

Acute coronary syndromes

This issue's special feature, on which these questions are based, was commissioned from independent authors. The Life-long Learning scheme 2007 is supported by an educational grant from Martindale Specials but the company has no editorial input. The information in the box below should help readers to identify knowledge gaps and undertake continuing professional development. Readers are also invited to complete the questions overleaf to test their knowledge of the articles, and send their answers, together with a stamped and addressed C5 envelope, to:

Life-long Learning – ACS
Hospital Pharmacist
 1 Lambeth High Street
 London SE1 7JN



Entries must be received by 26 November 2007. Results will be returned with a certificate of completion.

Life-long Learning competition

This is the second set of questions of the second Life-long Learning competition, for 2007, which will run until the November issue. The entrant who achieves the highest marks in this series of three exercises will win registration and travel expenses (up to £200) for the *Hospital Pharmacist* conference on 31 January 2008. The runner up will receive complimentary registration to the conference.

Your name, address and scores will be held on a database for the purpose of awarding prizes. Should you not wish your details to be held in this way, please tick the box. If you do this, you will be sent a certificate, but you will be ineligible for a prize.

Name: _____

RPSGB registration number: _____

Address: _____

Post code: _____

How to undertake continuing professional development

Identify knowledge gaps

- ◆ The causes of and methods for diagnosing acute coronary syndromes
- ◆ The pharmacological and surgical treatment of the conditions

Act

- ◆ Read the articles in this issue
- ◆ Test your knowledge by answering the multiple-choice questions overleaf

Evaluate

- ◆ What have you learnt?
- ◆ How has it added value to your practice?
- ◆ What will you do now and how will this be achieved?

The feature on acute coronary syndromes has been accredited by the College of Pharmacy Practice against the Royal Pharmaceutical Society's general and hospital practice areas of competence, which can be accessed via *Hospital Pharmacist* online (www.pjonline.com/links/hp)

Reading the feature and completing the questions will help readers to fulfil aspects of the following competency areas, depending on their area of practice and application of learning: G1, G5, G8, G9, HP1, HP2, HP4, HP5, HP10.

Completion of the questions entitles undergraduates to one point towards the

Professional Development Certificate, a joint initiative between the British Pharmaceutical Students' Association and the College.

The assistance of the College of Pharmacy Practice is acknowledged in producing the CPD elements of this month's special feature.

Further information on how hospital pharmacists are approaching the challenges of CPD can be found in articles in the February 2005 issue of *Hospital Pharmacist* (2005;12:65–72).



To answer the questions, tick either the True or False column

	True	False		True	False
1. Acute coronary syndromes (ACSs) are associated with:			6. Concerning ECG and blood results:		
a) Atheromatous plaques formed after the uptake of high-density lipoproteins by macrophages			a) Peak troponin levels are obtained approximately 12 hours after the onset of chest pain		
b) Platelet aggregation onto ruptured atheromatous plaques within a coronary artery			b) Raised troponin levels with ST segment depression indicate STEMI		
c) Central chest pain typically described as "crushing" and that can radiate to the left arm, neck or jaw			c) Raised troponin levels are always associated with ST segment elevation		
d) Chest pain that occurs only upon exertion			d) NSTEMI is not associated with raised troponin levels		
e) Chest pain that can be similar in nature to musculoskeletal pain			e) Raised troponin levels indicate myocyte damage		
2. Assessment and early treatment of ACS include:			7. Contraindications to thrombolysis include:		
a) Electrocardiogram (ECG) monitoring			a) History of stroke		
b) Troponin T or troponin I levels			b) Diabetes		
c) Aspirin 75mg as a stat dose			c) Pregnancy		
d) Oral metoclopramide 10mg when required for nausea			d) Severe hypertension		
e) Baseline blood glucose levels			e) Gastrointestinal bleeding		
3. Primary percutaneous intervention (PCI):			8. Unless contraindicated, national guidelines for secondary treatment post-MI suggest:		
a) Is the preferred reperfusion option in ST elevated myocardial infarction (STEMI), provided access to a high volume PCI procedure centre is available			a) Aspirin treatment should be life-long		
b) Achieves angiographically normal flow in less than 60 per cent of patients			b) Beta blockers should not be started until after the first 36 hours		
c) Carries a reduced risk of reinfarction compared with thrombolysis			c) Angiotensin converting enzyme inhibitors should only be started in the first 24 hours post-MI in patients with clinical signs of heart failure		
d) Does not involve the insertion of a stent			d) Eligible patients should continue treatment with eplerenone indefinitely		
e) Requires full platelet inhibition with aspirin and clopidogrel before the procedure			e) Patients should aim for a 7g intake of omega-3-acid ethyl esters per week		
4. Risk factors for ACS include:			9. Tight blood sugar control:		
a) Diabetes mellitus			a) Is indicated for all patients post-MI		
b) Hypotension			b) Was shown in the DIGAMI study to produce an absolute risk reduction in mortality of 11 per cent		
c) Low cholesterol			c) Is better achieved using long-term twice daily insulin compared with oral antidiabetic medicines		
d) Obesity			d) Is most beneficial for patients who are already regular users of insulin		
e) Smoking			e) Was achieved in the DIGAMI study by initially using a glucose-insulin infusion followed by insulin injections		
5. Thrombolysis:			10. Patients who have suffered a NSTEMI:		
a) Is the preferred treatment for non-ST elevated myocardial infarction (NSTEMI)			a) Should be initiated on low molecular weight heparin		
b) Achieves full reperfusion in over 60 per cent of patients			b) Are at higher mortality risk at six months compared with STEMI patients		
c) Is associated with a high risk of clotting			c) Should not receive a statin		
d) Is more effective if given within 12 hours of the onset of chest pain			d) Should receive clopidogrel for four weeks only		
e) Can be administered by bolus injection if newer agents (eg, tenecteplase) are used			e) May be suitable for glycoprotein IIb/IIIa inhibitor therapy if their PCI was delayed		

Answers will appear in the December issue

