About programme updates
The Centre for Pharmacy Postgraduate Education (CPPE) has a quality assurance process called programme guardians. A programme guardian is a recognised expert in an area relevant to the content of a learning programme who reviews the programme every six to eight months. Following the regular programme guardian review we have developed this update to inform you of any necessary corrections, additions, deletions or further supporting materials. We recommend that you check you have the most recent update if you are using a programme more than six months after its initial publication date.

This update has been prepared by Nicola Ward and should be read in conjunction with the Surgical Challenges learning@lunch programme. We have indicated the relevant section and page number of the original document wherever we provide updated information.

Learning with CPPE
CPPE offers a wide range of learning opportunities in a variety of formats for pharmacy professionals from all sectors of practice. We are funded by Health Education England to offer continuing professional development for all pharmacists and pharmacy technicians providing NHS services in England. For further information about our learning portfolio, visit: www.cppe.ac.uk

A note about web links
Where we think it will be helpful we have provided web links to take you directly to an article or specific part of a website. However, we are aware that web links can change. If you have difficulty accessing any web links we provide, please go to the organisation’s home page or your preferred internet search engine and use appropriate key words to search for the relevant item.

All web links were accessed on 26 April 2015.

Access to the BNF online
You can access the BNF online through MedicinesComplete. If you are not already registered, you will need to do so. UK-based individuals working for or on behalf of the NHS can register for free and access the BNF and BNF for children. To register, go to: www.medicinescomplete.com/about/subscribe.htm

Assessment
As part of your learning for this programme, you may wish to undertake the associated e-assessment. To access the assessment, go to: www.cppe.ac.uk/assessment

Brand names and trademarks
CPPE acknowledges the following brand names and registered trademarks mentioned in this update: Tazocin®
References in the programme to competency frameworks
In this programme we may map our learning objectives against the Royal Pharmaceutical Society of Great Britain’s competency framework, the General level framework or the Knowledge and skills framework. You can easily map the learning objectives against a competency framework that is relevant to your practice.

This document includes updated information to add to Book 1 and Book 2 from January 2016 and the updates from May 2014, October 2013, January 2013 and July 2012 to add, if you have not done so already.

Book 1

Section 3 Pre-operative issues
Section 3.2 Pre-operative medicines management
Table 2: Risks of continuing (page 23 – additional text)
Add this sentence to the end of the text in the first box in table 2:
Adverse effects on cardiovascular system and renal perfusion during anaesthesia (eg ACE inhibitors)

Antiplatelet agents (page 24 – amendment)
In the fifth sentence in paragraph two, change the text to read:
Clopidogrel, prasugrel and ticagrelor need to be stopped at least seven to ten days pre-operatively to allow for adequate platelet recovery.

(page 24 – additional text)
Insert the following after the second paragraph:
The American College of Chest Physicians guidelines now advocate continuing aspirin peri-operatively in many moderate to high risk patients. This practice does not appear to have been widely adopted in the UK yet.

Reference for this text:

Hormonal medication (page 28 – additional text)
At the bottom of the page, add the following text:
With regards to the number of surgical procedures carried out within the NHS, more recent statistics are available at the Hospital Episode Statistics website: http://www.hscic.gov.uk/hes
Change the text in the fourth sentence in the final paragraph to read:
In this case, the Medicines and Healthcare products Regulatory Agency (MHRA) advises stopping at least four weeks before surgery.

**Immunosuppressants** (page 32 – additional text)
Add this to the end of the paragraph in this section:
If immunosuppressant drugs are used following organ transplant, therapy must not be interrupted as this could have severe consequences, such as organ rejection. The anaesthetist and surgical pharmacist should liaise closely with the patient and his/her transplant team to manage the immunosuppression regimen appropriately.

**Section 4 Peri-operative medicines management**

**Nil by mouth** (page 33 – additional text)
Add this to the end of the paragraph:
It is important that periods of NBM are not extended any longer than necessary as this can have detrimental effects on the patients’ fluid and nutritional status.¹

**Section 7 Surgery in high risk patients**

**Drug abusers/misusers** (page 44 – amendment)
Amend the text in the paragraph in sentence four and five to read:
Their acute pain needs to be managed separately, using a multi-modal approach as opioids may not be fully effective. When opioids are required, these should, as in any other patient, be used at the lowest effective dose for the shortest possible time. Input from a specialist pain team may be helpful.

