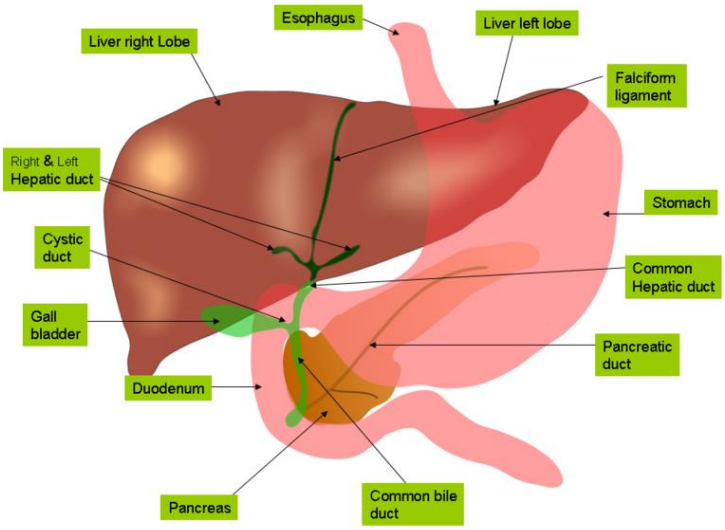
Liver Cirrhosis:
A Toolkit for Patients

Bring this book to every appointment



Division of Gastroenterology and Hepatology

University of Michigan
Health System

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Title page image: "Anatomy of the biliary tree, liver and gall bladder" ©Jiju Kurian Punnoose is licensed under a Creative Commons Attribution 3.0 Unported License.

Welcome

Welcome to the Cirrhosis Management Program at the University of Michigan. As your healthcare team, we take pride in doing everything possible to maximize your health. However, we cannot do this alone. You, the patient, can make an enormous difference in your health by eating right, taking your medications properly, and taking control of your disease management. This toolkit provides you with the information and tools you need to make informed decisions, avoid hospital stays and ER visits, and improve your quality of life.

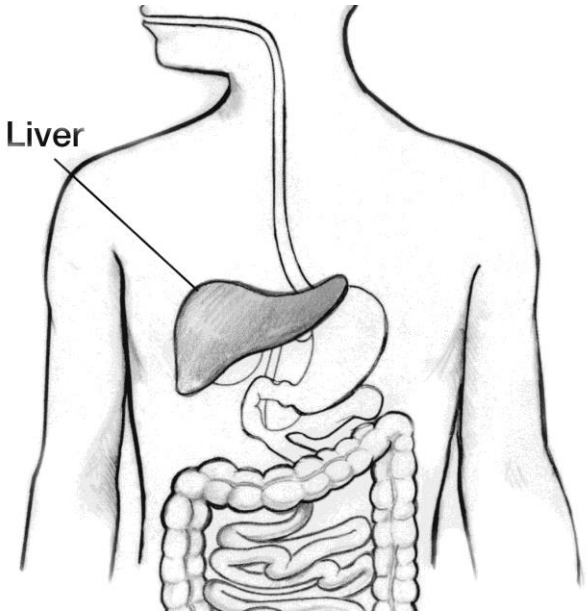
To schedule an appointment, call: **888-229-7408**

To speak with a nurse, call: **800-395-6431**

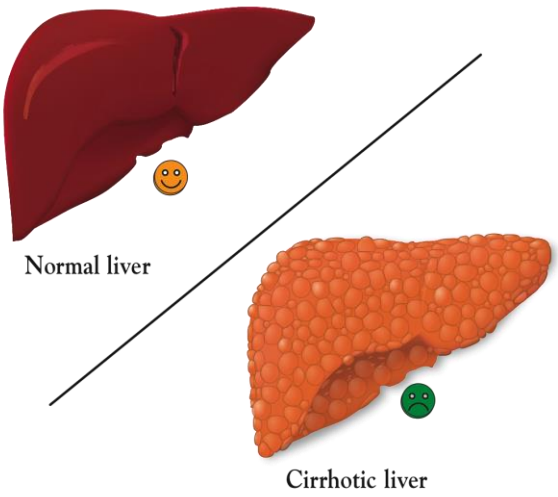
What is the liver?

