

Thoracic Surgery

Patient Guidebook

A guide to help you in your preparation for surgery.



Table of Contents

Types of Surgeries	3
Pre-surgery work-up	5
The Days Before Surgery	6
The Day of Surgery	6
After Surgery Care.....	7
Leaving the Hospital.....	8
Important Phone Numbers and Addresses.....	8

UMass Thoracic Surgery Locations:

Main Clinic

67 Belmont Street, Suite 201
Worcester, MA 01605
508-334-8996

Cancer Center at UMass Memorial Medical Center

Ambulatory Care Center
55 Lake Ave North
Worcester, MA 01655
866-597-HOPE (4673)

Health Alliance Hospital

100 Hospital Road
Leominster, MA 01453
978-466-4212

Types of Surgeries

Speak with your surgical team regarding which procedures may be needed to help you with your diagnosis.

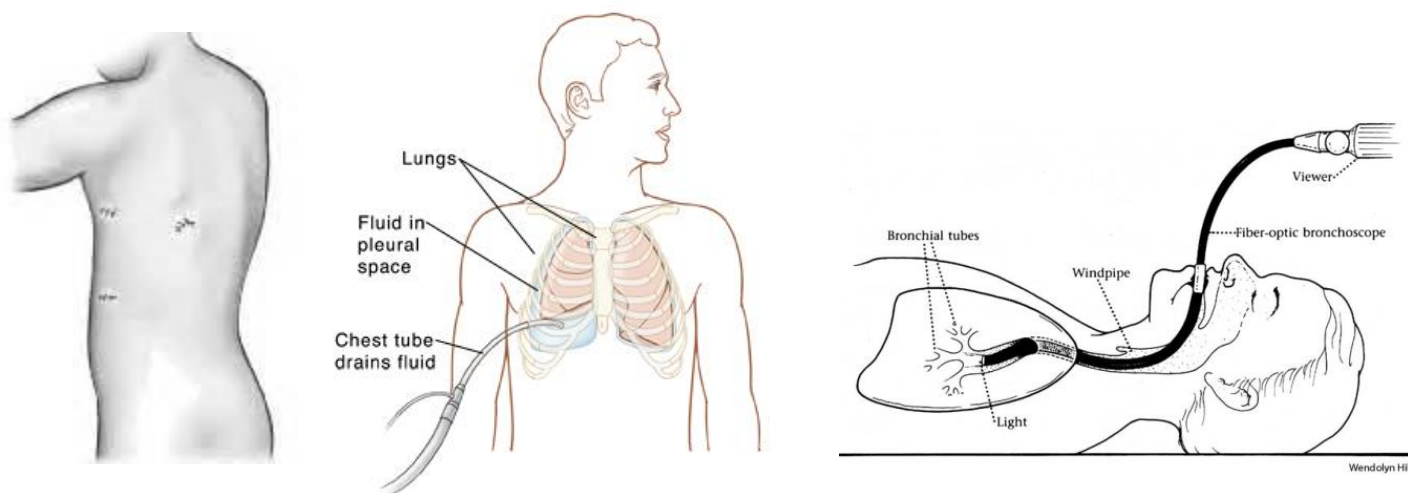
Bronchoscopy: A lit scope is placed through your mouth and into your airway for visualization and sampling of the inside of your lungs through transbronchial biopsies. These samples are sometimes ultrasound guided. This procedure is sometimes done under moderate sedation and you can go home the same day.

Mediastinoscopy: Performed through a small incision in the front of your neck, right above where you collar bones meet. A tubular lighted scope is inserted to visualize the mediastinum (area behind your breastbone) where lymph nodes can be sampled. Often you go home on the same day. Requires general anesthesia.

Camberlain/Mediastinotomy: Incision is made next to your breastbone to allow access to your mediastinum. This procedure allows lymph node sampling, tumor biopsy, and staging of disease. A small tube for drainage is sometimes placed. This procedure requires general anesthesia and usually involves a hospital stay.

Video Assisted Thorascopic Surgery (VATS): Small incisions are made in the chest wall or neck which are about ¼ inch to 2 inches in length. A lighted scope and other surgical instruments are put through these ports for visualization and manipulation of the inside of the chest. One or more chest tubes are placed for drainage after surgery. This procedure requires general anesthesia and a hospital stay.

Pleuroscopy: Similar to a VATS, this specialized scope is used when only the outer surface of the lung or inside of the chest wall needs to be examined or biopsied. One or more chest tubes are placed for drainage after surgery. This is performed under general anesthesia and usually requires a hospital stay.



