



**The Hong Kong College of Anaesthesiologists**  
**Final Fellowship Examinations**  
**Paper I**  
**25 April 2022 (Monday)**  
**Online**

**Scenario A for answering questions 1 to 3**

**A 60-year-old lady with left breast cancer is scheduled for elective left mastectomy. She had a deep brain stimulator (DBS) placed for advanced Parkinson's disease three years ago. The implantable pulse generator (IPG) is located under her right clavicle.**

1. What are the anaesthetic implications associated with Parkinson's disease?
2. What perioperative precautions are required in relation to deep brain stimulator?

**The patient was given general anaesthesia and was intubated for the surgery. The surgery went uneventful and lasted for 2 hours. However, 30 minutes after the end of anaesthesia, the patient remained unarousable and could not be extubated.**

3. Describe the possible causes and outline your management.

**Short Answer Question**

4. A 55-year-old healthy man with cervical stenosis and myelopathy is electively scheduled for posterior fusion of cervical C4 to C6. Outline your considerations throughout the perioperative period to facilitate intraoperative neuromonitoring and extubation at the end of the operation.

**Scenario B for answering questions 5 to 7**

**A 70-year-old woman who lives alone presenting with a 5-day history of fever, abdominal pain, nausea and vomiting. The abdominal X ray reveals gas under the diaphragm. She is listed for an emergency laparotomy for suspected perforated colonic carcinoma. The patient has a history of severe aortic stenosis and her effort tolerance has been getting progressively worse of late.**

5. What are your major anaesthetic concerns?
6. What is the pathophysiology of severe aortic stenosis and its relation to the development of symptoms? (60%) How do these symptoms correlate with echocardiography findings? (40%)
7. Discuss your anaesthetic plan including postoperative care.

### **Short Answer Questions**

8. Discuss the factors favoring monitored anaesthesia care (MAC) as the choice of anaesthesia for endovascular aortic repair (EVAR).
9. Describe the pharmacology (25%), benefits (25%) and possible limitations (25%) of perioperative tranexamic acid administration. Discuss the use of tranexamic acid in primary postpartum haemorrhage. (25%)
10. A 5-year-old child is scheduled for tonsillectomy as day surgery. He was born at 29 weeks and had a cold two weeks ago. Outline the areas of concern during your anaesthetic assessment.
11. As the Safety Officer for the Department, you were informed that a patient with a known drug allergy to Penicillin was given Ampicillin during anaesthesia. Describe what steps you will take to investigate the incident (60%) and recommend any organisational strategies that will help to minimize these errors (40%).
12. You were called by a post-anaesthesia-care-unit (PACU) nurse to assess a patient with difficulty of breathing after extubation. He is a 70-year-old man, BMI 35 with baseline creatinine 200 micromol/L and was operated for emergency laparotomy for intestinal obstruction. Justify your method to exclude residual neuromuscular blockade (20%). Discuss the perioperative clinical strategies to minimize residual neuromuscular blockade in this scenario. (80%)

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