

Acute Medicine (32017) SELF-ASSESSMENT QUESTIONNAIRE

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. The closing date is 21 July 2007 (midnight GMT).

Change in format

As announced in the previous issue SAQs will now 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 online system, passwords and pass mark will remain the same.

There may be teething problems and we would be grateful if all comments/problems could be sent in via email only: clinicalmedicine@rcplondon.ac.uk. We recommend that answers are submitted early so that any problems can be resolved before the deadline.

The answering process

- 1 To access the questions, log on to the Fellows and Members area www.rcplondon.ac.uk/Members/SAQ (those who have not yet registered will be automatically directed to the registration pages). Please contact the Information Centre if you have lost or forgotten your username or password: infocentre@rcplondon.ac.uk
- 2 Select: **Self assessment**
- 3 At the top of the SAQ page select the current CME question paper
- 4 Answer all 10 questions in any order, by selecting the best answer
- 5 Check your answers and change them if you wish to
- 6 Click on **Submit for final marking**.

NOTE – after submitting your answers NO changes are possible.

The marking process

- You must submit the answers before the closing date shown at the top of the screen
- Answers will be marked automatically on the date displayed for that paper
- You can find your marks on the CME page under **My past CME papers**.

Registering your external CPD credits

A pass mark of 80% allows you to claim two external CPD credits. Only the first seven distance-learning credits will be counted as external; the remainder can be claimed as personal credits.

To claim your credits:

- Credits can be recorded using the online diary system. All *Clinical Medicine* SAQs are listed under **External Approved CPD**.

1 A 24-year-old man was brought to accident and emergency (A&E) with a 12-hour history of generalised headache. The day before presentation he sunbathed for six hours and consumed 14 units of alcohol. The headache began insidiously but became increasingly severe and upon examination was 9/10 in severity. He had a history of migraine with visual aura which usually began abruptly, and was described as a unilateral throbbing pain associated with photophobia; it generally responded to sumatriptan. He felt that this headache was not like his usual migraine and had no relief from paracetamol or sumatriptan. Neurological examination was normal.

A working diagnosis and immediate management are:

- (a) Cerebral venous sinus thrombosis requiring computed tomography brain scan
- (b) Dehydration: the patient should be managed with fluids, anti-emetics and simple analgesia
- (c) Migraine: the patient can be discharged with simple analgesia and anti-emetics
- (d) Subarachnoid haemorrhage requiring a lumbar puncture to confirm/exclude
- (e) The patient is seeking opiate analgesia with a rehearsed history of migraine: psychological review is needed

2 A previously well 25-year-old man presented to A&E via ambulance after experiencing a generalised tonic clonic seizure lasting one minute. His wife witnessed the episode and reported that he had never previously had a seizure. He consumed five units of alcohol most days but had had none for the past three days. On examination, vital signs were normal. He was initially confused and disorientated but recovered within one hour with no recall of the episode. There were no focal neurological deficits on examination and both cardiac and respiratory examinations were normal. The most appropriate course of action would be to:

- (a) Administer intravenous (iv) phenytoin and lorazepam to prevent further seizures
- (b) Advise the patient against driving and arrange rapid outpatient follow-up to investigate underlying causes for the seizure
- (c) Arrange for an urgent magnetic resonance imaging brain scan as there is no explanation for the seizure

- (d) Commence anticonvulsant treatment and advise the patient against driving
- (e) Treat the patient with thiamine and benzodiazepines as this is likely to be an alcohol withdrawal seizure

3 A fit and well 19-year-old woman presented with gradual onset of a generalised throbbing headache over two days which continued to increase in severity and was associated with photophobia. She scored the headache currently as 9/10 severity and preferred to lie in a darkened, quiet room. Two days earlier she had returned from a cheese and wine holiday tour in the South of France. On examination, her temperature was 39°C and her heart rate 120 bpm. She was slightly drowsy but easily roused. Neck stiffness was apparent. There was no focal deficit on neurological examination and general examination was normal.

The single most appropriate immediate management for this patient is:

- (a) Administration of aciclovir
- (b) Administration of vancomycin
- (c) Diagnostic lumbar puncture
- (d) Simple analgesia alone
- (e) Treatment with ampicillin and dexamethasone

4 A 65-year-old man with previous coronary artery bypass surgery presented to A&E with a one-week history of palpitations. His regular medications were aspirin and simvastatin. Clinical examination was normal apart from a fast, irregular pulse (140 bpm). Blood pressure (BP) was 130/70 mmHg and there was no evidence of heart failure. His 12-hour troponin-T level was normal. Apart from considering anticoagulation, the single most appropriate therapy is:

- (a) Amiodarone chemical cardioversion

- (b) Digoxin for rate control
- (c) Electrical cardioversion
- (d) Flecainide
- (e) iv labetalol

5 A 67-year-old man with hypertension and hypercholesterolaemia presented to hospital with a three-week history of exertional chest pain, culminating in a one-day history of recurrent pain at rest. He smoked 20 cigarettes a day. He had never previously undergone coronary angiography. His medications included aspirin 75 mg od, simvastatin 20 mg od and amlodipine 5 mg od. On arrival, he was pain free after sublingual glyceryl trinitrate in the ambulance. His clinical examination was normal. His resting ECG showed sinus rhythm with no ST or T wave abnormalities. His 12-hour troponin-T level was elevated at 1.2 µg/l (<0.1 µg/l).

