

Why don't we ask day-patients to supply their own post-operative analgesia? Empowering patients to be responsible for their own care

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Abstract

Introduction: We investigated the process of patients acquiring analgesia following day surgery carried out in our local hospital.

Methods: Interviews were conducted with patients and staff who receive, prescribe, and dispense analgesia following day surgery.

Results: *Surgeons:* Frequently employ local anaesthetic intra-operatively. They do not routinely prescribe discharge analgesia.

Anaesthetists: Prescribe analgesia routinely - paracetamol, ibuprofen, and codeine. They are concerned patients cannot be relied on to purchase their own supplies.

Day Ward Nurses: Label and dispense all drugs ordered by anaesthetists.

Pharmacists: Supply pre-packed analgesia to the day unit.

Patients: Paracetamol and ibuprofen are commonly taken, codeine rarely. Most are familiar with these analgesics and have supplies at home. They would purchase drugs if instructed.

Conclusions: If patients acquired their own post-operative analgesia

Dispensing excess quantities of analgesics, particularly codeine, would be avoided

Staff would have more time to concentrate on direct patient care

There would be financial savings

Introduction

In the island of Guernsey's unique healthcare system adult day surgery patients are routinely supplied with take home analgesia. In-patients and paediatric day surgery patients are expected to purchase their own simple analgesia and a take home prescription is only issued for those drugs not obtainable over the counter.

Paracetamol and ibuprofen are the usual analgesics advised which many patients already have at home and are familiar with their use.

This study was designed to ask the question "Why don't we ask day patients to supply their own post-operative analgesia?".

Background

The Bailiwick of Guernsey (population 63,000) is a group of islands lying 70 miles from the south coast of England. Healthcare provision is not part of the NHS but broadly follows UK practices. A brief overview is provided in Reference 1. Visits to GPs and emergency department attendances, unless within 48 hours of discharge from hospital, incur a fee.

For adults undergoing a day surgical procedure, anaesthetists issue a prescription for take home drugs facilitated by a pre-printed sticker (see Figure1). Drugs are pre-packaged on purchase by the hospital, labelled and distributed by pharmacy, and dispensed by day unit registered nurses. Depending which prescription is signed the following quantities are dispensed: Paracetamol 16 x 500mg, Ibuprofen 24 x 400mg, Codeine 28 x 30mg. Patients do not pay for the medication.

Figure 1 Pre-printed analgesic prescription sticker.

Pack A	Discharge analgesia as per patient information leaflet				Pack B (delete one)			
PARACETAMOL	500MG	2 TABS	QDS prn	PARACETAMOL	500MG	2 TABS	QDS prn	
CODEINE	30MG	1-2 TABS	QDS prn	CODEINE	30MG	1-2 TABS	QDS prn	
IBUPROFEN	400MG	1 TAB	QDS 24 / 48 / 72 HRS					
Date	DR signature			Nurse signature				

Method

One author, ER, carried out structured interviews with all staff involved in prescribing and dispensing medication to day-case patients.

Patients were invited to complete an anonymous questionnaire featuring the following 6 questions.

- Has pain relief after your operation been discussed with you before coming to the Day Patient Unit?
- Do you usually have paracetamol or ibuprofen at home?
- If you had been asked, would you have been willing to purchase your own simple pain relief (paracetamol and ibuprofen) or use any you have at home?
- Did you expect to take pain relief home with you after your procedure?
- Do you have any concerns about managing any pain you may have after your procedure?
- Please add any further comments or questions in the space below

The questionnaires were handed out over the space of a week to all patients undergoing day surgery under a general anaesthetic.

An evaluation of cost was also performed.

Results

Surgeons

The surgical team commonly employed local anaesthetic in day-case procedures to aid immediate post-operative pain relief. All other analgesia was managed by anaesthetists.

Anaesthetists

The pre-packaged sets of paracetamol, ibuprofen, and codeine in those without contraindicating comorbidities were prescribed routinely by the anaesthetists as part of their peri-operative pain management strategy. There was reluctance from the anaesthetic department to change current practices for several reasons. Historically standardisation of post-operative analgesia had been introduced as a measure to reduce urgent presentations to the Emergency Department with post-operative pain. Prior to 2018 this would have incurred a fee for the patient as well as potentially creating work for the duty surgeon. Anaesthetists expressed concerns that patients could not be relied upon to provide for and comply with a self-administered medication regime. As Guernsey charges for primary care and has no 24-hour pharmacy facilities, access to analgesia was a factor they thought worth consideration.

Overall, anaesthetists felt that it was their responsibility to ensure all patients had access to necessary analgesia, and the easiest way to do this was to adhere to the existing standardised system.

Day Ward Nurses

Registered nurses on the day unit facilitated discharges according to agreed protocols. They were responsible for perioperative patient care including pain management. They labelled and dispensed all take-home medication.

Although dispensing the medication was not particularly laborious, they reported that if ward supplies ran out then a qualified member of staff had to go to pharmacy for each individual patient which was disruptive to their duties and time-consuming.

Other concerns raised by the nursing staff included discrepancies in the different patient information leaflets provided, including instructions on amounts and dosing intervals of postoperative analgesia. Additionally, they thought that codeine prescribing should be more selective. Many patients who were contacted by the day unit nurses by telephone routinely the day after operations, such as laparoscopic cholecystectomies, reported they could manage their pain without opioids and those who did use them often had side effects. Nurses expressed concerns that codeine had the potential be abused or passed on to others, something they had anecdotal experience of.

