

Liver surgery

You will be having surgery to remove a tumour(s) from your liver.

This handout will help you learn about the surgery, how to prepare for surgery and your care after surgery.

Surgery can be done in 2 ways: laparoscopic or the open method.

Laparoscopic

You are put to sleep with a general anesthesia. The surgery is done using several small incisions (cuts) in your abdomen and 1 larger incision in your upper abdomen (below the rib cage and above the belly button).

The surgery usually takes about 3 to 5 hours.

Plan to be in the hospital for about 3 to 5 days.

Open method

You are put to sleep with a general anesthesia.

The surgeon makes a larger incision in your upper abdomen (below the rib cage and above the belly button). The surgery usually takes about 3 to 5 hours, but may take longer.

Plan to be in the hospital for about 1 week.

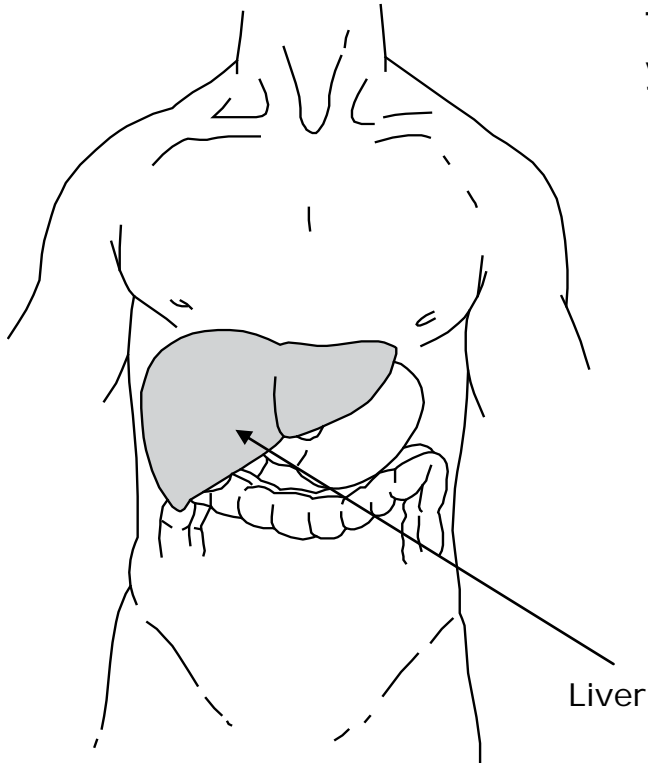
Table of contents

Topic	Page
The Liver	3
Before and after surgery	4 to 7
Call your surgeon, if you have	8

Research

During your clinic visit and hospital stay you may be asked to take part in a research study. The research will be explained to you. You can decide whether you want to take part or not. If you decide not to take part, your care will not be affected.

Liver



The liver does many things to keep you healthy:

- changes sugar into energy
- helps with the digestion of fats
- helps to get rid of waste products
- it stores and filters blood
- helps blood clot

Removing part of the liver

How much liver is removed depends on the size and location of the tumour(s). Because the liver can grow back to its normal size, a large part of it can be removed. It takes about 3 weeks for the liver function to return to normal. Most people return to their normal activities after having liver surgery.

Preparing before surgery

Keep up with your regular activities, exercise and eat a balanced diet. You want to be as strong as you can before you have the surgery.

Do not drink alcohol.

Arrange for someone to help you around the house, and do errands for you when you come home after surgery.

Follow the pre-op checklist and medication instructions that were given to you during your pre-op visit.

Your belly button needs to be cleaned before your surgery. Wash it with soap and warm water the night before your surgery. It is very important to clean the inside of your belly button very well.

Day of your surgery

On the morning of your surgery you go to Same Day Surgery (SDS) at the Juravinski Hospital. A nurse will admit you and start your intravenous, or IV. You may be given some medications. You will then go to the Operating Room (OR), either walking or on a stretcher. Your family may go with you and wait in the waiting area outside of the OR.

After surgery

After your surgery, you will go to a hospital bed where you will be closely watched. This could be in the Intensive Care Unit (ICU), or Observational Unit on E4/F4.

A nurse will be with you as you wake up. Your nurse will check your blood pressure, heart rate and temperature (vital signs) and dressing as needed.

Along with your IV, you may have:

- A Patient Controlled Analgesia (PCA) pump – where you push a button to give yourself the pain medication.
- An epidural catheter which is when the pain medicine is given through a thin tube into a small space in your lower back.
- A tube called a foley catheter in your bladder to drain urine.
- Tubes or drains near your incision area to drain extra fluid that can build up after surgery.
- To wear special pressure stockings, (TED stockings) or boots (moon boots). These stockings and boots keep blood moving and help prevent blood clots after surgery.

