# **Chest Surgery**

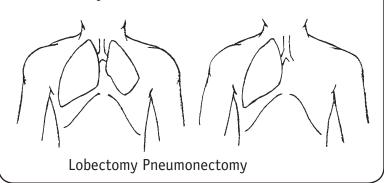
### **Thoracotomy for:**

Lobectomy

◆ Bullectomy

◆ Pneumonectomy

- ◆ Decortication
- ◆ Wedge Resection/Segmentectomy
- Sternotomy



Patient's Name:

Adapted from: Chest Surgery - Thoractomy, Catalogue No. FN.230.T391 July 2004, with permission of © Vancouver Coastal Health.

The information in this document is intended solely for the person to whom it was given by the health care team.

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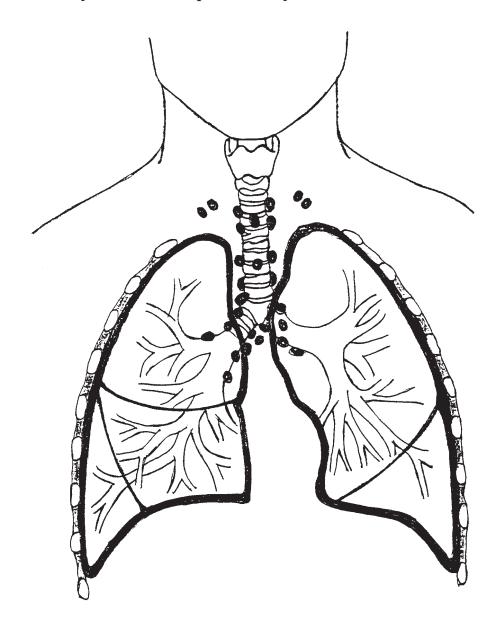
Notes:

You are about to have an operation on your lung or mediastinum. This booklet has been put together to let you know what to expect before and after your surgery. This information is meant as a guide only.



Throughout your hospital stay, registered nurses, your surgeon and resident doctors will care for you. Also, a dietitian, physiotherapist, social worker, clinical nurse specialist, patient services coordinator and clinical educator are available for support and information. All members of the health care team are available to answer your questions about your recovery. Please use this booklet to write down questions, messages or suggestions that you have for the health care team. Please bring this booklet with you when you come into hospital.

You may want to use this picture to have your doctor show you where he operated on your chest.



Artwork by: Jan Fierro

### **General Information**

You have a right lung and a left lung. The right lung is made up of three lobes and the left lung is made up of two lobes. Each lobe is made of smaller segments. A **thoracotomy** is an incision (3 to 8 inches long) into the chest cavity, usually to remove a small segment of lung, a lobe of the lung, or an entire lung.

Minimally Invasive Surgery (MIS) is a type of thoracotomy where the surgeon enters the chest cavity through two or three holes between the ribs. Through these holes, the surgeon passes scopes, biopsy and other instruments in order to do specific types of surgeries.

# The following is a list defining the various surgeries:

- A **lobectomy** is when a lobe(s) of a lung is removed. After this surgery, the remaining lung tissue expands to fill the space that was occupied by the diseased lung tissue.
- A **wedge resection** is when a small pie-shaped piece of a lobe is removed. The post-operative care after a wedge resection is the same as for a lobectomy.
- A **segmentectomy** is when an anatomical segment of a lobe is removed.
- A **bullectomy** is surgical removal of a bulla(e), a thin-walled blister or air filled cavity in the lung.

- ◆ A **decortication** is surgical removal of the pleural layers of the chest cavity.
- A **pneumonectomy** is the removal of an entire lung. If you have a pneumonectomy, the space that was occupied by the lung fills up with fluid and over time with solid tissue.
- ◆ **Thoracoscopy** is a procedure in which the surgeon inserts a telescope, through 1 2 holes, into the chest cavity to have a thorough look inside the chest.
- **Sternotomy** is an incision through your breast bone (sternum) to remove masses in the center of your chest called the mediastinum.

You will be surprised how quickly you'll start to feel better and be able to move around on your own after your operation. And before you know it, you'll be ready to go home.

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### Day 5 and Onward

If for some reason you are still in hospital after Day 4, the nurses will continue to check your vital signs and administer medications as ordered. Meanwhile you should:

- continue to deep breathe & cough
- walk around as much as you can
- prepare yourself for discharge

Your staples and chest tube sutures should be removed 7 to 10 days after your surgery. Your surgeon can remove them in their office or we can send a staple remover home with you so your family physician can remove them.