The liver is the body's largest internal organ. It is an essential organ and the body cannot survive without it. The liver has many important functions including

- Preventing infections
- Removing bacteria and toxins from the blood
- Digesting food and processing medications and hormones
- Making proteins that help the blood clot
- Storing vitamins, minerals, fats, and sugars for use by the body

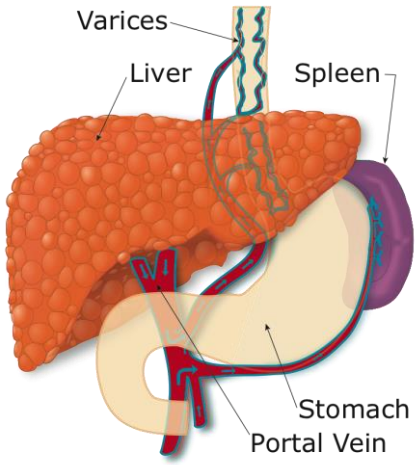


What is liver cirrhosis?

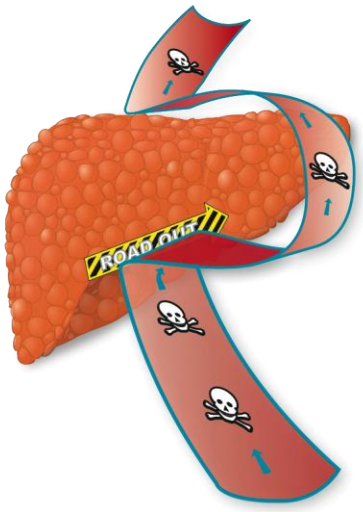


When something attacks and damages the liver, liver cells are killed and scar tissue is formed. This scarring process is called **fibrosis** (pronounced "fi-bro-sis"), and it happens slowly over many years. When the whole liver is scarred, it shrinks and hardens. This is called **cirrhosis**, and usually this damage cannot be undone. Any illness that affects the liver over a long period of time may lead to fibrosis and, eventually, cirrhosis. Heavy drinking and viruses (like hepatitis C or B) are common causes of cirrhosis. However, there are other causes as well. Cirrhosis may be caused by a buildup of fat in the liver of people who are overweight or have diabetes. Some people inherit genes that cause liver disease. Other causes include certain prescribed and over-the-counter medicines, environmental poisons, and autoimmune hepatitis, a condition in which a person's own immune system attacks the liver as if it were a foreign body.

What happens when you have cirrhosis?



Cirrhosis causes the liver to become lumpy and stiff. This prevents blood from flowing through the liver easily and causes the build-up of pressure in the portal vein, the vein that brings blood to the liver. High pressure in the portal vein is called **portal hypertension**. To relieve this pressure, the blood goes around the portal vein, through other veins. Some of these veins, called **varices**, can be found in the pipe that carries food from your mouth to your stomach (the esophagus) or in your stomach itself.



Portal hypertension also causes blood to back up into another organ called the spleen. This causes the spleen to get bigger and destroy more platelets than usual. Platelets are blood cells that help in blood clotting. With cirrhosis, blood is blocked from entering the liver and toxic substances that the liver normally filters escapes into general blood circulation.

Aside from the problems with liver blood flow, when cirrhosis is advanced, there aren't enough healthy liver cells to make good substances, such as albumin (a protein) and clotting factors that the liver normally makes. Another complication is Liver cancer, called **hepatocellular carcinoma** (HCC). This cancer can occur if some of the sick liver cells start to multiply out of control. Liver cancer, may occur in any stage of cirrhosis. There may be no signs of liver cancer until the cancer has grown very large and causes pain.

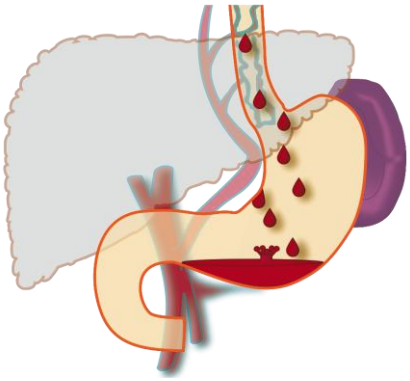
What are the symptoms of cirrhosis?

The early stage of cirrhosis is called **compensated cirrhosis**. At this stage you may have no symptoms at all. In fact, a person may live many years with cirrhosis without being aware that her liver is scarred. This is because the pressure in the portal vein is not yet too high and there are still enough healthy liver cells to keep up with the body's needs. But if nothing is done about the cause of cirrhosis (for example, if the person continues to drink alcohol, or if hepatitis or other causes of cirrhosis are not treated), the pressure in the portal vein gets higher and the few remaining healthy liver cells are not able to do all the work for the entire liver.