Pain

You will have pain and discomfort after surgery, especially around your incisions. Pain medicine will be given to you on a regular basis to keep you comfortable and your pain under control. As you heal, your pain should lessen each day.

Pain medicine can be given in different ways:

- PCA pump
- epidural - usually given for 3 to 5 days
- in your intravenous, or IV
- pills - when you are able to drink fluids

Most pain medicines can make you constipated. Stool softeners will be given to help prevent this problem.

You may also have stomach discomfort related to gas pains for a few days after surgery. Walking helps to lessen this discomfort.

Subcutaneous injections

After surgery you will need medication to prevent blood clots. This medication is given with a needle under the skin. It is called a subcutaneous injection.

Dressing and incision

You can shower when you get home. Do not take a bath until your incision is healed.

With the laparoscopic method, each incision should be a dry closed line. Your incisions may be covered with tape (steri-strips), try to keep the tape clean and dry. If the tape falls off, you can leave it off. The incisions will be closed with dissolvable stitches

With the open method, the incision will be covered by a dressing. The dressing will be removed 2 to 3 days after surgery. The incision will be closed with dissolvable stitches or staples (clips) which will be taken out about a week after your surgery.

If the staples are still in when you leave the hospital, they may be taken out by your family doctor, home care nurse or at your follow-up appointment with your surgeon.

Activity

While in the hospital you will feel tired and unwell. While rest is important, getting up and walking can help most patients feel better and recover quicker. You will be encouraged to do deep breathing, coughing and leg exercises after surgery.

Walking and increasing your activities helps to keep your lungs healthy, prevent blood clots and get your bowels moving.

Move as much as possible while in the hospital:

- Sit up near the edge of the bed and dangle your legs.
 - Sit up in a chair for meals.
 - Sit up when visiting.
 - Walk around the hallway (before doing this, ask for assistance from your nurse or therapist).
-

Feeling tired

It is normal to feel tired after surgery. It may take weeks to months for your energy to return to normal. Everyday do a bit more, walk a little farther.

At home, gradually resume your normal activities. Avoid heavy lifting (5 lbs or 2 kgs) or straining for at least 6 to 8 weeks. Do not do any heavy lifting or strenuous exercises until you check with your surgeon.

Eating

The IV will continue to run after surgery, giving you fluids and medicine. Your IV is removed when you are drinking and if not needed for medicine. Slowly, you will start drinking clear fluids, then progress to eating solid foods. You may find that you need to eat small amounts of food 4 to 6 times a day.

You may also feel nauseated or sick to your stomach. Medicine will be given to decrease this feeling.

Going home

You will need transportation home. If you are taking strong pain medicine with a narcotic, such as morphine do not drive, operate heavy machinery or drink alcohol.

When you go home, you will be given:

- ✓ prescriptions for pain medicine and a stool softener. Do not take Tylenol unless instructed by your surgeon. **Too much Tylenol can harm the liver.**
- ✓ a follow-up appointment with your surgeon.

Your nurse will review with you what you need to know about how to care for yourself at home. Discuss your concerns with your nurse. Ask the nurse to explain or clarify anything you do not understand. We want to ensure you know what to do when you go home.

Alcohol

Alcohol is cleared from the body through the liver. **Do not drink alcohol until you have talked with your surgeon.**

Call your surgeon if you notice ANY of these problems:

-
- | | |
|--------------|---|
| Fever | <ul style="list-style-type: none">• Your temperature is 38°C (100°F) or higher. |
|--------------|---|
-
- | | |
|-----------------|--|
| Incision | <ul style="list-style-type: none">• Pain in your incision that does not get better with medication.• Your incision is coming open, bleeding, draining or has yellow, green or smelly discharge.• The skin around your incision is red or swollen.• You are concerned about your incision. |
|-----------------|--|
-
- | | |
|----------------|---|
| Abdomen | <ul style="list-style-type: none">• You are constipated, or no bowel movement in 3 days.• You are vomiting or have diarrhea.• You have pain in your abdomen or feel sick to your stomach. |
|----------------|---|
-
- | | |
|-------------|--|
| Skin | <ul style="list-style-type: none">• You notice that the whites of your eyes or your skin looks yellow. |
|-------------|--|
-
- | | |
|--------------|---|
| Other | <ul style="list-style-type: none">! You have pain or tenderness in your leg (thigh or calf) with swelling, redness or warmth.! You have trouble breathing, chest pain or cough up blood.! You have lightheadedness or dizziness that does not go away.! You have a rapid heart beat (palpitations), facial flushing, sweating. |
|--------------|---|
-

If you have concerns about your surgery, do not wait for your follow-up appointment, call your surgeon. If you are unable to reach the surgeon, go to Emergency.



**Problems marked with this sign are emergencies.
Call 911 or go to Emergency.**