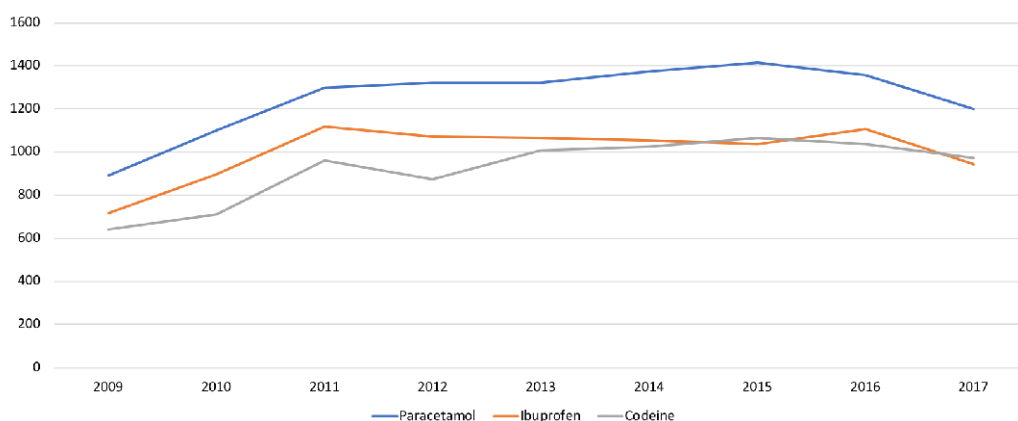
Generally, day unit nurses believed patients could manage their own postoperative analgesia.

Pharmacists

The hospital pharmacy supplied the day unit with analgesia on a weekly basis. Quantities of analgesics issued each year from 2009 to 2017 can be seen in Figure 2. Pharmacists raised important issues surrounding the amount of medication being wasted, as well as the over-prescription of codeine which could only be sourced in packs of 28 tablets. They supported the idea of streamlining the process and aiming to reduce waste.

Although the medications themselves cost the hospital pharmacy the same as patients would pay for over the counter medication, the hospital then faces additional costs to package and label these medications as well as the cost of delivering them to the ward. #

Figure 2 Number of packs of paracetamol, ibuprofen and codeine dispensed each year between 2009 and 2017.



Patients

The results of patient questionnaires showed that 7 of 8 patients who responded had both paracetamol and ibuprofen at home. The same number of patients said that, if asked, they would be happy to purchase or use their own simple analgesia, with the 1 other patient saying they would consider doing so.

Only 50% of patients had expected to take home analgesia after their surgery, and no patients had any concerns about managing their pain at home.

All patients were given packs of analgesia, even if they informed the staff that they were happy to use what they had at home.

Discussion

Patients are being encouraged to take more responsibility and actively participate in their care. Examples include enhanced recovery following surgery and the get-well dressed campaign which both aim to promote a more rapid recovery, earlier discharge from hospital and quicker return to normality.

Day surgery is advocated whenever possible, as it is associated with a reduction in several important risks such as hospital acquired infections and thromboembolic events. Patients are mobile faster and can return more readily to their normal lives (2). Post-operative pain management is an essential part of post-operative care aiming to ensure comfort and thereby facilitating early restoration to normal activity.

BADS (British Association of Day Surgery) guidelines (2) state that patients may be encouraged to buy their own simple analgesia, and the most important thing is that all patients should be discharged with appropriate written and verbal instructions on analgesic use. Additionally, this should include post discharge support information about signs and symptoms to expect potential complications and in the event of concerns who to contact. Advice following most procedures is to take analgesia regularly for a minimum of 3 days following day surgery (3)

Paracetamol is the analgesic advised to be taken routinely following day surgery, supplemented by ibuprofen and/or codeine. In the packs issued, if all drugs were taken regularly as advised, our patients received 2 days' supply of paracetamol, 8 days of ibuprofen and depending on dose 7 or 3.5 days of codeine. Most patients would need to purchase extra supplies of paracetamol during their recovery.

Codeine although regularly dispensed was rarely used. Looking at the pharmacy data it appears that codeine is prescribed in similar quantities to ibuprofen. This is probably in due to the way the prescription sticker is written (Figure 1). Given the potential for exacerbating nausea and vomiting, the constipating effect and misuse there seems to be no advantage to issue this routinely.

Our small study confirmed that patients are familiar with the common analgesics usually advised and often have supplies already at home. By diverting the onus of sourcing simple post-operative analgesia onto patients and carers, pharmacists, nursing, and medical staff would have time released for direct patient care.

The cost of supplying day unit post-operative take-home analgesic drugs in our hospital was approximately £2000 in 2016. However, this does not consider factors such as time taken by pharmacists and nurses to prepare, label, and dispense the medication. Whilst savings would be relatively modest in our small unit serving a population of 63,000 where the day surgery rate is below the average for England & Wales, extrapolation to a hospital serving a population of 500,000 would release in the order of £20k.

This study has demonstrated a potential for better use of resources creating a win: win: win situation for patients, medical, pharmacy and nursing staff, and hospital management. In order to change the current situation it requires day surgery patients to be informed in plain English what arrangements they need to make for post-operative analgesia – which analgesics to ensure they have at home, how to take them and when, the potential adverse effects, and who to contact if they have a problem. Prior to discharge they need to be asked if they do have supplies at home and if not, a limited pack dispensed at registered nurse discretion.

We end with the opening question:

“Why don't we ask day patients to supply their own post-operative analgesia?”

References

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