

The Hong Kong College of Anaesthesiologists Final Fellowship Examinations Paper I – Clinical Scenario (1 - 6) & SAQ (7 - 12) 11 March 2019 (Monday) 09:00 – 11:00 hours

Instructions:

- a. There are four pre-labelled answer books. Please make sure you answer the questions in the respective answer books.
- b. Write your candidate number on the cover of each answer book.
- c. Use ink or ball-point pen.
- d. There are 12 questions in this paper. Answer **ALL** questions. They are worth equal marks and you should spend approximately **ten minutes** for each question. For questions with multiple parts, allocation of marks is indicated in the brackets.
- e. Questions 1-3 are related to Scenario A, Questions 4-6 are related to Scenario B, Questions 7-12 are standalone short answer questions.

Scenario A

A 74-year-old lady with a history of Parkinson's disease and hypertension is listed for resection of a midline cerebellar tumour.

- 1. Outline your pre-operative assessment and management.
- 2. The surgeon tells you that the patient will need to be in the prone position for her surgery. Outline your anaesthetic technique with specific reference to the important concerns for this type of surgery.
- 3. During surgical dissection of the tumour, her end-tidal carbon dioxide tension (ETCO₂) drops rapidly from 30 mmHg (3.9 kPa) to 5 mmHg (0.6 kPa). Venous air embolism is suspected. Describe how you would assess and confirm your suspicion (40%) and how you would manage the situation (60%).

Go to page 2 for Scenario B Questions 4-6

<u>Scenario B</u>

A 62-year-old lady who underwent a renal transplant one year ago is now listed for allograft nephrectomy due to chronic graft rejection with concurrent fever and increasing abdominal pain. She has a background history of hypertension and diabetes mellitus for more than 10 years.

- 4. The patient's pre-operative oximetry (SpO_2) at room air is 88% and she is slightly tachypnoeic. How would you manage the patient?
- 5. What are the other specific pre-operative considerations for this patient?
- 6. Upon manipulating the diseased organ during surgery, the systolic blood pressure falls from 120 mmHg to 60 mmHg and the heart rate increases to 120 bpm. Describe your assessment and management of this situation.

Go to page 3 for Questions 7-12

Short Answer Questions

- 7. A middle-aged gentleman is scheduled for micro-laryngoscopy with laser excision of multiple laryngeal papillomata.
 - a) What are the three components of the "Fire Triad"? (10%) List the measures you would take to ensure safety in the operating theatre during the surgery. (50%)
 - b) Outline your management of an airway fire during the procedure. (40%)
- 8. What are the challenges of providing anaesthesia in the cardiac catheterization laboratory for interventional procedures?
- 9. Outline your pre-operative anaesthetic considerations for a 2-year-old boy with Down's syndrome for laparoscopic herniotomy.
- 10. A 39-year-old heroin abuser is admitted for a Whipple procedure tomorrow for pancreatic cancer. He claims he has been taking methadone 80 mg per day from clinic for many years. What would be your plan for his peri-operative pain management?
- 11. Discuss the possible measures to prevent post-dural puncture headache in parturients during labour and delivery.
- **12.** Discuss the severe side effects and drug interactions of tramadol.

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