

Short Answer Questions Practice

1. A 26-year old man attends the ED at 6 pm on a Friday evening complaining of lower abdominal pain and dysuria. The GU clinic is closed for the next 3 days as it a long weekend.

His urinalysis showed:

- Blood ++
- Protein +
- Glucose –ve
- Nitrites (nitrates) –ve
- Leucocytes –ve

What features in the history would suggest STD rather than UTI (2)

a.

b.

c.

d.

You decide it STD. What 3 things would you like to do before commencing empirical therapy? (3)

a.

b.

c.

What antibiotic regime would you commence and for how long? (2)

a.

b.

2. His mother brought an 18-months old child into the ED. He has been playing with a few 10p coins and mum feels she saw one coin in his mouth. What questions would you like to ask in the history? (3)

a.

b.

c.

What 2 thing you include in your examination? (2)

a.

b.

Name 2 investigations you would carry out in the ED. (2)

a.

b.

Describe three sites and the vertebral levels at which foreign bodies are most likely to get stuck in the oesophagus? (3)

Anatomical site

Vertebral level

3. A 34 year old woman returns to the ED after she was seen a senior house officer (SHO) a day before with a history of malaise, arthralgia, fever and dry cough. She was treated for viral illness. On return, she complains of breathlessness and her oxygen saturation in the ED on high flow oxygen was 94%. Her chest x-ray showed bibasal shadowing.

Report on the CXR provided. (2)

a.

b.

What type of non-invasive ventilation (NIV) would you use if indicated? (1)

a.

Name 3 ways you can improve compliance with NIV. (3)

a.

b.

c.

Make 2 comments on the ECG tracing from this patient. (2)

a.

b.

4. A 35 year-old man comes to the ED with bloody diarrhoea and abdominal pain. He has a 5-year history of Crohn's diseases. He has severe pain, looks unwell (he has guarding) and has a temperature of 37.8°C and tachycardic at 120/min.

Make 4 comments on this patient's abdominal x-ray shown. (2)

a.

b.

c.

d.

List two antibiotics including their routes of administration for this patient. (2)

a.

b.

Give the names of 2 other drug treatment and the routes of administration. (2)

a.

b.

Name 4 cutaneous and musculoskeletal manifestation of inflammatory bowel disease. (4)

a.

b.

c.

d.

5. A 46-year old woman attends the ED with pins and needles in her toes, clumsiness and double vision. She had an 'upset stomach' last week. She is usually fit and well. Clinical examination revealed grade 4/5 power in her lower limbs with absent deep tendon reflexes and diplopia on right lateral gaze. What is the likely diagnosis? (1)

a.

List 2 differential diagnoses. (2)

a.

b.

List 3 investigations you would carry out in the ED and indicate the reason. (3)

Investigation	Reason
a.	
b.	
c.	

Give the nerve root innervations of the following reflexes. (5)

a.
b.
c.
d.
e.

6. A mother brings her 10-year-old child to the ED with lethargy and malaise for a few weeks. She is limping and complaining of hip pain. There is gross limitation of movement of the left hip.

Blood test results are as follow:

- a. Haemoglobin = 8.4
- b. Platelets = 20
- c. Leucocytes = 28
- d. Reticulocytes = 0.5%

Give 4 differential diagnoses. (4)

a.
b.
c.
d.

List 6 investigations you would perform in the ED. (3)

a.

b.

c.

d.

e.

f.

Comment on the haematology result provided on this patient. (3)

a.

b.

c.

7. Ambulance crew brought a 51-year old man who vomited throughout the night to the ED. He deteriorated in the early morning with breathlessness, fever and generally unwell. His respiratory rate was 40, pulse 130 and temperature of 38.5°C.

Haematology result

Hb = 12.7

W BC = 9.8

Plt 150

MCV 106

Biochemistry

Alt = 75

Bil = 9

GGT 252

Comment on his chest x-ray shown. (2)

a.

b.

What is the diagnosis? (2)

a.

b.

What investigations or therapeutic measures would confirm the diagnosis? (2)

a.

b.

Comment on the blood results. (2)

a.

b.

In view of the history and blood results, what is likely underlying aetiology or precipitant of the diagnosis? (1)

a.

8. A 25-year old man comes to hospital complaining of sore (red) left eye for 2 hours. He was hammering metal yesterday and wears permanent contact lenses. His vision is slightly reduced in the affected eye. What questions might you want to ask in the history? (4)

a.

b.

c.

d.

What features might suggest penetrating eye injury on inspection of the anterior aspect of the globe? (3)

a.

b.

c.

You decide this is a penetrating eye injury. What 3 drugs would you give? (3)

a.

b.

c.

9. A 9-year-old boy (25 kg weight) was brought into the ED by his mother. He was dehydrated and lethargic looking unwell. Give 4 specific features to suggest dehydration. (4)

a.

b.

c.

d.

He has received resuscitation fluids and his deficit has been calculated. Calculate his maintenance for the next 8 hours. (Show your calculations) (3)

a.

b.

c.

Give 3 other tests you would like to do in the ED. (3)

a.

b.

c.

