Protocol for Initial Management of Isolated Chest Trauma
(Fractured ribs / fractured sternum)

NB Not suitable for elderly patients with dementia or renal impairment (creatinine >180).
Patients with dementia OR renal impairment require discussion with Thoracic Surgeon’s Team.
Consider also notifying Acute Pain Service and ICU for review.

Patients to be classified into one of three groups

<table>
<thead>
<tr>
<th>Group 1 (low risk)</th>
<th>Group 2 (moderate risk)</th>
<th>Group 3 (high risk)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Young patient</strong></td>
<td><strong>Multiple rib fractures</strong> with or without pneumothorax OR pulmonary contusion Not elderly No underlying cardiac OR respiratory disease No dementia or renal impairment</td>
<td></td>
</tr>
<tr>
<td>Simple rib fractures</td>
<td>Not elderly No underlying cardiac OR respiratory disease No dementia or renal impairment</td>
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<tr>
<td>No co-morbidities</td>
<td>Adequate pain control on oral analgesia Able to deep breathe, cough and use incentive spirometry = Discharge criteria met</td>
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<tr>
<td>Titrated PRN Morphine or fentanyl MS Contin 30 mgs PO BD Deep breathing Incentive spirometry Regular paracetamol q4h Ibuprofen 200-400 mg QID ** Oxycodone 5 mgs PO QID prn</td>
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Admit under Thoracic Surgeon

Morphine PCA with 1 mg/hr background infusion Hourly resps, BP and pulse Incentive spirometry Chest physiotherapy Continuous Spo2 monitoring TEDs / Aperients Heparin 5000 u BD Paracetamol 1gm Q4h Ibuprofen 200 – 400 mg QID **

Review in 4 hours by Thoracic Reg or ASU Reg A/H

If pain relief adequate and patient awake then continue current management If saturation drops below 90% off oxygen, must have oxygen and continuous Spo2 monitoring

If pain relief inadequate OR If patient difficult to rouse OR If respiratory rate < 10 OR > 35 OR Spo2 < 90% despite oxygen Request ICU Consult Consider thoracic epidural infusion

Review in 8 hours

If pain relief adequate Able to deep breathe Cease PCA & remove cannula Start MS Contin 30 mgs BD Oxycodone for breakthrough

If pain relief inadequate OR If difficult to rouse OR If respiratory rate < 10 OR > 35 OR If Spo2 < 90% despite oxygen Request ICU Consult Consider thoracic epidural infusion

Day 2: Repeat Chest X ray and FBC / EUC

** If > 55years OR has Diabetes or renal impairment → check creatinine If Creatinine elevated seek senior doctor’s advice regarding NSAIDs If creatine >180 then NO NSAIDs

Discharge with:
Script for panadeine forte, endone & NSAIDS Follow up with LMO 3 days F/U with Dr Flynn 2 weeks Instruct pt to return if complications develop (Give take-home packs A/H)

NO

Admit to EMSS Review later Discharge when criteria met *

YES

Review within 2 hours for disposition decision by Emergency Physician

Admit to EMSS Review later Discharge when criteria met *

Review within 2 hours for disposition decision by Emergency Physician

Admit under Thoracic Surgeon

Morphine PCA with 1 mg/hr background infusion Hourly resps, BP and pulse Incentive spirometry Chest physiotherapy Continuous Spo2 monitoring TEDs / Aperients Heparin 5000 u BD Regular paracetamol q6h Aperients

Request ICU Consult Consider thoracic epidural infusion

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