**Introductions to the case studies**

**Case study 1: Sean**

Amend the fifth bullet point at the bottom of the page to read:
Paracetamol IV 1 g four times a day

**References**

Add the following to the first reference:
This webpage no longer exists. More up-to-date statistics are available at the Hospital Episode Statistics website: [www.hscic.gov.uk/hes](http://www.hscic.gov.uk/hes)
Add the following to reference number 2:
The NHS Institute for Innovation and Improvement no longer exists. Alternative information on enhanced recovery is available from the NHS Improving Quality website: www.nhsiq.nhs.uk/resource-search/publications/enhanced-recovery-care-pathway-review.aspx

Add the following to reference number 3:
The NHS Institute for Innovation and Improvement no longer exists. Alternative information on the productive ward initiative is available on the King’s College London website: www.kcl.ac.uk/nursing/research/nnru/publications/Reports/Productive-Ward-final-report.pdf


Replace the web link in reference number 12 with:

Change reference 12 to read as follows as ninth edition is now available:

Replace the web link in reference number 14 with:

Remove reference 15 as the link is no longer available.
Surgical Challenges
A CPPE learning@lunch programme
Update January 2016

Further reading
(page 60 – amendments)
Replace the first resource (Enhanced recovery programme) with:
The NHS Institute for Innovation and Improvement no longer exists. Alternative information on enhanced recovery is available from the NHS Improving Quality website: www.nhsiq.nhs.uk/resource-search/publications/enhanced-recovery-care-pathway-review.aspx

Replace the references in the third resource (Peri-operative drug management) with:

Change the link in the fourth resource (Herbal medicines) for Memorial Sloan-Kettering Cancer Centre to:
www.mskcc.org/cancer-care/integrative-medicine/about-herbs

Replace the references under the final resource (Post-operative nausea and vomiting) with:

Book 2

Case study 1: Sean
(page 4 – amendment)
Amend the fifth bullet point at the bottom of the page to read:
Paracetamol IV 1 g four times a day

Suggested answers to reflective questions
(page 27 – amendment)
Replace the third bullet point in question 5 with:
- manage acute pain separately – do not rely on opioids alone but, if necessary, use lowest possible dose for shortest possible time

(page 27 – additional text)
Add this bullet point to the answer for question 5:
- manage patients’ expectations and discuss concerns and anxieties, for example, risk of relapse.

Suggested answers to practice points

Practice point 1 (page 28 – amendment)
Change the final bullet point on the page to read:
Wait 12 hours after last prophylactic LMWH dose to remove the epidural, then administer the next LMWH dose after four hours.²
Practice point 9 (page 33 – additional text)
Add this text to the end of the final bullet point:
or other potassium-containing intravenous fluids.

Suggested answers to case studies
(page 37 – additional text)
Add this text to the end of the answer to question 3 in the box at the top of the page:
Sean will also require prescriptions of suitable intravenous fluids while he is unable to maintain oral intake.
NICE guideline CG174 on intravenous fluid therapy suggests daily maintenance requirements.³

(page 40 – amendment)
Amend the sentence in paragraph three to read:
Continue Tazocin® 4.5 g three times a day for five days and if white cell count in range and no further
signs of infection, discontinue after 48 hours.

(page 46 – amendment)
Replace analgesia with anaesthesia in the question so it reads:
What are the advantages of giving spinal anaesthesia to a patient like June?

Amend the text in the box to:
There is less risk of adverse effects on the lungs and development of a chest infection than following
general anaesthesia.

Patient satisfaction is usually high.

Very good pain relief following surgery and less need for strong opioids and therefore lower risk of PONV
and of confusion.

The risk of unnoticed hypoglycaemia in people with diabetes is reduced as they are awake and able to
communicate any problems. They can resume their usual diet and medication promptly post-operatively.

Post-operative VTE is assumed to be less common than following general anaesthesia.

Discussion points (page 46 – amendment)
Change the first bullet point to read:
This is a complex technique and insertion of the spinal needle requires exact positioning which may be
associated with some discomfort for the patient (eg, if having lower back pain, arthritis etc.).
(page 46 – additional text)

Add a final bullet point to read:
There is a risk of delayed mobilisation after surgery as it will take several hours for the effect of the spinal anaesthetic to wear off.

References
(page 51 – amendment)

Change reference two to read as the ninth edition is now available:

References for this update


Feedback

We hope you find this learning programme useful for your practice. Please help us to assess its value and effectiveness by visiting your learning record in the My CPPE section on our website:
www.cppe.ac.uk/mycppe/record

Alternatively, please email us at: feedback@cppe.ac.uk

Copyright Controller HMSO 2016