10. A 37-year old male comes to the ED with a 3 months history of malaise, night sweats and weight loss. His partner is hiv positive. Comment on the CXR (1).

a.

Give 4 possible diagnoses of the x-ray findings

a.

b.

c.

d.

List 3 common respiratory pathogens in HIV (3).

a.

b.

c.

List 3 items of the British Thoracic Society grade severity of pneumonia (3).

a.

b.

c.

11. A 14-year old girl comes to the ED with lower abdominal pain. She is here without her parents and pregnancy test is positive. She is requesting a termination. She is in a relationship with a 19-year old partner. She does not want the parents notified. How would you assess some capacity? (3)

a.

b.

c.

What things must you ensure regarding Gillick competence. (3)

a.

b.

c.

On closer questioning she tells you she has had multiple sexual partners who are all adults and provided by her 19-year old boyfriend. What would you do now? (4)

a.

b.

c.

d.

12. A 37-year-old woman comes to ED. She has recently been diagnosed with SLE and has been taking regular ibuprofen for joint pains. She has come in because her ankles, hands and eyelids are swollen and she feels very breathless. Her exercise tolerance is greatly reduced. She was fit and well prior tot his. Her bloods show:

Sodium 145
Potassium 6.7
Urea 16.7
Creatinine 197

FBC is normal
ABG shows metabolic acidosis
Total protein 24
LFT normal

Her ECG is shown. Comment on the ECG changes. (2)

a.

b.

What other investigations (three things in the urinalysis) would you do? (4)

a.

b.

c.

d.

Give 2 likely causes for the deterioration. (2)

a.

b.

13. A 95-year old with advanced Alzheimer's is brought in from a nursing home. He has a 3-day history of the rash shown below. He has a low-grade fever, has a pulse of 100 and a BP of 102/95. Give 4 cause of the picture shown below. (4)

a.

b.

c.

d.

What single question in the history would contribute toward diagnosis? (1)

a.

What is Nikolsky's sign? (1)

a.

What treatment would you offer? (4)

a.

b.

c.

d.

14. A 72-year old man has fallen from a horse. He is immobilised and brought into the ED on a spinal board. His pulse is 80 and BP 102/84. He is complaining of abdominal pain and back pain. He has a past medical history of atrial fibrillation and hypertension. Name 2 medications other than warfarin that he may be taking which may affect his physiological status. (2)

a.

b.

You decide to do a fast scan. Give 4 limitations of fast scan. (4)

a.

b.

c.

d.

The surgeons decide to take him to theatre – what 2 things would you do now with doses? (2)

a.

b.

What are the complications of the medication listed in the first question? (2)

a.

b.

15. A 45-year old lady attends a week post abdominal hysterectomy for fibroids. She is known to have hyperthyroidism, which is being treated. She attends with a tachycardia of 140/min. Her temperature was 39.1°C and agitated. Abdominal examination showed well-healed surgical wound and soft to palpation. You decide she has thyroid storm. Give 4 possible differential diagnoses, which could account for her symptoms. (2)

a.

b.

Give 4 non-drug interventions (management) in her therapy. (4)

a.

b.

c.

d.

16. A 27 (69 kg) year old female attends ed with butterfly earring stuck in her ear lobule. Draw a diagram of the ear and show the landmarks of the sensory innervations to facilitate nerve blocks for removing the retained FB from the ear. (5)

a.

b.

c.

d.

e.

Calculate the dose (mls) of 1% plain lidocaine you would use for this procedure. Show your calculation. (2)

a.

b.

Give 3 systems affected by local anaesthetic toxicity and how they are affected. (3)

System affected	Effects

17. Photograph of fingertip avulsion injury with bone exposed.

Who would you treat this injury?

a.

b.

c.

d.

What are the complications associated with this kind of injury?

a.

b.

c.

d.

18. A woman presents with lower abdominal pain. She has been seen by her GP who diagnosed PID and started her on doxycycline and metronidazole.

How would you confirm this diagnosis? (3)

a.

b.

c.

What other tests would you do? (3)

a.

b.

c.

19. A 23-year-old man found collapsed at 6:00 am with a GCS of 13/15. His blood gases results were as follows: pH 7.31, pCO₂ and pO₂ were normal. The base excess was -6 and potassium was 7.1.

What do these blood tests indicate? (4)

a.

b.

c.

d.

What does the ECG show? (ST segment don in V2-4, tall/tented T waves) (4)

a.

b.

c.

d.

Blood tests results come back and show the following: urea 11, creatinine 220, potassium 7.9, CK 85 000, amylase 2000.

Give 3 possible causes. (3)

a.

b.

c.

What are your treatment priorities?

a.

b.

c.

d.

e.

20. A picture of a 6-year-old girl with red swollen eye.

What is the diagnosis (orbital cellulitis, pre-septal cellulitis, erysipelas)?

a.

Name 3 complications associated with this condition.

a.

b.

c.

Name 2 possible causative agents.

a.

b.

What is the possible source of infection in this age group?

a.

b.

c.

d.