What is his thrombolysis in myocardial infarction (TIMI) risk score and risk level?

- (a) 1: low risk
- (b) 3: high risk
- (c) 3: intermediate risk
- (d) 5: high risk
- (e) 5: intermediate risk

6 A 24-year-old woman was admitted via A&E with an acute exacerbation of asthma and was deteriorating despite treatment with oxygen, iv hydrocortisone and salbutamol nebulisers. Her chest X-ray (CXR) was normal. Her arterial blood gases on 60% oxygen were pH 7.32, pCO₂ 7.0, pO₂ 10.0, base excess -3.

What is of highest priority during subsequent management?

- (a) Addition of ipratropium nebulisers
- (b) Commencement of non-invasive ventilation
- (c) Continuous salbutamol nebulisation
- (d) iv magnesium
- (e) Review by critical care clinician

7 A 63-year-old smoker was admitted with breathlessness, fever and right lower lobe consolidation seen on CXR. His respiratory rate was 26 bpm, BP 120/84 mmHg, C-reactive protein (CRP) 250 mg/l, urea 8.0 mmol/l, creatinine 130 µmol/l.

Which of the following score positive on the CURB-65 score?

- (a) Age
- (b) BP
- (c) CRP
- (d) Respiratory rate
- (e) Urea

8 A 36-year-old woman presented to A&E disorientated and drowsy. Collateral information revealed that she was well the previous day but had a history of alcohol abuse. She was ataxic but nothing else of importance was found on clinical examination. Blood investigations demonstrated sodium (Na) 147 mmol/l (137–144), potassium (K) 5 mmol/l (3.5–4.9), urea 26.2 mmol/l (2.5–7.5), creatinine 340 µmol/l (60–110), chloride 100 mmol/l (95–107), bicarbonate (NaHCO₃) 8 mmol/l (20–28) and glucose 6.2 mmol/l. Arterial blood gas analysis breathing room air showed pH 7.1, PO₂ 12.6, kPa PCO₂ 2.5 kPa.

What are the metabolic derangements and the most likely cause of her acute illness?

- (a) High anion gap metabolic acidosis/ethylene glycol ingestion
- (b) High anion gap metabolic acidosis/isopropyl alcohol ingestion
- (c) High anion gap metabolic acidosis/paracetamol overdose
- (d) Normal anion gap metabolic acidosis/ethylene glycol
- (e) Normal anion gap metabolic acidosis/isopropyl alcohol ingestion

9 A 24-year-old man was brought to A&E with delirium and confusion, having been found collapsed outside a nightclub.

He was febrile (temperature 39.5°C) and had been vomiting. Further examination revealed agitation and profuse sweating. There was no evidence of focal infection. Blood investigations demonstrated Na 106 mmol/l, K 5 mmol/l, urea 8.9 mmol/l, creatinine 110 µmol/l, chloride 82 mmol/l, NaHCO₃ 24 mmol/l, glucose 6.2 mmol/l.

What is the most appropriate immediate treatment plan, having accepted that some form of sedation will be a component?

- (a) 0.9% saline fluid replacement and tepid sponging
- (b) 1.26% NaHCO₃ infusion for urinary acidification
- (c) 1.8% saline fluid replacement
- (d) Cold 0.9% saline fluid replacement
- (e) Dantrolene infusion

10 A 32-year-old man was brought in by ambulance to A&E, having been found collapsed in his garage at home with an empty bottle of 'antifreeze'. He was drowsy and incoherent but his airway was not compromised. Blood investigations demonstrated Na 144 mmol/l, K 7.3 mmol/l, urea 23.1 mmol/l, creatinine 520 µmol/l, chloride 83 mmol/l, NaHCO₃ 11 mmol/l, glucose 5.4 mmol/l, arterial blood gas pH 7.05. A presumptive diagnosis of ethylene glycol poisoning was made. His hyperkalaemia was treated with calcium and insulin/dextrose.

What is the next most appropriate step in his management?

- (a) 8.4% NaHCO₃ followed by 10% ethanol infusion
- (b) 8.4% NaHCO₃ infusion
- (c) 10% ethanol infusion and haemodialysis
- (d) Fomepizole infusion and haemodialysis
- (e) Haemofiltration on the critical care unit

CME Neurology SAQs

Answers to the CME SAQs published in *Clinical Medicine* April 2007

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