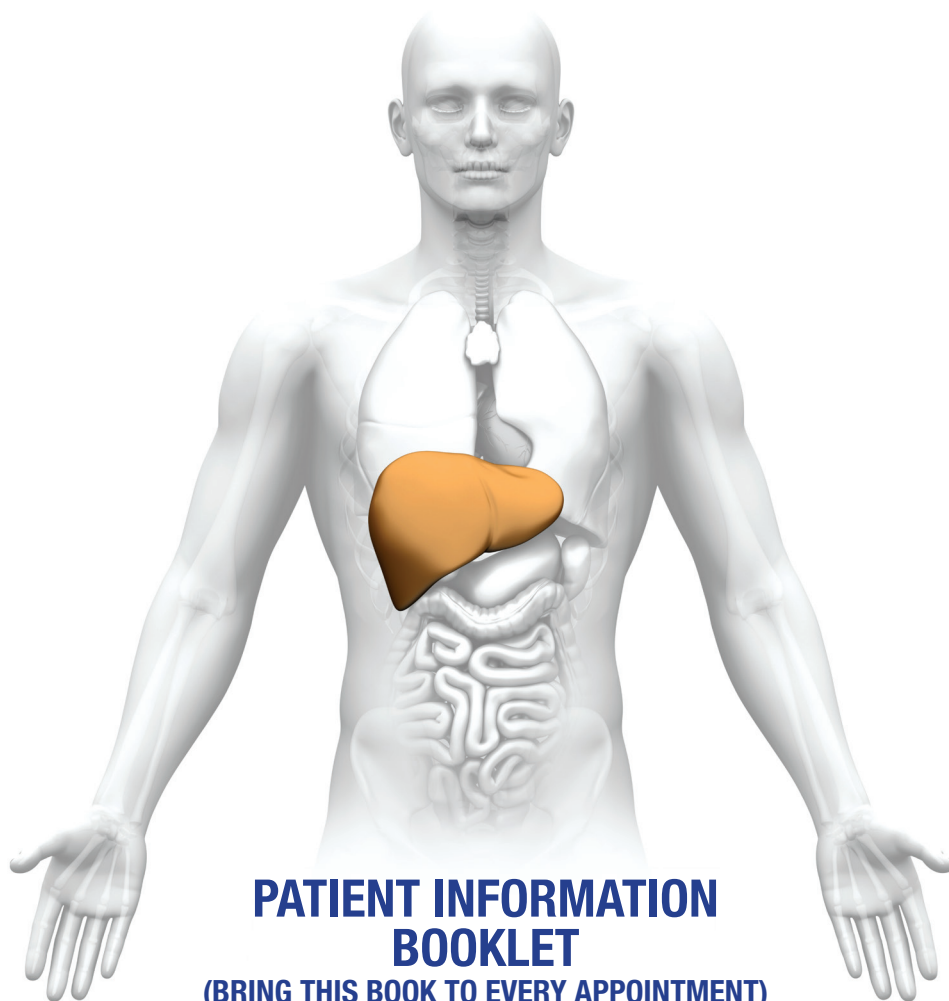


LIVER CIRRHOSIS



**PATIENT INFORMATION
BOOKLET**
(BRING THIS BOOK TO EVERY APPOINTMENT)



Health
Western Sydney
Local Health District

DEPARTMENT OF GASTROENTEROLOGY

DEPARTMENT OF GASTROENTEROLOGY & HEPATOLOGY

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WELCOME!

Welcome to the Storr Liver Centre.

We are an experienced and trusted multidisciplinary team dedicated to managing patients with *Liver Cirrhosis* and *Advanced Liver Disease*.

However, you as the patient can help **US** to help **YOU**. You can make a huge difference to your health by attending your appointments and scans, maintaining a healthy weight, eating right and taking all of your prescribed medications.

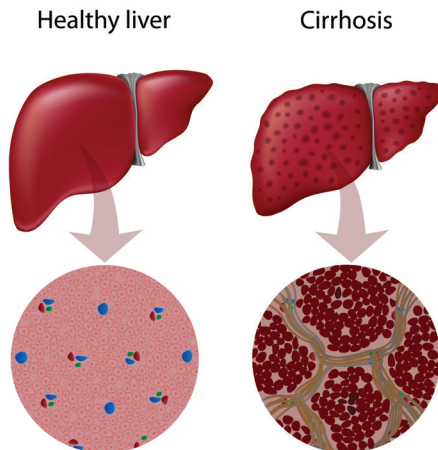
If you have any questions, please feel free to contact us on (02) 8890 7419.

