

Rheumatology – QUESTIONS

SAQ 1

A 68 yo female with rheumatoid arthritis presents with an acutely painful right knee. She is on low dose prednisolone and NSAIDs. Her temperature is 37.9°C.

- a. List four differential diagnoses for her presentation. (4 marks)

- b. For the most time critical diagnosis in your list, give three examination findings you will seek and briefly justify how they will confirm/exclude this diagnosis. (3 marks)

- c. Complete the following table for results of knee aspiration. (6 marks)

	Infectious	Inflammatory	Non-inflammatory
White cell count/mm ³			
Culture			
Crystals			
Colour			
PMN %			

- d. Her joint aspirate returns a WCC of 70,000 with 85% PMNs. Are steroids indicated? Justify your answer. (2 marks).

SAQ 2

A 36 year old male presents with 2 days of pain and swelling to both his left knee and his right elbow.

- a. State four questions you will ask on history taking given this presentation. (4 marks)

- b. State three risk factors for a septic joint in any patient. (3 marks)

- c. The patient has no history of trauma and is afebrile on examination. He is able to move the joint with only mild reduction in range of movement. You decide to aspirate joint fluid. State three contraindications to joint aspiration. (3 marks)
- d. Briefly describe how you will aspirate one of the two joints involved. Specify your anatomical landmarks. (4 marks)
- e. Aspirate fluid reveals negatively birefringent crystals with no bacteria seen. Briefly state the diagnosis and two appropriate treatments for this condition. Doses are not required. (3 marks)

SAQ 3

A 60 year old female presents with 2 days of progressive difficulty in getting up from her chair. Her PMHx is significant for end stage asthma. Examination of legs reveals 4/5 proximal symmetrical weakness of both legs, with brisk reflexes and no sensory deficits. An image of the patient is shown below.



- a. State three differential diagnoses you would consider in this patient. (3 marks)

b. List four tests you will order and briefly justify your reason. (4 marks)

c. (unfair question?) For the most likely diagnosis, state two management options. (2 marks)

SAQ 4

A 28 year old female presents to ED with 24 hours of dyspnoea. She reports a 3 year history of Raynaud's disease, polyarthralgia, and migraine. VQ scanning confirms a PE and appropriate treatment is commenced. An image of the patient is shown below.



a. List and justify three blood tests you will order for this patient. (3 marks)

b. List three systems affected by this condition and an example of a manifestation in each system. (3 marks)

c. State two treatment options for this condition (doses are not required). (2 marks)

d. The patient asks you whether her pulmonary embolus and Raynaud's disease are related to this condition. How do you answer her? (2 marks)

SAQ 5

A 70 year old male currently receiving chemotherapy for colorectal cancer (Duke's B) presents with a 3 hour history of a rash (image shown). He feels otherwise well, and states the rash is not itchy or painful. He is on no other medications aside from the chemotherapy and has been well except for a dry cough. He has no other past medical history.



- a. List four differential diagnoses for this rash. (4 marks)

- b. On examination, you notice the rash is palpable. Does this assist in differential diagnosis, and how? (2 marks)

- c. Meningitis is excluded based on a negative LP and negative blood cultures. A CXR is ordered and is shown. Describe the main abnormality on the x-ray and how this clarifies diagnosis in this patient. (2 marks)



- d. State two medications that may be used to treat this patient (do not include dose), and a possible side effect of each. (2 marks)

- e. Upon discharge, list two clinical signs/symptoms that the patient should be aware of as requiring immediate return to hospital.