Patient & Family Guide

2021

Laparoscopic Hiatal Hernia Repair

Please bring this guide to the hospital with you on the day of your surgery.

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Contents

Laparoscopic Hiatal Hernia Repair

You are being admitted to the Victoria General Hospital, QEII Health Sciences Centre for a laparoscopic hiatal hernia repair. This guide gives information on how to get ready for surgery, your hospital stay, and care at home after surgery.

This guide also includes a Clinical Pathway. A Clinical Pathway is a general guideline about your care. It will tell you what will happen each day before and after your surgery (see pages 9 to 12).

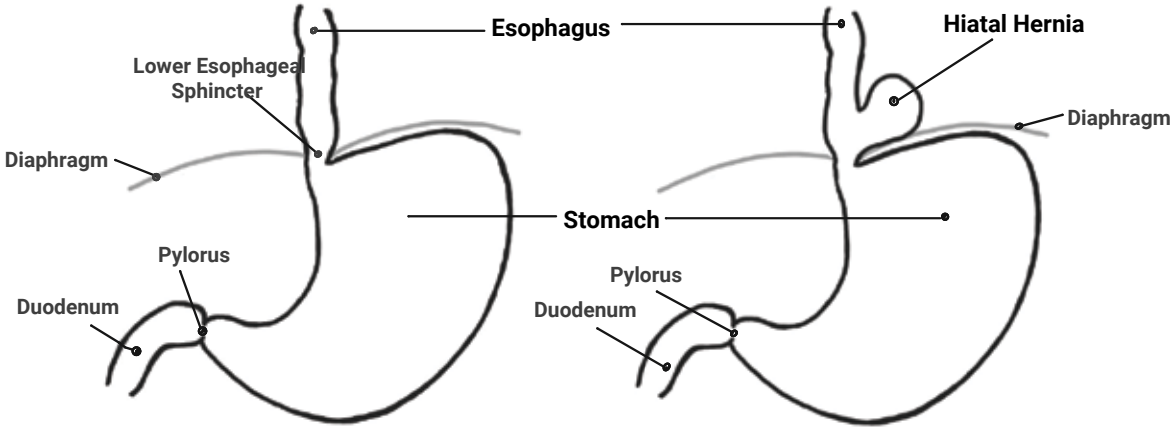
Make sure to read this guide and bring it with you to the hospital. Your health care team will refer to this guide during your hospital stay.

The Thoracic Clinic is located at the Victoria General Hospital, Dickson building, 1st and 4th floors.

- Dr. H. Henteleff: 902-473-5685
- Dr. A. Mujoomdar: 902-473-8337
- Dr. M. Plourde: 902-473-2281
- Dr. D. French: 902-473-6692
- Dr. A. Wallace: 902-473-7174

What is a laparoscopic hiatal hernia repair?

- A hiatal hernia happens when part of your stomach moves up into your lower chest through an opening in the diaphragm. This can cause:
  - › Trouble swallowing
  - › Heartburn
  - › Regurgitation (swallowed food comes back up into your mouth)
  - › Burping
  - › Blocking of the stomach (if the hernia is big)



Normal Esophagus & Stomach **Hiatal Hernia**

- Your doctor has arranged for you to have your hiatal hernia repaired.
- You may have a urinary catheter (thin hollow tube) in your bladder to drain or collect urine (pee).
- You will have 5 or 6 small (1 to 1 1/2-inch) incisions (cuts) in the middle of your abdomen (stomach area) between your nipples and belly button.
- Your surgery will take about 2 to 6 hours.
- Please see page 4 for breathing exercises to practice before your surgery.

After surgery

- You will be in the Recovery Room (Post-anesthetic Care Unit or PACU) for at least 1 to 3 hours. Visitors are not allowed in the recovery area.
- You will then go to the inpatient nursing unit. You may have visitors on the inpatient unit.

Intravenous (IV)

- You will have an IV in one arm. You will get medication(s) and fluids through your IV until you are able to drink well. **Do not pull on the IV tubing.** When you are walking, push the IV pole using your hand that does not have the IV.
- Your health care team will tell you when you can start to eat again. You will start with a clear fluid diet. If tolerated, you will then start full fluids, and then an esophageal soft diet.
- If you have nausea (upset stomach), ask your nurse for medication to help prevent vomiting (throwing up).

Nasogastric tube

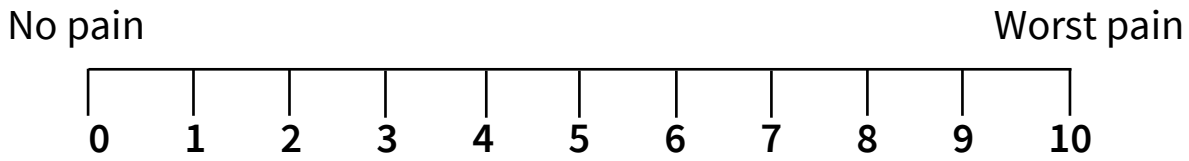
- You may have a nasogastric tube (NG tube) placed down your nose and into your stomach. This tube drains fluid from your stomach while you are healing and not eating. This tube will be removed within a few days, as directed by your health care team.

