



Leicester FCEM Course Autumn 2011

Short Answer Question (SAQ) Paper 1
Questions

20 questions

10 marks per question

Time allowed: 2 hours and 30 minutes

Question 1

What is the likely diagnosis? [1 mark]

What is the immediate treatment? [4 marks]

You decide to perform a short synacthen test. How is this done? [1 mark]

She starts to vomit blood and passes a large amount of melaena. She is still shocked and you suspect moderate to severe haemorrhage. Outline your immediate management. [4 marks]

Question 2

What are the symptoms of mild cyanide poisoning? [2 marks]

Following an ingestion of potassium cyanide, what are the antidotes for severe poisoning? [4 marks]

What is the Emergency Department management of patients with mild cyanide poisoning? (2)

A treatment for cyanide poisoning binds cyanide by forming methaemoglobin . How is methaemoglobinaemia treated? [2 marks]

Question 3

How many colony forming units is considered as a positive culture result for *E. Coll*? [1 mark]

Give 4 long term complications of untreated urinary tract infection in infants. [4 marks]

Give 4 factors that would increase this child's risk of long term damage from a UTI. [4 marks]

Give 3 gram-negative organisms that cause UTIs. [3 marks]

Question 4

[A]

Describe the abnormalities on the ECG. [3 marks]

How would you correct the electrolyte abnormality? Give dose and route. [2 marks]

What other electrolyte abnormality is often associated with the above electrolyte abnormality? [1 mark]

[B]

How would you manage this patient? [4 marks]

Question 5

How do you calculate the osmolar gap? [1 mark]

Give 2 clinical manifestations of Stage 1 ethylene glycol poisoning. [2 marks]

Give 2 drugs that can be used to treat ethylene glycol poisoning and what is their mechanism of action? [3 marks]

Calculate this patient's anion gap. [1 mark]

Give 6 other causes of metabolic acidosis with an elevated anion gap. [3 marks]

Question 6

What is your next line of investigation? What is the associated childhood cancer risk? What is the risk to the maternal breasts? [3 marks]

| Investigation | Childhood cancer risk | Maternal breast cancer risk |
|---------------|-----------------------|-----------------------------|
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A small pulmonary embolus is detected. What is the treatment and dose? [3 marks]

She unfortunately loses consciousness and starts to fit.

What is the immediate treatment? Give drug doses/routes where appropriate. [4 marks]

Question 7

What are the features of Kawasaki disease? [4 marks]

What potential condition results from the long term treatment of Kawasaki disease and the viral illness described? [1 mark]

There are 5 stages of this syndrome

What are the features of stage one? [2 marks]

The last stages include seizures, multi organ failure, flaccidity, high blood ammonia and death. What is the pathophysiology of this condition? [2 marks]

What is the risk of death in children with brain damage? [1 mark]

Question 8

What is the likely diagnosis? [1 mark]

Give 2 common causes of the above diagnosis. [2 marks]

What group of infection is associated with the above diagnosis? [1 mark]

What is the name and the diagnostic criteria attached to the above diagnosis? [4 marks]

Give 4 presentations when surgery is considered. [2 marks]

Question 9

[A]

What is the differential diagnosis in a child of this age presenting with a limp? [4 marks]

On examination he is found to have small petechial rashes <1mm in diameter on both forearms.

Other than FBC U&E's, what investigations will you organise next? [2 marks]

What is the more likely diagnosis? [1 mark]

[B]

Describe the Radiograph. [2 marks]

What age group suffer with this condition? [1 mark]

Question 10

[A]

What is the most likely diagnosis? [1 mark]

What is the likely organism? [1 mark]

What is the complication if treatment is not initiated? What is the treatment in question? [2 marks]

[B]

