

# Liver Transplant

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A liver transplant is a surgical procedure to remove a diseased liver and replace it with a healthy liver from a donor. Most liver transplant operations use livers from deceased donors, though a liver may also come from a living donor.

Liver transplant is a treatment option for people who have end-stage liver failure that can't be controlled using other treatments and for some people with liver cancer. Liver failure can occur rapidly, in a matter of weeks (acute liver failure), or it can occur slowly over months and years (chronic liver failure).

Liver failure has many causes, including:

- Liver cirrhosis
- Biliary duct atresia
- Cystic fibrosis
- Early-stage liver cancer
- Hemochromatosis
- Primary biliary cirrhosis
- Primary sclerosing cholangitis
- Wilson's disease

## Indications for liver transplant include:

- Hepatitis B
- Hepatitis C
- Alcohol induced cirrhosis
- Autoimmune Hepatitis
- Liver tumors
- Acute/fulminant liver failure



## Complication

As with any other surgical procedure, complications may arise after liver transplantation. Liver transplant surgery carries a risk of significant complications, including:

- Bile duct complications, including bile duct leaks or shrinking of the bile ducts
- Bleeding
- Blood clots
- Failure of donated liver

- Infection
- Memory and thinking problems
- Rejection of donated liver

## **Bleeding**

There is a small risk of bleeding from the place where the donor and recipient blood vessels were sewn together (Anastomosis site). This is minimized by monitoring clotting factors in the blood after surgery.

## **Rejection**

Your body will recognize your new organ as foreign and immune cells (lymphocytes) can attack the transplanted organ. Most patients experience some degree of rejection, but it is usually easily reversed with medications. Rejection occurs when your body's natural defenses, called the immune system, damage the new liver. Your immune system keeps you healthy by fighting against things that don't belong in your body, such as bacteria and viruses. After a transplant, it is common for your immune system to fight against the liver and try to destroy it.

## **Hepatic Artery Thrombosis:**

A clot can form in the hepatic artery that can cause the liver to malfunction. We perform an ultrasound the day after surgery to look for this complication and monitor you throughout your postoperative course. If it is found, medications or surgical repair can minimize permanent damage and avoid re transplantation.

## **Infection**

Your immune system is suppressed after a transplant making you more at risk for certain infections. We will prescribe medications to prevent the more common post transplant infections. You will need to monitor your temperature at home and make certain adjustments in your daily life to avoid harmful infections.

## **Precautions**

The first three months after transplant are the most risky for getting such infections as the flu, so patients should follow these precautions:

- A fever that continues for more than 2 days
- shortness of breath
- A cough that produces a yellowish or greenish substance
- Tell the doctor if you are exposed to any disease.

- Tell the doctor if a cold sore, rash, or water blister appears on the body or spots appear in the throat or on the tongue.
- Stay out of crowds and rooms with poor circulation.
- Stay away from soil, including those in which house-plants are grown, and gardens, during the three months following transplant.
- Take all medications as directed.
- Learn to report the early symptoms of infection.
- Wash hands after coughing or sneezing, and throw tissues into the trash immediately.
- Avoid handling animal waste and avoid contact with animals who roam outside. Do not clean bird cages or fish or turtle tanks or cat litter. The cat litter box should be covered and taken out of a patient's home before it is changed.
- If someone in the patient's family becomes ill with a cold or flu, have that individual follow normal precautions (use separate drinking glasses, covering their mouths when coughing, etc.)
- If the patient has a wound and must change his own dressing, wash hands before and after.

To ensure that the transplant is successful and that the patient has a long and healthy life, keep in touch with doctors and nurses, and follow their advice. Nutrition plays a big part of a liver transplant, so what a patient eats after the transplant is very important.

### **After Surgery**

- You will stay in the hospital for 1 to 3 weeks to be sure your new liver is working. Your Doctor will give you medicines to prevent rejection of your new liver and to prevent infections. Your doctor will check for bleeding, infections, and rejection. During this time you will learn how to take care of yourself and use your medicines to protect your new liver after you go home.
- In the hospital, you will slowly start eating again. First you will start with liquids, and then to solid food as your new liver starts work.
- After you leave the hospital, you will see your doctor often to be sure your new liver is working well. You will have regular blood tests to check that your new liver is not being damaged by rejection, infection, or problems with blood vessels. Report your Doctor if any illnesses. It is important to do what your doctor says to take care of your new liver.

### **Diet and Nutrition**

You have been ill for a long time prior to your transplant. Therefore your Diet is an important part of your recovery, Eat healthy and balanced diet will help get you back on your feet again. Your diet should include:

- Fruits.
- Vegetables.
- Whole-grain cereals and breads.
- Low -fat milk and dairy products
- Lean meats, fish, or other sources of protein

**Further recommendations:**

- Avoid snacks such as cakes and biscuits between meals. If you are hungry, eat vegetables or fruits.
  - Buy small amounts of milk products. So that you can eat them while they are still fresh
- Use of sodium (salt), sugar, and fat - Use of salt may be restricted to help limit fluid retention and to control blood pressure and blood sugar. A low-fat, low-sugar diet will help control weight and blood sugar. Consult a nutritionist regarding the use of salt, sugar, and fat in a diet