Wedge Resection or Segmentectomy Surgery

Information for patients and families

Read this information to learn:

- how to prepare for your surgery
- what to expect while in hospital
- what to expect after you return home
- who to call if you have any questions

Your surgery has been scheduled for:

Date: ________________________________

Time: ________________________________

Come to the hospital at: _______________

You can expect to stay in the hospital for about:

____________________________________
Your lungs

Right lung

Left lung

© UHN Patient Education
Preparing for your surgery

What type of surgery am I having?

You have 2 lungs in your body. Your right lung has 3 parts. Your left lung has 2 parts. These parts are called lobes.

- A **wedge resection** is the removal of a small, wedge-shaped part of lung tissue from a lobe of your lung.
- A **segmentectomy** is also the removal of lung tissue from a part of your lobe. During a segmentectomy the surgeon removes a larger piece of lung tissue than in a wedge resection. The whole lobe of the lung is not removed.

Why do I need this surgery?

You may have an infection in your lung. Or, you may need to have something removed from your lung, like a tumour. A tumour can be benign (not cancer) or malignant (cancer). If you have a tumour, your doctor will tell you what type you have.

Sometimes a wedge resection is done if we cannot get a tissue diagnosis in any other way.
What happens during the surgery?

- You receive medicine so you are asleep before the surgery starts.
- When you are asleep, your surgeon looks down into your lungs with a special telescope. This is called a bronchoscopy.
- Your surgeon may be able to do your surgery using special tools and the help of a video camera. This is called video assisted thoracoscopic surgery (VATS).

How long will I need to stay in the hospital?

How long you stay in the hospital depends on the kind of surgery and incision (cut) your surgeon makes. You may stay overnight or up to 3 days. When you can go home will depend on how you are recovering. Your health care team may tell you during their morning rounds (check-ins) that you can go home that day.

Before coming to the hospital, plan to have someone pick you up when you are ready to go home after surgery.

What tests will I need before surgery?

Before your surgery, we do a complete check of your health. This may include many tests. These tests help your surgeon plan your surgery. They also help find other health problems. The risks of surgery can be decreased by managing these health problems before your surgery.

These tests may include 1 or more of the following:
- Pulmonary function test (PFT) and Exercise Oximetry
- PET scan
- CT scan
- MRI brain

We will let you know the tests you need and give you more information about them.
What are the risks of having this surgery?

All surgeries have some risk. Out of 1000 people who have this surgery, 1 to 2 people will die from problems that happen during the surgery.

What will happen during my pre-admission visit?

You must come for your pre-admission appointment before your surgery. **If you don't come for your pre-admission visit, your surgery will be canceled** (unless you were given other instructions).

During your pre-admission visit, we will do a complete check of your health and talk to you about the surgery. You can find more details about your pre-admission visit in the My Surgery Guide you received.

Can the time for my surgery change?

Yes. We do our best to do your surgery at the scheduled time. But, we may need to reschedule your surgery if other emergencies come up.
Your hospital stay

Where will I go after surgery?

You will stay in the Post Anesthetic Care Unit (PACU) for 1 to 2 hours. Once you are awake and stable, we take you up the ward. You may go to the Step Down Unit (SDU) overnight.

There are 4 beds in the SDU room. Both male and female patients are cared for in this room. A thoracic nurse will be in the room with you at all times. As your health improves you will be moved to a regular ward room on 10ES until you are discharged home.

What can I expect?

- A physiotherapist may treat you once or twice a day. The physiotherapist helps you improve your movement. They help you do:
  - deep breathing and coughing exercises to clear your lungs of mucous. This helps to prevent pneumonia.
  - shoulder exercises on the side of your surgery. These exercises help to keep your shoulder joint moving fully.

  How often you see the physiotherapist depends on your condition during the day. Your nurse helps you with these exercises at night.

- You are usually able to drink the evening after your surgery. You may have a light meal if you want it.

  Your appetite may be poor. This is normal. Try to eat a little at each meal. Your body needs nutrients to heal and recover after surgery.
What can I expect to have on my body?

