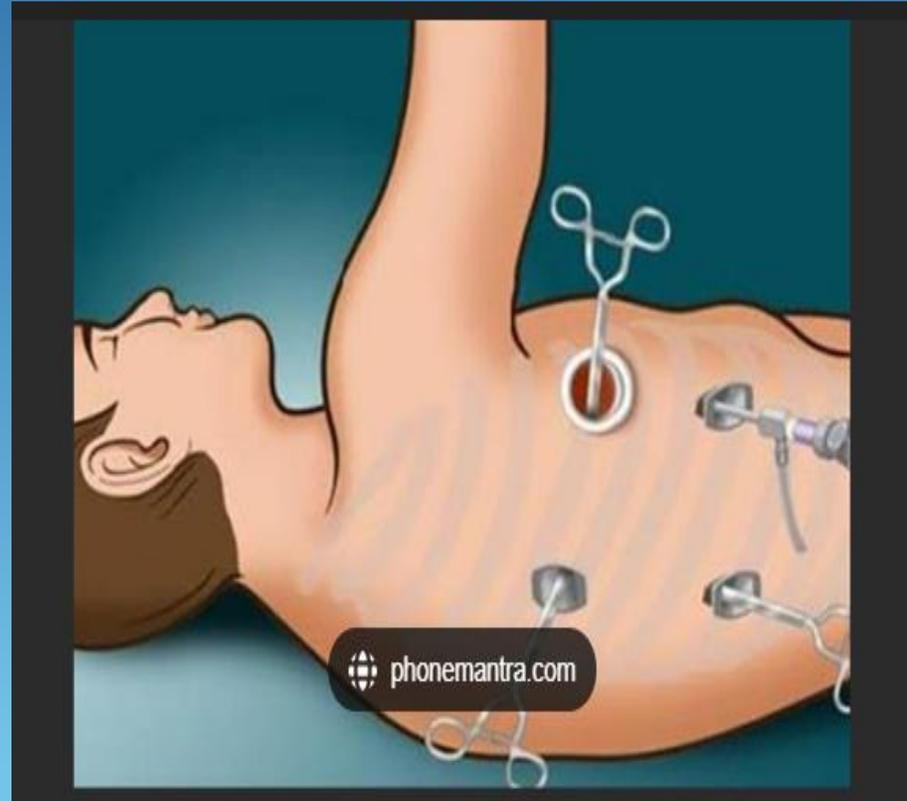


# Thoracotomy and Open Abdomen

- Topics to discuss
- Video Assisted Thoracoscopy (VATS)
- Rib Plating
- Open Abdomen and temporary Closures
  - Abthera
  - Abdominal Packing for Trauma
  - Thoracic Packing For Trauma



