

Liver Resection

Information for patients and families

Read this information to learn:

- what a liver resection is
- what to expect
- how to care for yourself when you get home
- what problems to look out for
- who to call if you have any questions

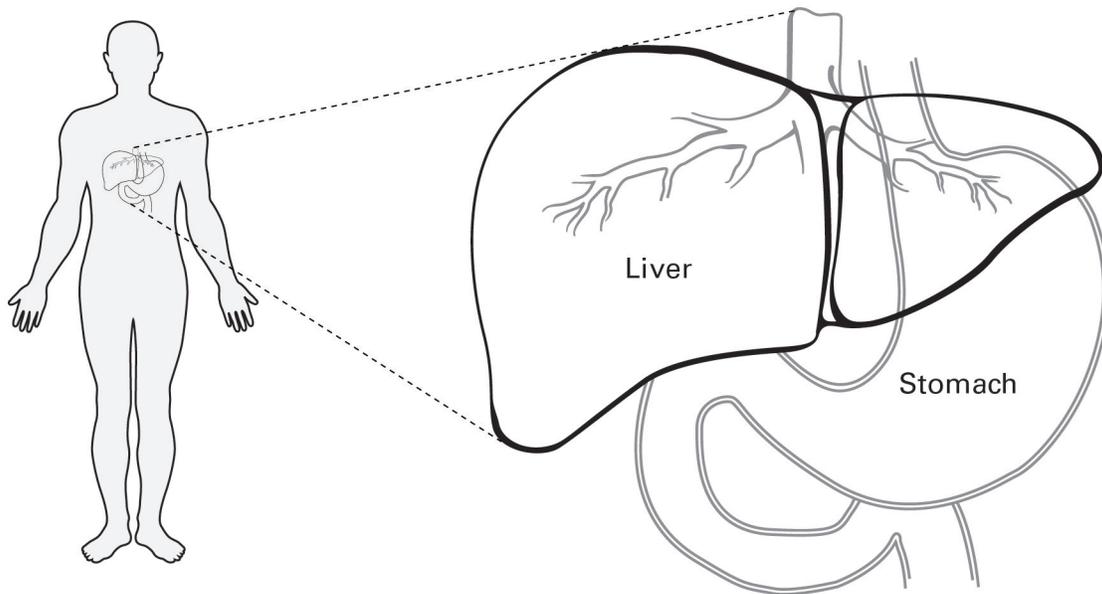
What is a liver resection?

A liver resection is surgery that removes a part of your liver. The goal of this surgery is to remove any part of your liver that is diseased. Your surgeon may also remove some surrounding tissue if necessary. You have this surgery to treat health problems like cancer, cirrhosis, and cysts.

Your surgeon can remove more than half (up to 80%) of your liver as long as the rest is healthy. Your liver regenerates (grows again) very well. Your remaining liver will grow back within the first few weeks, but it can take up to 3 months.

Please note: Most liver resections include removing your gallbladder because it is in the middle of your liver and it is often attached to the piece of liver that needs to be removed.





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Are there any risks?

There are risks with any surgery. With a liver resection, there is a small risk of bleeding. About 1 out of 5 people who have this surgery may need a blood transfusion). There is also a small risk of infection or bile leaking (about 1 in 10 people may have bile leaking).

Your surgeon and anesthesiologist (doctor who will give you medicine so you will sleep through the surgery) will talk to you about the risks and possible problems of the surgery. Ask as many questions as you need to understand the surgery and what to expect.

How can my family be involved in my care?

We encourage your family to be involved in your care. Things they can do include:

- coming with you when you have appointments or tests
- taking notes at appointments
- sharing information with other family members
- helping you make decisions
- helping with your care (for example, driving, making meals or cleaning)
- providing emotional support

How do I prepare for my surgery?

- ✓ You will have a preadmission appointment before your surgery. During this appointment, we will ask you about your medical history.
- ✓ **Some medicines may increase your risk of bleeding during or after your procedure. Tell your doctor or health care provider if you are taking:**
 - medicines such as acetylsalicylic acid (Aspirin®), clopidogrel (Plavix®), prasugrel (Effient®), ticagrelor (Brillinta®), ibuprofen (Advil®, Motrin®, Nuprin®), naproxen (Naprosyn®) or indomethacin
 - medicines such as warfarin (Coumadin®), dalteparin (Fragmin®), enoxaparin (Lovenox®), tinzaparin (Innohep®), fondaparinux (Arixtra®), dabigatran (Pradaxa®), rivaroxaban (Xarelto®) or apixaban (Eliquis®)

Your doctor or health care provider may tell you to stop taking these medicines for a certain number of days before your procedure.

- ✓ If you take certain medicines regularly, including herbal medicines, call your surgeon's office and ask if you should take them before your surgery.
- ✓ Bring your health card (OHIP) .
- ✓ Bring all the medicines you take or a list of all the medicines you take to the hospital.

Don't eat or drink anything after midnight the night before your surgery. Your stomach must be empty.

What can I expect after surgery?

Your surgery can take from 2 to 5 hours.

1. After your surgery we will take you to the Post Anesthesia Care Unit (PACU). You will stay there until you wake up.
2. We usually take you to the step down unit on the 9th floor Eaton building. Here, we closely monitor you for 24 to 48 hours.
3. Then we move you to a regular ward room on the same unit.

It's very important that your family also take care of themselves. Your family may become very tired while you are in hospital. The nurse may ask your family to take a break. This may mean they go home for a rest.

