UNIVERSITY OF JAFFNA, SRI LANKA

FACULTY OF MEDICINE
FINAL EXAMINATION FOR MEDICAL DEGREES —JULY 2021

MEDICINE PAPER II

Date: 26.07.2021 **Time: 3 HOURS**

Answer All TEN (10) Questions

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1. **A 30-year-female** presents to accident and **emergency department with shortness of breath of one day duration.** She also has **reduced urine output for last** 3 days and no urine output for last **12 hours.** Examination revealed **bilateral pedal oedema, pulse 90bpm, BP 165/100mmHg, elevated JVP, bi-** basal fine **crepitations and tender hepatomegaly without palpable urinary bladder. Initial** investigations show

   UFR — Albumin +, RBC- field full with few RBC cast. Blood urea - 70mddi(normal 6 -20mg/c11)

   1.1 What is the most likely diagnosis? (10 marks)

   1.2 List 4 causes for above diagnosis? (10 marks)

   1.3 List the investigations that need to be performed on this patient? (30 marks)

1.4 Discuss the management of this patient? (50 marks)

02. A 56-year old man presents with a history of right sided pleuritic chest pain of 3 days duration.

2.1 List 4 causes of pleuritic chest pain? **(10 marks)**

2.2 Examination reveals signs confined to right lower zone with reduced vocal fremitus and vocal resonance with stony dullness. List 3 important general examination findings those have aetiological significance? (10 marks)

Physical findings	Aetiological **significance**

2.3 What investigation you will perform to confirm the clinical diagnosis of 2.2

(10 marks)

2.4 Discuss the investigations you **will perform** to arrive at an etiological diagnosis?

(50 marks)

2.5 Briefly outline the treatment of this patient? (20 marks)

3. A 60-year-old male who has undergone coronary artery bypass graft 5years back following an acute anterior myocardial infarction presents with exertional dyspnoea of NYHA II of one week duration. He is a diabetic for 20 years. His current medications are Aspirin 150 mg daily, Clopidogrel 75 mg daily, Metformin 500 mg tds, Gliclazide 80 mg bid and Atorvastatin 20 mg noct.

On general examination he has **bilateral** pitting ankle oedema and pallor. His **PR is 110/min** irregularly irregular. BP is 140/70 mm Hg, has bilateral **basal inspiratory** fine crepitations. Initial investigations showed Sp02 92% on air RBS 321mg/d1, **FBC** 9.5g/dl, MO/ 70 ·11, WBC 4800/mm3, N 70 L28, Platelet 155000/mrn ^{3} .
UFR reveals protein ++ and a 12 lead ECG shows atrial fibrillation.

3.1 What is the most probable clinical diagnosis for his exertional dyspnoea? (10 marks)

3.2 Name two conditions that could have precipitated the above presentation. (10 marks)

3.3 Name two ECG abnormalities you would Cook for to confirm the diagnosis of atrial fibrillation. (20 marks)

3A Name two possib l e causes for his pallor. (10 marks)

3.5 Name two possible causes for the ankle oedema. (10 marks)

3.6 What investigation you would request to confirm the diagnosis you mentioned in (10 marks)

3.7 Name a medication you would administer to relieve his presenting symptoms (10 marks)

3.8

3.8.1 Name 02 medications that could be added to improve the prognosis of the condition you mentioned in 3.1 (10 marks)

3.8.2 Name two blood investigations you would perform before initiating the treatment. (10 marks)

04. A 32-year-old male presents with a history of fever, loss of appetite and weight of 1 month duration.

4.1 Define Pyrexia of Unknown origin (PUG)? (20 marks)

4.2 On direct questioning he admits that he had an altered bowel habit and right sided lower abdominal pain of 3 months duration. Name 2 differential diagnosis for the above presentation
(10marks)

4.3 How will you differentiate clinically the 2 conditions that you have mentioned in 4.2

(30 marks)

4.4 Name an important initial imaging investigation you would request on this patient (10 marks)

4.5 Name 2 specific investigations you would request to arrive at a definite diagnosis? (10 marks)

4.5 Name 2 cardiac conditions that could present with PUO? (10 marks)

4.7 Name 2 non haematological malignancies presents with PUO? (10 marks)

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5. A 35-year-old male presents with bilateral symmetrical distal interphalangeal joint pain and swe lling and low backache of 3 months duration. He had seen a dermatologist for a rash involving both knees and low er legs six months back and is on topical ointments.

