

FCEM OCT 2010 – SAQ

1. Elderly lady with few week history of feeling generally unwell & now developed jaundice. Bloods show abnormal lfts with transaminases raised more than alk phos.
  - a. Explain the biochemical abnormalities.
  - b. Give 4 key questions you would want to ask in the history
  - c. Give 4 tests that you would want to perform in the ED.
  
2. Bloods show metabolic acidosis with raised BM and raised potassium, with glucose and ketones in the urine
  - a. What is the diagnosis?
  - b. Calculate the Anion Gap
  - c. Give 4 non-drug causes of a raised anion gap metabolic acidosis
  - d. Give a suitable fluid regimen for the next 8 hours.
  - e. Give 3 complications of DKA that could occur in the 1<sup>st</sup> 48 hours
  
3. Knee XR - ? tibial spine #
  - a. What does the xray show?
  - b. What structure could be involved and give the name of a test to assess the structure?
  - c. What are the complications of haemarthrosis?
  - d. Describe your landmarks for aspirating a knee joint
  - e. He is unable to fully extend his knee. Explain why?
  - f. What is the definitive treatment for this injury?
  
4. Elderly lady taken 32 paracetamol, no PMH, AMT 10/10.
  - a. What is the best treatment for this overdose?

- b. How does the antidote work?
  - c. Give 5 things to be taken into account when assessing someone's capacity
  - d. You decide she does not have capacity, give the next 2 steps in your management plan for this lady
  
- 5. Elderly lady with hyponatraemia, also given urinary sodium and osmolality and serum osmolality
  - a. What is the diagnosis?
  - b. Give 4 potential causes for this abnormality
  - c. Explain the osmolality and urinary sodium findings
  - d. What is the diagnosis?
  - e. Give 4 cerebral causes for the answer to d.
  - f. What is the treatment?
  
- 6. Female bodybuilder been on speed in a club, then finished the night with some GHB, she presents with reduced gcs. She is intubated, her sodium is low and she is catheterised ( picture shown of dark red/brown urine)
  - a. What is the diagnosis?
  - b. Other than initial stabilisation what 2 treatments would you provide with dose/routes.
  - c. What electrolyte would you like to check before starting on the above treatment and why?
  - d. Give 2 possible causes for her low sodium
  - e. Her CT head is normal. What do you think the cause of her low gcs is and what do you think will be the course of her gcs?
  
- 7. Picture of penile ulcer ( apparently painful)
  - a. Give 2 reasons from the history why you would think this is STD.

- b. Give 2 things you would do before starting empirical treatment
  - c. You decide to treat him, give 2 treatments you would give to cover bacterial STDs and which organism they cover
  - d. Give 3 things you would tell him before he left the ED
  
- 8. Young man from Africa with prolonged painful erection, bloods show a haemolytic anaemia
  - a. What is the diagnosis and underlying condition
  - b. Explain the pathophysiology behind his blood abnormalities
  - c. What is the emergency treatment for this condition?
  - d. Give 2 other things you could do in the ED
  - e. Give another 3 (non-traumatic) causes of priapism
  
- 9. ECG with peaked t waves and no p waves. Lady with SLE taking ibuprofen for joint pains, started feeling unwell with swollen eyes/feet. K 6.5
  - a. Give 2 ECG abnormalities
  - b. What is the cause of the ECG changes?
  - c. She goes into VT, other than anti-arrhythmics give 2 other treatments would you provide (dose and route)
  - d. Give 3 abnormalities you would expect to see in her urine
  - e. Give 2 possible causes for her hyperkalaemia
  
- 10. Picture of LMA
  - a. What is it?
  - b. Give three anatomical predictors of a difficult airway
  - c. Give 3 contraindications to LMA as a rescue device?
  - d. Give 2(?) reasons for performing an emergency cricoidotomy

11. Standby call for a 36/40 woman in labour – not going to make it to the delivery suite.

- a. Give 4 things you would have ready for her arrival
- b. What 4 pieces of information would you like when she arrives ( unsure if they meant from the patient or paramedics)
- c. The baby expediently delivers – what 3 things do you assess before you assess the pulse?
- d. You start CPR – describe how you would perform it, giving landmarks and compression:ventilation ratio
- e. If drugs were needed, give 3 possible drugs with doses

12. Hypothermic arrest

- a. Give 4 things you would have ready in preparation for receiving a hypothermic patient
- b. They arrest on arrival – give 4 things that you would do differently for resuscitation of a dead hypothermic patient.
- c. Pictures of frost bitten hands – give 2 treatments you would provide, and 2 you would not

13. Young man returned from east Africa with swinging pyrexia etc. then fits

- a. What is the diagnosis and name of the organism
- b. Give 2 investigations to confirm the diagnosis
- c. Give 3 treatments of the fits and where appropriate give dosages
- d. Give 3 other causes of raised temp from someone returning from Africa ( other than normal causes – pneumonia/uti etc)
- e. Low plt's, low hb, high wcc – explain the bloods.

14. Lady come in with temp after chemo.

- a. What is the definition of neutropenia?
  - b. What is the definition of septic shock?
  - c. Describe how to take blood cultures from a central line
  - d. Give 2 coagulation tests to perform if suspecting DIC
  - e. Give appropriate antibiotic regimen for neutropenic sepsis and explain why?
15. Pt c/o SOB, (?) chest pains & (?) generally unwell. CXR with LUL consolidation, his partner is HIV and receiving treatment for TB
- a. Give 3 other causes for the CXR findings other than TB
  - b. 6 tests in the ED that may alter your management
  - c. 3 other organisms that can cause pulmonary problems in HIV
16. Young man with recent URTI presented with PCP and SOB. You diagnose cardiomyopathy.
- a. Give 4 other causes for his symptoms
  - b. Give (?) 4 investigations you would perform
  - c. Give 4 viruses that can cause myocarditis
  - d. Give 4 clinical signs that would support the diagnosis of myocarditis
17. Chlorine spill – several affected – with hazard plate shown
- a. Who do you contact to find out more about the agent released?
  - b. What are your 2 first management steps?
  - c. What is a P2 (Triage category)?
  - d. 3 systems chlorine affects and what it does there
  - e. Explain the metabolic derangement (hypoxia with hyperchloraemic acidosis)
  - f. What does the CXR show? (bilateral diffuse interstitial shadowing)

18. 6 year old girl has this rash on her back ( shingles)

- a. What is the diagnosis?
- b. Mum is 17/40 – what do you explain to her (3 points)
- c. Give 3 treatments you would provide with dosages and mechanism ( unsure if the meant to mum or daughter)
- d. There is a 3/52 old cousin. Is she at risk? Explain your answer

19. Eye fb

- a. 6 things from the history other than symptoms that you would ask
- b. 4 signs of a penetrating eye injury
- c. 3 classes of drugs that you would give

20. 4 year old girl with an avulsed tooth.

- a. What 2 things in the history are you going to ask about?
- b. Would you reimplant the tooth? Explain to mum your reasoning
- c. What advise would you give mum on discharge?
- d. Give 2 methods of controlling bleeding from a tooth socket in an adult.