The Faculty of Intensive Care Medicine

Example SBA Questions for the FFICM MCQ

1. A 38 year old woman is admitted to the ED after an out of hospital VF cardiac arrest. After 3 shocks there was return of spontaneous circulation. She was intubated at the scene by paramedics. In the ED she is ventilated, is haemodynamically stable and her GCS is 3. A 12 lead ECG shows ST elevation in Leads II, III and aVF with reciprocal changes in the chest leads. The interventional cardiology team are planning intervention.

   What is the next management priority?

   A. Placement of an arterial line avoiding the right radial
   B. Placement of an arterial line avoiding the right femoral
   C. Nasogastric tube insertion and administration of aspirin and clopidogrel
   D. Nasogastric tube insertion and administration of aspirin and ticagrelor
   E. Infusion of 30ml/kg of 4 degrees C 0.9% sodium chloride

   Answer = D

2. A 50 year old previously well woman has been admitted to your district general hospital due to a sudden collapse. Her GCS in the emergency department was 12 (E3, V4, M5) and she was maintaining her airway. CT scan showed evidence of a subarachnoid haemorrhage. You are responsible for transferring her to a neurosurgical centre for ongoing care. Prior to transfer her clinical condition changes to GCS 11 (E3, V4, M4).

   What is the most important step in achieving a safe transfer?

   A. Ensure you have appropriate drugs prepared for the transfer
   B. Insert an arterial line
   C. Intubate the patient
   D. Maintain systolic blood pressure above 160mmHg
   E. Take a mobile phone with stored numbers of the receiving unit

   Answer = C

3. What is the most characteristic feature of early salicylate poisoning in adults?

   A. Hypothermia
   B. Loss of consciousness
   C. Normal anion gap
   D. Respiratory alkalosis
   E. Vertigo

   Answer = D

4. Which of the following is the most useful agent in the treatment of ventricular tachycardia?

   A. Dobutamine
   B. Adenosine
   C. Digoxin
   D. Amiodarone
   E. Ivabradine

   Answer = D

5. In patients with eGFR less than 20 mls/minute, which of the following drugs should be given in reduced dose?

    A. Amiodarone
    B. Dalteparin
    C. Linezolid
    D. Omeprazole
    E. Sodium nitroprusside

    Answer = B

6. An 80 year old man remains ventilated 2 days following emergency infra-renal abdominal aortic aneurysm repair. His abdomen is distended and he becomes oliguric with a creatinine rising to 200 micromol/L. Serum potassium is 5.0 mmol/L and arterial pH 7.3. Mean arterial pressure is 70 mmHg unsupported.

    What is the best initial management?

    A. Commence inotropes
    B. Commence furosemide infusion
    C. Measure intra-abdominal pressure
    D. Start renal replacement therapy
    E. Urgent abdominal CT scan

    Answer = C

7. This patient is at high risk of abdominal compartment syndrome. While all of the answers are plausible, the best answer is to measure the intra-abdominal pressure before considering the other management options.

    You are reviewing a patient on ICU who has developed recent diarrhoea. He has had a prolonged hospital admission, with several abdominal operations. He is on day 5 of a course of antibiotics for a ventilator-associated pneumonia. Stool PCR-based assay for Clostridium difficile toxins A and B is positive.

    Which is the most appropriate next investigation?

    A. Stool: Enzyme immune assay (EIA) for toxins A and B
    B. Stool: Glutamate dehydrogenase EIA
    C. No further testing required
    D. Colonoscopy and repeat PCR based assay for toxins A and B
    E. Stop antibiotics and no further testing

    Answer = A

    The Department of Health and ARHAI advise that organisations adhere to a two stage testing approach which consists of:
    A GDH EIA (or a NAAT or PCR) test to screen samples followed by a sensitive toxin EIA test (or a cytotoxin assay)

    If the first test (GDH or NAAT) is negative, the second test (sensitive toxin EIA) does NOT need to be performed
    https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/215135/dh_133016.pdf

    EIA: Enzyme immunoassay that detects the presence of toxins.
    GDH: A glutamate dehydrogenase (GDH) test detects an antigen that is produced in high amounts by C. difficile, both toxin and non-toxin producing.
    NAAT: Nucleic Acid Amplification Test that detects the presence of toxin gene(s).
    PCR: Polymerase Chain Reaction test (a type of NAAT).
    Toxin test: A toxin test is used to detect the presence of C. difficile toxin(s) that are specific for C. difficile colitis / pseudomembranous colitis.