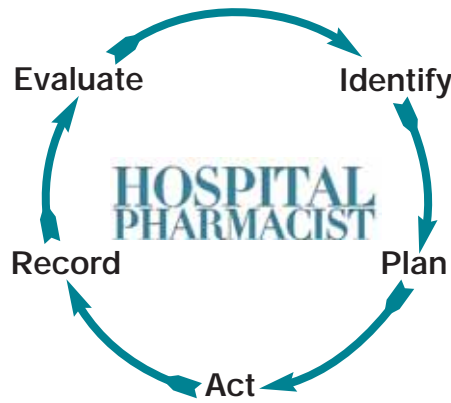


# Drug withdrawal

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— Drug withdrawal**  
*Hospital Pharmacist*  
 1 Lambeth High Street  
 London SE1 7JN



Entries must be received by 21 January 2008. Results will be returned with a certificate of completion.

### Life-long Learning competition

The second Life-long Learning competition of 2007 ended with the November issue of *Hospital Pharmacist*. Details of the next competition are still being finalised.

In the meantime, readers are invited to continue to answer the Life-long Learning questions overleaf for continuous professional development purposes. Answers will be marked as usual and a certificate of completion will be sent in return. Accreditation by the College of Pharmacy Practice remains unchanged.

Name: \_\_\_\_\_

RPSGB registration number: \_\_\_\_\_

Address: \_\_\_\_\_

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Post code: \_\_\_\_\_

### How to undertake continuing professional development

#### Identify knowledge gaps

- ◆ The drugs for which withdrawal symptoms are most common
- ◆ How to treat withdrawal symptoms and minimise the risk of them occurring

#### 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 drug withdrawal 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](http://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**.



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

	True	False		True	False
<b>1. In patients who undergo elective surgery:</b>			<b>6. Unsuccessful withdrawal of antiepileptic drugs is more likely if:</b>		
a) All routine drugs must be stopped if the patient is fasting			a) The epilepsy started during childhood		
b) Sipping water while fasting increases gastric volume			b) Multiple treatments have been required		
c) Monoamine oxidase inhibitors (MAOIs) can interact with anaesthetics			c) The patient has had a recent abnormal electroencephalogram		
d) If discontinuation is appropriate, aspirin should be stopped three days before surgery			d) The patient has a history of myoclonic seizures		
e) An international normalised ratio of 1.5 is considered safe for patients taking anticoagulants			e) The patient suffers from learning difficulties		
<b>2. Concerning mechanisms of dependence:</b>			<b>7. Neonatal abstinence syndrome (NAS):</b>		
a) Psychological dependence is mediated by dopamine			a) Is measured using the Finnegan scale		
b) Psychological dependence is responsible for the rebound hypertension caused by beta-blocker withdrawal			b) Is more likely to occur in neonates who were exposed to cocaine during pregnancy		
c) Physiological dependence occurs because of down-regulation of receptors			c) Causes nasal stuffiness		
d) Physiological dependence may be mistaken for a separate disease			d) Is linked to a reduction in the moro reflex		
e) Tolerance occurs when repeated use of a drug leads to an increased pharmacological effect			e) Occurs earlier in neonates who are exposed to methadone during pregnancy, than those exposed to morphine		
<b>3. Regarding serotonin syndrome:</b>			<b>8. Concerning discontinuation:</b>		
a) It is caused by a build up of serotonin after alteration in serotonin uptake			a) Lorazepam should be converted to the equivalent dose of diazepam, then tapered slowly over a number of weeks		
b) Symptoms include bradycardia			b) Fluoxetine should be converted to the equivalent dose of sertraline, then tapered slowly over a number of weeks		
c) Surgical patients who take fluoxetine should not be anaesthetised with pethidine			c) It may be possible to stop temazepam without conversion to diazepam		
d) If swapping from sertraline to clomipramine, doses should be cross-tapered			d) If a patient is to discontinue carbamazepine and sodium valproate, the two should be withdrawn simultaneously		
e) Patients should not take two selective serotonin reuptake inhibitors at the same time			e) When discontinuing phenytoin, the daily dose should be decreased by 50mg every four weeks		
<b>4. Withdrawal symptoms:</b>			<b>9. In order to prevent withdrawal effects:</b>		
a) Of antipsychotics last for up to two months			a) Temporary stopping of antidepressants in surgical patients should be avoided if possible		
b) Of benzodiazepines start within one to two days			b) A benzodiazepine with a short half-life (eg, lorazepam) is preferable		
c) Of antidepressants only last for 72 hours			c) The dose of primidone should be reduced every two weeks		
d) Can occur after a single missed dose of venlafaxine			d) Swapping antidepressant treatments may require a washout period		
e) Of antipsychotics can include a worsening of tardive dyskinesia			e) The dose of MAOIs may need to be reduced over a number of months		
<b>5. Withdrawal symptoms from antidepressants:</b>			<b>10. In the treatment of NAS:</b>		
a) Are more likely if the drug has a long half-life			a) Milk formula should be hypocaloric		
b) Are more likely if the patient is a child			b) Morphine is commonly used		
c) Are commonly due to receptor rebound			c) Phenobarbital is used in neonates who experience seizures		
d) Are less likely if the patient also takes antihypertensive drugs			d) Diazepam has proved to be beneficial		
e) Are less likely if the patient suffered withdrawal symptoms from previous treatment			e) The use of clonidine is encouraged		

Answers will appear in the February issue

