

Thoracic injuries pathway

All suspected thoracic injuries should be discussed with a senior ED clinician

Senior discussion required in **ALL AGE GROUPS** with thoracic injuries if:

- Severe pain
- Evidence of thoracic injury (extensive bruising or flail)
- Low saturations (<94% or <88% with chronic lung disease)

Indications for CT chest:

1. High risk mechanism
2. Penetrating chest injury
3. Over 65 with blunt trauma to the chest with clinical signs of injury and any of the following:
 - COPD/chronic lung disease
 - Anticoagulation
 - Hypoxia (<94% or <88% in chronic lung disease)

Admission under the surgical team:

- Evidence of pulmonary contusion on imaging
- Traumatic pneumothorax or haemothorax
- Any thoracic injury with difficulty in breathing, uncontrolled pain or requiring oxygen to maintain SpO2 >94% (>88% in COPD)
- Consider any rib fracture in a patient >65 OR with chronic lung disease (refer to medics)
- CONSIDER admission in all age groups with 3 or more rib fractures (d/w senior)

Consider discharge:

- < 3 Rib fractures
- PIC Score <5 (PTO)
- Rib fracture score ≤ 6 (PTO) and not requiring strong opioids (unless usually prescribed)
- NEWS = 0

CRITERIA FOR REFERRAL TO AINTREE MTC: 0151 525 5980 Bleep 5428

- ≥3 Rib # clinical flail
- ≥3 Rib # with severe displacement (bi-cortical displacement, >100%)
- ≥3 Rib # with mild-to-moderate (50-100%) displacement and respiratory compromise, despite optimal pain management
- Need for mechanical ventilation with any of the above
- Open chest wound
- Large haemothorax >500ml drained from ICD

PIC score					
Pain on movement		Ability to deep breath		Ability to cough	
Severe (8-10)	3	Unable to perform	4	Absent	3
Moderate (5-7)	2	Severely impaired	3	Weak	2
Mild (0-4)	1	Mild impairment	2	Strong/normal	1
		No impairment	1		
				Total	

BREAKS Number of individual fractures <small>(may be more than one break per rib, count breaks individually)</small>	SIDES Unilateral = 1 Bilateral = 2	AGE FACTOR Less than 50 = 1 51 to 60 = 2 61 to 70 = 3 71 to 80 = 4 Over 80 = 5
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BREAKS X **SIDES** + **AGE FACTOR** = **RIB FRACTURE SCORE**