before biopsy
- C. Refuse the biopsy because of the risk of tumour seeding along the biopsy track
- D. Perform an aspiration biopsy to reduce the risk of fracture

## Correct Answers

1. **B**
2. **A**
3. **D**
4. **C**
5. **D**
6. **D**
7. **B**
8. **A**
9. **D**
10. **C**
11. **D**
12. **B**
13. **C**
14. **C**
15. **B**
16. **B**