# Video Assisted Thoracoscopy (VATS)



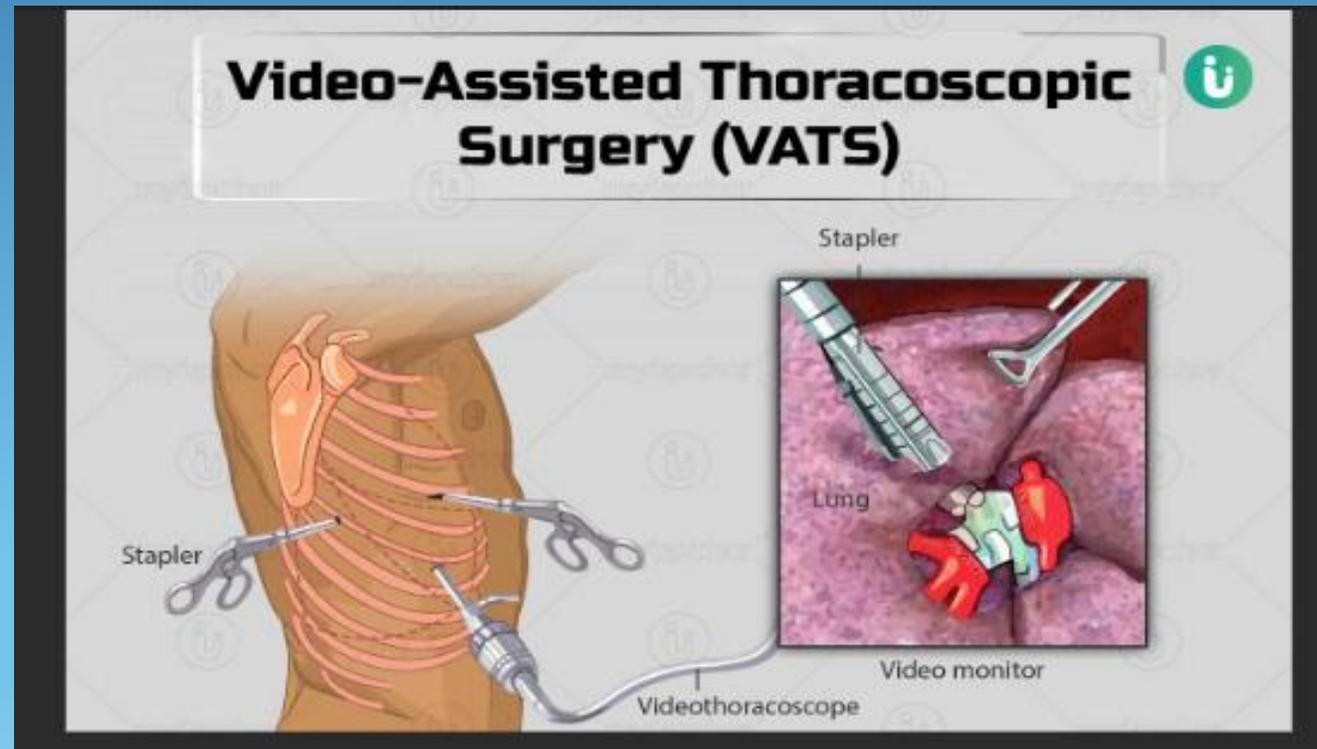
Video-assisted thoracoscopic surgery (VATS) is a minimally invasive surgical technique used to diagnose and treat problems in the chest.

During a VATS procedure, a tiny camera and surgical tools are inserted into the chest through one or more small cuts in the chest wall. The camera, called a thoracoscope, sends images of the inside of the chest to a video monitor. These images guide the surgeon during the procedure.