Thoracotomy: Larger incision that can extend anywhere from the shoulder blade, around your side, and go your sternum (breast bone). These larger incisions are often needed for removing larger resections, for patients who have already had radiation, or for patients with infected lung spaces. Great care is taken to spare as many muscles as possible. One or more chest tubes are places for drainage after surgery. Requires general anesthesia and hospital stay.

Pleural biopsy/decortications: Samples of the outer surface of your lung, and/or the inner surface of your chest wall are taken and sent to the lab for analysis. For infected spaces, or for patients who have a trapped lung, larger pieces of tissue may be removed to help with recovery.

Pleurodesis: Sometimes the lung has difficulty staying inflated, or fluid keeps accumulating around the lung. This procedure makes the outside of the lung more adherent to the inside of the chest wall to help keep it inflated. Chest tubes are placed for drainage after surgery.

Wedge biopsy/resection: Small abnormalities or nodules are cut out of the lung using a surgical stapler. These samples are sent to the pathology lab for diagnosis, cultures, and/or staging. One or more chest tubes are placed for drainage after surgery.

Lobectomy: The lungs are made of 5 lobes, 3 on the right and 2 on the left. One or more of the affected lobes are removed and sent to the pathology lab for diagnosis, cultures, and/or staging. One or more chest tubes are placed for drainage after surgery.

Pneumonectomy: An entire lung is removed, along with it's airway and it's blood vessels. Sometimes pieces of ribs are also removed. This is usually done for cancers that have invaded more than one lobe of the lung. Chest tubes may or may not be placed after this surgery. The lung is sent to the pathology lab for diagnosis and staging.

Esophagectomy: The swallowing tube that connects your throat to your stomach is removed and sent to the pathology lab for study. This is usually done for esophageal cancer. Sometimes the upper part of your stomach is also removed. The stomach is sometimes pulled up into the chest and connected, or a piece of colon is transplanted to serve as a new swallowing tube. This operation usually requires multiple incisions in the neck, chest, and/or abdomen. It also usually requires drainage tubes in those same areas to be placed. Sometimes a feeding tube is placed for temporary or permanent feeding. When you wake up you will not be able to eat for many days. Speak with your surgical team about your most likely course of care.

Pre-surgery work-up

Pre-anesthesia testing: You will meet with an anesthesiologist before any surgery which uses general anesthesia. The anesthesiologist will talk to you about your past medical history, surgical history, and concerns. It is important that you **bring a list of your current medications with their dosage**. Pre-anesthesia testing is located in the Jaquith Building on Memorial Campus.

Pre-admissions testing: A pre-admission testing appointment will be made within 30 days of your surgery. You will most likely have a chest x-ray and various blood tests.

Additional testing: Sometimes additional tests are needed before surgery. The tests chosen by your surgeon are individual to your needs and may include:

Physiatry: If you have difficulty exercising we may ask you to see an exercise doctor to build your strength before surgery. This can help decrease your time in the hospital and speed your recovery after surgery.

PET Scans: This additional imaging helps the surgical team to determine how active or growing any worrisome findings on your CT scan may be. It also helps with staging in patients that are known to have cancer. Be sure to ask **for a copy of these images on a CD** so that you may bring them to your appointments.

Cardiac testing: Thoracic surgery is a stressful procedure for the body. Heart tests help the providers determine your individual risk for surgery.

1. **Echocardiogram:** This is performed to measure the strength of your heart muscles and to look for heart valve problems.
2. **Cardiac stress test:** this helps to determine how your heart handles the stress of surgery, and may be performed on a treadmill or with an injection of medication that simulates stress. A cardiologist interprets the results from these tests and reports them to your surgical team.

Lung testing: It may be necessary to get more information about your lungs before proceeding to surgery. These tests give the surgical team a better understanding of how your lungs will cope with surgery.

1. **Pulmonary Function Testing (PFT's):** This series of tests are needed to determine how healthy your lungs are and if you are able to tolerate a lung surgery. During the test you will be asked to complete various breathing exercises using machines that measure the health and strength of your lungs. The results of this test are determined by a pulmonologist and reported back to your surgeon. These tests usually take 30 minutes to 1 hour to complete.
2. **Ventilation/Perfusions scans (V/Q Scan):** This test is sometimes ordered to determine which places inside your lungs are functioning well and which ones are not doing well. This helps the surgical team to evaluate your ability to tolerate the removal of parts of your lung. These tests are completed in the radiology department and take about one hour to complete.

The Days Before Surgery

Medication: Any blood thinners like aspirin or clopidogrel (Plavix) should be stopped at least 5 days prior to surgery unless instructed by your doctor.

Eating and Drinking: Do NOT eat or drink after midnight the night before your surgery.

