

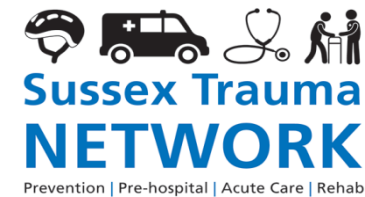
# Blunt Chest Trauma: Pain Management Guidelines

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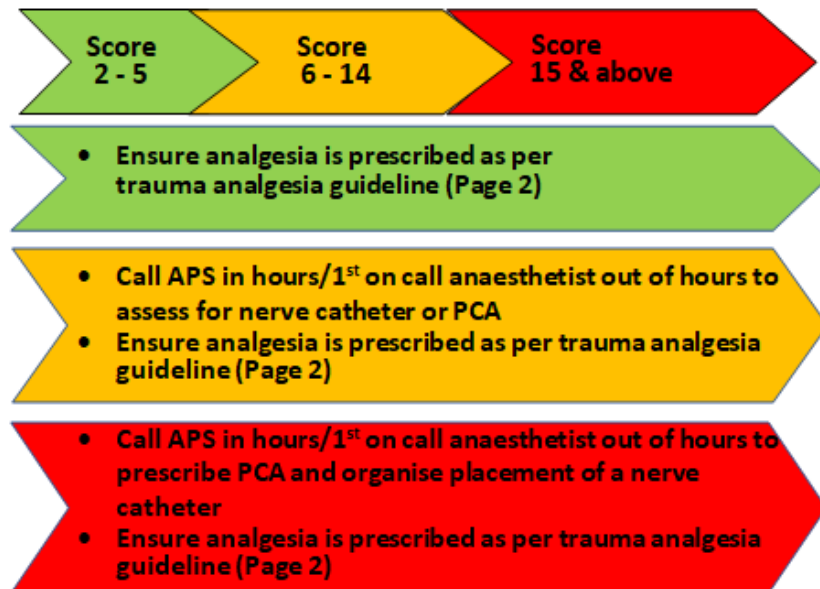
# Management of Rib Fractures

## STEP 1: Calculate Rib Fracture Score (RFS)

( BREAKS x SIDES ) + Age = Rib Fracture Score (RFS)		
BREAKS	SIDES	AGE
No. of fractures	Unilateral = 1	Less than 50 = 1
	Bilateral = 2	51 to 60 = 2
		61 to 70 = 3
		71 to 80 = 4
		More than 80 = 5

## STEP 2: Determine management plan

**⚠ PRH: Patients with a RFS > 5: consider transfer to RSCH**



## REGARDLESS OF RIB FRACTURE SCORE:

### Refer for PCA and/or Regional Anaesthesia if:

- Significant multiple injuries or high impact injury
- Evidence of lung contusions
- Clinical deterioration:  
<94%, RR >24 or increasing O2 requirements
- Significant respiratory or cardiac disease

### Refer to Critical Care if:

- Flail chest
- Pneumothorax
- Significant multiple injuries
- Clinical deterioration:  
<94%, RR >30 or O2 requirements 40% or more
- Significant respiratory or cardiac disease

### Refer for chest physiotherapy if:

- New oxygen requirement
- Retention of secretions

# Management of Chest Injuries

**Parent teams: Analgesia should be optimised using the following guideline**

Age < 65 years & normal renal function	Age > 65 years age & normal renal function	Abnormal renal function (any age)
<b>Paracetamol</b> 1 gram 4–6hrly. Reduce dose to 500mg QDS if patient weighs ≤50kg		
<b>Lidocaine plasters:</b> 1 to 3 plasters over <b>fractured ribs:</b> apply for <b>12 hours</b> (e.g. 8am to 8pm), remove for 12 hours (e.g. 8pm to 8 am)		
<b>Use an NSAID if no contraindications:</b> <b>Ibuprofen</b> 400mg PO TDS or <b>Naproxen</b> 500mg PO BD	<b>Avoid NSAIDS</b>	
<b>Morphine (IR) 5 - 20 mg 2 hourly PO PRN</b> lowest effective dose - monitor renal function  IF intractable side effects with morphine switch to <b>Oxycodone (IR) 2.5 - 10mg 2 hourly PO PRN</b>	<b>Morphine (IR) 2.5 - 10 mg 2 hourly PO PRN</b> lowest effective dose - monitor renal function <b>Age&gt;85: Morphine (IR) 2.5-5 mg 4 hourly PO PRN</b>  IF intractable side effects with morphine switch to <b>Oxycodone (IR) 1.5 - 5 mg 2 hourly PO PRN</b> <b>Age&gt;85: Oxycodone (IR) 1.5-2.5 mg 4 hourly PO PRN</b>	<b>eGFR 30 - 60</b> <b>Morphine (IR) 2.5 - 5mg 4 hourly PO PRN</b>  IF intractable side effects with morphine switch to <b>Oxycodone (IR) 1.5 - 2.5mg 4 hourly PO PRN</b> <b>IF eGFR &lt; 30</b> <b>Oxycodone (IR) 1.5 - 2.5mg 6 hourly PRN, or</b> <b>Consider referring for Fentanyl PCA</b>
<b>Consider Gabapentin if chest drain in situ or evidence of neuropathic pain:</b>		
<b>Gabapentin 300mg PO TDS</b>	<b>Gabapentin 300mg PO TDS</b> Give 100-200mg for patients with co-morbidities	<b>eGFR 30-60 Gabapentin 100mg to 200mg PO TDS</b> <b>eGFR &lt;30 Gabapentin 100mg PO BD</b>

\*All doses in the above table are in accordance with Trust analgesia guidelines

**Important: Analgesia must be optimised prior to physiotherapy**

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