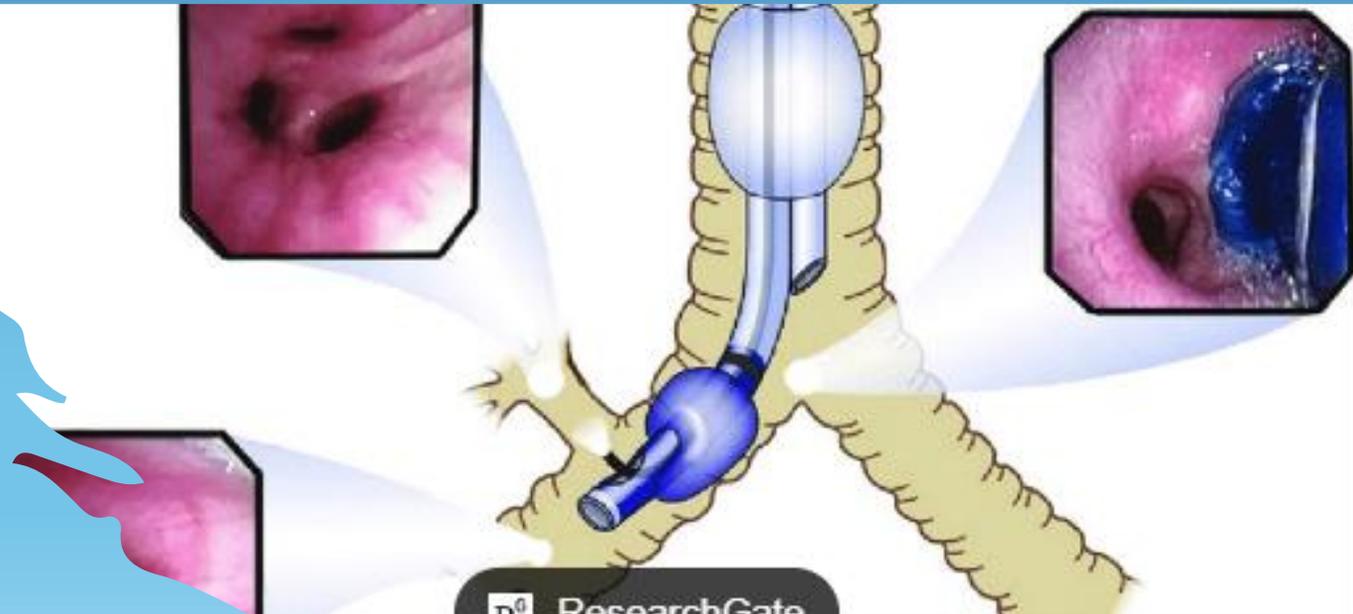
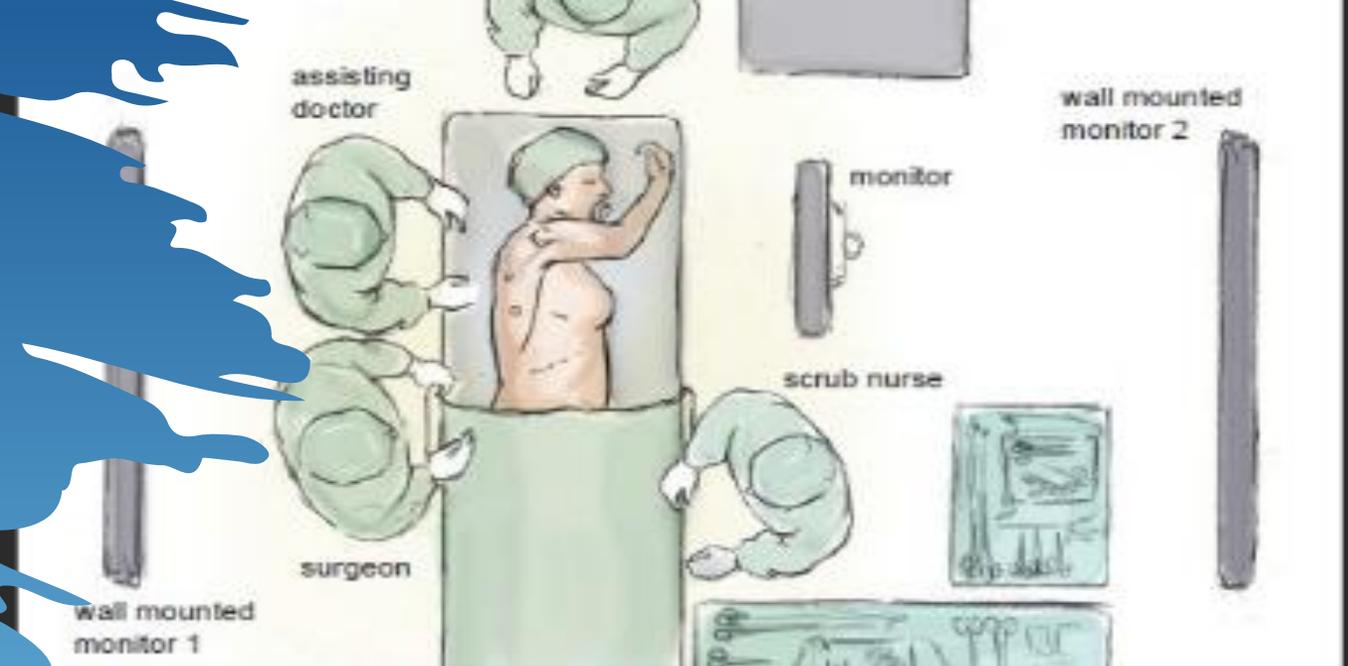
# Video Assisted Thoracoscopy (VATS)

- Equipment needed
- Same as for Laparoscopy
- Positioning is the hardest part
- Need bean back and need to pad both knees, and elbows and support the neck in the lateral recumbent position



