Management of Minor Chest Trauma in RBWH ETC

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Background

Rib fractures following chest wall trauma are common injuries in adults presenting to emergency departments. Elderly are often over-represented.

With no formal follow up pathway on discharge, prevention of complications relies on emergency department counselling and GP management.

Poorly managed chest trauma may result in serious and wide-ranging complications such as pneumonia, respiratory failure and opioid addiction.

The aim of this Quality Improvement initiative was to monitor RBWH ETC interventions and prescribing habits and investigate factors which influence re-presentation rate with complications of chest trauma.

Methods

A clinical retrospective audit was undertaken to evaluate the management of all minor chest trauma presentations (fracture or contusion to ribs/chest wall/sternum) to RBWH ETC between July and December 2019.

Fractured ribs or sternum, contusion to chest wall and multiple chest injuries were used to identify the study cohort (Emergency Department Information System (EDIS)) and analyse the opioid prescribing data (ieMR).

Findings

209 patients presented to ETC with minor chest trauma over the 6-month period. Weekend and afterhours presentations were over-represented.

72% (n=150) of patients were seen by physiotherapy prior to discharge for mobility assessment and breathing exercises.

53% (n=111) were prescribed opioid analgesia during their time in ETC.

Prescription audit

40% (n=84) received an opioid script upon discharge with oxycodone being the most common drug prescribed (Fig. 1).

Of these, 35% (n=29) were prescribed more than 10 tablets upon discharge, with some patients receiving up to 48 tablets on discharge.

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Pain is the most common cause of representation following minor chest trauma. Majority of representing patients able to be discharged. Improved patient advice and better GP linkage is required.

Physiotherapy has an important role in safe discharge, contributing to low representation rate with respiratory complications following injury.

Implications

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Further projects

Development of RBWH ETC Rib Fracture Management patient handout to provide advice on analgesia, breathing exercises and follow up.

Planned whole of hospital and community prescribing trend study through RBWH ETC and the Jamieson Trauma Institute collaboration.