

UNIVERSITY OF BOLTON

SCHOOL OF HEALTH AND HUMAN SCIENCES

MSc ADVANCED PRACTICE
ADVANCED PROFESSIONAL DEVELOPMENT

SEMESTER ONE EXAMINATION 2018/2019

ACUTE MEDICINE

MODULE NO: HLT7089

PAPER 2: EXTENDED MATCHING QUESTIONS

Date: Wednesday 16 January 2019

Time: 3.30 pm – 5.00 pm

INSTRUCTIONS TO CANDIDATES:

There are 50 questions.

Answer ALL 50 questions.

Each question is worth 2 marks.

There are a total of 100 marks available.

The pass mark is 50%.

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1. Arm swelling

Option list:

- a. Deep Vein Thrombosis
- b. Arterial Obstruction
- c. Thrombophlebitis
- d. Pre-patellar bursitis
- e. SVC obstruction
- f. Haematoma
- g. Fracture
- h. Cellulitis

For each patient with arm swelling, select the single most likely diagnosis:

1. A 43 year old with a red and swollen right lower arm that is hot and tender to touch. On examination, there is clear demarcation and a small bite mark.
2. A 69 year old woman with a left swollen arm who is on warfarin for a DVT. On examination she has full range of movement but there is localised bruising from where she may have 'banged it'.
3. A 54 year old man with full left arm swelling. He tells you that his face feels a bit swollen and he has recently been experiencing exertional breathlessness. On examination, there is non-tender pitting oedema. You notice that his JVP is raised.
4. A 52 year old woman who smokes. She has developed full left arm swelling which is tense and tender is to touch. Her CXR shows a right middle lobe mass.
5. A 73 year old gentleman who smokes. He has developed right arm swelling which is non-tender, and reduced sensation to his right hand. His fingers are discoloured and feel cold.

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2. Anaemia

Option list:

- a. Iron deficiency anaemia
- b. Macrocytic anaemia
- c. Myeloma
- d. Anaemia of chronic disease
- e. Aplastic anaemia
- f. Auto immune haemolytic anaemia
- g. Thalassaemia
- h. Sickle cell crisis

For each patient with anaemia, select the single most likely diagnosis:

6. A 26 year old man with a three month history of lethargy, bruising and night sweats. Blood tests show a haemoglobin of 62, with low white cell count and platelet counts, and absence of reticulocytes.
7. A 32 year old lady with a six month history of progressive exertional breathlessness and fatigue. Blood tests show a Hb of 80, a low MCV and a low ferritin level.
8. A 58 year old man with who has a history of drinking alcohol excessively presents to the emergency department with confusion. Blood tests show a Hb of 92 and an MCV of 103.
9. An 18 year old man of African origin with severe generalised pain. Blood tests show a Hb of 52.
10. A 52 year old man presents to his GP with a three month history general malaise, and back and hip pain. Blood tests show Hb of 90, normal MCV and pancytopenia. Urinary Bence Jones proteins are present.

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3. ECG abnormalities

Option list:

- a. Hyperkalaemia
- b. Left bundle branch block
- c. Anterolateral myocardial infarction
- d. Pulmonary Embolism
- e. Right bundle branch block
- f. Atrial fibrillation
- g. Hypokalaemia
- h. Inferior myocardial infarction

For each clinical scenario or ECG finding, select the most likely cause:

- 11. Dominant R wave in V1, inverted T waves V1-V3 and deep S wave in V6.
- 12. A 49 year old man with crushing left sided chest pain that radiates to his jaw. The ECG shows ST elevation V1-V6.
- 13. A 56 year old lady with chronic kidney disease and ECG changes that show small P waves and tented T waves.
- 14. A 72 year old woman who is admitted with intermittent irregular palpitations and breathlessness.
- 15. A 43 year old man who presents with breathlessness. The ECG shows sinus tachycardia, deep S wave in I, inverted T wave and Q wave in lead III.

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4. Shortness of breath

Option list:

- a. Pleural effusion
- b. Pneumothorax
- c. Fibrosing alveolitis
- d. Anaemia
- e. Pneumonia
- f. Pulmonary oedema
- g. Bronchogenic carcinoma
- h. Acute respiratory distress syndrome

For each patient with shortness of breath, select the single most likely diagnosis:

16. A 66 year old man is admitted with weight loss, cough, haemoptysis and shortness of breath. On examination he is anaemic, clubbed and afebrile, and there is reduced air entry to his right upper lobe.
17. A 72 year old lady is admitted with breathlessness and cough productive of pink frothy sputum. On examination, she is cyanosed and tachycardic, and has bilateral inspiratory crackles.
18. A 49 year old man presents with fever, rigors, breathlessness and right sided pleuritic chest pain. On examination, there is reduced expansion to the right side, and creps to the right base.
19. A 23 year old woman with progressive breathlessness and fatigue.
20. A 19 year old slim man with sudden onset of left sided pleuritic chest pain and breathlessness.

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5. Weight loss

Option list:

- a. Coeliac disease
- b. Thyrotoxicosis
- c. Crohns disease
- d. Irritable bowel syndrome
- e. Diabetes mellitus
- f. Tuberculosis
- g. Pancreatic carcinoma
- h. Gastric carcinoma

For each patient below, select the single most likely cause of the weight loss:

- 21. A 32 year old man of South Asian descent complains of fever, weight loss, night sweats and persistent cough.
- 22. A 29 year old woman complains of weight loss associated with diarrhoea and palpitations. Her pulse is irregular.
- 23. A 21 year old man presents with a one month history of weight loss and excessive thirst.
- 24. A 52 year old man with weight loss, constipation, abdominal cramping and tiredness.
- 25. A 28 year old lady presents with a 3 week history of weight loss and loose stools which occur up to 8 times a day and night.

