

## Liver Resection

---

### What is a liver resection?

This is a surgical procedure where the surgeon removes part of the liver. It is done under general anesthetic which means you sleep during the procedure.

### Why do I need a liver resection?

This procedure is done for many reasons. Talk to your doctor about why you are having this surgery.

Up to 75% of liver tissue can be removed safely. The liver tissue left is usually able to regenerate and grow back to nearly original size in 6 to 8 weeks.

### What are the risks?

Your surgeon will talk to you about the risks and benefits of this procedure. Make sure you understand these before you sign a consent. Some of the risks you will talk about are:

- severe bleeding during the procedure
- possible need for a blood transfusion after surgery
- infection
- bile leakage from the liver

## Getting Ready . . .

---

### Pre-Admission Assessment Clinic Visit

You will get an appointment to come to a Pre-Admission visit at St. Joseph's Hospital 1 to 3 weeks before your procedure. In this clinic, the nurse will tell you what to expect and how to get ready at home. The nurse will also tell you when to come to the hospital on the day of your procedure.

The nurse will tell you how long to plan to stay in the hospital:

- If you have the open method, the stay is 4 to 5 days
- If you have the laparoscopic method, the stay is 1 to 2 days

You will also meet with an anesthetist to plan your general anesthetic.

# The Day of the Procedure . . .

---

## Day Surgery Registration

You will check in at the Day Surgery Area at your assigned time. You will be called into the unit alone. Your support person will stay in the waiting room until he or she is called in.

## Day Surgery Unit

Your nurse will greet you and get you settled. The nurse will review your health history. You will have a needle and tube put into a vein in your arm. This is called an intravenous or IV. This is used to give you fluid and medication. You may also have a medication to relax you while you wait.

After you are ready, your nurse will call in your support person to wait with you.

## In the Operating Room

You are taken to the operating room on a stretcher. Staff in this room will greet you wearing operating room clothes. They will help you move onto the operating room table.

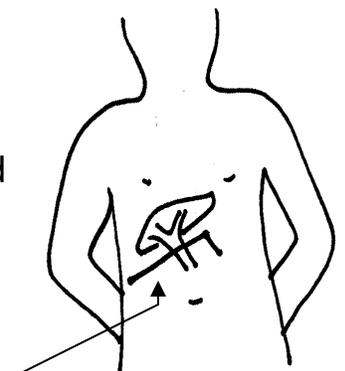
The anesthetist will then put you to sleep for the procedure. A special tube is then placed in your throat to help you breathe.

The skin on your abdomen is cleaned with a special solution then draped with sterile cloth and surgery starts.

## Open Method . . .

Your surgeon makes an incision in the upper right area of your abdomen below your ribs. A sterile ultrasound probe is used to find the diseased tissue before it is removed. The whole liver is examined to find all of the sections that need removing. Some tissue may also be destroyed by a special instrument called **RadioFrequency thermal Ablation** or **RFA**.

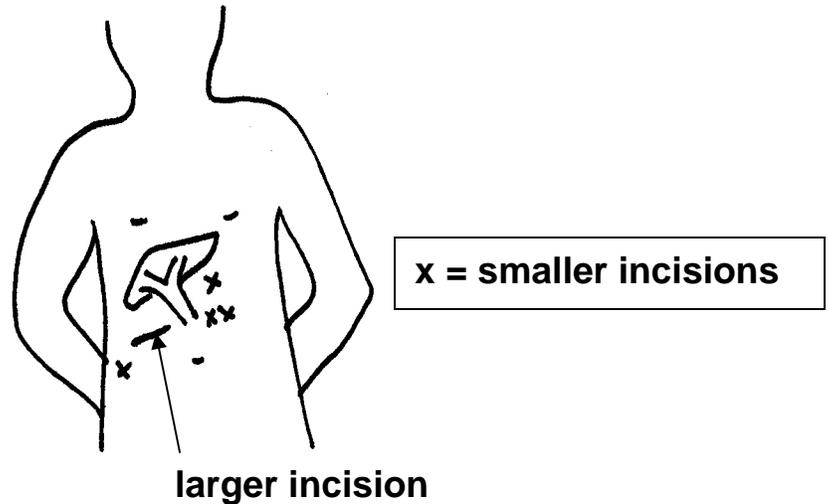
The incision is closed with stitches and a dressing.



