

Investigating postoperative opioid prescribing in a private hospital to improve patient outcomes

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Background

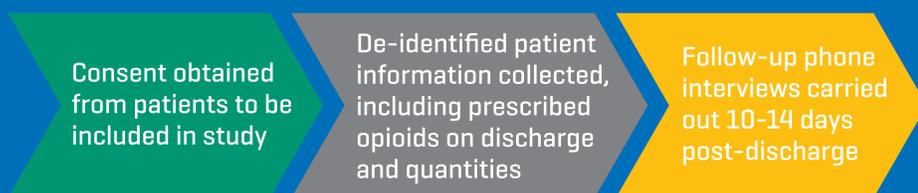
Opioids are an important treatment option in acute postoperative pain^[1] and are commonly used in this setting^[2]. However, literature suggests that overprescribing of opioids can contribute to the pool of unused opioids in the community, and duration of use is correlated with risk of long-term use^[3-5]. Guidelines do not recommend slow-release (SR) opioids for acute pain due to an increased risk of complications such as opioid-induced ventilatory impairment^[6].

Aim

To gain an understanding of postoperative opioid analgesia prescribed at discharge and subsequently consumed, and identify opioid stewardship opportunities to improve patient care.

Methods

A prospective medication chart audit was conducted on orthopaedic wards at Epworth Hospital Richmond, the largest private hospital in Victoria. Patients who underwent total knee arthroplasty (TKR), total hip arthroplasty (THR) or anterior cruciate ligament (ACL) surgery were included in the study.



Results

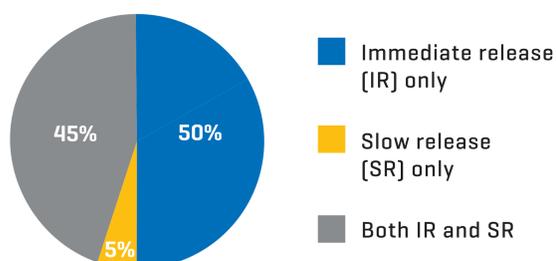
Forty-two patients were audited during the three-week data collection period. 98% of the patients were opioid naïve on admission. All patients were prescribed at least one opioid on discharge, with the most common being immediate-release (IR) oxycodone [67%]. 50% of patients received a SR opioid [see figure 1].

Scan QR code:

- Characteristics of audited patients
- Prescribed analgesia data
- References



Figure 1: Opioid formulation prescribed to patients on hospital discharge



Of the 35 patients interviewed, 63% had leftover opioids. A total of 1005 opioid tablets were supplied, with 385 tablets remaining and unused [38%] [see figure 2].

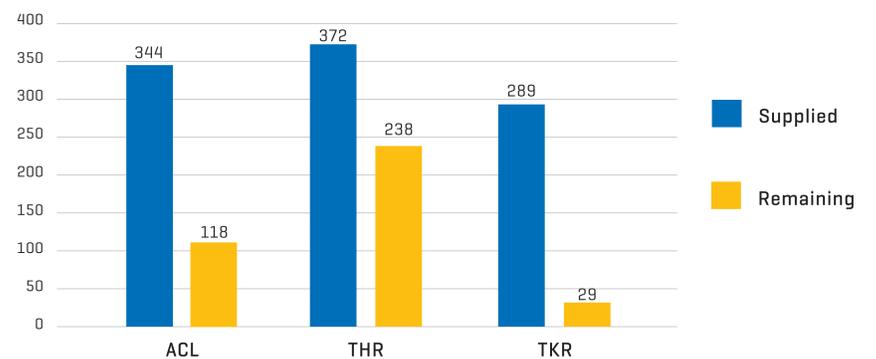
Phone interviews showed patient's perception regarding the need for opioids did not consistently align with current recommendations. Patients requested additional supply for:

"Just in case"

"Finish the course"

"My pain is better but the physio told me to take it before my session"

Figure 2: Total number of opioid tablets prescribed vs. remaining post hospital discharge



Knowledge of correct opioid disposal processes was only recalled by 17% of patients. Unsafe disposal responses included:

Disposing into general waste

Keeping for 'next time'

Flushing down the toilet

Putting into compost

Burning

Discussion

Although guidelines do not recommend SR opioid formulations for acute pain in opioid naïve patients, a large percentage of patients received this at hospital discharge. Patients who had THR or TKR were more likely to go home with SR opioid and combination opioids, compared to those who had an ACL.

A high proportion of patients had opioid tablets left over. Despite this, some patient's perceptions of need for opioids did not align with current recommendations. 11 patients [31%] contacted their surgeon or had a GP consult to obtain more opioids, reasons included: they had run out of supply; or wanted more. Incorrect disposal or keeping of unused medications contributes to the pool of unused opioids in the community which carries the risk of accidental or intentional future misuse. To address the issues highlighted in the study, an effective way to ensure consumers absorb information and follow best practice is with a combination of written and verbal information.

Next Steps

Excess quantities of opioids are being prescribed to patients post orthopaedic surgery with half receiving SR opioids to manage acute pain. Planned strategies to address the findings in this study include:

- Discussion with the medication safety management committee to leverage engagement with opioid stewardship activities
- Pharmacist-led intervention to tailor opioid prescription to individual pain requirements
- Prescriber feedback
- Patient education and provision of written information regarding opioid weaning and cessation plan as well as safe opioid disposal

Refer to QR code for references