Implementation of an Analgesia and Bowel Protocol to **Improve Inpatient Care After a Fracture**

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Background

This improvement work was aimed at patients \geq 65 years who are admitted with a fracture to one of the orthopaedic wards in Royal Alexandria Hospital, Paisley. Anecdotally, it was believed that this patient group was receiving insufficient analgesia and laxatives.

Introduction

The Scottish Standard of Care for Hip Fracture was introduced in 2014 to encourage good practice and reduce variability of care between different hospitals [1]. Standard 2 (provision of pain relief) states that patients should have analgesia optimised. Standard 8 states all patients should be mobilising by the end of the first post-operative day. Regular analgesia, including Opioids, helps patients achieve this target.



The Orthogeriatric, multidisciplinary team at Royal Alexandra Hospital believed that these standards should apply to all patients 65 and older that have been admitted with any fracture. This is because optimal pain relief allows for earlier mobilisation, resulting in fewer complications and earlier discharge . Furthermore, pain, constipation and immobility can contribute to the development of delirium, which is associated with increased length of stay, morbidity and mortality [2]. The assessment of pain in cognitively impaired and/or non-verbal patients can be challenging. The Abbey pain scale is recommended as a way of assessing pain in patients unable to communicate their pain [1,3].

The aim of this project was to improve analgesia and laxative prescribing for the aforementioned patient group with a multidisciplinary approach.

Methods and Intervention

December 2017 - Audit

Data revealed inconsistent analgesia and laxative prescriptions in the first 24 hours for acute elderly Orthopaedic trauma admissions

August 2018 - Protocol Introduced

•Regular Paracetemol (according to weight) •Regular Opioid medication (pre-existing or regular oral Morphine liquid) •Regular laxatives •Regular analgesia and bowel function review

November 2018 - Audit Data collected to examine

The 2018 audit showed a 93% increase in regular Opioid prescriptions and that less patients were receiving Codeine and Tramadol. There was an increase in long-acting Opioid prescribing due to the Anaesthetic team diverging from the protocol, by prescribing a 3 day course of relatively large dose Oxycontin Modified Release (Figure 3.).



Unfortunately, the 2018 audit revealed a 64% increase in the number of patients without a weight documented on admission compared to 2017 (Figure 4.). The majority of recorded weights were either self reported or estimated weights which were potentially inaccurate.

the protocol's effectiveness

Results

The analgesia and bowels protocol has resulted in improvements in various aspects in the care of older people admitted acutely to Orthopaedics.



After introduction of the protocol, all patients over 65 admitted with a fracture, had either regular or 'as required' analgesia prescribed on admission (Figure 1.).



Prescribing of regular laxatives significantly improved (Figure 5.), although a number of the prescriptions deviated from the protocol.

The 2018 audit also revealed:

- Only 47% of patients had prescriptions adhering to the protocol
- 92% of patients who could self-report had generic pain scores $\geq 5/10$
- Patients receiving analgesia per protocol had lower mean generic pain scores (6.2 vs 7.7)
- 47% of patients had an Adults with Incapacity (AWI) form in place
- No patients with an AWI form had an Abbey Pain Score chart to assist with pain management
- 24% of AWI patients, assessed by the auditors, had significant Abbey pain scores (\geq 3)



In 2018 88.2% of patients were prescribed regular Paracetemol compared to 71.4% in 2017. This represents around a 25% improvement (Figure 2.).

Conclusions and Recommendations

The protocol led to improved analgesia and laxative prescribing. Recommendations include:

1. Adherence to the protocol needs to be increased through education of Anaesthetic and Orthopaedic ward staff

2. Patient care would be optimised by performing regular assessments of their analgesia and bowel function to allow more prompt and appropriate medication adjustments 3. Acquiring an accurate weight on admission is a priority and needs to be achieved through use of a 'Patslide-like' weighing scale

4. Pain assessment tools (e.g. Abbey pain chart) would improve analgesia administration

References

- 1. National Services Scotland. Scottish Standards of Care for Hip Fracture Patients, 2018.
- 2. Scottish Intercollegiate Guidelines Network. Management of Hip Fracture in Older People: A National Clinical Guideline, 2009.
- 3. Schofield, P: The Assessment of Pain in Older People: UK National Guidelines. Age and Ageing, 47:1, pp i1 - i22, 2018.