## Laparoscopic Method . . .

For this method, 4 to 5 small incisions and 1 larger incision are made in the abdomen. Instruments are put into these incisions to do the surgery. One incision has a small telescope with a camera at the end for the surgeon to see. The other incisions are used for surgical instruments. The larger incision is used to remove the tissue.

Here is a picture of where the incisions may be:



## After the Procedure . . .

---

### Recovery Room

You are taken to the Recovery area where nurses look after you until you are fully awake. If you have pain or nausea, tell your nurse.

### Intensive Care Unit or the Step Down Unit

When you are fully awake and stable, you will go to a nursing unit for care and monitoring.

## Care After Surgery . . .

---

### Intravenous fluids

The IV will stay in until you are able to drink fluids without any problems. The IV often comes out the day after surgery.

## Drain

You may have a tube with suction to collect fluids after surgery. Your nurses will monitor the drainage and look after this tube. Your nurse will remove this when it is no longer needed.

## Pain control

To help control pain you will have a PCA pump. Your nurse will explain how to use it. This computerized pump is programmed to give you pain control medication when you press a button. Most people have the pump for 1 day then take oral pain medication after that.

Other ways to relieve pain and discomfort are:

- drinking warm fluids
- walking
- any method of relaxation, such as listening to music or deep breathing

When you go home, take the pain control medication suggested by your doctor. Your pain should become less each day. If your pain does not decrease, call your family doctor or surgeon.



## What activity can I do?

### Deep breathing, coughing and circulation exercises

Do your deep breathing, coughing and circulation exercises each hour, while you are awake. When you are able to get up and walk around, you do not need to do these exercises.

### Walking

Moving and walking can help you recover. Ask your nurse to help you the first time you get up after surgery. As you feel stronger, you will be able to take longer walks.

At home, gradually resume your normal activities. Do not do heavy lifting or strenuous exercise until you check with your surgeon.



## Hygiene

If you had laparoscopic surgery, you may shower the day after surgery. Try not to get your incisions too wet. Do not use soap on your abdomen. Pat your incisions dry. You can have a tub bath after your incisions have healed.

If you had the open method, sponge bath until the incision is healed. If your incision gets wet, pat is dry. You can have a tub bath after the incision has healed.

## Nutrition

You will have clear fluids first until you can drink without having nausea or vomiting. You will then progress slowly progress to eating soft foods then a full diet.

Healthy eating is important for your recovery. Choose fruit, vegetables and whole-grain products. To avoid constipation eat fruit, vegetables and whole grain products. It is also a good idea to increase the amount of fluid you drink. Talk to your surgeon or ask to see a dietitian about the amount of fluid to drink if you have kidney or heart problems.



## Incision care

While you are in hospital, the nurses look after you incision and dressing and teach you how to do this at home.

## At Home . . .

### Pain or Discomfort

For pain or discomfort, take pain control medication as prescribed by your doctor. You should need less pain control medication each day.

### Incision Care

Look at the incisions each day. Each incision should be a dry, closed line. Your incisions may be covered with tape. Try to keep the tape clean and dry. If the tape falls off at home, you can leave it off.

If you have stitches or clips in the incisions, they will be taken out at your follow-up visit with the surgeon.

## Nutrition

You can follow your normal diet when you get home.

Healthy eating is important for your recovery. Choose fruit, vegetables and whole-grain products. To avoid constipation eat fruit, vegetables and whole grain products. It is also a good idea to increase the amount of fluid you drink. Talk to your family doctor about the amount of fluid to drink if you have kidney or heart problems.



## Sexual activity

You can resume sexual activity when you feel comfortable.

## Activity

Gradually resume your normal activities. Do not do heavy lifting or strenuous exercise until you check with your surgeon.



## Returning to work

The usual time off work is 2 weeks. This time can vary depending on the type of work you do. Talk with your doctor about when you can expect to return to work.

If you had the open method, plan to be off work 6 to 8 weeks.

## Follow-up . . .

If you have stitches that need to be taken out, call your family doctor to make an appointment.

You should have an appointment to talk to your doctor about your results and your treatment plan. If you do not have an appointment, call to make one.



**Contact your doctor right away or seek emergency help if you have:**

- bleeding from any incision
- any incision that is red, swollen, or has drainage
- a fever
- pain that gets worse



• Centre for Ambulatory Health Services • St. Joseph's Hospital • Centre for Mountain Health Services