5.1 What is the likely clinical diagnosis? (10 marks)

5.2 Mention three other characteristic patterns of joint involvement that can be seen in the diagnosis mentioned in 5.1? (10 marks)

5.3 Mention 4 other sites of skin rashes you will look carefully in this patient? (10 marks)

5.4 List the other clinical manifestations of the disease you mentioned in 5.1 (10 marks)

5.5 What investigations will help in establishing the diagnosis? Write the expected findings (10 marks)

6. **A 50-year-old male with diagnosed Chronic Liver Cell Disease (CLCD) presents with abdominal pain and distension** of one week **duration. He is a febrile, icteric and confused on admission. He is a heavy alcohol consumer and had several similar admissions in the past. On examination he is very dark in complexion , GCS 13/15,PR 112bpm,BP 110/70mmhg,diffuse abdominal tenderness with fluid thrill elicited.**

His initial investigations are WBC 10500/mm ^{3} ,N-85%,L-12%, Hb 10.3g/di, MCV 102f1,PLT-85000/mm3, RBS 210mg/dl

6.1 Give two acute medical problems you have identified in this patient? (10 marks)

6.2 Write two likely underlying aetiology of CLCD you will consider in this patient (10 marks)

6.3 Name other relevant physical signs you will elicit in this patient in view of the problems identified in 6.1 (15 marks)

6.4 List the investigations you will request in this patient to help in the management of the acute problems mentioned in 6.1 and Give reasons (15 **marks)**

6.5 How will you **manage** this patient on presentation? (40 marks)

6.6 List the other complications of CLOD and the relevant investigations you will perform to assess them.

(10 marks)

7. A-25-year-old female patient presents to the ward with a history of progressi ve drooping of eyelids, and double vision for the past 8 months. She clearly states diurnal variation with worsening of sympt oms towards the evening. Her medical history is otherwise unremarkable. On examination she has bila teral asymmetrical ptosis and ophthalmoplegia with variable diplopia not conforming to a particular ocular nerve palsy. She does not have any bulbar weakness or proximal muscle weakness. She has a small diffuse goitre. Remaining examination is unremarkable.

7.1 What is the diagnosis? (10 marks)

7.2 Name a test and an examination technique that you can do immediately in the ward w hich might support your diagnosis? (10 marks)

7.3 List a specific blood investigation and a neurophysiological investigation that would support your diagnosis. (10 marks)

7.4 T hat is the significance of goitre with respect to the diagnosis? (10 *marks)*

7.5 Outline the management of this patient. (40 marks)

7,6 What advices you would give her on discharge? (20 marks)

8.4 What are the advises you would give this patient on discharge? (20 marks)

9. A 30-year-old previously healthy farmer presents to A&E with a history of ingestion of organophosphate taken one hour prior to admission.

9.1 List six important physical signs you will expect in this patient (20 marks)

9.2 Name the antidotes used in the treatment (10 marks)

9.3 How do you manage this patient **in the first one hour?** (40 marks)

9.4 List five clinical parameters and their targets that need to be achieved to confirm the adequacy of antidote treatment. (20 marks)

9.5 List two long term complications of this poisoning (10 marks)

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10. A 60-year-old woman presents with excessive tiredness on mild exertion for last 3 months. She has **no significant past medical history except taking thyroxine 100 micrograms mane daily for hypothyroidism due to Hashimotos' thyroiditis. On physical examination, she is pale, and having** depigmented **macules over limbs and trunk. Her vitals are normal.**
Investigations show

I-i b 8.1 &IL
MCV 116fL (80-96)
WBC 8000/mm ^{3}
Platelets — 170,000/mm ^{3}
.1- 511 — 2.0 m WE. (0.2-4.5)
Bilirubin — 1.00 mg/dl. (0.3-1.5)

10.1 What nutritional deficiency that could cause her anemia? (10 marks)

10.2 **List three other important** physical signs you will expect in this nutritional deficiency (15 marks)

10.3 List the findings you would **expect in the** blood picture (10 marks)

What blood investigation you will perform **to** confirm the diagnosis mentioned in **"10.1"** (10marks)

10.5 What is the etiological diagnosis for her deficiency mentioned in**"10.1"** (10 Marks)

10.5 List four other medical conditions that could cause the nutritional deficiency mentioned in 10.1 (20 marks)

10.7 List two blood investigation you will perform to confirm the diagnosis ment i oned in "10.5" (10 marks)

US Outline the management of her anemia (15 marks)