Face mask or nasal prongs

- You may have a mask on your face or nasal prongs in your nose to give you moist (damp) air and oxygen.

Pain management

- It is normal to have discomfort or pain after surgery. Each person's amount and type of pain is different. Your pain will get better over time as you heal.
- The goal of pain management is to have as little pain as possible while resting, and pain you can handle when you are active. With good pain control while resting, you will be comfortable enough to sleep. When you are active, there may be a bit more pain, but the pain should not stop you from coughing, deep breathing, getting into a chair for meals, and walking.
- You will be asked to describe your pain after surgery using a scale of 0 (zero) to 10. Zero is no pain and 10 is the worst pain you have ever felt.



- You will also be asked:
  - to rate your pain level during rest and activity.
  - if the pain prevents you from moving.
  - if you are satisfied with your pain.

  This will help us find out whether your pain is being controlled well and if your medication(s) needs to be changed.
- If you are in pain, it will be harder to get moving. It is important to tell a member of your health care team if your pain is not well managed.
- Depending on your surgery, you may get pain medication by:
  - IV infusion (directly into your bloodstream)
  - subcutaneous injection (a needle injected below your skin)
  - orally (by mouth)
- Your doctor will prescribe different types of medications that work in different ways to help control pain. These may include:
  - Narcotic analgesics (painkillers) like codeine, hydromorphone (Dilaudid®), or morphine. These are opioid medications used to manage severe (very bad) pain.
  - Anti-inflammatories like ibuprofen (Advil®)
  - Acetaminophen (Tylenol®)
- As you heal, you will feel less pain and will not need medication as often.

- **Pain control can help you:**
  - › have greater comfort while you heal.
  - › get well faster - with less pain you can walk, do your breathing exercises, and get your strength back more quickly.
  - › avoid problems like pneumonia (lung infection) and blood clots.
  - › leave the hospital sooner.
- **The following side effects are common with pain medication, but can be managed well. Tell your nurse if you have any of the following symptoms:**
  - › Itchy skin
  - › Nausea (upset stomach)
  - › Vomiting (throwing up)
  - › Heaviness in your legs
  - › Tingling or numbness
  - › Drowsiness and/or tiredness
  - › Dizziness
  - › Slowed breathing
  - › Constipation (not being able to poop)

Deep breathing and coughing

- We will encourage you to do deep breathing and coughing exercises. Deep breathing after surgery:
  - › keeps your lungs fully expanded (made bigger).
  - › clears mucus from your lungs and throat.
  - › lowers your chance of getting a chest infection (pneumonia).
- Deep breathing exercises work best when you are sitting up in a chair or on the side of the bed.
- You may be given a device called an incentive spirometer to help with this. An incentive spirometer helps you take deep breaths. Use it 10 times every hour when you are awake.

Practice this exercise before your surgery:

1. Blow out quickly 4 times.
2. Take a deep breath in and hold it.
3. Blow the breath all the way out.
4. Take another deep breath in and cough out — **clearing your throat is not enough**.
5. After surgery, repeat this exercise 2 times each hour while you are awake.

While coughing, hold a pillow firmly against your incisions. This will support your incisions and make coughing less painful.

After your surgery, your physiotherapist or nurse will check your breathing and work with you to clear the mucus from your lungs.

Activity

- Moving your body prevents blood clots from forming and being upright improves lung function.
- It is important to move your legs and feet, and turn every 2 hours while in bed.
- Try to get up and move around, or at least sit in a chair, as soon as possible after surgery. Then start walking.
- **Ask for help when you first start getting up.**

Your activity will be increased slowly over time as follows:

Evening of surgery

- About 6 hours after returning to the unit, we will help you to a sitting position on the side of your bed and to the bathroom.

Day after surgery

- Your nurse or physiotherapist will help you up to the chair at your bedside. If you are feeling comfortable, they will take you for a walk.
- When lying, sitting, or walking, try to keep good posture.
- Based on your progress, your activity will be increased each day. The goal is to be up in the chair and up walking at least 3 times a day.

At home

- Keep doing your deep breathing and coughing exercises. You may take the incentive spirometer home.

Pain

- You can expect to have soreness around the incisions for up to 2 weeks (14 days) after surgery. Your doctor may give you a prescription for pain medication. As your pain gets better, you should wait longer between doses.
- Your doctor may also suggest taking acetaminophen and ibuprofen at the same time to help manage your pain. Most people can stop taking prescription pain medications after a week (7 days).