At that point, you may notice symptoms like low energy, poor appetite, weight loss, or loss of muscle mass. As the disease progresses symptoms become more severe and may be life threatening. Advanced cirrhosis is called **decompensated cirrhosis**. At this stage you can also develop the following

serious problems:

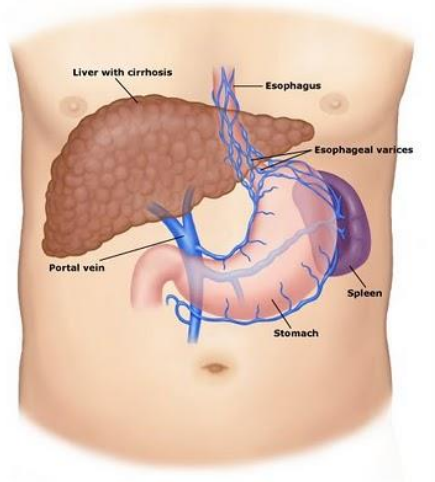
- **bleeding varices** - internal bleeding from large blood vessels in the esophagus
- **ascites** (pronounced “a-sigh-tees”) - a buildup of fluid in the belly,
- **encephalopathy** (pronounced “en-sef-a-lop-a-thee”) - confusion from the buildup of toxins in the blood
- **Jaundice** - yellowing of the eyes and skin,



Sometimes, if the damaging agent (such as alcohol) is removed, the liver can slowly heal. Other times, the only way to cure cirrhosis is to replace the sick liver with a healthy liver – this is called liver transplantation.

Treating the complications of decompensated cirrhosis

Preventing bleeding from Esophageal Varices



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Backup of blood from the scarred liver may cause the veins in the wall of the esophagus to enlarge. The esophagus is the swallowing tube that connects the throat to the stomach. The pressure inside the enlarged veins, called esophageal varices, is higher than normal. The increased pressure can cause the

veins to burst, leading to sudden and severe bleeding.

Bleeding varices can be very severe, causing death if not treated immediately. Signs of bleeding varices include vomiting of large amounts of fresh blood or clots. People who have signs of bleeding varices should go to an emergency room immediately.

If you vomit blood or your stool turns black and tarry, **you must go to the emergency room immediately**. These are signs that varices may have begun to bleed, and this can be life threatening.

Unless the varices break and bleed, patients have no symptoms and do not know they have varices.

What can be done to prevent serious bleeding?

If you have liver disease that could cause varices to form, your doctor will usually recommend that you have an **upper endoscopy test** (EGD) to determine if varices are present and what their size is. Larger varices have a higher risk of breaking and bleeding, and if you have them your doctor will start treatment with medications called Beta Blockers.

Beta blockers help reduce blood flow and pressure in varices. They include

- Propranolol (Inderal®), taken twice a day
- Nadolol (Corgard®), taken once a day
- Carvedilol (Coreg®), taken twice a day
    - Your doctor will generally start you on a very low dose of one of these drugs and check your heart rate (pulse). The goal of treatment is to give you enough of one of these drugs to reduce your heart rate by 25%. The dose of medicine will be increased slowly until this goal is reached.

- Most people with low blood pressure tolerate beta blockers well. Tell your doctor if you get dizzy and lightheaded after taking these medicines.

If varices do bleed, doctors may apply rubber bands to the varices to block them. If the varices still bleed after treatment with medication and rubber bands, you may need a TIPS procedure (Transjugular Intrahepatic Portosystemic Shunt). With this procedure the doctor creates an internal tunnel in the liver that reduces blood flow and pressure in varices.

Managing ascites

Another problem caused by high pressure in the veins of the liver is ascites.

Fluid leaks out into the belly and begins to fill it up. This can make the abdomen (belly) enlarge like a balloon filled with water. The legs can get swollen too. This can be very uncomfortable.

Ascites may make it difficult to eat because there is less room for food. It can also be difficult to breath, especially when you are lying down. The most dangerous problem associated with ascites is infection, which can be life threatening.

> If you have ascites and you suddenly get a fever or new belly pain, **you must go to the emergency room immediately**. These could be signs of a serious infection that can be life threatening.

Abdominal Anatomy

The **abdominal cavity** (the belly) contains the digestive organs such as the stomach, intestines and liver. Normally, the abdominal contents are moist, but contain no fluid. Ascites is a medical condition in which excess fluid begins to puddle within the abdominal cavity. This fluid is **outside** of the intestines and collects between the abdominal wall and the organs within.

Causes of Ascites

Liver disease is the most common cause of ascites. The word "cirrhosis" means "scar tissue," so this condition is often called “cirrhosis of the liver”. This scar tissue changes the normally smooth liver surface to a lumpy surface that blocks the blood from exiting the liver. If the blood cannot flow freely, too much pressure builds up in the liver tissue. This is called **portal hypertension**. This condition causes the surface of the liver to "weep" fluid into the abdominal cavity. The fluid collects in the belly and causes ascites. The liver also sends signals to the kidney to “hold on” to salt, resulting in fluid retention in the legs or abdomen.