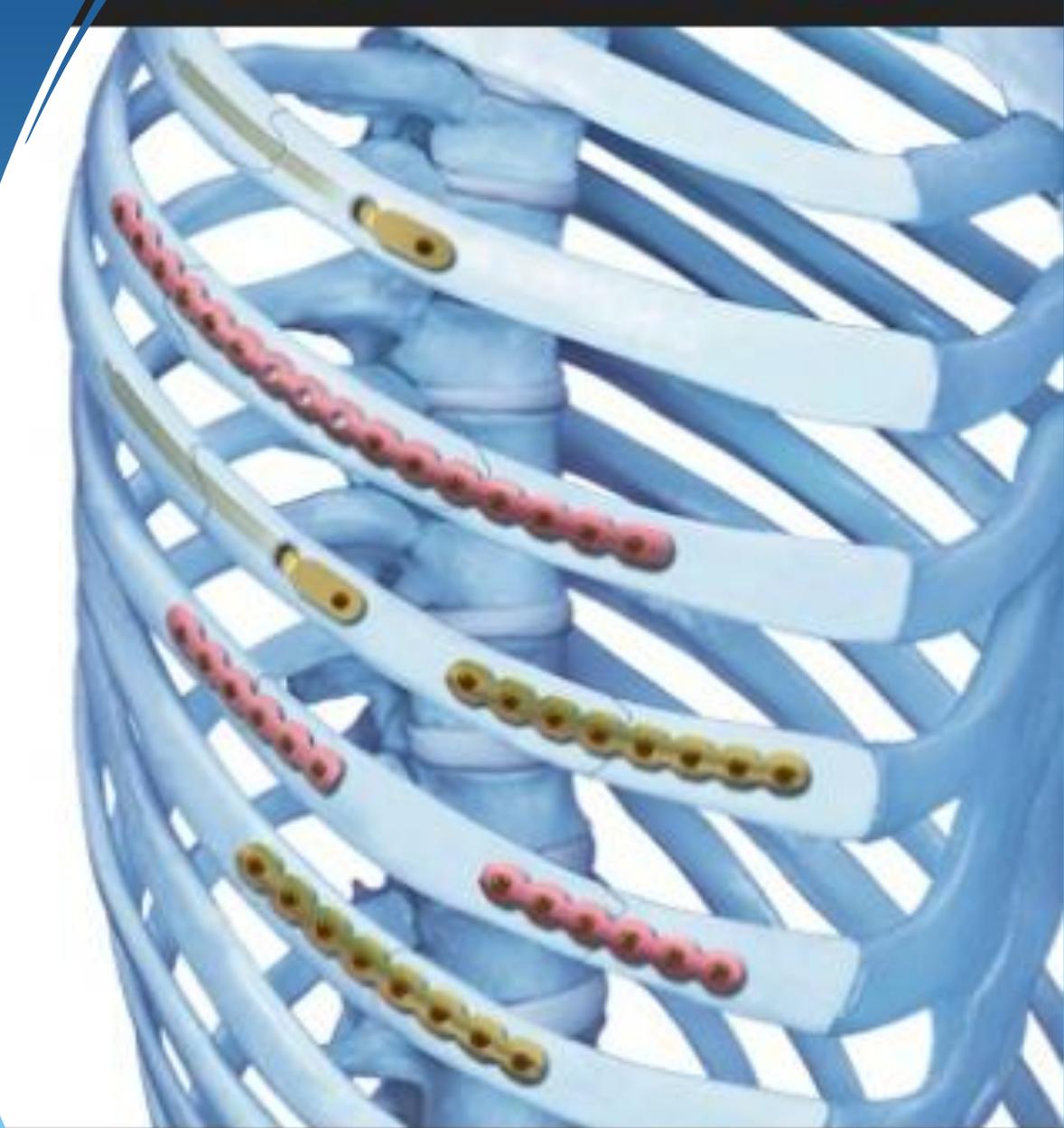
# Video Assisted Thoracoscopy (VATS)

- Patients may require single lung ventilation from dual lumen ET tube
- This will allow for isolation of the operative side of the chest to deflate the lung to have more space to operate
- Post op the patient will have atelectasis and will need aggressive IS and pulmonary toilet



# Rib Plating

- Kls rib plating system
- The KLS Martin Thoracic Plating System includes metallic plates and screws that provide rigid fixation to fractures and planned osteotomies in the thoracic anatomy. The implants are available in multiple shapes and sizes<sup>1</sup>. The system uses titanium plates that conform to patients' ribs and protect against instability and nonunion<sup>2</sup>.