Your Questions.

### Day 4 after surgery

- If not already done, your oxygen may be discontinued. Continue deep breathing and coughing exercises and continue to increase your activity.
- You can walk on your own and be sitting in the chair at least for meals.
- ◆ Your nurse will check your temperature, blood pressure, and pulse at least twice today.
- You will have pills to relieve the pain. The nurse will check your comfort level at least every four hours.
- Your nurse will check your oxygen level twice today.
- If you still have it, your epidural catheter may be removed (usually at least 24 hours before discharge).
- ◆ Any small IV's may be removed.
- Review the discharge booklet and finalize your plans for going home.

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### **Getting Ready for Surgery**

Most patients come to the Preadmission Clinic (PAC) for their tests before surgery. The nurses in PAC will teach you about how to prepare for your surgery and answer any questions you may have. If you had a preadmission clinic visit, you will be admitted for surgery the day of your operation through the Surgical Admissions Unit.

- ◆ The anaesthetist is the doctor who puts you to sleep for your operation, and monitors your condition during the operation and in the recovery room. An anaesthetist will see you in the PAC and ask you questions about your general health and any medications you are taking.
- An anaesthetist will also talk to you about ways to relieve your pain after the operation. Your nurses and doctors will teach you how to describe your pain on a scale of 1 10, so it can be better controlled.
- ◆ A technician from the lab will take a blood sample and do an ECG. You may also have a chest x-ray.
- ◆ Your stomach should be empty for the operation.

  The evening before the operation, you may be given medication to clean out your bowels. After midnight, you are not allowed to eat anything. Only clear fluids (i.e. water, clear tea or broth) are allowed up to 6 hours before admission to hospital.
- If you are already in hospital, you may or may not be allowed clear fluids the night before surgery.

report to the hospital. Your Questions: today. a chest x-ray a few hours after. removed. The Day of Surgery

### **Before your Operation:**

• Have a shower the night before or the morning of your surgery. After your surgery it will be a few days before you can shower again.

• Your Surgeons office will tell you the time you are to

- Report to the Surgical Admissions Unit promptly at the time you were told to do so.
- You may be given some pills that have been ordered by the anaesthetist and an intravenous may be started in your hand or arm.

- You will continue to be encouraged to get up to the chair and go for walks.
- If you've had a **pneumonectomy**, your activity will be a bit slower and you will likely begin to walk more
- ◆ Your nurse will check your oxygen level with the pulse oximeter and adjust or remove your oxygen.
- ◆ Your chest tube(s) may be removed and you will have
- If you have them, your sternotomy tubes may be
- You may have a laxative or suppository if your bowels haven't moved.
- ◆ Your ECG monitoring may be removed.
- You and your family can begin to think about your needs when you go home.

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• You may be advanced to eating and drinking a regular diet. If you have had a pneumonectomy, your fluid intake will continue to be restricted throughout your hospital stay.

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## Day 3 after surgery

- You may have more of your equipment removed.
- The IV line in your neck and your foley catheter may be removed.
- You will continue taking pills to relieve your pain and be weaned off your epidural or PCA.
- ◆ Your nurse will check your blood pressure, pulse, breathing, bandages, and comfort level every 4 hours.

- ◆ About 15 20 minutes before the operation, you will be taken to a holding area near the operating room.
- ◆ Your family can stay with you until you go to the operating room.
- Once you have gone to the operating room, your family should probably go home to await a call from your surgeon. Your family should leave the phone number where they can be reached, including a cell phone number if available.
- If your family chooses to stay to the hospital they can wait in the South lobby waiting area.
- Send home any valuables such as money, credit cards, jewelry, lap-top computers, etc. to prevent the possibility of loss or theft.

Your Questions:								

### **After your Operation:**

- You will go to the Post Anesthetic Care Unit (PACU). You may stay in this area overnight or be transferred to the Maxi Care unit on 3 South Surgical. Only immediate family are allowed to visit in these areas, and only for short periods of time.
- While most patients are drowsy after surgery, you will be aware of the nurses and doctors talking to you, and of the equipment used to check how your body is working.
- You will be given oxygen by a face mask or by small nose prongs. Your nurse will check your oxygen level with a small finger probe called the "pulse oximeter".
- You may have an IV line in your neck. This line (called a central line) is used to give you fluid and medications. It was inserted after the anaesthetist puts you to sleep.
- ◆ You will have a small IV in your wrist. This IV (called an arterial catheter) is used to draw blood samples and to measure your blood pressure. It was inserted after you were put to sleep and will be removed prior to being transferred to the Maxi Unit.
- You will have a tube in your bladder called a foley catheter. This will be used to collect and measure your urine and will be removed by your nurse when it is appropriate to do so.

