Under the Knife: Dissecting perioperative pain and discharge management practices in patients receiving opioid substitution therapy

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Background

- Surgical opioid substitution therapy (OST) patients present with complex challenges with regards to their pharmacotherapy
- Complexities in pain management can be compounded by challenges like:
  - Tolerance to opioids
  - Opioid-induced hyperalgesia
  - Stigma and perception of 'drug-seeking' behaviour
  - Logistics of ensuring continuation of therapy on discharge

Aims

1) To review perioperative and discharge management of surgical patients prescribed opioid substitution therapy (OST).

2) To compare findings to current recommendations from the literature

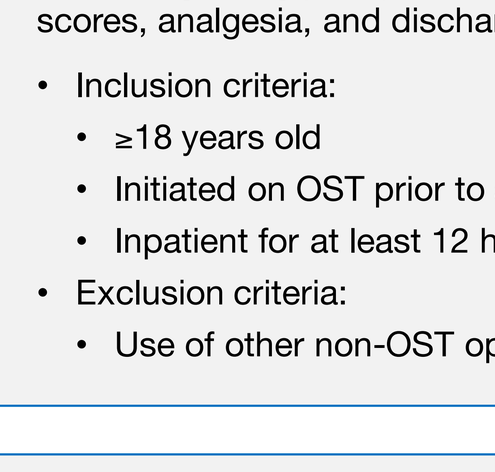
Methods

- All eligible surgical patients on OST; admitted to Flinders Medical Centre between 2011 and 2016 were included in the audit.
- Data collection was done using a standardised form to capture details regarding perioperative OST dosing, postoperative pain scores, analgesia, and discharge analgesia
  - Inclusion criteria:
    - ≥18 years old
    - Initiated on OST prior to admission
    - Inpatient for at least 12 hours post surgery
  - Exclusion criteria:
    - Use of other non-OST opioids prior to admission

Results

Patient Demographics

- 45 patients receiving buprenorphine (n=31) or methadone (n=14)
- Mean duration of admission approximately 10 (±10) days



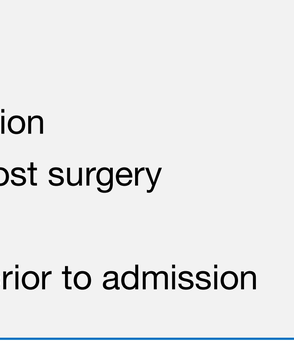


Figure 1: Opioid Substitution therapy by percentage

Perioperative Management

- More patients receiving buprenorphine had their therapy held compared to methadone patients (n=13 vs n=3). See Fig. 2.
- Buprenorphine patients who had their therapy held (n=13), recorded increased pain scores and higher opioid requirements

Figure 2: Percentage of OST held prior to surgery

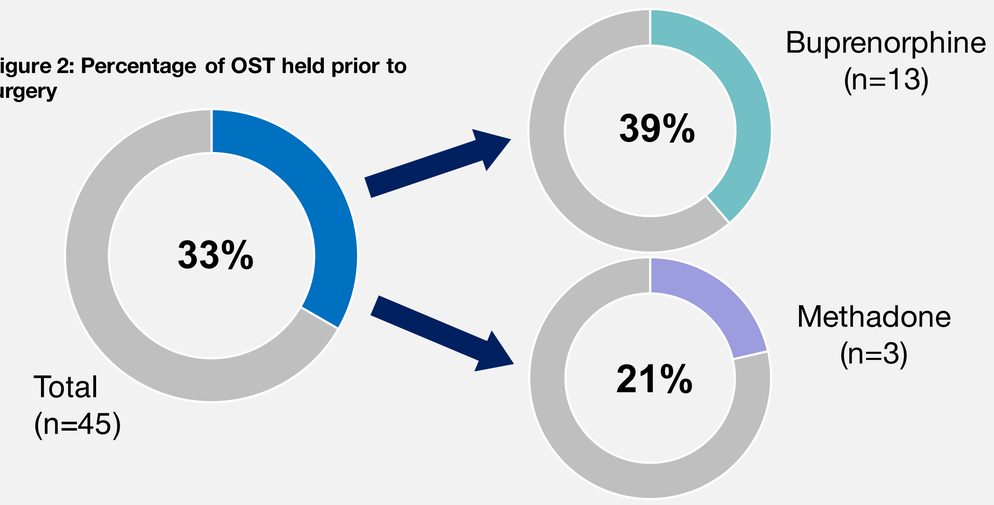
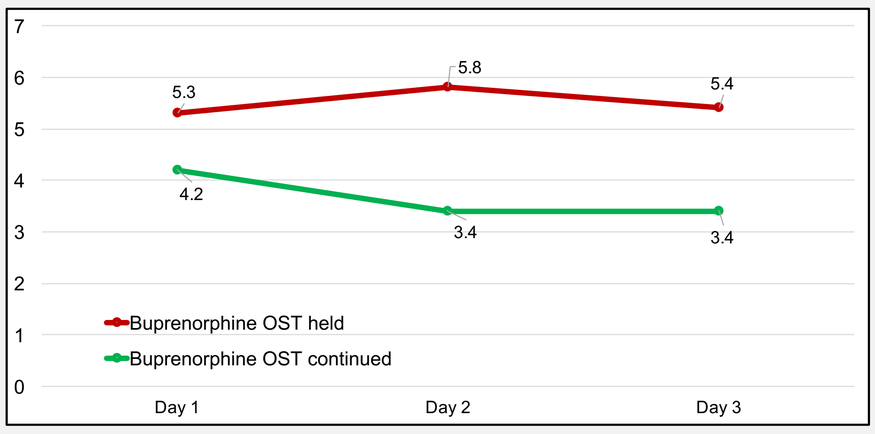


Figure 3: Mean daily postoperative pain scores of buprenorphine patients (patient reported scores out of 10)



Discharge Practices

- Most patients were discharged with analgesia
- Opioids prescribed in majority of cases (67%)
- Lack of multimodal analgesia used, see Fig. 4

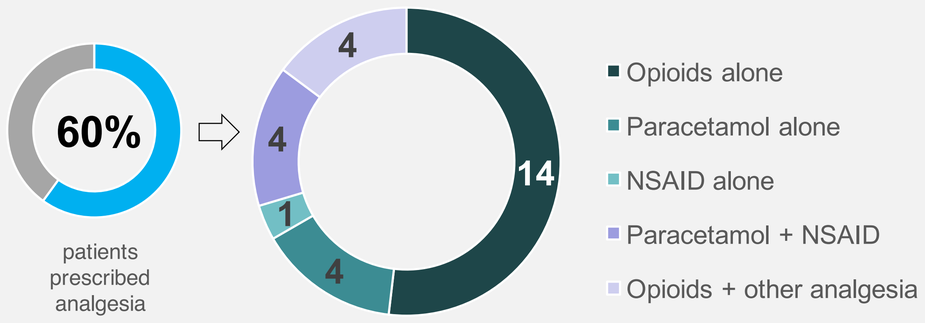


Figure 4: Breakdown of analgesia prescribed on hospital discharge for patients receiving OST .

Conclusions

- OST was held in one third of cases prior to surgery
  - More common for patients receiving buprenorphine (possibly due to concerns with buprenorphine pharmacological properties)
- Holding OST peri-operatively may affect post-op pain management and increase non-OST opioid use.
- Discharge practices could be improved – a lack of multimodal analgesia is being used and opioids prescribed in most cases.
- Consistency is lacking in perioperative OST management

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