Arrival time: You will receive a call from the hospital on the afternoon before your surgery. This call will tell you what time to arrive at the hospital on the day of your operation.

The Day of Surgery

Arrival: When you arrive, you should register at patient registration location on the 1st floor near the gift shop at the main entrance. From this area, you will be taken to the preoperative area.

Medications: Follow the instructions you are given by pre-testing. If told to take your morning medications, take with a small sip of water when you wake up. Be sure to let your nurse know which medications you have or have not taken when you arrive.

Valuables: Please leave all valuables at home or with a loved one prior to surgery. You may wear your dentures.

IV's: IV's are started on all thoracic surgery patients. The surgeon and anesthesiologist will determine whether or not you need a specialized IV that can monitor your blood pressure during surgery.

Epidurals: Some patients will require epidurals to be placed prior to undergoing surgery. This tube allows for pain medication to be given directly to the area to be operated on. This decision will be based upon the extent of surgery that is expected and the post-operative recovery time.

Health care proxy: We recommend that all patients have a written health care proxy form in their medical records. Health care proxy forms are available in the doctor's office and also in the surgical suite.

Family/visitors: Family may accompany you to the pre-surgical area. During surgery family can wait in the surgical waiting area, cafeteria, or chapel. Alternatively, they may leave a phone number and we can contact them when your surgery is complete.

After Surgery Care

Recovery: After surgery, most patients are breathing on their own when they are brought to the post anesthesia care unit. Sometimes patients are taken directly to the critical care unit for close monitoring.

Providers: We strive to provide our patients with the best in multidisciplinary care. Many providers will contribute to your optimal recovery after surgery. Your care team will consist of your surgical team, nurses, hospitalists, nurse practitioners, pulmonologists, respiratory therapists, residents, nutritionists, physical therapists, and others.

Pain Control: Pain control is very important to your recovery. IV pain medications and oral pain medications will be used to help you regain normal levels of activity and comfort. These medicines will be slowly decreased in preparation for your discharge home. If you had an epidural placed, this will be removed before you go home. Many patients are discharged home with prescriptions for pain medications to be taken by mouth. These medications cause constipation so it is important to take stool softeners or laxatives to maintain a normal bowel regimen.

Breathing Exercises: You will be given an incentive spirometer to use while you are awake in the hospital. This tool helps to train you take long and deep breaths. Deep breathing with occasional coughing to clear secretions is a very important way to fight infection and help your lungs to heal. It is very important to take your spirometer home with you and continue your deep breathing after your operation.



Activity: Despite undergoing thoracic surgery, it will be very important to be active as soon as possible. We encourage you to wiggle your toes and move your legs as soon as you wake up! With help from nursing or physical therapy staff, you will get out of bed, sit in a chair, and begin walking with 24 hours of having your surgery.

Chest Tubes: Chest tubes are connected to small boxes called Pleurevacs which collect fluid after your operation and help the surgical team determine if there is air leaking from your lung. Most chest tubes are removed between 24 and 72 hours after they are placed; however, some need to stay longer. The chest tubes will be assessed daily to determine when they are safe to be removed.

Oxygen: You may require oxygen in the post-operative period. All patients are given supplemental oxygen when they leave surgery, so it is normal to have a mask on your face when you wake up.

Urine Catheter: Many patients will require urine catheters to be placed during surgery. These are removed within 48 hours after the operation. Some day surgeries do not require urine catheters.

Leaving the Hospital

1. You will be discharged from the hospital with instructions on how to care for your wounds.
2. Some patients will require a brief stay at a rehabilitation center before returning to their residence.
3. Some patients will require help from visiting nurses for wound care.
4. You should expect to have a post-operative follow-up appointment with the Thoracic Surgery Team about 7-10 days after you leave the hospital.
 - **If you do not have an appointment with Thoracic Surgery when you leave the hospital, please call (508) 334-8996 to schedule one.**

Important Phone Numbers and Addresses

Thoracic Surgery Clinic

67 Belmont Street, 2nd Floor
Worcester, MA 01605
Phone: (508) 334-8996
Fax: (508) 334-6296

UMass Memorial Medical Center – Memorial Campus

119 Belmont Street
Worcester, MA 01605
(508) 334-1000

Health Alliance Hospital – Leominster Clinic

60 Hospital Road
Leominster, MA
Phone: 978-466-4212
Fax: 978-466-4669

Pre-Admissions/Pre-Surgical Testing – Jaquith Building

119 Belmont Street
Worcester, MA 01605
(508) 334-5603

Multi-Disciplinary Lung Cancer Clinic

ACC Building – University Campus

55 Lake Ave
Worcester, MA 01605
(508) 334-3550