

Hong Kong College of Anaesthesiologists Final FHKCA Examination February/March 2000 Paper I Scenario

Scenario A

A 72 year old patient scheduled for resection of abdominal aortic aneurysm is given vancomycin 1 gm iv. as prophylaxis against graft infection after induction of anaesthesia. The drug is given by infusion over 15 minutes, but the anaesthetist notes that the patient's blood pressure falls over the next 5 minutes from 130/76 mmHg to 35/18 mmHg. A diagnosis of anaphylaxis is made

- 1. What are the possible underlying mechanisms for anaphylaxis reactions,
- 2. Describe your initial management of this patient?
- 3. How would you investigate the patient intraoperatively and post-operatively?

Scenario B

A previously healthy 56 year old male patient is having a left hepatectomy for hepatic carcinoma. Anaesthesia consisted of thiopentone, atracurium, morphine, N2O, O2 and isoflurane and the patient is mechanically ventilated. Standard monitoring is applied. A double lumen 7 French CVP line is placed in the right internal jugular with some difficulty. There are two peripheral intravenous drips, one 16 gauge and one 14 gauge. Forty-five minutes through the surgery, the arterial pressure registered as 60/35 mmHg.

4. Discuss your steps to establish the cause of hypotension.

The patient requires blood transfusion. After your junior colleague has started the second unit of blood for 5 minutes, you notice that the blood group of the second unit is incompatible with the first unit as well as with the patient's blood group.

- 5. Outline your crisis management of this incident.
- 6. Outline systematically the measures that can prevent transfusion error.

Scenario C

Ten months ago, the patient (50 year old man) became increasingly breathless, was easily fatigued on walking and noticed occasional diplopia. He was diagnosed as myasthenia gravis and is currently on 10mg prednisolone daily and 2mg pyridostigmine twice daily. This has improved his walking ability.

Last week after coughing a small amount of blood, he had a blood test (Haemoglobin 72 gm/L), a chest Xray and bronchoscopy which revealed a small cell carcinoma in the upper lobe of his left lung. He is scheduled for open left upper lobectomy.

- 7. Outline the pre-operative investigations you would require and why.
- 8. Discuss your anaesthetic and postoperative management
- 9. Describe the anatomy of the airway relevant to the choice and insertion of a double lumen tube.