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CME Cardiology SAQs (80450)

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 60-year-old lady presented to a district general hospital with typical cardiac chest pain at rest. She was a smoker with hypercholesterolaemia and a positive family history for ischaemic heart disease. She had 2 mm of planar ST depression in the lateral chest leads of her electrocardiogram (ECG) and her troponin at 12 hours came back as 0.12 µg/l. Her heart rate was 68 beats per minute, her systolic blood pressure was 139 mmHg and her creatinine levels were 80 µmol/l. Her pain settled and she felt well and wanted to go home. There was a previous history of an intra-cerebral bleed, although this was many years ago.

Which of the following would be an appropriate management strategy based on current NICE guidelines?

(a) She should be started on tirofiban and transferred to a cardiac centre for immediate percutaneous coronary intervention (PCI)
(b) She should be sent home for an out-patient coronary computed tomography (CT) scan
(c) She should be transferred to a PCI centre for angiography within 4 days
(d) She should be transferred to a PCI centre for angiography within 2 days
(e) She should be not be given antiplatelet drugs in light of her history of a previous cerebral bleed

2 In the risk assessment and management of acute coronary syndromes which of the following is true?

(a) Exercise electocardiography (ECG) testing plays a prominent role in risk stratification
(b) If a patient has a negative 12-hour troponin there is no need for inpatient coronary angiography
(c) Any patient with a positive troponin requires inpatient coronary angiography
(d) Thrombolysis should be considered in high-risk patients with ongoing symptoms, even without ST-elevation on ECG
(e) A GRACE score above 140 suggests a high risk acute coronary syndrome (ACS)

3 A 61-year-old male presented with new onset atrial fibrillation (AF). He had few symptoms and could not be sure when it started. He was active and otherwise well. He was treated for hypertension but had no other co morbidities. Electrocardiography (ECG) showed AF with rapid ventricular conduction with a rate of 130 beats per minute, but no other abnormalities.

Which of the following statements is not true?

(a) Beta-blocker monotherapy would be reasonable for rate control
(b) There would be an indication for warfarin therapy
(c) An echocardiogram should be delayed until his rate is slower
(d) A rhythm-control strategy would be the preferred initial management strategy
(e) A left atrial size of >50 mm on echocardiogram is associated with a greater burden of atrial fibrillation

4 Which of the following is not considered a useful therapy in the treatment of atrial fibrillation?

(a) Atrioventricular node ablation and pacing
(b) Cardioversion with oral flecainide
(c) Radio frequency ablation during concomitant cardiac surgery
(d) Long term amiodarone therapy in permanent atrial fibrillation
(e) Transoesphageal echocardiography (TOE) guidance for direct current cardioversion (DCCV)

5 Which of the following statements about end-stage heart failure and the cardio-renal syndrome (CRS) is false?

(a) Kidney dysfunction in heart failure is a direct consequence of impaired renal blood flow in the setting of depressed left ventricular systolic function
(b) In a large cohort of patients admitted with decompensated heart failure, 30–40% of patients had a creatinine clearance of <30 ml/min
(c) Although anaemia is common in patients with CRS, erythropoietin levels are often low
(d) Baseline glomerular filtration rate (GFR) is a stronger predictor of mortality in patients with heart failure than left ventricular ejection fraction or New York Heart Association (NYHA) functional class
(e) Reversal of renal dysfunction can improve cardiac function

6 Which of the following statements about the management of cardio-renal syndrome is true?

(a) Furosemide treatment improves glomerular filtration rate in many patients
(b) Angiotensin-converting-enzyme (ACE) inhibitors and angiotensin receptor blockers should be stopped whenever there is a subsequent rise in creatinine following their commencement
(c) There is no difference in the effectiveness of a continuous intravenous (IV) furosemide infusion compared to bolus IV doses
(d) Ultrafiltration does not offer any advantages to diuretic therapy alone
(e) Dietary salt restriction is of no benefit in patients with cardio-renal syndrome

7 Which of the following statements about sudden cardiac death (SCD) is not true?

(a) There is a large preponderance of sudden cardiac death (SCD) in males compared to females during the young adult and early middle-age years.
(b) In 5–10% of cases, SCD occurs in the absence of coronary artery disease or cardiomyopathy
(c) 15–20% of cases of SCD are attributed to bradyarrhythmias
(d) Angina is an uncommon symptom preceding SCD
(e) The overall incidence of SCD in the United States is 1–2 per 1,000 population annually

8 Implantation of an implantable cardioverter-defibrillator (ICD) is not a class 1 indication in which of the following situations?

(a) Hypertrophic cardiomyopathy with documented ventricular fibrillation (VF) or ventricular tachycardia (VT) on optimal medical therapy
(b) Acute myocardial infarction patients who survive a cardiac arrest with documented VF/VT
(c) Arrhythmogenic right ventricular cardiomyopathy with documented VF/VT on optimal medical therapy
(d) Non-ischaemic dilated cardiomyopathy with documented VF/VT on optimal medical therapy
(e) Brugada syndrome patients who survive a cardiac arrest

9 A 55-year-old male of Indian origin came to hospital for a cardiovascular health check. He was a smoker and had a positive family history of ischaemic heart disease in a first degree relative aged <60 years. He had no significant past medical history and was not currently on any medications. His blood pressure was 135/80 mmHg and he had a body mass index (BMI) of 31 kg/m^2.

His fasting lipid profile was:
total cholesterol 6.6 mmol/l
high density lipoprotein (HDL) 2.1 mmol/l
total cholesterol/HDL ratio 3.14
low density lipoprotein (LDL) 3.2 mmol/l
fasting blood glucose 4 mmol/l

What is the correct management this gentleman should be offered?

(a) Reassurance with no intervention required
(b) Simvastatin 40 mg
(c) Simvastatin 20 mg
(d) Nicotinic acid
(e) Rosuvastatin 20 mg

10 For the same patient as in question 9, which of the following statements is true?

(a) Treatment should be modified to lower his low density lipoprotein (LDL) cholesterol specifically
(b) The patient's ethnicity and socioeconomic background should not be considered when calculating 10-year cardiovascular risk
(c) Patients with raised transaminases (but less than three times the upper limit of normal) should not be routinely excluded from statin therapy
(d) The Framingham risk score should be used to calculate 10-year cardiovascular risk
(e) The addition of an anion exchange resin, fibrate or fish oil supplement should swiftly be introduced to supplement statin therapy

CME Infectious diseases SAQs

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

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