How do I care for my incisions (cuts)?

- While you are in the hospital, your nurse will teach you how to care for your incisions at home.
- You may have Steri-Strips™ covering your incisions for up to 2 weeks.
- Avoid saunas, soaking in water (includes tub baths), hot tubs, whirlpools, and swimming pools until your incisions are healed (look closed like a cut on your finger, are not draining any fluid or blood, and are not painful, warm, or red). These activities can slow the healing of your incisions.
- Ask your health care team at discharge, when you can take a shower, bath, or sponge bath after surgery. Write the instructions here so you remember:

  _____

  _____

- **Tell your primary health care provider if your incisions get red or painful.** Signs of infection include:
  - › redness around the incisions that spreads.
  - › green, yellow, or smelly pus coming from the incision sites. It is common for fluids to drain for 3 to 5 days after surgery. Then, this should stop and your incisions should stay dry.
  - › increased pain or swelling around the incisions.
  - › temperature over 38° C (100.4° F). Signs of a fever may include chills, sweating, and headaches.

  If you notice any of these symptoms, call your surgeon's office right away.

- **For 4 to 6 weeks after your surgery, DO NOT lift, push, or pull anything heavier than 10 pounds.** For example, do not:
  - lift a baby or small child.
  - carry a grocery bag.
  - change bed sheets.
  - use a vacuum cleaner or lawn mower.
  - carry wet or dry laundry.
- Walking helps to increase your strength, keeps your lungs clear, and lowers the risk of complications. Walk regularly, starting slow. You should not get short of breath or feel exhausted (very tired). If this happens, stop and rest. Walk slower the next time. The goal is to get at least 30 minutes of activity a day.
- Going up and down stairs should not be a problem. We will practice this with you before you go home.
- You may have sex again whenever you feel ready.
- **Do not** drive until you feel ready. **Do not drive while taking pain medications.** You must wait 24 hours (1 day) after your last dose of pain medication before it is safe to drive.
- **Do not drink alcohol while taking pain medications.**
- At your follow-up appointment, talk with your surgeon about what activities you can do.

Nutrition

- You will get the *Esophageal Soft Diet* pamphlet before going home.
  - www.nshealth.ca/sites/nshealth.ca/files/patientinformation/1440.pdf
- The goal is to have about 2000 calories a day for females and 2500 calories a day for males. If you are concerned about whether you are getting enough calories, talk with a dietitian.
- It is important to **eat only soft, moist foods, and fluids that are easy to swallow for 6 weeks after surgery**. Do not return to your regular diet until you have had a follow-up appointment with your surgeon.
- Eat and drink slowly.
- Chew solid foods very well.
- Eat 6 small meals a day instead of 3 large meals.

Clinical Pathway

Terms used in this pathway are explained in the glossary on page 12.

	Pre-admission	Day of admission/surgery PRE-op	Day of admission/surgery POST-op
Tests	• Bloodwork • Chest X-ray • Electrocardiogram • Urinalysis (urine test)	• Bloodwork (if ordered)	• Bloodwork
Consults with other health care providers			• Respiratory therapy (if needed)
Treatments		• IV	• IV • NG tube • Urinary catheter • Incision dressings
Medication(s)		• Patient's own medication(s)	• Patient's own medication(s) • PPI IV • Oxygen • Pain medications • Medications by PO (by mouth)/NG tube • DVT prophylaxis

	Pre-admission	Day of admission/surgery PRE-op	Day of admission/surgery POST-op
Activity	• Independent (on your own)	• Independent	• Sit up on side of bed for 5 to 10 minutes at 8 p.m. and 4 a.m. • Sit up in chair, if able • Walk, if able • Use incentive spirometer every hour while awake
Nutrition		• You may have clear fluids only, 8 hours before surgery. • You will be given 500 ml clear apple juice or cranberry cocktail 3 hours before your surgery (called pre-op carbohydrate loading). • You must stop drinking 2 hours before your surgery.	• NPO
Planning information to review with your health care team	• Review this guide, including Clinical Pathway • Skin and bowel prep • Discharge plans, length of stay	• Review what will happen on day of surgery	

