

1. a) Classify the causes of portal hypertension, giving one example for each of the classes (3 marks)
- b) List the modalities of management of acute variceal bleeding in a 40-year old boy from Machakos (5 marks)
- c) How would you prevent re-bleeding in the patient in (b) (2 marks)

2. A 29-year-old teacher presents with anxiety, palpitations, weight loss, heat intolerance and an anterior neck mass.
 - a) What is the most likely diagnosis (1 mark)
 - b) List 3 investigations and their expected results (3 marks)
 - c) List 3 expected clinical signs (3 marks)
 - d) Outline the therapeutic options in this patient (3 marks)

3. A usual resident of Nairobi visited Kisumu for three weeks. On returning to Nairobi, he develops fever, rigors, headache, abdominal pain, and loose motions. He gets confused and has associated neck pain.
 - a) List three differential diagnoses (3 marks)
 - b) Outline the necessary investigations to ascertain his diagnosis (7 marks)

4. A 32-year-old woman with heart failure secondary to dilated cardiomyopathy has been stable at New York Heart Association class 2. She presents with rapid worsening of symptoms.
 - a) Outline the potential causes of the acute decompensation (5 marks)
 - b) Outline the relevant investigation (5 marks)

5. a) List five risk factors for Osteoarthritis (5 marks)
- b) Outline the management of arthritis (5 marks)

6. A 65-year-old man presents with bone pains, tenderness over the lumbar spine. Investigations show Haemoglobin 6.5 g/dl, normochromic picture and ESR 70 mm/hr.
 - a) Give 2 differential diagnosis (2 marks)
 - b) What investigations would you do to ascertain the diagnosis (8 marks)

Ca prostate
 Chronic Osteomyelitis
 TB spine
 RA
 Multiple Myeloma
 Leukemia - case?

Osteoarthritis
 Metabolic vit. D def

Ca
 Tuberculosis
 Malaria
 Typhoid fever
 Dengue fever
 Bacterial meningitis
 Cryptosporidiosis

Heart failure
 Blood culture, ABG, UEC
 Urinalysis
 Chest X-ray
 Stool culture

If acute
 Blood culture (within 2 hrs)
 Arthrocentesis
 Synovial fluid
 Pleural fluid
 Urinalysis
 Creatinine

Ca - Cervical spondylitis
 Meningitis
 a - Rapid response test
 b - ESR count
 c - LP - CSF microscopy, MSC
 d - ECG - rule out MI
 e - Blood culture
 Failure of therapy med / fluid overload
 A renal
 Urinalysis / Urine microscopy / Urine culture
 Urinalysis
 Renal function
 ESR
 Hypertension status

Corrected to Osteoarthritis

7. A 55 year old man presents with a 4 day history of cough, right sided chest pain, shortness of breath and fever. His sputum is rusty brown and sometimes blood stained.
 a) What is the most likely diagnosis (1 mark)
 b) List 5 diagnostic investigations (5 marks)
 c) Outline the treatment of this patient (4 marks)

8. a) Define acute renal failure (acute kidney injury) (4 marks)
 b) Outline the causes of pre-renal azotemia (6 marks)

9. Concerning bacterial meningitis
 a) List four common causes of bacterial meningitis (4 marks)
 b) Give three useful investigations (3 marks) and
 c) Outline the treatment of the patient (3 marks)

10. A 60 year old Kenyan female patient presents with features consistent with peptic ulcer
 a) List 3 likely causes of peptic ulcer disease in her (3 marks)
 b) Outline the diagnostic evaluation of this patient to

- i) Confirm presence of ulcers (2 marks)
- ii) Determine the causative factor (5 marks)

<p><u>Macroscopic - NSAIDs</u> central location Hypochloric H. pylori H. pylori causes NSAIDs NSAID causes NSAID causes taking aspirin</p>	<p><u>Location ulcer</u> • Duodenum (antral, prepyloric, S-shaped in 2 parts) • Body of stomach • Less markedly located (A. pylori) • Three typical features: Involvement</p>	<p><u>Acute localized</u> • Antral-pyloric • Proximal duodenum • Pyloric antrum • Distal duodenum • Gastric outlet obstruction</p>	<p><u>Investigation</u> Full blood count → Hb Urea/electrolytes LP Pylori test</p>
<p><u>Quadrant</u> 2. duodenal 1. pyloric</p>	<p><u>Quadrant</u> Pyloric 1. pyloric 2. duodenal</p>	<p><u>Investigation</u> PPI Amoxicillin</p>	<p><u>Investigation</u> PPI + clarithromycin + metronidazole</p>
<p><u>Investigation of blood count</u> anemia etc. <u>Dyspepsia/gastric</u> <u>balance</u> main meal gastric motility</p>	<p><u>Investigation</u> PPI + clarithromycin + metronidazole</p>	<p><u>Investigation</u> PPI + clarithromycin + metronidazole</p>	<p><u>Investigation</u> PPI + clarithromycin + metronidazole</p>

Handwritten notes:
 • H. pylori
 • NSAIDs
 • H. pylori
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