WHAT IS LIVER CIRRHOSIS?

Liver cirrhosis simply means scarring of the liver. Scarring of the liver is a concern as it causes healthy liver cells to die and be replaced by stiff scar tissue. This process happens slowly and is often irreversible and may lead to the whole liver hardening and becoming scarred and shrunken.

There are many causes of liver cirrhosis. The most common are caused by chronic Hepatitis B and C infections as well as long term heavy alcohol consumption. It may also be caused by fat build-up in the liver. This is seen in people who are overweight or who have diabetes.

There are other less common causes of cirrhosis such as autoimmune hepatitis (where the body's immune system attacks the liver) as well as certain medications and environmental chemicals.



WHY IS CIRRHOSIS A PROBLEM?

A liver with cirrhosis becomes very hardened and lumpy with scar tissue. This makes it very hard for blood to flow through the liver. This causes a build-up or pressure on one side of the liver causing the pressure to increase *inside* the veins that are attached to the liver.

Imagine a hose full of water that has been kinked at one end. This causes the water to build up and flow back toward the tap.



One of the veins affected is called the **portal vein**, which is responsible for bringing blood to the liver. When the pressure in this vein is increased it is called **Portal Hypertension**.

This then causes a backflow of blood (like the kinked up hose) up into the spleen. The size of the spleen then increases causing it to store platelets (a type of blood cell) which affect how well your blood clots.

Besides causing problems with blood flow, the scar tissue also limits how well the liver can do its job.

The liver's role is to filter and remove toxins, produce bile to break down nutrients, control blood clotting and produce important proteins.

When the liver cannot carry out these vital roles it causes many of the toxins to escape into the body causing confusion and trouble concentrating.

WHAT ARE THE SYMPTOMS OF CIRRHOSIS?

There are two (2) different stages of cirrhosis – **compensated** and **decompensated**.

Compensated cirrhosis often has little or no symptoms. This is because there are still enough healthy cells in the liver to do its job. At this point the liver can 'compensate' or make up for the previous damage.

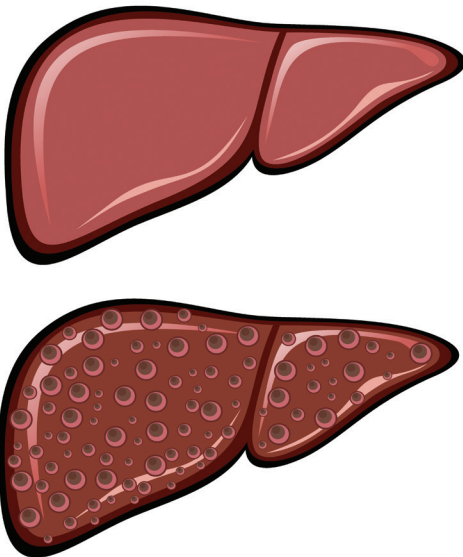
However, if the liver continues to be damaged (from untreated Hepatitis, poor diet or alcohol use) the healthy liver cells will become stressed and no longer function well.

Symptoms you may feel include;

* Fatigue * Poor Appetite * Weight loss

When the healthy liver cells become too overwhelmed you may progress from compensated to decompensated cirrhosis.

Decompensated cirrhosis is very serious. People with decompensated cirrhosis notice a rapid decline in their health and will experience signs and symptoms of liver failure.



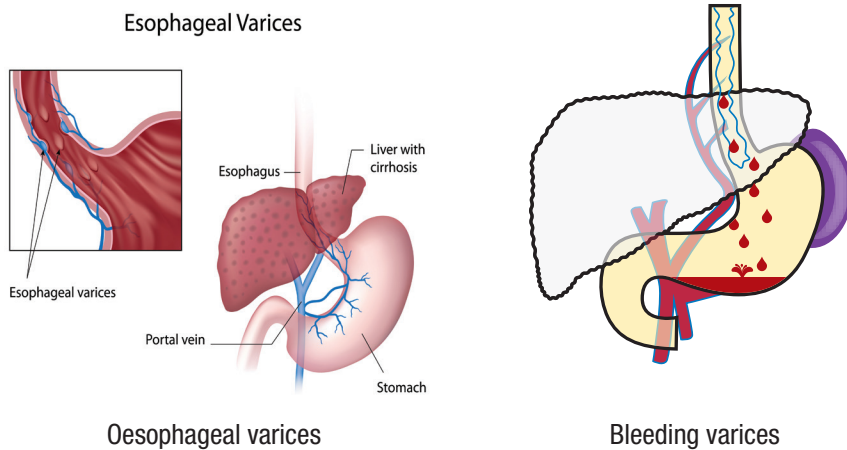
SOME SIGNS AND SYMPTOMS OF DECOMPENSATION

1. Variceal Bleeding

Because of increased pressure in the veins, some of the larger blood vessels in your oesophagus (feeding tube) become swollen and enlarged.