	Post-op Day 1	Post-op Day 2	Post-op Day 3
Tests	• Bloodwork	• Bloodwork	
Consults	• Physiotherapy • Dietitian		
Treatments	• Incision dressings • IVF (D/C if not needed) • Urinary catheter (D/C if not needed) • NG tube (D/C if not needed)	• Incision dressings	• Incision dressings
Medication(s)	• Patient's own medication(s) • Oxygen • PPI IV • DVT prophylaxis • Stool softener	• Patient's own medication(s) • PPI change to PO, if tolerating fluids • DVT prophylaxis • Stool softener	• Patient's own medication(s) • PPI PO • DVT prophylaxis • Stool softener
Activity	• Raise head of bed (HOB) 30 degrees or more • Up to chair at least 3 times a day • Walk 3 times a day advance, as able • Use incentive spirometer every hour while awake	• Raise HOB 30 degrees or more • Up to chair at least 3 times a day • Walk • Use incentive spirometer every hour while awake	• Raise HOB 30 degrees or more • Up to chair at least 3 times a day • Walk, as able • Use incentive spirometer every hour while awake
Nutrition	• IVF • **NPO to clear fluids**	• **Clear fluids to full fluids**	• **Full fluids to esophageal diet**

	Post-op Day 1	Post-op Day 2	Post-op Day 3
Discharge Planning information to review with your health care team	• Deep breathing and coughing • Activity • Eating guidelines • Pain control goals • Talk about issues that may affect discharge with your health care team.	• Deep breathing and coughing • Activity • Eating guidelines • Pain control goals • Talk about issues that may affect discharge with your health care team. • Meet with dietitian to go over Esophageal Soft Diet. Please ask any questions you may have.	• Before leaving, you will need: › prescriptions › follow-up appointments • Usually, you will be discharged by 11 a.m. on discharge day.

Glossary

APS: Acute Pain Service

Arterial catheter: this small catheter (thin hollow tube) is used only in the ICU/IMCU. It is inserted into an artery to measure blood pressure.

Bowel prep: You may need a laxative (medication to help you poop) before your surgery.

D/C if declassified: Once you are discharged from IMCU and move to 6A, this catheter must be removed, or "D/C'd" for short.

CXR: an X-ray of your chest area

DVT prophylaxis: the use of medications and other methods to prevent deep venous thrombosis

ECG/EKG (electrocardiography): a test that measures the electrical activity of the heartbeat

ICU (Intensive Care Unit): This unit is on 3A at the VG site. There is usually one nurse for each patient. Patients on this unit need closer monitoring than on the main surgical unit. Your vital signs (oxygen, breathing, blood pressure, heart rate, heart rhythm, etc.) will be closely monitored.

IMCU (Intermediate Care Unit): This is also known as the stepdown unit. The IMCU is on 6A or 6B at the VG site. There is one nurse for every 2 patients. Patients on this unint need closer monitoring than on the main surgical floor unit, but not as much monitoring as on the ICU.

IV: a tube inserted (put in) to a vein in your arm or hand

IVF (intravenous fluid): a tube inserted (put in) to a vein in your arm or hand to give liquids. "D/C" means to remove the tube once you are drinking well on your own.

J-Tube (jejunostomy): a feeding tube placed in the bowel for extra nutrition, especially if you had poor nutrition before getting sick

JP drain (Jackson-Pratt drain): rubber tube put in after surgery to drain bodily fluids from your incision(s)

Medications by PO/NG: medications given orally (by mouth) or through the nose using a nasogastric (NG) tube

NG tube (nasogastric tube): a tube inserted in the nose, down the throat and esophagus, into the stomach to give medications, liquids, or liquid food. The tube can also be used to relieve pressure or to drain stomach fluids.

NPO: short for the Latin saying “nothing by mouth”. This means you must not drink or eat anything through your mouth.

PACU (Post Anesthesia Care Unit): This is also known as the “recovery room”. The PACU is on the 10th floor of the Centennial Building at the VG site. You will be taken from the OR (operating room) to the PACU to recover. This is where you will wake up after your surgery. Your vital signs (oxygen, breathing, blood pressure, heart rate, heart rhythm, etc.) will be closely monitored.

PFT (pulmonary function test): a test used to measure how well the lungs are working

PO: short for the Latin saying “by mouth”

PPI (proton pump inhibitor): a substance taken orally (by mouth) used to lower the amount of acid made in the stomach

Skin prep: Your surgeon may need to shave the surgical area.

Urinalysis: a urine (pee) test to check for diseases, infections, or kidney problems

Urinary catheter: a catheter (thin hollow tube) put into the bladder to drain or collect urine. “D/C” means to remove the tube once it is no longer needed.

What are your questions?
Please ask. We are here to help you.

Questions for my health care team:

Notes:

Looking for more health information?
Find this pamphlet and all our patient resources here: https://library.nshealth.ca/PatientEducation
Contact your local public library for books, videos, magazines, and other resources.
For more information, go to http://library.novascotia.ca
Connect with a registered nurse in Nova Scotia any time: call 811 or visit https://811.novascotia.ca
Learn about other programs and services in your community: call 211 or visit http://ns.211.ca

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Adapted by: Physiotherapy and 6A, QEII
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Designed by: Nova Scotia Health Library Services

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The information in this pamphlet is to be updated every 3 years or as needed.