VIDEO-ASSISTED THORACOSCOPIC SURGERY AS AN ADJUNCT TO RIB FIXATION: HOW WE DO IT

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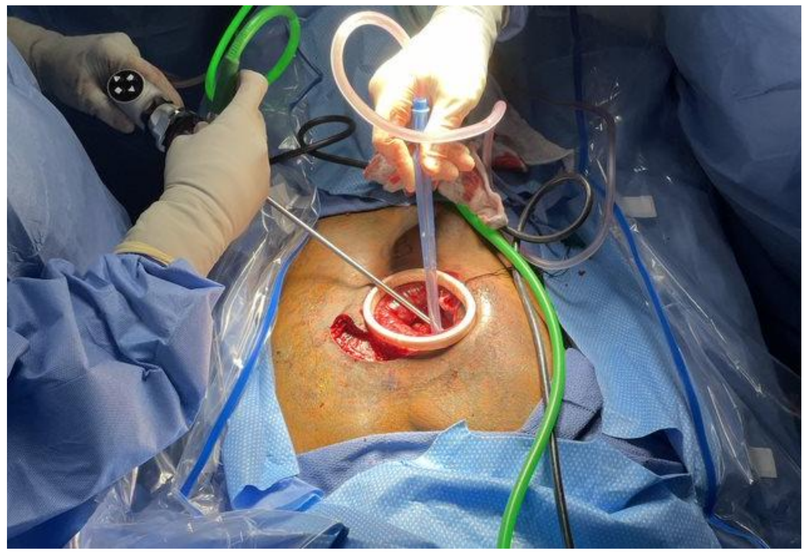
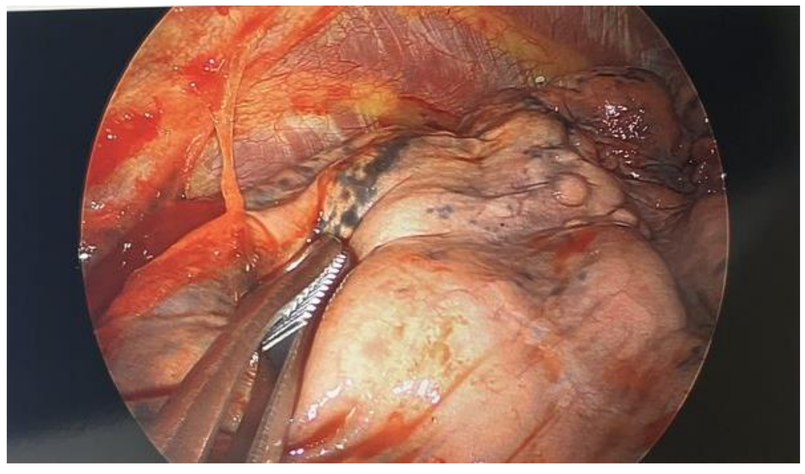
BACKGROUND

- Video-assisted thoracoscopic surgery popularized in the 1990s for pleurodesis, lung resections, decortications.
- Accepted intervention in trauma for evacuation of post-traumatic retained hemothorax, empyema, and parapneumonic effusions.
- Typical procedure includes dual-lumen endotracheal intubation and multiple port sites.
- Our institution performs VATS in conjunction with surgical stabilization of rib fractures via single port, standard endotracheal intubation with interval apnea, requiring minimal equipment.

PROCEDURE

- Surgical stabilization of rib fractures typically performed in lateral decubitus position.
- Single lumen endotracheal intubation.
- Preoxygenation with 100% FiO_2 begins during SSRF.
- After SSRF, intrathoracic access gained through previous open incision, small wound protector.





- 5 mm, 30º thoracoscope used.
- Interval apnea is used to facilitate visualization.
- Yankauer suction catheter and ring-forceps used to gently retract lung.
- After completion, 19F round drain tube thoracostomy through previous port site.

DISCUSSION

- Hemothorax associated with blunt thoracic trauma shown to have significant morbidity.
- Using single port, single lumen technique with interval apnea, injuries can be properly addressed.
- Obvious limitations to technique include management of large volume hemorrhage, hilar injuries, which would necessitate thoracotomy for control.

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