

CME Respiratory Medicine (125124): 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 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. In a person with non-cystic fibrosis bronchiectasis, after how many courses of antibiotics in 1 year are long-term antibiotics considered?
 - (a) One or more
 - (b) Two or more
 - (c) Three or more
 - (d) Four or more
 - (e) Five or more
2. In which circumstances are inhaled corticosteroids recommended in patients with bronchiectasis?
 - (a) In all bronchiectasis patients
 - (b) In those with co-existent asthma
 - (c) In those with co-existent connective tissue disease
 - (d) In those with co-existent emphysema
 - (e) In those with co-existent rhinosinusitis
3. Which of the following is the first-choice nebulised antibiotic used for long-term inhaled prophylaxis against chronic *Pseudomonas aeruginosa* infection according to British Thoracic Society 2019 guidelines?
 - (a) Aztreonam
 - (b) Ciprofloxacin

- (c) Colomycin
- (d) Gentamicin
- (e) Tobramycin

4. A 62-year-old man was found to have a 1.5 cm spiculated right lower lobe lung nodule with a small bronchus leading to it. Computed tomography (CT) showed right para-tracheal lymph node which was 15 mm in diameter but no obvious metastases. He had mild chronic obstructive pulmonary disease.

Which of the following statements about his treatment options is the most accurate?

- (a) A positron emission tomography (PET) should be obtained and if this showed moderate uptake in the right para-tracheal lymph node but no distant metastases, an endobronchial ultrasound (EBUS) should be attempted and biopsy of the mediastinal lymph nodes
 - (b) If he is fit enough, proceed to surgery urgently without the delay of further investigations
 - (c) If PET suggests a single neck lymph node involvement, the patient should have surgery
 - (d) Navigational bronchoscopy or radial EBUS is required to attempt histological diagnosis in order to avoid unnecessary surgery
 - (e) Stereotactic body radiation therapy treatment provides similar outcomes to lobectomy for cancer
5. A 73-year-old woman presented with a right sided pleural effusion. A diagnostic ultrasound guided pleural aspiration was performed and cytology revealed adenocarcinoma cells. A CT of the chest revealed a right lung hilar mass with right and left paratracheal lymph node enlargement. A thoracoscopy with biopsy (which confirmed metastatic adenocarcinoma of lung origin), drainage of the effusion, and talc pleurodesis were performed.
- What is the next step in further treatment?*
- (a) Chemotherapy is not an option as cancer is too advanced
 - (b) Epidermal growth factor receptor gene testing should be performed on the biopsy sample
 - (c) If this were a malignant mesothelioma, the patient should definitely have surgery
 - (d) If this were a mesothelioma, post-operative radiotherapy would be advised for the operative wound
 - (e) The patient should have EBUS to sample para-tracheal lymph nodes

6. Which one of the following is an indication to start acute non-invasive ventilation (NIV) in the emergency department?

- (a) Acute exacerbation of asthma with pH 7.34, PCO_2 6 kPa, PO_2 7.5 kPa an hour after having nebulisers, steroids and oxygen
- (b) Acute exacerbation of chronic obstructive pulmonary disease (COPD) with pH 7.20, PCO_2 13 kPa, PO_2 7 kPa on arrival at the emergency department
- (c) Acute exacerbation of COPD with pH 7.26, PCO_2 13 kPa, PO_2 8 kPa an hour after having nebulisers and controlled oxygen
- (d) Acute exacerbation of COPD with pH 7.35, PCO_2 8 kPa, PO_2 11 kPa on arrival at the emergency department
- (e) Pneumonia with features of acute respiratory distress syndrome

7. Which of the following statements is incorrect?

- (a) Acute NIV in COPD exacerbation with acute hypoxemic respiratory failure (AHRF) can reduce intubation rate
- (b) Acute NIV should be initiated only in the presence of acidosis
- (c) AHRF can be the first presentation of undiagnosed neuromuscular conditions
- (d) NIV can be delivered on a ward doesn't have to be in a high dependency unit
- (e) Sedation can be considered in agitated patients who are not tolerating NIV due to agitation

8. A 32-year-old woman who was 20-weeks pregnant presented with syncope, sudden onset dyspnoea and chest pain. She had been suffering from moderate morning sickness for the prior 2 weeks. She had no significant previous medical history. She was found to have a pulse rate of 120 beats per minute, blood pressure 110/70 mmHg, respiratory rate of 24 breaths per minute and SpO_2 95% on room air. The breath sounds were normal. Her chest x-ray was unremarkable.

When considering further management, which one of the following actions should be undertaken?

- (a) A CT pulmonary angiogram (PA), to detect a small pulmonary embolism (PE) which is likely to be the cause of her symptoms
- (b) A d-dimer, because a negative result could avoid the need for a CTPA
- (c) A ventilation-perfusion (VQ) scan, it is preferable as the first line of diagnostic imaging for a PE as it will expose the fetus to less radiation than a CT pulmonary angiogram
- (d) An ultrasound Doppler of the leg veins, advisable even in the absence of calf pain
- (e) Apixaban is required for initial treatment

9. A 68-year-old woman presented with breathlessness and feeling faint. The following observations were noted: pulse 108 beats per minute, blood pressure 109/68 mmHg, respiratory rate of 26 breaths per minute, SpO_2 89% on room air. Blood tests revealed an elevated brain natriuretic peptide. A CTPA was obtained urgently and demonstrated a segmental PE without obvious right ventricular dilatation.

Which of the following is correct?

- (a) An echocardiogram is useful to determine if she is at risk of a complicated outcome
- (b) European Society of Cardiology guidelines recommend consideration of systemic thrombolysis at this stage
- (c) Low molecular weight heparin is required in the first instance
- (d) She could be managed as an outpatient
- (e) She should be offered catheter-directed thrombolysis

10. A 51-year-old man with a 35-pack a year smoking history presented with a 2-day history of worsening dyspnoea and right-sided chest pain. He said he has been coughing up more clear sputum than usual but had noticed a streak of blood in the sputum. He had no calf tenderness but he was off work for 5 days for a twisted ankle 3 weeks previously. He was found to be afebrile with a heart rate of 108 beats per minute, respiratory rate of 22 breaths per minute, blood pressure 126/84 mmHg and SpO_2 92% on room air. His chest x-ray showed hyperexpanded lung fields.

Which of the following statements is true?

- (a) A negative d-dimer would not avoid the need for a CTPA or VQ scan
- (b) A right sided intracardiac blood clot is an indication for surgical embolectomy
- (c) He should be considered to be at high risk of PE
- (d) If he is found to have a PE, he should have a CT scan of the abdomen and pelvis
- (e) If the d-dimer were positive, a VQ scan would be the first choice imaging modality

CME Tropical Medicine SAQ

Answers to the CME SAQ published in *Clinical Medicine* in March 2019

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