After your surgery, you will have:

<table>
<thead>
<tr>
<th>Incisions</th>
<th>Your surgery will be completed either by a thoracotomy or by video assisted surgery (VATS). Your surgeon will tell you where and how big your incision (cut) will be. A thoracotomy means the incision is on your side. The incision will be anywhere from 8 to 25 centimeters (about 2½ to 10 inches) long. If you are having video assisted surgery (VATS), you will have 3 to 5 small incisions on your side. Each incision is about 2 centimeters (about ¾ of an inch) long. You will have 1 to 2 small incisions on your side for the chest tube(s). Each will be about 2 centimeters (about ¾ of an inch) long. Bandages cover your incisions. We remove them the following day after your surgery.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Thoracotomy" /></td>
<td><img src="image2.png" alt="VATS" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stitches</th>
<th>Your surgeons usually use dissolvable stitches to close your incisions. This means they go away on their own. If they are not dissolvable, your nurse usually removes the stitches 14 days after your surgery. If your stitches need to remain in after you are discharged home, your family doctor can remove them. We will tell you if this is the case.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3.png" alt="Stitches" /></td>
<td></td>
</tr>
</tbody>
</table>
| **Chest tubes** | You will have 1 to 2 chest tubes coming out of the side of your chest. These tubes remove air and fluid from the inside of your chest area. The tubes are attached to a machine that helps suck the air and fluid out.

We use stitches to keep the chest tubes in place. These are not dissolvable. We remove your chest tubes once it is safe. We remove the stitches 14 days after we take the tubes out. |
| **Heart monitor** | You will be on a heart monitor if you are in the Step Down Unit. This doesn’t mean there is a problem with your heart. We do this for all patients who have your type of surgery. |
| **Urinary catheter** | You may have a tube draining your bladder overnight. If you do, we remove it the next morning. While you are in the hospital, the nurse measures how much you urinate. |
| **Intravenous (IV)** | You have an IV so we can give you fluids and medicines. It stays in until you are drinking well or you no longer need pain medicine through a pump. |
If you are in the step down unit, you may have a tube that looks like an IV. We use it to take blood samples without having to poke you with a needle. It also monitors your blood pressure.

You may need oxygen after your surgery. At first, you will have an oxygen mask over your nose and mouth. When you no longer need the mask, you may get oxygen through your nostrils (nasal prongs). You may need oxygen overnight after surgery. We remove the oxygen once your oxygen levels are good enough.

**How can I manage my pain?**

We will work with you to manage your pain. We can give you pain medicine in different ways. These include:

With an epidural, a doctor puts a small tube in your back. They usually do this right before your surgery. The tube is left in place to give you pain medicine after your surgery. It's attached to a pump, which gives you the medicines. They include a pain killer and medicine that numbs the area where you had surgery. They may make your legs feel numb or heavy.
### Intravenous (IV) Patient Controlled Analgesic or PCA

A PCA pump is connected to your IV. The pump gives you pain medicine through your IV when you push the button. You should press the button:
- when you start to feel pain
- before you do something that brings on pain
- before you do deep breathing and coughing exercises
- before you start to move or turn

You should feel the effects of the medicine within 2 to 3 minutes. If you don’t feel any pain relief, let your nurse know.

You are only allowed to have a certain amount of pain medicine every 4 hours. To control how much medicine you get, the PCA pump has a safety timer called a **lock out**. If you press the button during the lockout time, you won't get more medicine. **Only you should press the button.**

<table>
<thead>
<tr>
<th>Intravenous (IV) medicine</th>
</tr>
</thead>
<tbody>
<tr>
<td>You get your pain medicine through an IV. It’s important to let your nurse know when you have pain so they can give you the pain medicine. If you don’t feel any pain relief after getting the medicine, let your nurse know.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Medicine by mouth</th>
</tr>
</thead>
<tbody>
<tr>
<td>You may get your pain medicine in tablets that you swallow. This will happen once you are drinking fluids. Let your nurse know when you have pain, so they can give you the pain medicine.</td>
</tr>
</tbody>
</table>

You can expect to need pain medicine every 3 to 4 hours for the first few days after surgery. As you heal, you will feel less pain and will not need the medicine as often.

During your hospital stay, your medicines may change. Review these changes with your nurse, surgeon or pharmacist. You will get a prescription before you leave the hospital. See your family doctor if you have further questions.
During your hospital stay, we will help you prepare for going home.

## Going home

### How can I expect to feel as I recover?

It takes time to heal and recover. Each person recovers at their own pace. How long it takes for you to recover depends on your age, health and attitude. Your family doctor can help you to manage any symptoms you may have.

### Food and appetite

Your appetite should return to normal within a few days. It should improve as you start to feel better and your activities increase. If your appetite is poor, try eating smaller meals more often. Make sure you drink at least 6 cups of fluid each day (unless your doctor gave you different instructions).