We have a visitor's lounge for you and your family. The visiting hours at the hospital are flexible. There is a rest period in the step down unit from 2:00 to 3:00 pm daily. Only 2 people may visit at a time.



Pain

You will have some pain from your incision. After your surgery and during the first few days in hospital, you may have an epidural or a Patient Controlled Analgesia (PCA) pump to help with pain.

- With an epidural, a doctor puts a small tube in your back. The tube is left in place to give you pain medicine after your surgery.
- With Patient Controlled Analgesia (PCA), you get pain medicine through your IV. You may have a PCA pump. This will allow you to give yourself pain medicine when you push a button.

Your anesthetist will talk to you about these types of pain control before your surgery. They will take away most of your pain so you can rest and take part in your care.

As you heal, you will need less pain medicine. Eventually, you will switch to oral pain medicine (medicine you take by mouth), usually 2 to 3 days after your surgery. Once you are able to drink fluids, you will receive a prescription for pain medicine before you go home from the hospital.



Medicines

During your hospital stay, your medicines may change. You will receive a print out of the prescription medicines you will need when you leave the hospital. Please review these with your nurse, surgeon, physician's assistant or pharmacist before you leave. You can talk to your family doctor if you have any questions.



How do I care for myself once I return home?



Food

After your surgery, you should not have to change what you eat unless your doctor gives you special instructions. Eat smaller meals more often for the first few weeks after your surgery.

After surgery, you may become constipated. This is sometimes caused by your pain medicine or because you're not moving around as much. Your doctor may prescribe you a stool softener or a laxative.

Eating more fiber (vegetables, fruits and bran) and drinking more water can help. Talk to your doctor if constipation becomes a problem.



Activity

For the first week or so you will feel tired and weak when you get home. It's important that you rest, but don't stay in bed all the time. Get up and do mild exercises like walking around the house or taking short walks. Continue with your deep breathing and coughing exercises.

Your health care team will let you know if there are movements you shouldn't do for a while. As you get better you will be able to start your regular daily activities. Don't do any stomach exercises until your doctor says it's OK.



Lifting

Don't do any heavy lifting, carrying, pushing or pulling **for at least 6 weeks**. These activities include things like vacuuming, carrying heavy groceries or shoveling snow. You may lift up to 10 pounds (about 5 kilograms).

Lifting more than this may put stress on your incision. Your surgeon will tell you when you can begin regular activities.



Incision (cut)

Your incision shouldn't need any special care. Take a look at your incision each day and check for signs of infection. Call the nurse navigator if your incision:

- becomes more swollen or red
- becomes more painful
- is warmer to the touch
- has any discharge (yellow, white, orange or bloody liquid) oozing out of it

You can get more information about signs of infection in your **Going Home after Surgery** booklet.



Showering or bathing

You can shower 2 to 3 days after surgery. Let the water run over your incisions. Pat your incisions dry with a clean towel. Don't rub.

Don't take baths, go in hot tubs or go swimming until your incision has healed on the outside. This usually takes about 14 days.



Driving

Don't drive for the first **2 to 3 weeks** you are home. Don't drive until you no longer need to take pain medicines that make you drowsy.



Sex

You can resume sexual activity when you feel comfortable. You may want to wait a few weeks until you have less pain and more energy. When you are able to climb 2 flights of stairs comfortably, you are probably ready for sexual activity. Choose positions that do not strain the muscles of your abdomen.



When will I have my follow-up appointment?

You will have a follow-up appointment with your surgeon within about 4 weeks. If you do not have an appointment for a follow-up before leaving the hospital, call your surgeon's office. You should call to arrange the appointment during the first week you are home.

Please bring your health card (OHIP) to your follow-up appointment.



Returning to work

At your follow-up appointment, you and your surgeon can talk about returning to work and decide what is best for you.

What if I had the surgery to treat cancer?

If you had a liver resection to remove a cancer, your surgeon will talk to you about the results of your surgery and any further treatment you may need.

What problems should I look out for?



Please call the nurse navigator at 416 262 1991 if:

- you have a fever higher than 38 °C or 101 °F
- you have severe nausea or vomiting (you can't keep anything down, even liquids)
- you have redness, swelling, odour, discharge or increasing pain around your incision
- you have pain or trouble going pee
- you have stomach pain and it doesn't get better after taking pain medicine



Please call if you have any other concerns. You can also see your family doctor. After hours or in case of an emergency, go to the nearest emergency department.

Who can I call if I have any questions?

Nurse Navigators Phone: 416 262 1991
General Surgery Clinic Phone: 416 340 4800, extension 8060
9ES General Surgery Unit Phone: 416 340 3522

LHIN Home and Community Care (ask for your local office)

Phone: 310 2222 (toll free – no area code)

Website: <http://healthcareathome.ca>

Hepatobiliary (HPB) surgeons:

Dr. Steven Gallinger Phone: 416 340 4412
Dr. Ian McGilvray Phone: 416 340 5242
Dr. Carol-anne Moulton Phone :416 340 5336
Dr. Gonzalo Sapisochin Phone: 416 340 5230
Dr. Trevor Reichman Phone: 416 340 4800 ext. 5404

For more general information about what to expect before and after your surgery, please see your **My Surgery** guide.

Visit www.uhnpatienteducation.ca for more health information. Contact us to provide feedback or request this brochure in a different format, such as large print or electronic formats: pfep@uhn.ca