



SUBJECT: CLINICAL CARDIOLOGY AND RESPIRATORY

DISEASE

TOPIC:RIB FRACTURE

Empathize



Patient: sharp chest pain with breathing, coughing, or movement.

Fear: "I can't take a deep breath."



Ideate



- Causes: trauma, falls, accidents.
- Issues: pain \rightarrow shallow breathing \rightarrow risk of

atelectasis.



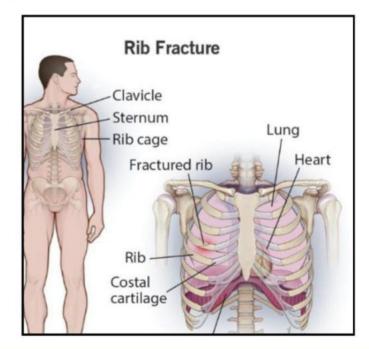
Define & Explain



•Rib fracture: break in one or more ribs, usually due to

trauma

Common in elderly due to brittle bones.



Clinical Features



- Sharp localized pain.
- Pain on deep breathing, coughing, or movement
- Tenderness, swelling, crepitus.

Signs of Broken Ribs

- · Breathing problems
- · Pain at the site of the injury
- Grinding or crunching noises when the site of the injury is moved or touched
- · Blue nail beds or lips
- Muscle spasms of the ribcage
- · The ribcage appears deformed
- Pain every time there is a flex with the ribcage, be it through coughing, laughing, and sneezing or through deep breaths and movement





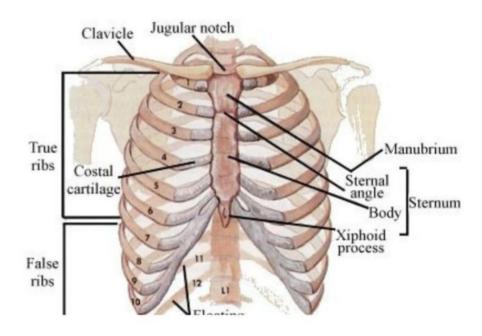
Clinical Findings



Shallow breathing.

Decreased chest expansion.

Risk of pneumonia, hypoxemia.



Cardio Considerations

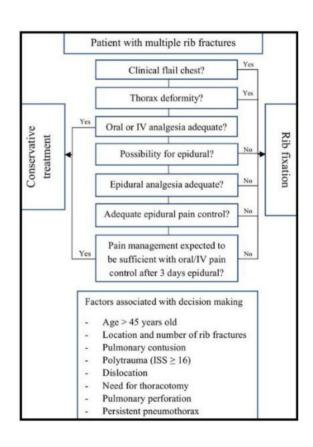


- Multiple fractures may injure lungs, vessels, or heart.
- Risk of hemothorax, pneumothorax.
- Tachycardia due to pain.

Flow Chart (Roadmap)



```
Trauma
↓
Rib fracture
↓
Pain & tenderness
↓
Shallow breathing
↓
Atelectasis / Pneumonia
↓
Hypoxemia & Cardio-respiratory stress
```



MCQs



Q1. Most common cause of rib fracture: a) Trauma b) Infection c) Cancer d) Asthma (Ans: a)

Q2. Pain in rib fracture is worsened by: a) Eating b) Deep breathing c) Sleep d) Swallowing (Ans: b)

Q3. Major complication of rib fracture: a) Pneumothorax b) Diabetes c) Stroke d) CKD (Ans: a)

MCQs



Q4. Crepitus in rib fracture is due to: a) Air in pleura b) Friction of broken bone ends c) Muscle spasm d) Infection (Ans: b)

Q5. Best treatment for simple rib fracture: a) Rest & analgesics b) Surgery c) Plaster cast d) Oxygen only (Ans: a)

Q6. Rib fractures can lead to: a) Atelectasis b) Pulmonary fibrosis c) COPD d) Asthma (Ans: a)