This can put you at risk of the vessels bursting open – this is called *bleeding varices*.

WHEN THIS HAPPENS IT IS AN EMERGENCY. IF YOU VOMIT BLOOD OR NOTICE YOUR STOOLS BECOMING BLACK AND TARRY YOU MUST GO TO YOUR NEAREST EMERGENCY ROOM IMMEDIATELY.



2. Encephalopathy (Mental Confusion)

When you have cirrhosis your liver is unable to filter toxins out of your body. When this happens toxins such as ammonia can enter the brain and cause confusion. This is called *encephalopathy* (*en-cef-a-lop-a-thy*).

Early stages of encephalopathy affect your sleep patterns. You may notice that you have trouble sleeping at night but feel very sleepy during the day.

You or your loved ones may also notice changes to your mood and concentration. All of these symptoms may be early stages of encephalopathy and need to be mentioned at your next appointment.

You may be prescribed medications to prevent encephalopathy occurring. They include Lactulose and / or rifaximin. Lactulose works by giving loose bowel motions and thereby reducing the amount of ammonia levels in the blood. Rifaximin is an antibiotic that reduces the amount of ammonia build-up in the body.

It is important that if prescribed you take this medication regularly in order to prevent you getting encephalopathy.

ENCEPHALOPATHY CAN BE VERY SERIOUS.

IF YOU OR YOUR LOVED ONES NOTICE THAT YOU ARE CONFUSED OR VERY SLEEPY YOU SHOULD GO IMMEDIATELY TO THE HOSPITAL EMERGENCY ROOM.



3. Ascites

High pressure in the veins that is caused by cirrhosis can also cause a build-up of fluid in the stomach. This is called *ascites* (*uh-sigh-teez*).

The belly becomes very large and you will notice a sudden increase in weight.

You will probably feel quite uncomfortable and eating will become difficult as you will always feel full.

You may also find that breathing becomes difficult, especially when you lie down.

ASCITES CAN BE LIFE-THREATENING IF YOU GET AN INFECTION IN THE FLUID.

IF YOU SUDDENLY EXPERIENCE STOMACH PAINS OR GET A FEVER YOU NEED TO GO TO THE HOSPITAL EMERGENCY ROOM IMMEDIATELY.



4. Jaundice

Jaundice is yellowing of the skin and whites of the eyes that is caused by a build-up of Bilirubin. Bilirubin is a substance that is normally filtered by the healthy liver.

If you notice jaundice for the first time, it could be a sign that your liver may be getting worse or an infection. See your doctor immediately if this happens.



MANAGING YOUR CIRRHOSIS

Although there is no cure for cirrhosis, there are many things we do to monitor how well your liver is coping with having cirrhosis.

Liver Cancer Screening

When you have cirrhosis you are at a higher risk of developing liver cancer. Liver cancer is very serious and for this reason we will send you for an ultrasound of your liver *every 6 months* to monitor this.



It is very important that you attend these appointments.

Ascitic Fluid Drainage

If your ascites becomes too uncomfortable or large you may need to have the fluid drained. This is called a *paracentesis* or *ascitic tap*. Your doctor or nurse will explain the procedure further if it is required.

Blood Tests

Before your appointments in the clinic you will need to have blood tests done so that we can monitor how well your liver is working. It is important that you have these blood tests done as close to your appointment as possible.



Medications

There are many different medications that you may be prescribed by the doctors at the liver clinic. It is very important that they are taken exactly as prescribed.



One such medication is **Lactulose**, a sticky liquid medication that may be prescribed to you to prevent encephalopathy (confusion). This medication works by absorbing the toxins in your body and passes them out with a bowel motion. Although it can increase the amount of times you open your bowels each day and be inconvenient, it is extremely important that you continue with this medication. Please feel free to speak to the clinic nurses if you are having problems with taking Lactulose.



Nutrition and Liver Cirrhosis

As part of your regular clinic visits to manage your cirrhosis, your doctor or nurse may suggest that you make an appointment to see the clinic dietician.

Because cirrhosis stops the liver from working properly, certain chemicals that provide energy to the body are unable to be released from the liver. This causes the body to use your fat and muscle stores for energy.