# Rib Plating



<https://youtu.be/4WLLSNaLqPI>

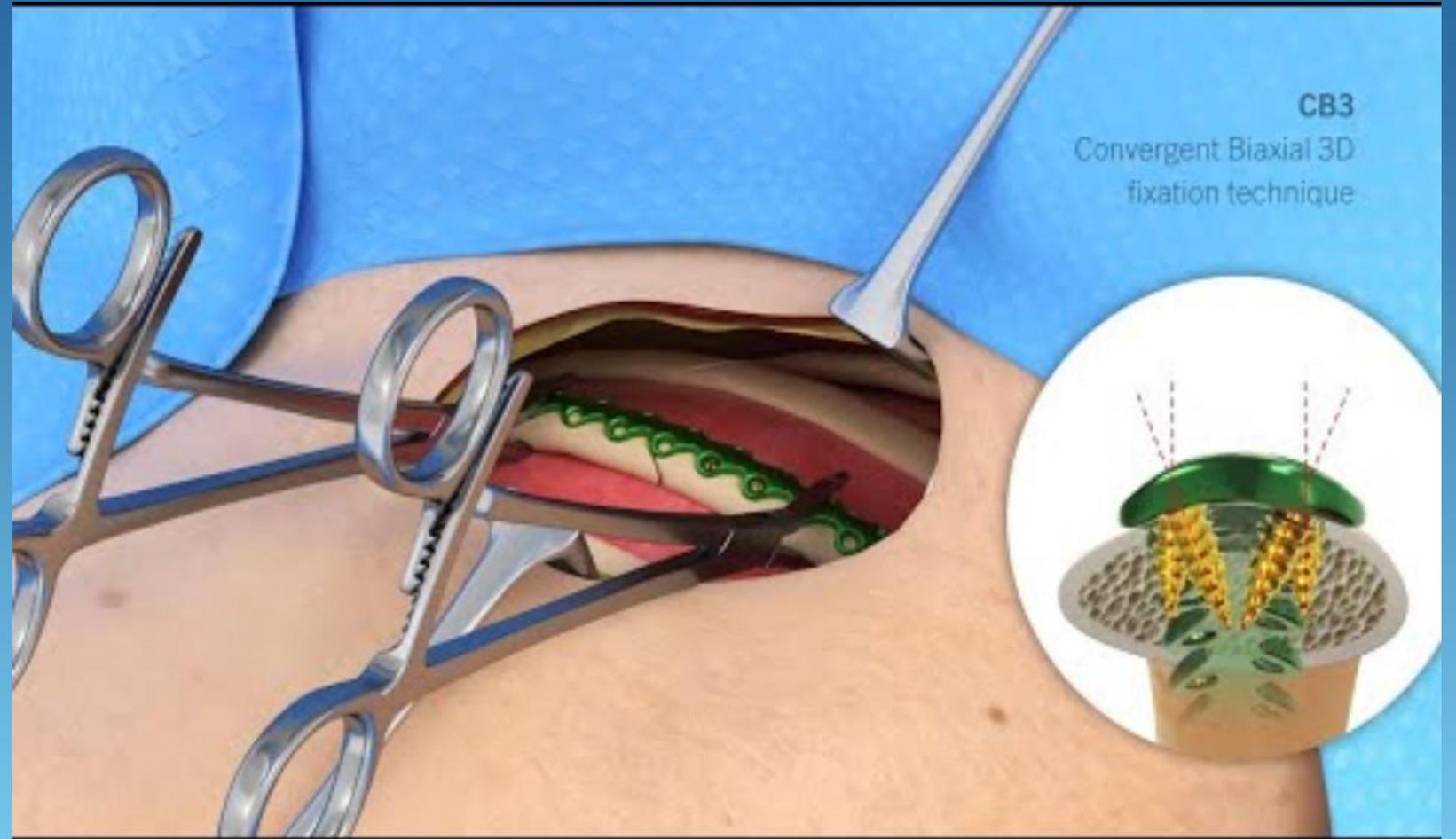
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# Rib Plating



<https://youtu.be/BRs2si1i4r4>

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# Rib Plating

- Reasons to do rib plating
- Rib plating, also known as rib fixation surgery, is a procedure that uses materials and technologies designed to successfully support the chest wall, reducing pain, the duration of mechanical ventilation, hospital stay, ICU time and further complications such as pulmonary infection or pneumonia<sup>1</sup>. It is typically used to treat severe rib fractures caused by car or motorcycle crashes, falls, assaults or other blunt injuries<sup>2</sup>. The procedure stabilizes the chest, reducing pain and helping the patient breathe easier<sup>3</sup>.



