

UNIVERSITY OF CAPE TOWN
STELLENBOSCH UNIVERSITY
Faculty of Health Sciences

MMed Emergency Medicine
Final Examination

MPhil Emergency Medicine
Written Examination

13 August 2009

Clinical Short Answer Paper I

0900 – 1200

**No Calculators and/or Electronic Equipment/Aid
will be allowed**

This paper consist of **FIFTEEN** short answer questions. All questions are to be answered. Each question is worth 10 marks.

Answer Questions in the following books:

Questions	Book
1-4	1
5-8	2
9-12	3
13-15	4

If you need to continue an answer in another book, do not mix answers in one book other than labeled above.

PAPER I

Question 1

Briefly describe differences in mechanism of injury, clinical presentation, complications and management of anterior vs. posterior hip dislocations

(15)

Question 2

How long after an overdose is activated charcoal still effective as decontamination agent? List agents for which activated charcoal is **not** effective and describe why it is not effective.

(15)

Question 3

Discuss the uses and limitations of Echocardiography in the Emergency Centre.

(15)

Question 4

Describe how you would perform a regional block of the ear. Include anatomy, drugs and dosages, and indicate the nerves involved.

(15)

Question 5

Compare and contrast anterior, inferior, posterior and right ventricular myocardial infarctions with respect to

- a) Diagnosis on ECG (8)
- b) Commonly associated Complications (describe the pathophysiology of these complications)

(7)

[15]

Question 6

A 16 year old female ingests an overdose of her mother's theophylline tablets.

- a) What arrhythmias would you expect?

(5)

- b) How would you manage these arrhythmias in this patient? (10)

[15]

Question 7

Compare and contrast intravenous Lignocaine versus Amiodarone as an antiarrhythmic agent. Include the indications, efficacy, side-effects and contraindications of each.

(15)

Question 8

Discuss your differential diagnosis in a patient presenting with ptosis. Include causes, associated clinical syndromes and diagnosis.

(15)

Question 9

a) Discuss the physiological effects of NonInvasive Positive Pressure Ventilation (NIPPV). (7)

b) What is the evidence behind its use in –

i) COPD (4)

ii) Acute Cardiogenic Pulmonary Oedema (4)

(4)

[15]

Question 10

Outline and discuss 5 evidence based interventions that have been shown to improve outcomes in the management of **severe sepsis and septic shock** in the Emergency Centre.

(15)

Question 11

Discuss the utility and limitations of End Tidal Carbon Dioxide (ETCO₂) monitoring in critically ill patients in the Emergency Centre .

(15)

Question 12

The elderly are at particular risk of sepsis from respiratory problems.

a) Outline the age related changes in respiratory function and structure that contribute to respiratory morbidity in the elderly.

(7)

b) Describe the factors influencing the decision to admit the elderly patient with Community Acquired Pneumonia.

(8)

[15]

Question 13

Neurologic complications are common amongst patients with advanced retroviral disease presenting to the EC.

a) List the common pathogens causing Central Nervous System infections in HIV positive patients. (5)

b) Discuss the indications for neuro-imaging in the HIV positive patient presenting with headache. (10)

[15]

Question 14

A mother brings her 18 month old son with a complaint of shortness of breath and coughing. The cough sounds almost like a dog barking. Describe your diagnosis and clinical management of this patient in the emergency centre.

(15)

Question 15

A 55yr old diabetic woman presents to the Emergency Centre. She thinks a spider bit her a week ago, but can't remember the actual incident. Examination reveals a necrotic ulcer on her left thigh.

a. Name one local cytotoxic spider (1)

b. Write short notes on the clinical picture of necrotic arachnidism (6)

c. List the differential diagnosis of necrotic arachnidism (5)

d. Shortly discuss the management of necrotic arachnidism (3)

[15]

Total 10 x 15 marks

