



The Hong Kong College of Anaesthesiologists
Final Fellowship Examinations
Paper I – Clinical Scenario (1 - 6) & SAQ (7 - 12)
16 August 2021 (Monday)
09:00 – 11:00 hours

Instructions:

- a. There are twelve 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 78-year-old male was admitted to the hospital with abdominal pain and a hypotensive episode with his haemoglobin falling 13g/dl to 10g/dl. A clinical diagnosis of a leaking abdominal aortic aneurysm was made and a CT scan revealed an infrarenal abdominal aneurysm.

The patient is a known hypertensive and also has atrial fibrillation. He has been non-compliant with treatment.

He is listed for an emergency endovascular repair of infra-renal abdominal aortic aneurysm (EVAR) in the radiology suite.


1. What are the anaesthetic concerns for this patient (50%)? How would you address these concerns in the preoperative assessment and preparation (50%)?
2. What are your considerations on deciding on the different types of anaesthesia that are suitable for this patient?
3. In general, what are the risk factors that contribute to spinal cord ischaemia in repair of aortic aneurysms (both open and endovascular repair) and what are some of the preventive measures to minimizing this complication.

**Go to page 2 for Scenario B
Questions 4-6**

Scenario B

A 65-year-old man with stage IV lung cancer and malignant pericardial effusion has 2 previous pericardiocentesis within the last 4 weeks. He is planned for left video-assisted thoracoscopic (VAT) and pericardial window.

4. Outline your pre-operative assessment (60%) and what are the clinical and echocardiographic features signifying the severity of his pericardial effusion? (40%).
5. A provisional diagnosis of cardiac tamponade is made and further pericardiocentesis is not possible. Discuss your plan for induction of anaesthesia (50%) and justify your airway management technique (50%).
6. One day after the surgery, the patient complains of hoarseness. What is the differential diagnosis (30%) and how can this be prevented and managed (70%)?



**Go to page 3 for
Questions 7-12**

Short Answer Questions

7. Discuss the methods to prevent hypotension during spinal anaesthesia for cesarean delivery.
8. Describe the anatomy and the significant variations of the low back (lumbar) area, relevant to the practice of epidural anaesthesia.
9. Discuss different monitoring methods on cerebral ischemia during carotid endarterectomy.
10. A 40-year-old lady is scheduled for laparoscopic hysterectomy for fibroids. She is known to have long-standing open angle glaucoma with increased intra-ocular pressure. Describe measures you would take to minimize any increase in intra-ocular pressure during surgery.
11. Discuss the applicability and limitations of the following assessment tools in assessing patient's functional capacity in preoperative settings:
 - i) Duke Activity Status Index (DASI) (50%)
 - ii) 6-minute walk test (6MWT) (50%)
12. A 10-year-old boy is scheduled for a dental surgery (examination under anaesthesia, removal of carious teeth, excision of dental cyst) tomorrow. He weighs 30kg and has intellectual disability of unknown cause, with aggressive behaviour. Surgeon requests nasotracheal intubation.

What are the anaesthetic concerns? (40%) How you would induce and intubate him? (60%)

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