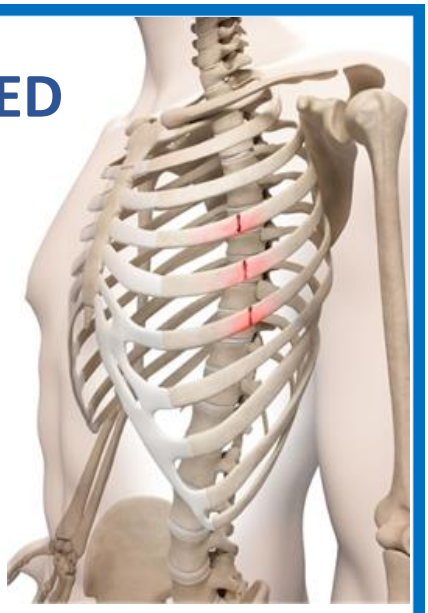
RIB FRACTURE PRESENTATION IN THE ED



- Usually a result of blunt thoracic trauma but can be from penetrating trauma or even spontaneous e.g. due to severe coughing.
- Ribs 4 – 10 are most vulnerable to fracture.
- A fracture of ribs 1 – 3 signifies a significant degree of trauma.

Only perform a CXR to exclude associated pathology – it can miss up to 50% of fractures. CT chest is the most sensitive imaging modality.

Consequences of rib fractures include:

★ Pneumo/haemothorax
★ Pneumonia
★ Pulmonary effusion
★ Solid organ injuries (liver/spleen)
★ Atelectasis
★ ARDS

Factors associated with increased morbidity and mortality:

★ Age greater than 65 years
★ Respiratory or cardiovascular comorbidity
★ Flail segment (3 contiguous ribs fractured in at least two places)

Management:

- Document presence/absence of bruising or surgical emphysema.
- Prescribe analgesia in stepwise manner – prompt analgesia enables deep breathing and reduces secondary complications.
- Consider CT chest – indicated if unstable observations
- Refer to specialists if risk factors for morbidity are present
- Discharge home if no adverse features and pain control adequate
- Advise compliance with chest physiotherapy