Instructions:

a. There are three pre-labelled answer books. Please make sure you answer the respective questions in the appropriate answer book.

b. Write your examination number on the cover of each answer book.

c. Answer ALL questions (nine questions). They are worth equal marks and you should spend approximately ten minutes for each question.

Scenario A

A 64-year-old woman with longstanding rheumatoid arthritis presents for a revision left total hip replacement. Her medications are: methotrexate, sulfasalzine, hydroxychloroquine, folic acid and celecoxib.

1. How would you assess her cervical spine and what findings would cause your concern?

2. Despite some concerns about her cervical spine, surgical stabilization is considered to be unnecessary at this stage. Discuss the pros and cons of regional versus general anaesthesia for this patient.

3. The operation proceeds under general anaesthesia with tracheal intubation, muscle paralysis and mechanical ventilation. Soon after insertion of the femoral prosthesis, the oxygen saturation falls over 2 minutes from 98% to 85%. What is your immediate management and the differential diagnosis?

Scenario B

You are called down to the emergency department to perform a preoperative assessment on a 36-year-old pregnant woman (G4P0) requiring an emergency laparotomy for a suspected ruptured appendix.

She is currently of 32 weeks gestation and has conceived the foetus following many cycles of in-vitro fertilisation. She is extremely anxious and emotional about losing or having the anaesthetic causing damage to her foetus. She has even expressed wishes of refusing surgery and her condition managed conservatively based on these fears.

4. Outline the key elements of your discussion with the patient preoperatively.

5. Describe your peri-operative management plan.

6. As the patient was transferred from her trolley to the operating table, she suddenly became distressed and then lost consciousness. She is now unresponsive and apnoeic. Describe your management and highlights the differences compared to resuscitation of a non-pregnant patient?
Scenario C

A 50-year-old man, previously healthy, with multiple colonic polyps is scheduled for laparoscopic total colectomy.

7. Before surgery, the patient requires oral sodium phosphate solution for bowel preparation. Outline the complications and discuss how these can be minimized.

8. The surgery is anticipated to require 5 hours in the lithotomy position. Discuss the potential complications of the lithotomy position.

9. Discuss clinical strategies to minimize postoperative ileus in this patient.

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