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CME Infectious diseases SAQs (80449)

Self-assessment questionnaire

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SAQs and answers are ONLINE for RCP fellows and collegiate members

The SAQs printed in the CME section can only be answered online to achieve external CPD credits.

Any comments should be sent in via email only: clinicalmedicine@rcplondon.ac.uk

Format

SAQs follow a best of five format in line with the MRCP(UK) Part 1 exam. Candidates are asked to choose the best answer from five possible answers.

The answering process

1 Go to **www.rcplondon.ac.uk/SAQ**
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 28-year-old-man joined a methadone programme. He had been an intravenous drug user for around 13 years. A routine screen for viral hepatitis was performed.

Investigations:

hepatitis B core antibody	positive
hepatitis B surface antibody	positive
hepatitis B surface antigen	negative
hepatitis B envelope antigen	negative

What is the correct interpretation of these results?

(a) chronic carriage of hepatitis B virus with high risk of transmission
(b) chronic carriage of hepatitis B virus with low risk of transmission
(c) previous infection with hepatitis B virus
(d) previous vaccination against hepatitis B virus
(e) recent infection with hepatitis B virus

2 A 65-year-old woman presented with a 3-day history of cough productive of green sputum. She had had frequent previous chest infections due to bronchiectasis.

Investigation:

Sputum culture	*Pseudomonas aeruginosa* sensitive to ciprofloxacin

Treatment with ciprofloxacin was started.

In addition to diarrhoea, what potential complication of ciprofloxacin therapy should the patient be specifically warned about?

(a) depression
(b) headache
(c) seizures
(d) skin rash
(e) tendinitis

3 A 24-year-old woman presented with a 2-day history of cough productive of green phlegm. She had a long history of asthma, causing hospital admission on several occasions. 2 years previously she had developed a type 1 hypersensitivity reaction after receiving penicillin. She had given birth 3 weeks previously and was breast-feeding at the time of presentation.

On examination there were signs of consolidation at the left lung base.

What is the most appropriate treatment?

(a) cefuroxime
(b) chloramphenicol
(c) clarithromycin
(d) co-amoxiclav
(e) levofloxacin

4. A 27-year-old man presented with a 3-day history of a cough productive of small amounts of clear sputum. He had no significant past medical history and he was a non-smoker. He had returned from a 2-week holiday in Spain 5 days before his symptoms began.

On examination, he appeared well and was afebrile. His pulse was 70 beats-per-minute, with a blood pressure of 110/58 mmHg and respiratory rate of 18 breaths-per-minute. On auscultation the chest was clear. His oxygen saturations when breathing room air were 97%.

What is the most appropriate therapy?

(a) amoxicillin alone
(b) co-amoxiclav alone
(c) co-amoxiclav plus clarithromycin
(d) levofloxacin alone
(e) no antibiotic required

5 A 64-year-old man presented with a 3-month history of passing blood in his urine. He had had a prosthetic aortic valve replacement 4 years previously.

A decision was made to perform an elective cystoscopy

Investigations:

urine microscopy	0 white cells/μl (<10)
culture	no significant growth

What is the most appropriate peri-operative antibiotic prophylaxis against infective endocarditis?

(a) amoxicillin
(b) clindamycin
(c) gentamicin
(d) no antibiotic required
(e) vancomycin

6 A 31-year-old man presented with a 7-day history of cough, breathlessness and haemoptysis. He was a current intravenous drug user.

On examination, he appeared unwell. His temperature was 39.2°C and his pulse was 118 beats-per-minute with a blood pressure of 82/48 mmHg and respiratory rate of 32 breaths-per-minute. His oxygen saturations were 88% when breathing room air.

Investigations:

chest X-ray	bilateral shadowing with a fluid-filled cavity

What is the most likely cause of the infection?

(a) *Legionella pneumophila*
(b) *Mycobacterium tuberculosis*
(c) *Pneumocystis jirovecii*
(d) *Staphylococcus aureus*
(e) *Streptococcus pneumoniae*

7 A 24-year-old woman presented with a 1-day history of cough, sore throat, aching muscles and fever. She had no past medical history of note and she had not been vaccinated against influenza that winter. 2 weeks previously, the Department of Health had declared that influenza activity had reached the threshold for prescribing influenza treatment according to the National Institute for Health and Care Excellence (NICE) guidance.

What is the most appropriate treatment?

(a) aciclovir
(b) amantadine
(c) no anti-viral required
(d) oseltamivir
(e) zanamivir

8 A 34-year-old woman presented with a 12-day history of fever, malaise and breathlessness. She had had rheumatic fever when she was 10 years old. She had been told that she did not have any heart murmurs following this. She had been an injecting drug user for 18 years.

On examination she appeared unwell and had a temperature of 39.4°C. A de-crescendo early diastolic murmur was clearly heard at the lower left sternal border.

Investigations:

blood culture	*Staphylococcus aureus* isolated from a single bottle

Which feature is a major Duke criterion for the diagnosis of endocarditis?

(a) history of injecting drug use
(b) history of rheumatic fever
(c) new onset of an early-diastolic murmur
(d) Staphylococcus aureus isolated from blood culture
(e) temperature greater than 39.0°C

9 A 32-year-old man presented with severe cellulitis. He had previously developed anaphylaxis after taking amoxicillin and had developed an urticarial rash after taking vancomycin. His only medication was citalopram for depression.

A decision to start outpatient parenteral antibiotic therapy was made.

What is the most appropriate treatment?

(a) ceftriaxone
(b) daptomycin
(c) ertapenem
(d) linezolid
(e) teicoplanin

10 A 48-year-old man presented with a 6-day history of chest pain, cough and haemoptysis. He had acute myeloid leukaemia and had received an allogeneic bone marrow transplant. 4 weeks previously he had completed his second cycle of post-transplant chemotherapy.

On examination there was bronchial breathing over the upper part of the right side of his chest.

He was treated with meropenem and vancomycin by the admitting medical team, but after 48 hours he remained febrile and unwell.

Investigations:

computed tomography (CT) scan of chest	right apical cavitating lesion

What additional antimicrobial treatment is most appropriate?

(a) antituberculous chemotherapy
(b) co-trimoxazole
(c) fluconazole
(d) linezolid
(e) voriconazole

CME Rheumatology SAQs

Answers to the CME SAQs published in *Clinical Medicine* August 2013

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