Try to eat high protein and high calorie foods. Soups, plain foods and light meals are easier to digest. If you continue to have problems with your appetite, call your family doctor.

### Bowel upset

Constipation is a common problem when taking pain medicine. To prevent constipation:

- Drink plenty of fluids (at least 6 cups a day unless your doctor or dietitian gave you different instructions).
- Add bran, high fibre breads and cereals, berries, dried fruit or prune juice to your diet (unless your doctor or dietitian gave you different instructions).
- Your doctor will prescribe you a stool softener while you are taking the pain medicine. You may also use a mild laxative if you need one.

If you still have problems, see your family doctor.
What instructions do I follow once I am home?

Activity
You can gradually increase your activity when you get home. Go for a walk at least once a day if you can.

Incisions
- Keep your incisions clean and dry.
- You don't have to cover your incisions. If your clothes are rubbing on your incisions, you can cover them with clean gauze.
- Don’t put lotions or creams on your incisions until they are completely healed.

There may be a "bump" along the incisions. It will decrease over 4 to 6 weeks. Most of your pain should be gone by 6 to 8 weeks after your surgery.

The area around your incisions may feel numb. This is normal. This may last a few weeks to a few months or may not go away at all. But, it usually improves with time. The numbness may be worse on cold, damp days.

Showering or bathing
You can shower once you get home, and you should shower each day. Use a mild soap, and let the water run over your incisions. Pat the incisions dry with a towel. Don’t rub.
Returning to work

You should expect to be off work for at least 2 to 4 weeks. Depending on your job, you may need to be off longer. Ask your surgeon when it's safe for you to return to work.

Driving

Don’t drive until you are off all pain medicine. The pain medicine you are taking may make you drowsy.

You must be able to fully move your arm and shoulder before you can safely steer a car. This usually takes about 2 to 3 weeks after surgery.

Lifting

No heavy lifting, carrying, pushing or pulling for 4 weeks. For example, this includes no vacuuming, carrying heavy groceries, or shoveling snow.

You can lift up to 10 pounds (about 5 kilograms). Lifting more than this may stress your incisions. Your surgeon will let you know when you can start doing your regular activities.

Sex

You can start having sex whenever you feel more comfortable (have less pain and more energy). Choose positions that won't put stress on your incisions.

Sports

Wait 2 to 3 weeks before you swim. You can golf after about 3 to 4 weeks. Wait 4 weeks before you start jogging, playing tennis or racquetball, or doing aerobics.

Talk to your surgeon before you do any sky diving or scuba diving. We don't recommend scuba diving after some lung surgeries.
Travel

Please check with your surgeon about traveling. We usually recommend you not travel by air for 2 to 3 weeks after your surgery.

Follow-up care

Your surgeon will send a letter to your family doctor about your surgery. Your family doctor will provide on-going medical care once you leave the hospital.

See your family doctor for any problems or questions about your medicines, prescriptions, managing your pain, sleeping, appetite or constipation.

Follow-up appointment

We will let you know when to see your surgeon. Your follow-up visit is usually about 4 to 6 weeks after your surgery.

If you don't have an appointment for a follow-up before you leave the hospital, call your surgeon's office the first week you are home.

On the day of your follow-up appointment, go to the x-ray department first to have a chest x-ray.

Remember to bring your health card (OHIP) to your follow-up visit.
When should I call my surgeon?

Call your surgeon if you:

- have new redness or swelling around your incisions
- have pus (yellowish or white liquid) coming from your incisions
- feel increasing pain at your incisions
- have a temperature higher than 38.5 °C or 101 °F
- have shortness of breath
- cough out mucous that is yellow or green or has a bad smell
- cough out fresh red blood
- have diarrhea often
- feel nauseous (feel like throwing up) or you are throwing up
- lose weight or continue having a poor appetite

Who can I call if I have any questions?

If you need information about the time of your surgery, tests or appointments please call your surgeon’s office:

Dr. M. Cypel ☎ 416 340 5156
Dr. G. Darling ☎ 416 340 3121
Dr. M. De Perrot ☎ 416 340 5549
Dr. S. Keshavjee ☎ 416 340 4010
Dr. A. Pierre ☎ 416 340 5354
Dr. T. Waddell ☎ 416 340 3432
Dr. K. Yasufuku ☎ 416 340 4290