# Chest tubes Quick Tips



<https://youtu.be/Ui0eKmEk38M>

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# Open Abdomen and Temporary Closures

- **Damage-control laparotomy** is widely practiced today. First introduced as a temporizing measure to salvage otherwise moribund trauma patients, it has evolved to become a preferred method for general surgical patients whose physiological derangements do not permit the completion of an intended operation

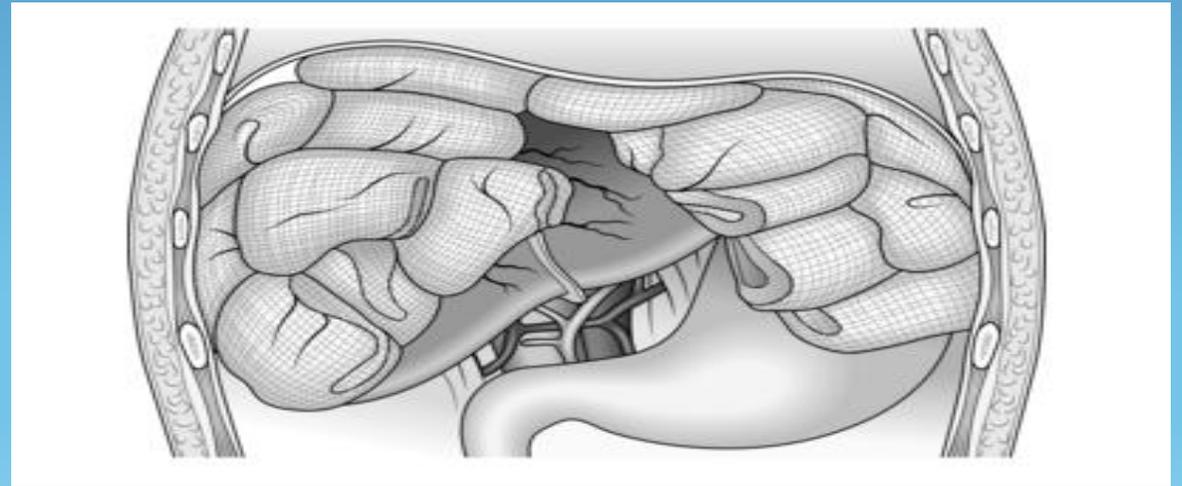
Damage control laparotomy was first described by **Dr. Harlan Stone in 1983** when he suggested that patients with severe trauma should have their primary procedures abbreviated when coagulopathy was encountered.

Damage control surgery is surgical intervention to keep the patient alive rather than correct the anatomy. It addresses the "lethal triad" for critically ill patients with severe hemorrhage affecting ...



# Abdominal packing

The term “damage control” is rooted in Navy history as the way to approach shipboard battle damage. Essentially, it applied to quick measures aimed at stopping flood waters from rushing in and sinking a ship. In surgery, the term has come to mean application of expedient approaches to stemming exsanguinating hemorrhage and controlling contamination, in the physiologically deranged patient, to the point where resuscitation can occur. Trauma surgery typically has four stages. First is hemorrhage control, second is contamination control, third is evaluation or diagnosis, and fourth is reconstruction.

