



University of Jaffna, Sri Lanka
Faculty of Medicine
Second Examination for Medical Degrees- Part II (1st)
August 2012
Pathology : Paper II

Date 29.08.2012

Time: 3 hours

Answer all the ten questions

Answer each question in separate answer book

1.0

A 44 year old male patient presents with right sided pleural effusion.

- 1.1 Describe the pathological features (macroscopy and microscopy) of an acute bacterial pneumonia (50 marks)
- 1.2 List five(5) other possible causes for a pleural effusion (25 marks)
- 1.3 List the possible investigation that you would carry out on a pleural aspirate indicating the possible information you could obtain from each investigation (25 marks)

2.0

- 2.1 Classify intracranial haemorrhages (50 marks)
- 2.2 Give the commonest cause for intracerebral / intraparenchymal haemorrhage. (20 marks)
- 2.3 Describe three other pathological changes (macroscopy only) in the central nervous system that could be caused by the above, mentioned in 2.2 (30 marks)

3.0

- 3.1 Briefly describe the macroscopic appearance of pathological specimens of
 - a. Crohn disease (20marks)
 - b. Ulcerative colitis (20marks)
- 3.2 Discuss the factors and lesions that predisposing to colorectal carcinoma (40marks)
- 3.3 Briefly enumerate the pathogenetical events of colorectal carcinoma (20marks)

4. A 60year old women presented with carpopedal spasm. She had recently undergone a total thyroidectomy .
- 4.1 What is the clinical diagnosis of this patient? (5 marks)
- 4.2 What are the possible causes for this problem in this patient? (10marks)
- 4.3 What are the laboratory investigations you should do on this patient to find out the consequences / complications of thyroidectomy ? (15 marks)
- 4.4 Describe briefly the microscopic findings of papillary carcinoma of thyroid (30marks)
- 4.5 What are the common sites of metastasis in various types of primary thyroid malignancy? (10marks)
- 4.6 Mention two other endocrine disorders that can co-exist with the primary thyroid malignancy and brief out the laboratory investigations useful to detect the conditions you have mentioned (30marks)
- 5.0**
- 5.1 Briefly describe the macroscopic and microscopic appearance of a fibroadenoma (25marks)
- 5.2 list five (5) other different pathological entities that could be presented as lump in the breast (10 marks)
- 5.3 Enumerate the differences between dysplasia and hyperplasia (15 marks)
- 5.4 List the risk factors of development of breast malignancy (20marks)
- 5.5 Relates the grading and staging to the prognosis of breast malignancies (30marks)
- 6.** A 60 year old hypertensive male was admitted to emergency treatment unit with sudden onset of severe retrosternal chest pain radiating along the left upper arm. ECG showed evidence of acute myocardial infarction (MI). His condition deteriorated and he died on 7th day of the illness
- 6.1 List three (3) possible causes of death of this patient (15 marks)
- 6.2 Describe the postmortem (macroscopy and microscopy) findings of his heart (40 marks)
- 6.3 Briefly discuss the pathogenesis of the MI (30 marks)
- 6.4 List five (5) major risk factors of the MI (15 marks)

7.0

7.1

- a) Briefly describe the pathogenesis of glomerular injury in glomerulonephritis (GN) (40 marks)
- b) Describe the microscopic features of membranoproliferative GN (20marks)
- c) List five (5) other different types of glomerulonephritis (15 marks)

7.2

- a) A 44- year old man has experienced worsening headache, nausea and vomiting over the past 72 hours. On physical examination his blood pressure was 270/160 mm Hg, and there was bilateral papilloedema.
Urine analysis showed proteinuria 2+, haematuria 1+ and no glucose or ketones.

Describe the expected pathological (macroscopy & microscopy) findings of his kidney (25 marks)

8.0

A 46 year old female presented with right hypochondrial pain and fever of two days duration. Examination reveals tenderness on right hypochondrial region. Her CRP was 10 (normal <6).
After initial assessment acute calculus cholecystitis was made.

- 8.1 Briefly discuss the pathophysiology of biliary stone formation (30marks)
- 8.2 Describe in brief the pathological changes in the gall bladder, related to acute cholecystitis (40marks)
- 8.3 list the complications of acute cholecystitis (30marks)

9.0

A 65 year old man presented with headache and blurring of vision. On examination he is found to have a palpable spleen 2cm below the ~~right~~ ^{left} costal margin.

His investigations are as follows:

Hb – 19 g/dl

PCV – 58 %

MCV – 63 fl

Platelets – 600,000/mm³

WBC – 18,000/mm³ (N – 80%, L – 10%, E – 5%, B – 5%)

- 9.1 What is the most likely diagnosis? (10marks)
- 9.2 List 3 complications that can occur in this patient? (30marks)
- 9.3 What further investigations would you do to confirm his diagnosis? (20marks)
- 9.4 List the abnormalities seen in each of the investigation mention in 9.3 (40marks)

10.0

A 24 year old previously healthy boy presented with gradual onset of dyspnoea on exertion of one month duration. He was pale and icteric. Mild splenomegaly was noted. Haemolytic anaemia was suspected.

- 10.1 List the laboratory investigations and the expected findings that would confirm haemolytic anaemia (20marks)
- 10.2 List the hereditary causes of haemolytic anaemia (30marks)
- 10.3 With the clinical details and the laboratory results autoimmune haemolytic anaemia was suspected
- 10.3.1 Mention one laboratory investigation that would confirm autoimmune haemolytic anaemia (10marks)
- 10.3.2 List 2 main types of autoimmune haemolytic anaemias (10marks)
- 10.3.3 Enumerate 3 causes for one of the type of autoimmune haemolytic anaemia you mentioned in 10.3.2 (30marks)