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6. Headache

Option list:

- a. Benign intercranial hypertension
- b. Migraine
- c. Cluster headache
- d. Viral meningitis
- e. Bacterial meningitis
- f. Sagittal sinus thrombosis
- g. Space occupying lesion
- h. Subdural haemorrhage

For each patient with headache, select the single most likely diagnosis:

26. A 20 year old woman who has recently been started on the oral contraceptive pill presents with a sudden, severe headache that radiates across the top of her head. A CT Brain with contrast shows a positive Delta sign.
27. A 32 year old man is brought into the emergency department with a 12 hour history of severe headache. On examination, he is photophobic and has marked meningism. Cerebrospinal fluid shows a raised lymphocyte count and normal protein and glucose concentrations.
28. A 21 year old woman with a raised body mass index presents with a 6 month history of intermittent headaches that are associate with visual blurring. Her symptoms improve with weight loss and diuretics.
29. An 86 year old man is admitted with drowsiness and loss of balance. His family inform you that he has been falling recently.
30. A 62 year old woman is admitted to AMU following a partial seizure. She describes a generalised headache for the past three weeks that is worse on bending forward or coughing. She has previously been treated for squamous cell lung cancer

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7. Haematemesis

Option list:

- a. Crohns disease
- b. Gastric ulcer
- c. Gastric carcinoma
- d. Oesophageal varicies
- e. Mallory Weis tear
- f. Barretts oesophagus
- g. Duodenal ulcer
- h. Ulverative colitis

For each patient with haematemesis, select the single most likely diagnosis:

- 31. A 58 year old man who drinks alcohol excessively is admitted after vomiting blood. On examination he has signs of chronic liver disease.
- 32. A 27 year old lady presents with haematemesis after a bout of gastroenteritis where she has been vomiting.
- 33. A 49 year old man complains of epigastric pain that is worse at night and is relieved by eating. He has been vomiting small amounts of blood.
- 34. A 63 year old lady with a several year history of heartburn presents with intermittent and occasional haematemesis. Endoscopy reveals intestinal-type metaplasia at the distal oesophagus.
- 35. A 65 year old lady presents with a two month history of dyspepsia, weightloss and haematemesis. Examination reveals an enlarged left supraclavicular node.

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8. Electrolyte and metabolic disturbances

Option list:

- a. Hypokalaemia
- b. Hyperosmolar non-ketotic coma
- c. Addisons disease
- d. Vitamin D toxicity
- e. Hypercalcaemia
- f. Hypocalcaemia
- g. Hyperkalaemia
- h. Syndrome of inappropriate antidiuretic hormone secretion (SIADH)

For each patient with an electrolyte or metabolic disturbance, select the single most likely diagnosis:

- 36. A 62 year old smoker who presents with weight loss and haemoptysis. His urine osmolality raised and the serum sodium is 115 (n=135-145).
- 37. A 32 year old lady is admitted with tetany and carpo-pedal spasm after thyroid surgery.
- 38. A 46 year old man who is being treated for a fungal infection, presents to the AMU with muscle weakness, arrhythmias and tetany. The ECG shows prominent U waves and prolonged P-R interval.
- 39. A 52 year old lady presents with thirst, abdominal pain and a history of renal stones.
- 40. A 21 year old triathlete presents with a two month history of nausea.. He does not take any regular medication. She regularly takes a number of dietary and mineral supplements.

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9. Fall and loss of consciousness

Option list:

- a. Epilepsy
- b. Pseudo seizure
- c. Carotid sinus syncope
- d. Postural hypotension
- e. Meniere's disease
- f. Drop attack
- g. Arrhythmia
- h. Vaso-vagal syncope

For each patient with a fall or loss of consciousness, select the single most likely diagnosis:

- 41. An 80 year old lady who has recently been started on an anti-hypertensive is admitted following a fall after getting out of bed.
- 42. A 72 year old man is referred with 'blackouts' The ECG shows trifasicular block.
- 43. An 18 year old girl is admitted following an unwitnessed seizure. She was disorientated following the event and there is evidence of tongue biting.
- 44. A 42 year old lady falls to the floor after hearing bad news
- 45. A 68 year old woman is admitted to the AMU following an attack of sudden weakness of the legs, which caused her to fall to the ground. There was no loss of consciousness or confusion. She describes several episodes of this over the past few months.

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10. Management of arrhythmia

Option list:

- a. Digoxin
- b. Beta blocker and oral anticoagulant
- c. Beta blocker
- d. IV Amiodarone
- e. IV Adenosine
- f. DC cardioversion
- g. IV Atropine
- h. Permanent dual chamber pacing

For each patient below, select the single most likely option to manage the arrhythmia:

46. A 78 year old man is admitted unwell following an episode of loss of consciousness. On examination, his pulse is 32bpm, BP is 70/42 and the ECG shows complete heart block.
47. A 22 year old man is admitted unwell after ingesting amphetamines on a 'night out'. His ECG shows a narrow complex tachycardia with a rate of 150 and his BP is 86/52.
48. A 52 year old woman is admitted with an irregular pulse at 134 bpm. Her BP and other vital signs are within normal limits. She has no previous medical history.
49. A 78 year old man who is admitted following episodes of light-headedness. There has been no loss of consciousness. He takes Simvastatin for hypercholesterolemia. His BP is normal and the cardiac monitor shows intermittent episodes of complete heart block.
50. A 66 year old woman is admitted with palpitations and mild chest discomfort. Her cardiac monitor shows a broad complex tachycardia rate 150 and the BP is 108/52.

END OF QUESTIONS