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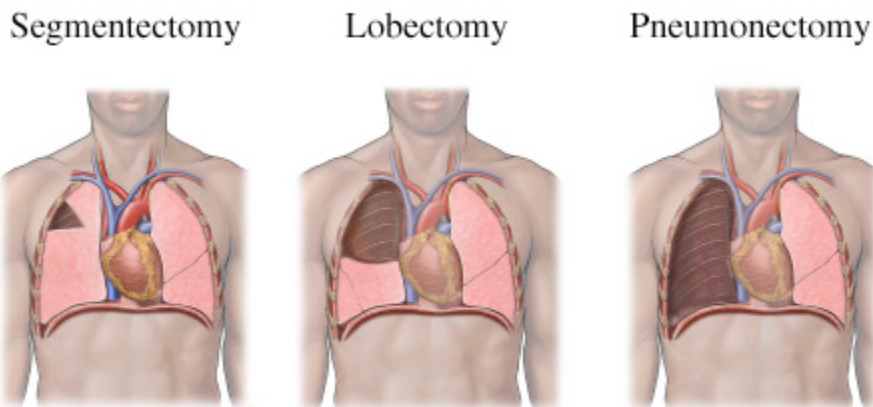
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## THORACOTOMY FOR LUNG RESECTION

Surgery to remove all or part of a lung involves making a cut on one side of your chest (thorax) during a procedure called a thoracotomy. Surgery that uses this approach avoids areas in the chest that contain the heart and the spinal cord.

After the cut is made between the ribs, all or part of the lung is removed depending on the location, size, and type of lung cancer that is present.



The types of lung surgery are:

- Wedge resection (segmentectomy). The surgeon removes a small wedge-shaped piece of lung that contains the lung cancer and a margin of healthy tissue around the cancer. This is likely to be done when your lung function would be decreased too much by removing a lobe of lung (lobectomy).
- Lobectomy. The right lung has three lobes and the left lung has two lobes. A lobectomy removes the entire lobe of your lung that contains the cancer. Your lungs can function with the lobes that remain.
- Pneumonectomy. A pneumonectomy removes your entire lung that contains the lung cancer. A pneumonectomy is done only when necessary because it will greatly reduce your overall lung function.

A video-assisted thoracoscopic surgery (VATS) may be done before a thoracotomy. This procedure involves inserting a long, thin tube (videoscope) with a camera attached and small surgical instruments into your chest through small cuts made between your ribs. The VATS method may be used to:

- Confirm the diagnosis of lung cancer.
- Biopsy lymph nodes in the center part of your chest (mediastinum).
- Perform a wedge resection of your lung cancer.

### **What To Expect After Surgery**

Lung surgery requires you to stay in the hospital 1 – 5 days after the procedure. How long you stay will depend on:

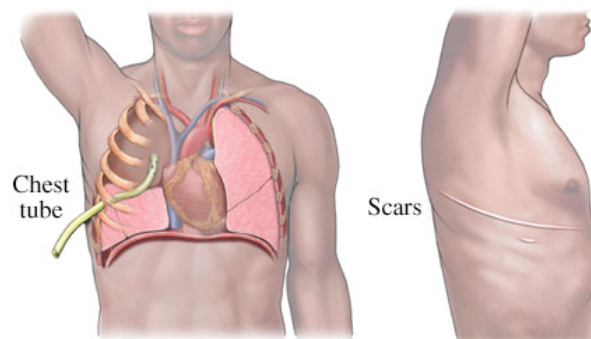
- Your remaining lung function.
- Your overall health before surgery.
- Which type of surgery was done.

## **Pain**

Thoracotomy surgery involves making a cut in the side of your chest between your ribs. Your ribs are spread apart so that your surgeon can see into your chest cavity. A small piece of rib or the entire rib may be removed to make it easier for the surgeon to take out the lung cancer. The incisions and your chest area may be painful for several weeks to months after surgery.

## **Chest tubes**

One or more chest tubes are used after surgery to drain your chest cavity of fluid and blood, which are present after lung surgery. The chest tubes also help your lungs refill with air. Chest tubes are placed in your chest cavity and extend out through your chest wall and skin through small cuts between your ribs on the same side as the surgery. The tubes are connected to a machine that creates a gentle suction, which helps your chest fluid to drain. The fluid is collected in a container that measures the amount of fluid draining from your chest. The chest tubes will be removed when the drainage from your chest has stopped and no air is leaking from your chest incision, which is usually a few days.



## **Respiratory treatments**

A respiratory therapist will help you with breathing treatments to improve your lung function after surgery. Treatments usually involve deep breathing and the use of a spirometer. Medications may also be used to help open your airway and help you breathe more easily.

### **Why It Is Done**

A thoracotomy with or without a videoscope is done to:

- Confirm the diagnosis of lung cancer.

- Remove a lung cancer.
- Remove scar tissue or fix an air leak in your lung.

### **How Well It Works**

Surgery is more effective in early-stage non–small cell lung cancer when the lung cancer can be completely removed and the cancer has not spread to lymph nodes or outside the chest cavity.

Surgery is occasionally used in limited-stage small cell lung cancer, although small cell lung cancers are not often diagnosed at this early stage.

People who have stage IIIB and stage IV non–small cell lung cancers are usually not considered to be good candidates for surgery. Surgery may be done for stage IIIB and stage IV cancers in certain locations in the lungs or chest.

### **Risks**

Lung surgery risks include:

- Bleeding.
- Infection.
- An air leak in your lung that does not close.
- Damage to your heart, lungs, blood vessels, or nerves in your chest.
- Ongoing pain in your chest wall.
- Risks from general anesthesia.

### **What To Think About**

Lung surgery is most effective for early-stage lung cancers, especially non–small cell lung cancer.

Lung function tests, possibly including a lung scan, are usually done before surgery is considered. You may not be a good candidate for surgery to remove all or part of a lung if you have poor lung function. Cardiac studies may also be done if you have any risk factors for complications from heart problems.

Lung surgery may be done to confirm a diagnosis of lung cancer. Additional surgery, such as removing the affected lobe (lobectomy) or lymph node biopsies, may be done at the same time for treatment purposes.

### **QUESTIONS TO ASK YOUR SURGEON:**

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