

CME: Infectious diseases (141750): self-assessment questionnaire

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SAQs and answers are ONLINE for RCP fellows and collegiate members

Format

Candidates are asked to choose the best answer from the five possible answers. This best of five format is used in many medical examinations; however, the questions are not intended to be representative of those used in the MRCP(UK) Part 1 or Part 2 Written Examinations.

The answering process

- 1 Go to <https://cme.rcplondon.ac.uk>
- 2 Log on using your usual RCP username and password
- 3 Select the relevant CME question paper
- 4 Answer all 10 questions by selecting the best answer from the options provided
- 5 Once you have answered all the questions, click on Submit

Registering your external CPD credits

Carrying out this activity allows you to claim two external CPD credits. These will be automatically transferred to your CPD diary, where you can review the activity and claim your points.

1. A 38-year-old man with T10 to T11 spondylodiscitis underwent drainage of an epidural abscess one week previously. He was on 60 mL of methadone as an opioid agonist substitutive treatment.

What is the most appropriate first step in analgesic management?

- (a) Add diclofenac.
- (b) Add oxycodone.
- (c) Divide the daily methadone dose into 20 mL every 8 hours.
- (d) Start gabapentin.
- (e) Stop methadone and start oxycodone.

2. A 28-year-old woman who injects drugs presented with right eye pain and decreased vision with vague constitutional symptoms.

What investigation is most likely to yield a diagnosis?

- (a) Blood cultures.
- (b) Blood pressure monitoring.

- (c) Fundoscopy.
- (d) Ophthalmology review.
- (e) Urine dipstick.

3. A 40-year-old man presented with a red, pruritic and painful rash over his right leg. He also reported constitutional symptoms including night sweats, weight loss and arthro-myalgias; he had been injecting cocaine in that leg. On examination, he had fever and large violaceous plaques, and a large flaccid bullae on the right leg, developing a necrotic centre. He had normocytic anaemia and neutropenia. Numerous blood cultures were returned as negative.

What is the most likely diagnosis?

- (a) Contact dermatitis.
- (b) Endocarditis with embolisation.
- (c) Levamisole-induced rash.
- (d) Pyoderma gangrenosum.
- (e) Vasculitis.

4. A 45-year-old man's opioid substitution therapy had been well controlled with 60 mg of methadone for a few months, when suddenly, three days after hospital admission, he developed palpitations and chest pain.

What medication is least likely to have caused this?

- (a) Artemether.
- (b) Citalopram.
- (c) Clarithromycin.
- (d) Voriconazole.
- (e) Zopiclone.

5. Which of the following statements about the monkeypox rash is true?

- (a) A patient with monkeypox will always have more than one lesion.
- (b) Lesions in the genital or perianal region are rare.
- (c) Lesions may arise before or after the development of systemic symptoms.
- (d) Lesions start as scabbed lesions, which then fall off and form vesicles.
- (e) Lymphadenopathy is rarely seen in monkeypox.

6. An 82-year-old woman was being treated for a suspected urinary tract infection while an inpatient in hospital. Nursing staff reported that, over the previous 48 hours, she had been increasingly confused and agitated. Prior to this episode, there were no concerns regarding the patient's cognition. On assessment, the patient was alert. She was able to tell you her date of birth, but could not recall her age or the current year, and could not name the hospital she was in. She was asked to list the months of the year backwards but could only get as far as October.

What is this patient's score on the four 'A's test for delirium screening (4AT)?

- (a) 0/12.
 (b) 2/12.
 (c) 3/12.
 (d) 7/12.
 (e) 12/12.
7. A 57-year-old man who was a non-smoker presented to the emergency department with a 5-day history of fever, worsening shortness of breath and a cough productive of yellow/green sputum. He was normally fit and well. On examination, he had crackles at the right lung base. His National Early Warning Score was 1 (respiratory rate 20 breaths per minute, oxygen saturation 96%, heart rate 99 beats per minute, blood pressure 105/85 mmHg and temperature 38.2°C). He was alert, but disorientated to time and place, and struggled to give a coherent history. An abbreviated mental test-10 score was 5/10. Chest X-ray demonstrated consolidation at the right lung base. Blood tests revealed white cell count $16.0 \times 10^9/L$ (4.0–11.0), neutrophils $11 \times 10^9/L$ (1.8–7.5), C-reactive protein 211 mg/L (<5), creatinine 89 $\mu\text{mol/L}$ (59–104) and urea 6.5 mmol/L (2.5–7.8). The patient was started on antibiotics for a presumed community-acquired pneumonia.

Which of the following features is associated with increased mortality?

- (a) Age of 57 years.
 (b) AMT-10 score of 5/10.
 (c) Blood pressure of 105/85 mmHg.
 (d) Respiratory rate of 20 breaths per minute.
 (e) Urea 6.5 mmol/L.
8. A 67-year-old man, with a history of type 2 diabetes and alcohol excess, presented to the emergency department with a 3-day history of fever and headache. Carers reported that the patient had become increasingly confused over the previous 48 hours. On examination, he had neck stiffness. Glasgow coma score was 13/15. He was non-compliant with neurological examination. Chest

X-ray and computed tomography of the head were normal. Blood tests revealed white cell count $14.0 \times 10^9/L$ (4.0–11.0), neutrophils $9.0 \times 10^9/L$ (1.8–7.5) and C-reactive protein 80 mg/L (<5). Renal function was normal. The cerebrospinal fluid (CSF) was clear with normal opening pressure, 100 white cells, a low glucose and high protein. Gram and Ziehl–Neelsen staining were negative, however, Gram-positive bacilli were noted in blood cultures on day 2. The patient had no known drug allergies.

Given the most likely diagnosis, what is the most appropriate initial antibiotic therapy for this patient?

- (a) Amoxicillin and gentamicin.
 (b) Ceftriaxone.
 (c) Isoniazid, rifampicin, pyrazinamide and ethambutol.
 (d) Metronidazole.
 (e) Vancomycin.
9. In a patient who has suspected acute meningitis, when should computed tomography of the head be performed prior to lumbar puncture?
- (a) Glasgow coma score of 13 with no focal neurological signs.
 (b) Headache, vomiting and neck stiffness.
 (c) New confusion.
 (d) New sixth cranial nerve palsy.
 (e) Unable to view fundus on fundoscopy.
10. A 66-year-old patient presented with fever, headache and meningism. They were alert and orientated with a Glasgow coma score of 15 and had no symptoms or signs of encephalitis.
- After performing blood cultures and a lumbar puncture, what management would you initiate within 1 hour of their arrival to hospital?**
- (a) Ceftriaxone, aciclovir, amoxicillin and dexamethasone.
 (b) Ceftriaxone, aciclovir and amoxicillin.
 (c) Ceftriaxone, aciclovir and dexamethasone.
 (d) Ceftriaxone, amoxicillin and dexamethasone.
 (e) Ceftriaxone and amoxicillin.

CME Geriatric medicine SAQ

Answers to the CME SAQ published in *Clinical Medicine* in July 2022

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
(a)	(e)	(a)	(c)	(b)	(a)	(e)	(e)	(c)	(b)