Instructions:

a. There are three pre-labelled answer books. Please make sure you answer the respective questions in the appropriate answer book.

b. Write your examination number on the cover of each answer book.

c. Answer ALL questions (nine questions). They are worth equal marks and you should spend approximately ten minutes for each question.

Scenario A

A 46-year-old lady with 10 years history of Rheumatoid Arthritis is scheduled for laparoscopic assisted vaginal hysterectomy. Her current medications include prednisolone, methotrexate, sulphasalazine and diclofenac.

a) Discuss the anaesthetic concerns in this patient.

b) During the operation, surgeon asked you to inject indigo-carmine intravenously to help identify the ureteric orifices. 5 minutes after your injection, end tidal CO2 dropped from 40mmHg to 15mmHg and her blood pressure monitor started alarming. SpO2 also fell from 99% to 88%. Briefly describe the pharmacology of indigo-carmine with particular reference to its side effects and outline your management.

c) Whilst recovering in the intensive care unit this lady complained to the nurse on duty that she recalled being paralysed and struggling with a tube in her throat during the operation. How would you manage this?

Scenario B

A 75-year-old woman presents with headache for 2 months. A CT scan shows a 2 cm thick left frontoparietal chronic subdural haematoma. She is scheduled for burr hole drainage of the haematoma. She has lone atrial fibrillation and is taking oral dabigatran 150 mg bd and metoprolol 50 mg bd. She is conscious and there is no demonstrable focal neurological sign.

a) Describe the pharmacology of dabigatran. What are the advantages of using dabigatran over warfarin?

b) Discuss the treatment and various anaesthetic options to facilitate drainage of her chronic subdural haematoma.

c) Before the scheduled burr hole surgery, the patient deteriorates and becomes unconscious. The left pupil is fixed and dilated. Outline the emergency treatment before urgent surgery for evacuation of haematoma.
Scenario C

A 30-year-old man involved in a car accident suffered from isolated cervical spine fracture.

a) What are the early and late physiological changes in patients who had traumatic cervical spinal cord injuries?

b) Discuss the anaesthetic concerns in this man for cervical spinal surgery.

c) The patient received anterior cervical spinal surgery and developed airway obstruction in the recovery 30 minutes after extubation. How would you recognise/diagnose respiratory obstruction? What are the potential causes? Outline your management.

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