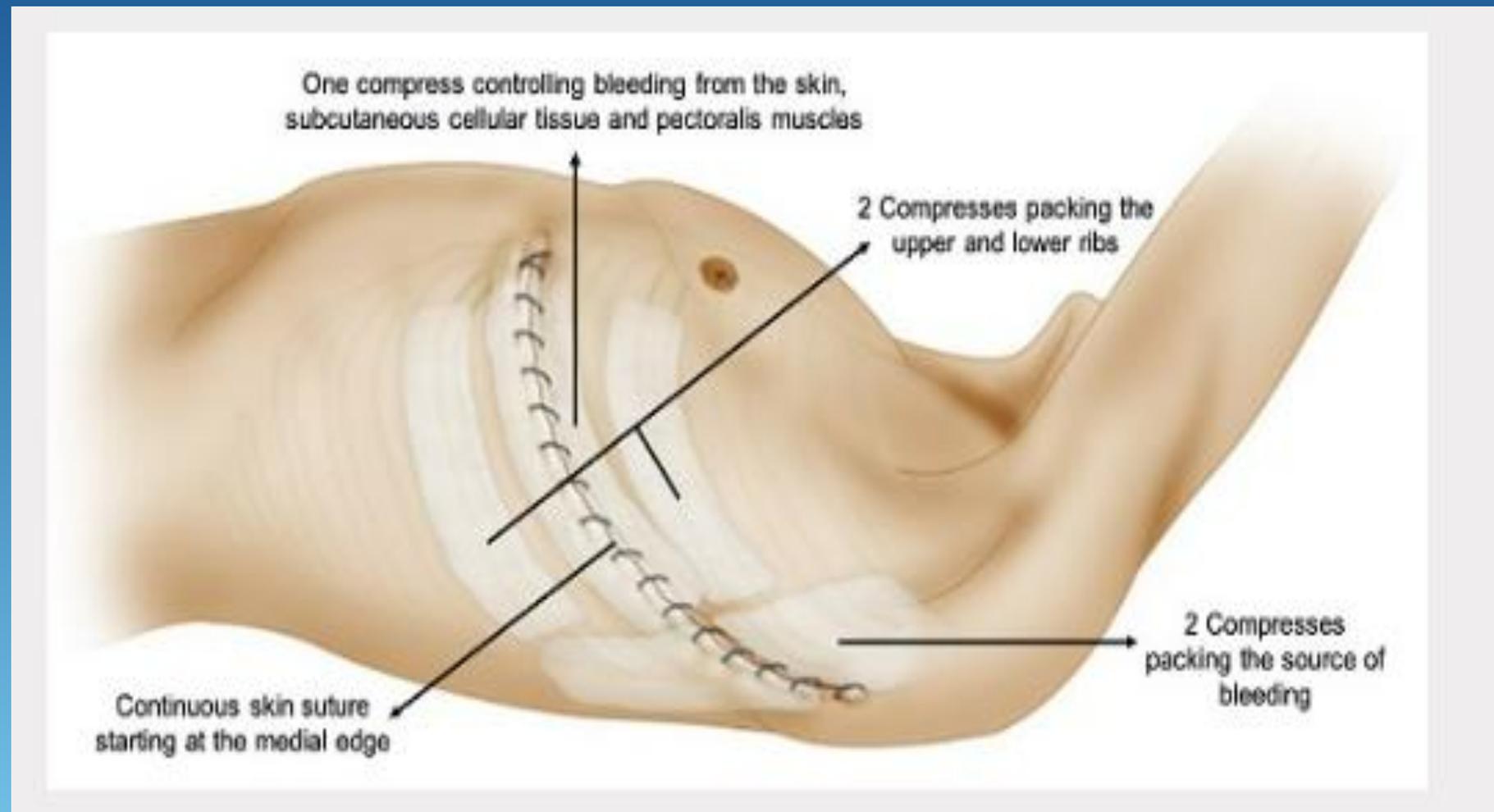


# Abthera

- Covers the bowel
- Can go on with or without abdominal packs in place
- Change every 3-5 days
- Change canister as needed
- Traumas may have 1-2 liters of blood for 2-3 hours



# Thoracic Packing For Trauma



- May or may not have Abthera placed on chest wall



# Key Points

- Document on the patient “Do NOT Close Abdomen/ Chest Packs in place”
- Do not close chest or abdomen on damage control case permanently without an imaging study to confirm the count. See policy
- Abthera may have high output the first few hours after a trauma, will need aggressive transfusion to keep up
- Chest tubes will be placed in all rib plating cases
- If you do not know or have not seen it ask for help.
- We are all in this together....!



# Questions

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