



The Hong Kong College of Anaesthesiologists

Final Fellowship Examination Paper I

Friday, 19th March 2004
09:00 - 10:30 hrs

Instructions:

- For each clinical scenario there are three related short questions.
 - There are three pre-labelled answer books. Please make sure you answer the respective scenario in the appropriate answer book.
 - Write your examination number on the cover of each answer book.
 - Answer All questions (nine questions). They worth equal marks and you should spend approximately ten minutes for each short question.
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Scenario A

A 23 year old healthy male requires an exploratory laparotomy 3 hours after a motor vehicle accident. The patient had a meal half an hour before the accident. He had no loss of consciousness.

1. What circumstances would lead you to require a cervical spine X-ray series before anaesthesia?

X-rays show the patient has an unstable fracture dislocation of C5-6. There is no neurological deficit. There is no reason to believe he is hypovolaemic.

2. How will you induce anaesthesia while minimising the risk of spinal cord injury? Give reasons for your decision. Outline any potential disadvantages of the technique you choose.

The same patient has the fracture stabilised surgically the following day. Unfortunately after the surgery he develops complete quadriplegia. Two weeks later the patient requires a laparotomy for suspected gut obstruction.

3. What are the anaesthetic considerations on this occasion?

Scenario B

A 56 year old retired female nursing officer is scheduled for laparoscopic cholecystectomy. Because of her fear of nosocomial infections, she insists to have this operation done on a day-stay basis. She is 163cm tall and weighs 75kg. She takes an oral hypoglycaemic drug for diabetes mellitus and a diuretic for hypertension.

1. Discuss the anaesthetic considerations before accepting her for day-stay operation and list the additional information that might be needed.
2. 30 minutes into the operation, the SpO₂ dropped from 96% to 89% over 10 minutes, and the peak airway pressure increased from 22 cmH₂O to 30 cmH₂O. List the differential diagnosis and outline the steps you would take to confirm your diagnosis.
3. Describe the peri-operative measures you would take to minimise postoperative pain.

Scenario C

A 63 year old man presents for right carotid endarterectomy. He has hypertension, non-insulin dependent diabetes and stable angina. Current medication consists of glibenclamide, metoprolol and aspirin.

1. What are the options for anaesthesia in this patient? Briefly discuss the advantages and disadvantages of each option.
2. Outline the techniques that can be used to monitor cerebral perfusion intraoperatively.
3. List and explain specific problems likely to be encountered in the recovery room after this type of surgery?

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