

Criteria for Rib Fixation

Indications

- **Flail Chest**
 - Non-intubated patients with flail chest and worsening respiratory function
 - Intubated patients with flail chest
 - Patients with extensive and/or bilateral flail chest without respiratory failure
 - Flail sternum
- **Chest Wall Deformity /Defect**
 - Loss of thoracic volume or significant deformity that may limit chest wall function
 - Open chest defect
 - Rib perforation of vital structures and/or pulmonary herniation
- **Fractured Ribs – non-flail**
 - Patients with multiple displaced fractured ribs
 - Painful non-union
- **Pain Control**
 - Uncontrolled pain despite multimodal analgesia

Contraindications

- Patient unlikely to survive due to other injuries or age or multiple co-morbidities
- Other injuries that will likely prolong tracheal intubation and mechanical ventilation eg significant head injury, spinal cord injury resulting in paralysis of some or all of the respiratory muscles etc.
- Any contra-indication to surgery including severe immunosuppression or severe chronic disease
- Pregnant women

How to refer patients

- The Trauma Department is the point of contact for referrals for possible rib fixation – trauma will review and involve Cardiothoracic as appropriate
- 3D reconstructions of the chest wall need to be organised (Request from CT radiographer)
- Referrals and consults should be made within 24-48 hours of admission – Contact the Trauma Fellow or Trauma Consultant directly.