This leads to unhealthy weight loss and muscle wasting which can be very serious for your health.

To prevent this, the dietician will thoroughly assess your dietary requirements and help you to formulate an eating plan that focuses on a high energy, high protein diet to maintain muscle and to keep the body working normally.

Why is nutrition important in liver cirrhosis?

Good nutrition is very important to support your liver's function when you have liver cirrhosis. Nutritional deficiencies, weight loss and muscle wasting are common in liver cirrhosis, and can be managed with the right diet.

Not everyone with liver cirrhosis will need to follow the same diet, therefore it is important to see a dietician at your liver clinic who can provide dietary information specific to your condition.



Do I need to follow a special diet?

Liver Cirrhosis

In the early stages of liver cirrhosis, there is often no need for a specialised diet. Good nutrition can support your liver function and overall health. You should follow a healthy and well balanced diet and maintain a healthy weight. Your diet should contain lots of variety from all food groups including breads and cereals, fruits and vegetables, lean meats (and alternatives like lentils and legumes), and dairy (and alternatives like soy). Each food group provides your body with essential nutrients so it is important that you do not remove any of these food groups from your diet.

Advanced Liver Disease

If your liver cirrhosis is more advanced (Advanced Liver Disease) your dietitian will recommend a more specialised diet. It is common to experience symptoms such as a poor appetite, nausea, reduced energy levels or fluid retention in the legs (oedema) or abdomen (ascites). These symptoms often make it difficult to eat as much food (particularly protein) as your body needs. A poor diet, as well as poor liver function, can cause malnutrition and muscle wasting (particularly in your arms and around your shoulders, chest and back). If you have Advanced Liver Disease it is very important that you speak to your doctor and dietician about your diet. They may recommend a high protein, low salt (sodium) diet.

If you have been advised to follow a high protein diet, foods that you should eat more of include: meat, poultry, seafood, eggs, milk, yoghurt, cheese, nuts, seeds, lentils, legumes and soy products. Your doctor or dietician may also recommend special protein supplement drinks.

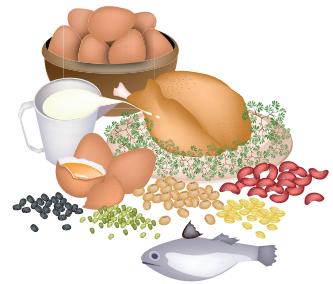
If you have been advised to follow a low salt (low sodium) diet you should not add salt to foods in cooking or at the table, and you should avoid high salt processed foods, takeaway and condiments.

Most people with Advanced Liver Disease find that eating several small meals a day helps, especially if your appetite is poor. It is recommended that you eat six to eight small meals per day, and have a good snack before you go to bed.

How can I see a dietician?

Your doctor or liver nurse can refer you to see a dietician. In your first appointment with a dietician, they will conduct a nutritional assessment which involves:

- Taking measurements of your weight, height, Body Mass Index (BMI). They may sometimes measure your hand grip strength and the size of your muscles in your upper arms.
- Asking about your clinical symptoms which may be impacting on how much you can eat and drink.
- Assessing the foods and drinks you are having, specific to the needs of your liver and any other medical conditions that you have.



The dietician will then provide you with practical recommendations about your diet and nutrition to help support your liver function and overall health. Your dietary needs may change over time, so your dietician will follow up with you to make sure you are always eating the best diet for your liver.

CONTACT NUMBERS

UNIVERSITY CLINIC: WESTMEAD HOSPITAL: 8890 6544
9881 8000; SELECT BLACKTOWN HOSPITAL; SELECT AMBULATORY CARE

APPOINTMENT DIARY

Date	Time	Appointment type	Location	Referral needed
				Yes/No
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APPOINTMENT DIARY (CONTINUED)

Date	Time	Appointment type	Location	Referral needed
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MEDICATION LIST

MEDICATION	Dose (How many mg)	Frequency (How often)

WEIGHT TRACKER

Date	Weight

ULTRASOUND APPOINTMENTS

Date	Next Due

GASTROSCOPY BOOKINGS

Date	Result

NOTES



Health

Western Sydney
Local Health District

**University Clinics: Westmead Hospital;
Blacktown Hospital Ambulatory Care**

Westmead Hospital Level 2

Cnr Hawkesbury & Darcy Road

Westmead NSW 2145

Phone: (02) 8890 7705

Email: storr.admin@sydney.edu.au

<https://www.wslhd.health.nsw.gov.au/Westmead-Hospital>

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