

decortication

Is surgical removal of pluera (pleurectomy)

Indications

- Empyema thoracis **tuberculous** or **non tuberculous**
- post-traumatic **haemothorax** (blood accumulation in pleural space).
- pneumonia (**lung infection**),
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Continue Indications

- **chronic empyema (pleural space infection), iatrogenic infection after pleural tap** (infection following the diagnostic/therapeutic removal of fluid or air from the pleural space)
- **septicaemia** (bacterial infection in the blood).
- for the treatment of **fibrothorax** (formation of fibrous tissue in the pleural space)

empyema

- **An empyema** is infection in the pleural space. The development of an empyema results from fluid within the pleural space which becomes infected, and the deposition of infected protein material onto the surface of the lung and the chest wall.
- The infected material deposited onto the lung is called a **pleural peel**.
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What causes empyema?

- Most empyemas begin as a pneumonia.
- Some patients with pneumonia develop a pleural effusion. In most patients, the pleural effusion resolves when the pneumonia is treated.
- For unknown reasons, in some patients, the effusion does not go away, but becomes infected.
- An infected pleural effusion is called an empyema.

- The **empyema** has **two components**:
- the fluid in the space, and the pleural peel deposited onto the lung and chest wall.
- The **vast majority** of empyemas will not respond to antibiotics, nor will they resolve on their own.
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- The vast majority require **surgical exploration and drainage.**

- The remaining causes of **empyema** are **secondary infections** of a bland pleural effusion.
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- For example, a patient with heart failure may develop a pleural effusion. The same patient may develop a urinary tract infection.
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- **Bacteria** from the urinary tract infection enter the blood, and then infect the **pleural effusion**, resulting in an **empyema**.

How empyema is treated?

- In the presence of pneumonia, the foundation of the treatment of **empyema** is **antibiotic therapy of the pneumonia.**
- In concert with the antibiotics, the infected fluid must be drained, and the pleural peel must be removed from the lung and chest wall.

- If the process is **discovered early**, then a minimally invasive thoracoscopy (**VATS**) procedure may be used.
- Through tiny incisions, under endoscopic guidance, the fluid is drained and the pleural peel is removed from the surface of the lung and chest wall.
- Two or three drains called **chest tubes** are left in the pleural space.
- They are usually removed **4 to 7 days** after surgery.

- **Decortication is of two types, and is performed under **general anaesthesia**:**
- **Open Thoracotomy:**
- **Video-assisted Thoracoscopic Surgery (VATS):**

Risks and Complications

- **decortication** may be associated with certain risks and complications, which can be treated appropriately.
- **Infection**
- **Persistent** air leak from the lung
- **Bleeding**
- **Bronchopleural fistula** (an abnormal connection between the pleural space and the lung)
- **Respiratory failure**
- **Cardiac complications**

VATS vs. Open Thoracotomy

- The **VATS** technique has proven to have better outcomes with less pain and shorter recovery than open thoracotomy, and is recommended for early effusion when the capsule is thin.
- However, an **open approach** is suggested to remove a thick capsule that could have fused to the chest cavity and lung, as a thoracoscopy is more difficult to perform and may be associated with chances of injury.

What are the Aims/ goals

physiotherapy

- **Breathing exercises**
- **Huffing and coughing**
- **Relaxation**
- **Shoulder exercises**
- **Postural correction**
- **Care of the chest tube**
- **Ankle pumping exercises**
- **Positioning**
- **Early mobilization**

Thank you