## Day 2 after surgery

As you recover from your operation, your nurse will continue to encourage you to do deep breathing and coughing exercises throughout the day.

#### Your nurse will also:

- help you wash with a basin at the bedside, or assist you into the washroom.
- check your blood pressure, pulse, breathing, comfort level and your ability to move and feel your body at least every four hours.
- remove the bandage from your incision.
- check your oxygen level with the pulse oximeter and adjust the oxygen as needed.
- ◆ Your chest tube(s) may be taken off suction or removed completely.
- ◆ Your nurse and the physiotherapist will help you to get up to the chair a few times and to go for a walk a couple of times today. You may be progressed a little slower if you have had a pneumonectomy.
- If you had an epidural it will be turned down gradually and you will be offered oral pain medication to control your discomfort.
- You may or may not have your foley catheter removed.

- ◆ The physiotherapist will listen to your breathing and review deep breathing and coughing exercises with you. As well, you will be given arm exercises to prevent shoulder stiffness and leg and ankle exercises to help prevent blood clots.
- ◆ Your nurse and the physiotherapist will help you to sit on the side of the bed and if you are able, will help you to sit in a chair. Sitting up will help your lungs recover.
- Your nurse will help you wash with a basin at the bedside.
- ◆ Your nurse will let you know when you are safe to drink fluids. If you've had a pneumonectomy, your fluid intake will be restricted.
- You may be progressed to eating solid foods by supper time.
- The visiting hours on the Maxi Care Unit are 2:00 pm to 8:00 pm.

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- If you have a **lobectomy, wedge resection, segment-ectomy, bullectomy, or decortication**, you will have one or two drainage tubes in your chest that will be connected to collection containers and to suction. These tubes drain air and fluid that collect in your chest after surgery (the doctor will determine when your chest tube(s) are removed). If you have a pneumonectomy, your chest tube will be removed in PACU.
- If you have had a **sternotomy** you will also have one or two small tubes coming out from under your breast bone to drain fluid from under the incision. These tubes are connected to small suction containers and will be removed when there is little or no drainage.
- ◆ You may have a very small line in your back. This line (called an Epidural) is used to give you pain medication. Another way of delivering pain medication is through your IV which you can control. This is referred to as Patient Controlled Analgesia or PCA. At least every hour the nurse will check your comfort level and your ability to move and feel your body.
- ◆ You will have five small sticky pads on the front of your chest connected to a heart monitor. These will be on for 2 5 days.
- ◆ Your nurse will check your blood pressure, heart rate and breathing rate at least every hour.

- ◆ After your surgery, your nurse will encourage you to take deep breaths and cough, to gently exercise your arms and legs, and to turn in bed frequently. If you had a **pneumonectomy**, you will be asked to lie on your incision or on your back only for the duration of your hospital stay--do not lie on your other side.
- Your nurse may help you to sit at the edge of your bed and provide you with some ice chips to moisten your mouth in the afternoon or evening the day of your surgery.
- ◆ You will have one bloodwork drawn and have a chest x-ray early the next morning.

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### First Day after surgery

You may or may not already be in the Maxi Care unit located on South 3 Surgical POD 1, 3rd Floor. The PACU or Maxi Care Nurse will remove the small IV in your wrist. The other equipment will stay in place for now.

In the Maxi Care unit you will be cared for by the Thoracic Surgery team (nurses, thoracic surgeon, thoracic residents, respiratory therapist, physiotherapist, social worker, dietitian). If you have any concerns about your hospitalization or about going home, please ask any one of the team members.

#### In the Maxi Care:

- Your nurse will orientate you to your new room and show you how to work the nurse call button.
- ◆ Your nurse will check your blood pressure, pulse, breathing, bandages, comfort level and your ability to move and feel your body when you arrive and then at least every four hours. Please let the nurse know if you have pain.
- You will have oxygen by face mask or by small nasal prongs. Your nurse will check your oxygen level in your blood with a small device that clips onto your finger. This is called a pulse oximeter. Your ECG electrodes will be connected to the bedside monitor or to a telemetry pack so you can walk around.