

Patterns of opioid administration amongst ambulance officers in patients with conservatively managed renal colic and correlation with emergency department stay

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Objectives

1. Assess paramedic/first-responder analgesia patterns in acute renal colic.
2. Identify any correlation between analgesia prescribed and clinical outcomes.
3. Identify any patterns with analgesia administered and time from discharge from emergency department.

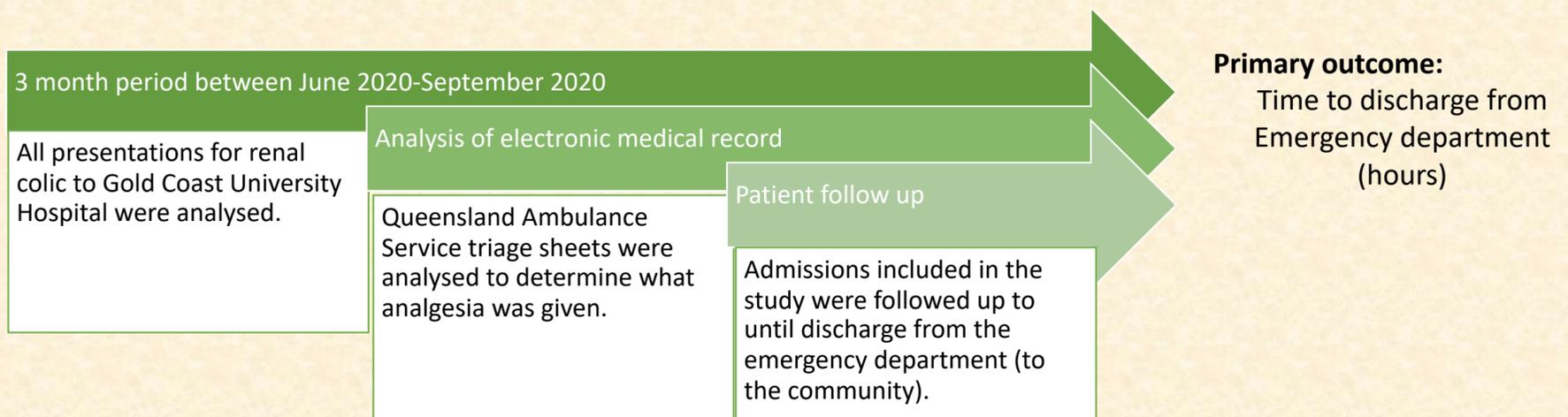


Introduction

Acute renal colic is a frequent urological presentation to the emergency department. We hypothesise earlier appropriate analgesic requirements may alter the trajectory of these patients within the department. We present a retrospective review of analgesia provided by ambulance first responders.

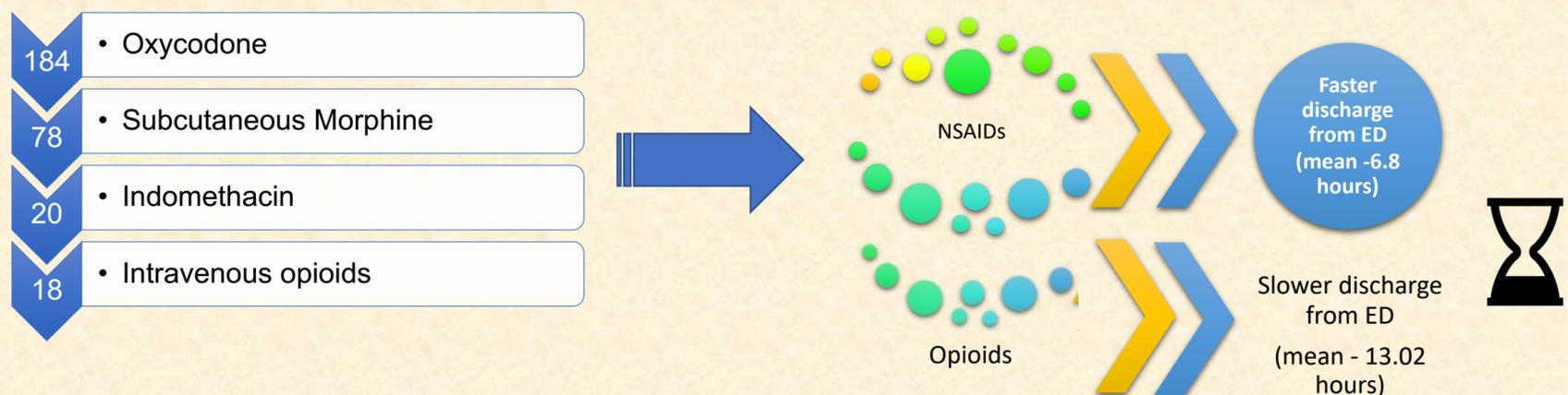
Methods

A database of emergency department presentations was analysed over a 3-month period in 2020 from June to September. Presentations of ureteric colic were identified, and these charts were analysed electronically. Patients who had conservatively managed stones were included in the study. Queensland Ambulance Service Paramedic Triage sheets were electronically scanned into the medical record and retrospectively reviewed.



Results

212 patients were included in the study. The most administered analgesic was oxycodone which was administered in 184 instances, subcutaneous morphine which was given in 78 cases. Subcutaneous fentanyl was administered in 38 of patients. Indomethacin or non-steroid anti-inflammatories (NSAID) were only administered in 20 patients. Upfront Intravenous morphine or fentanyl was utilised in 18 of patients. Patients who were administered NSAIDs had a mean overall time to discharge of 6.8 hours compared to 13.02 hours in non-NSAID administered patients.



Conclusions

Results of this audit indicate that patients who were administered intravenous opioids had a greater time to discharge compared to NSAID administered patients. A limiting factor of the analysis was that frequently these medications were combined and thus further detailed subgroup analysis with larger cohorts are required.