

Poisoning

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This issue's special feature, on which these questions are based, was commissioned from independent authors. The new Life-long Learning scheme 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 — poisoning
Hospital Pharmacist
 1 Lambeth High Street
 London SE1 7JN

Name: _____

RPSGB registration number: _____

Address: _____

Post code: _____



Entries must be received by 5 March 2007. Results will be returned with a certificate of completion.

New Life-long Learning competition

This month sees the launch of a new Life-long Learning competition, sponsored by Martindale Specials. The entrant who achieves the highest marks overall in this series of six exercises will win attendance at the European Association of Hospital Pharmacists annual congress, to be held in Maastricht, The Netherlands, in spring 2008.

The best five scores from the six exercises in this series, which will run from January to July/August 2007 (excluding the March issue, which will not carry Life-long Learning questions) will be taken into consideration.

The runner-up will receive registration and travel expenses for the *Hospital Pharmacist* conference in 2008. Third and fourth place will receive Pharmaceutical Press vouchers or British Society for the History of Pharmacy china mugs.

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.

How to undertake continuing professional development

Identify knowledge gaps

- ◆ The general management of a poisoned patient and the pharmacist's role in their treatment
- ◆ The specific antidotes available for the treatment of poisoning and situations in which they may be used

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 poisons 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. Poisoning:			6. Cyanide poisoning:		
a) Approximately ten per cent of enquiries to poisons units involve drugs			a) The clinical features of cyanide poisoning are due to tissue hypoxia		
b) Antidotes are available for most poisons			b) Treatment of cyanide poisoning can not begin until the blood cyanide concentration has been established		
c) The management of poisoning is often guided by the patient's clinical condition			c) Dicobalt edetate is usually only used in patients with severe cyanide toxicity		
d) Treatment of poisoning cannot begin until the poison has been identified			d) Hydroxocobalamin was the first agent to be licensed in the UK for the treatment of cyanide poisoning		
e) It is important to obtain the accurate weight of the patient for antidote dose calculations			e) Treatment with sodium thiosulphate is limited by its severe side effects		
2. Activated charcoal:			7. Poisoning with toxic alcohols:		
a) Helps prevent the absorption of poisons into the bloodstream			a) It is important to measure the blood concentration of ethanol during treatment		
b) Is most effective if given within one or two hours of ingestion of the poison			b) Ethanol is expensive		
c) Should not be administered more than once within 24 hours			c) It is more cost-effective to treat a methanol overdose with ethanol than fomepizole		
d) Is unpleasant to drink			d) Fomepizole has unpredictable kinetics		
e) Should be mixed with food to improve its palatability			e) Once treatment with ethanol has started, fomepizole is contraindicated		
3. Drug elimination and prevention of absorption:			8. Opioid poisoning:		
a) Using syrup of ipecachuana to induce vomiting has been shown to improve the outcome of most poisonings			a) Pin-point pupils are a sign of opioid poisoning		
b) Urinary elimination of weak acids is increased by urinary alkalinisation			b) Naloxone is only administered by intravenous infusion		
c) Gastric lavage has been shown to reduce mortality from poisons			c) Naloxone may be useful in the diagnosis of opioid poisoning		
d) Whole bowel irrigation may be required to treat an overdose of lithium tablets			d) Repeated doses of naloxone may be required to treat opioid poisoning		
e) Haemoperfusion is commonly used to treat iron poisoning			e) Naloxone may precipitate opioid withdrawal in addicts		
4. The effects of poisoning:			9. Calcium channel blocker poisoning:		
a) Ethylene glycol ingestion can lead to metabolic acidosis and hypocalcaemia			a) Overdose of calcium channel blockers causes cardiovascular toxicity		
b) Beta-blocker overdose causes tachycardia			b) Toxicity from sustained release calcium channel blocker overdose is usually short-lived		
c) Symptoms of lone benzodiazepine poisoning usually resolve within 12-24 hours			c) Insulin-dextrose infusion may be indicated in calcium channel blocker overdose		
d) Severe metabolic acidosis is a symptom of mild cyanide poisoning			d) During treatment with insulin serum potassium must be monitored every 15 minutes		
e) In overdose sulphonylureas cause hypoglycaemia			e) Patients with resistant hypotension due to calcium channel blocker toxicity may require glucagon		
5. Specific antidotes:			10. Treatment targets and decisions:		
a) Flumazenil is useful in the treatment of mixed overdoses			a) The target urinary pH in treatment of aspirin poisoning is 7.5-8.5		
b) Sodium bicarbonate can be used to treat aspirin poisoning			b) The decision to treat early presenting patients with NAC is usually based on the concentration of paracetamol in blood plasma		
c) Insulin-dextrose is first-line treatment for beta-blocker poisoning			c) Most adverse reactions of NAC will settle if the infusion is stopped for about half an hour		
d) Octreotide is a poorly tolerated antidote for sulphonylurea poisoning			d) Prompt treatment of ethylene glycol overdose may prevent significant toxicity		
e) Dextrose administration may cause fluid and electrolyte imbalances			e) If a patient is started on haemodialysis the dose of the antidote needs to be altered		

Answers will appear in the news section of the March issue

