

Chest Wall Trauma (Blunt) - For In-Patient Use - Summary Clinical Guideline - Derby Only

Reference no.: CG-SURGEN/2020/004

Risk Factors for poor outcomes in blunt chest wall trauma

- Age 65 years or older
- Three or more rib fractured
- High/Mid chest wall rib fractures
- Flail Segments
- Chronic lung disease
- Onset of pneumonia post-injury
- Oxygen saturation < 90% in ED on air on presentation
- PaO₂/FiO₂ ratio < 33 on admission [*note: normal is 12kPa : 0.21 ~ 57*]
- Body Mass Index > 25kg/m²

Inpatient Multidisciplinary Management

All patients admitted to SAU, 308 (current rib fracture cohort ward), SDU, HDU/ITU should be assessed by the appropriate members of the MDT as contacted/informed by the Medical/Surgical/Nursing team.

These referrals should be completed within 24 hrs of admission.

Multidisciplinary Team	Responsibilities	Contact
Surgical/Medical Team	<ul style="list-style-type: none"> - Forms the parent team responsible for the care during the admission - Ensure referral to the appropriate members of the MDT 	Emergency surgery SpR
Ward Nursing team	<ul style="list-style-type: none"> - Wards obs, analgesia delivery as per rib # order set, mobilise, sit out, refer to non-medical MDT members below within 24 hrs of admission 	
Acute Pain	<ul style="list-style-type: none"> - Review of all rib # inpatients - Liaise with SDU consultant as required - Mon – Friday 8-4 - Out of hours for pain advice +/- review – on-call anaesthetic team 	Pain team bleep 3078, 3365,1283 Anaes SpR. 2076 White board referral 07788 388426
Physiotherapy	<ul style="list-style-type: none"> - Incentive spirometry, mobilisation 	
CCOT	<ul style="list-style-type: none"> - Review of all rib # inpatients - Liaise with anaesthetic/SDU/ICU team as required - Every day 8am -9pm 	Bleep 3340 Out of hours message 07788388471
DME	<ul style="list-style-type: none"> - Medical review of patients above the age of 70 	Extramed referral
Orthopaedic	<ul style="list-style-type: none"> - Assessment of other ortho injuries +/- surgery. Development of rib fixation pathway 	On call Ortho SpR
Respiratory	<ul style="list-style-type: none"> - Refer for advice for severe chronic lung disease 	On call respiratory SpR
Major Trauma Rehab Coordinator	<ul style="list-style-type: none"> - Coordinate MDT input for patients <70 yrs. Facilitate discharge and appropriate follow up. 	Extramed white board referral under services

Analgesia

- All patients should receive multi-modal analgesia with Paracetamol and NSAIDS unless contraindicated +/- opioids. **(Prescribe the appropriate 'Rib fracture' order set on EPMA for inpatients. See full guideline for details.)**
- Patients with multiple rib fractures may require intravenous morphine as initial rescue followed by oral opioids and 'rescue' morphine subcutaneously as per the trust guideline 'Pain Management Guidelines for Adults' available on Koha.
- A regional anaesthetic technique (Erector spinae block/ Epidural) should be considered (contraindications such as coagulation disorders, platelet deficit, fractured thoracic vertebrae or suspected major haemorrhage may affect choice of technique) to patients with risk factors of a poor outcome. (see above)