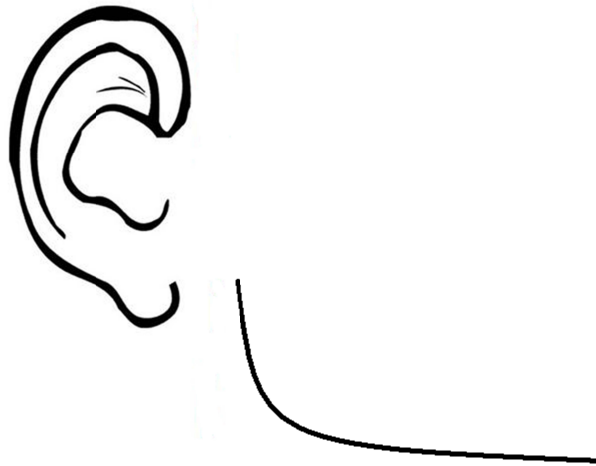
You suspect acute bacterial sialadenitis in a 76-year-old woman. What clinical findings would you expect? [4 marks]

What are the organisms commonly involved? [2 marks]

Question 11

Draw and name the sensory nerve supply to the ear. [3 marks]

Indicate where you would infiltrate local anaesthetic to block sensation to the ear. [2 marks]



What does 0.05% mean when describing local anaesthetic drug concentration? [1 mark]

Give four early signs and symptoms of local anaesthetic toxicity. [2 marks]

What is the antidote to local anaesthetic poisoning? Give drug and dose. [2 marks]

Question 12

[A]

Describe the changes that can be seen on his retina. [3 marks]

What is the cause of his sudden blindness? [1 mark]

[B]

Give two systemic symptoms of this condition. [2 marks]

What is the drug type and mechanism of action of the following drugs used to treat this condition? [4 marks]

(i) Mannitol

(ii) Acetazolamide

Question 13

Define sepsis. [1 mark]

Define septic shock. [1 mark]

Define neutropenic sepsis. [1 mark]

What is this patient's CURB-65 score and what does it predict? [3 marks]

What are the criteria to suggest hospital acquired pneumonia? [2 marks]

What antibiotics are considered as first line for Community Acquired Pneumonia treated at home? Give route and dose. [2 marks]

Question 14

[A]

What is the risk of HIV following a needlestick injury? [1 mark]

What is the current antiviral recommendation? Give name and doses. [2 marks]

What other drugs/treatment will you consider for her? [2 marks]

[B]

What is Clinical Governance? [2 marks]

What are the components of Clinical Governance? [3 marks]

Question 15

What investigation is shown? [4 marks]

Identify the structured labelled A-F. [3 marks]

A
B
C
D
E
F

Identify 6 abnormalities on this investigation. [3 marks]

Question 16

What are the four common features of pelvic inflammatory disease? [4 marks]

Give 2 of the common pathogens? [2 marks]

What combination of drugs would you use to treat this condition? [2 marks]

In what circumstances do you consider admission? [2 marks]

Question 17

Give the most likely diagnosis. [1 mark]

Give 5 treatment options available (multiple treatments for the same abnormality not accepted.) [5 marks]

How would you confirm the diagnosis? [1 mark]

What are the symptoms of hypercalcaemia other than the ones stated already? [3 marks]

Question 18

What is the commonest cause of diarrhoea? [1 mark]

What other causes of diarrhoea in a traveller do you know? [3 marks]

She also complains of night sweats and admits that she did not manage to take her malaria prophylaxis regularly.

What is the name of the parasite that causes this condition? [1 mark]

What is the incubation period? [1 mark]

How often does the symptoms cycle occur? [1 mark]

Give 6 poor prognostic features of this condition. [3 marks]

Question 19

[A]

What do you ask from him and what information can you give him? [2 marks]

Give 6 serious arrestable (indictable) offences. [3 marks]

[B]

While looking through your patient list one of them fits the bill but he also complained of wrist pain. What does this radiograph show? [1 mark]

What was the likely mechanism of injury? [1 mark]

Which bone is commonly fractured in association with this injury? [1 mark]

What are common complications of this condition? [2 marks]

Question 20

Comment on these results. [1 mark]

Explain the blood gas result. [1 mark]

On endoscopy he had a gastric outlet obstruction. What are the possible causes? [2 marks]

If this were to occur in a 5-week-old boy with a history of vomiting shortly after feeds, what is the likely diagnosis? [1 mark]

What is typical of the initial presentation, with regards to vomiting and feeding? [1 mark]

What 2 ways may this be diagnosed? [2 marks]

What are the 2 main goals of preoperative management? [2 marks]