

Bilateral mediastinal lymphadenopathy is detected on chest X-ray. Which of the following is the most likely diagnosis?

- (a) Culture-negative endocarditis
- (b) Cytomegalovirus infection
- (c) Lymphoma
- (d) Epstein-Barr virus infection
- (e) Sarcoidosis

7 A 24-year-old man presents with cough, fever, pleuritic chest pain and shortness of breath beginning three days into a flu-like illness. He reports a small amount of haemoptysis on one occasion. On examination, he is tachycardic (98/min), normotensive (105/80 mmHg), tachypnoeic (respiratory rate (RR) 32/min), with bilateral crepitations on auscultation of his chest. He is referred for assessment for level 2 care. Results of investigations are serum sodium 130 mmol/l (137–144), serum urea 4.2 mmol/l (2.5–7.5), serum creatinine 78 µmol/l (60–110), haemoglobin (Hb) 13.5 g/dl (13–18), white blood cell (WBC) count $2 \times 10^9/l$ (4–11), neutrophil count $0.88 \times 10^9/l$ (1.5–7), platelet count $144 \times 10^9/l$ (150–400), serum C-reactive protein 324 mg/l (<10). Chest X-ray shows multilobar infiltrates with a small right-sided pleural effusion. Sputum Gram film reveals numerous clustered Gram-positive cocci. What is the most appropriate combination antimicrobial therapy?

- (a) Augmentin + clarithromycin
- (b) Cefotaxime + flucloxacillin + clarithromycin
- (c) Linezolid + clindamycin + rifampicin
- (d) Rifampicin + isoniazid + pyrazinamide + ethambutol
- (e) Vancomycin + ciprofloxacin

8 A 74-year-old man with refractory Crohn's disease and a history of aortic aneurysm repair is admitted to hospital for a recurrent fever. He has been receiving total parenteral nutrition at home for the past 12 months because of poor nutritional intake and malnutrition. In the last four months he has received two six-week courses of vancomycin for methicillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia thought to be line related. The line has been removed on each occasion and the patient presented again shortly after stopping antibiotics each time. Physical examination reveals a severely malnourished individual but with no obvious focus of infection. Blood cultures grow MRSA with the same sensitivity pattern as the two previous isolates, including sensitivity to vancomycin, erythromycin, tetracycline, fusidic acid and rifampicin. Which of the following statements about the MRSA is correct?

- (a) The MRSA is likely to be fully sensitive to vancomycin, but the patient has not responded because of the presence of deep-seated infection
- (b) The MRSA is likely to be sensitive to vancomycin; the patient needs re-education with regard to line care as he is developing recurrent line infections

- (c) The MRSA is likely to be resistant to vancomycin and should be referred for specialist testing
- (d) The MRSA is likely to be a vancomycin intermediate-resistant *S. aureus* and should be referred for specialist testing
- (e) This is the most common sensitivity pattern for MRSA. It is coincidence that this man has had three separate episodes. The MRSA should be referred for typing

9 A 36-year-old man presents to the acute medical unit with a six-week history of a dry unproductive cough associated with night sweats and breathlessness on exertion. His general practitioner has treated him with amoxicillin six days previously with no improvement. On examination, he is febrile with a temperature 39.5°C, tachycardic 100/min, RR 24/min and coarse crackles at both bases of his lung fields. He has evidence of oral candidiasis. A chest radiograph shows bilateral pulmonary infiltrates with a normal cardiac size. The most likely diagnosis is:

- (a) *Pneumocystis carinii* pneumonia
- (b) Pulmonary TB
- (c) Pulmonary toxoplasmosis
- (d) Pulmonary oedema due to cardiac failure
- (e) Pulmonary cryptococcosis

10 A 26-year-old female asylum seeker from Zambia thought to have HIV is admitted from accident and emergency following an episode of fit. Further questioning of her friends reveals that she has been complaining of a frontal headache, and on occasions has been noted to have left-sided weakness. She has bilateral papillary oedema. Investigations show Hb 7.9 g/dl (11.5–16.5), WBC $4.5 \times 10^9/l$ (4–11) and platelet count $95 \times 10^9/l$ (150–400). Computed tomography head scan shows three enhancing occupying lesions in the right cerebral hemisphere causing midline shift. What is the next most appropriate step in management?

- (a) Blood transfusion
- (b) Bone marrow aspiration
- (c) Lumbar puncture
- (d) Confirmatory HIV antibody testing
- (e) Intravenous dexamethasone with empirical trial of treatment with sulphadiazine and pyrimethamine

CME Oncology SAQs

Answers to the CME SAQs published in *Clinical Medicine* August 2008

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