Symptoms

In mild cases, there are usually no symptoms. As more fluid collects, the abdomen swells. There may be a loss of appetite, frequent heartburn, fullness after eating, or abdominal pain. Eventually, there is swelling of the abdomen that looks similar to the later stages of pregnancy. This may cause back pain, changes in bowel function, and fatigue. During the day, gravity may carry some of the fluid down into the scrotum (the sac that hold the testicles) or legs causing swelling, (**edema)**. Initially, the swelling may go down overnight. As the condition worsens, however, the swelling may spread up the leg and be present day and night. As more fluid builds up, it may spread up to the chest and cause difficulty breathing.

Treatment

Ascites is not actually a disease, but a symptom. The proper treatment depends upon the underlying cause. If infection, cancer, or heart failure is the cause, the treatment is directed appropriately to the underlying problem. However, in the majority of patients, ascites is a sign of advanced liver failure, or cirrhosis of the liver. The basis of treatment includes:

- **Avoiding further liver damage**
  Patients who drink alcohol must stop all alcohol consumption.
- **Low salt (sodium) diet**
  The buildup of ascetic fluid is not the result of too much water intake, but

rather the body's inability to keep in too much sodium (salt). For this reason, it is important to cut down on salt intake, not water intake. Dietary sodium intake is usually restricted to less than 2000 mg per day (about 1 teaspoon). **Most salt in a person's diet comes from processed foods, not from the salt shaker.**

- **Diuretic therapy ("Water Pills")**
  These medications help the body get rid of extra sodium and water through the kidneys. Common medications include spironolactone (Aldactone®), and furosemide (Lasix®). One treatment plan begins with 100 mg of spironolactone and 40 mg of furosemide every AM. If there is no weight loss in the first two weeks, the dose is gradually increased up to a maximum of 400 mg of spironolactone and 160 mg of furosemide daily. Response to treatment varies and finding out which treatment plan works best for you takes time, as the doctor adjusts the dose of medications over a period of weeks or months.
- **Paracentesis (Tap)**
  Paracentesis is the draining of fluid out of the abdomen with a needle. This is done using local anesthetic (lidocaine). The drained fluid is tested in the lab see if it contains. Tap provides a very quick relief of ascites symptoms, but it does not correct the underlying cause so the fluid eventually returns. You must follow strict sodium restriction and diuretic therapy in order to slow down the re-accumulation of fluid. Tap also has some serious side effects:
    - Removing 5 liters or more at one time can cause a drop in blood pressure, and kidney damage. To prevent this complication your doctor may decide to give you **Intravenous** (IV) **albumin** . IV means that the medicine will be given directly into the vein.
    - Frequent taps can increase the risk of infection, and cause an imbalance of nutrients (potassium and sodium) levels in the blood. It can also worsen kidney function.
- **Monitor Progress**
  During treatment, it is important that your doctor monitors you closely

with periodic measurements of body weight and blood tests. This is especially true in patients taking diuretics (which may cause reduced kidney function and changes in the blood levels of sodium and potassium). The best way, you, the patient, can help the doctors manage your fluid problem is by recording your weight and dose of water pills (diuretics) you take every day. Use the log on page 27 of the toolkit to record your weight and diuretic dose daily. In addition keep track of dates when you have taps (paracentesis).

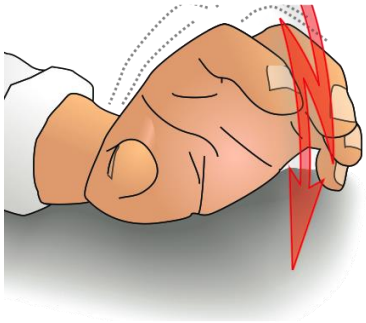
- **Spontaneous bacterial peritonitis**
  This condition occurs when the ascites fluid becomes infected, and can be life threatening. Symptoms include fever and abdominal pain but these symptoms may be absent during the early stages. If you have an infection of the ascites fluid, you will need to be admitted for IV antibiotics. After the first episode of peritonitis you will have to take an antibiotic pill to prevent recurrence of peritonitis. Even patients who have never had peritonitis, but need frequent paracentesis (Tap), may need to take antibiotics to prevent this infection from developing.
- **Hepatorenal syndrome**
  This refers to kidney failure that sometimes develops in patients with end-stage liver disease. This may happen suddenly or as a slowly progressive process. To treat the condition your doctor will stop diuretic therapy and IV fluids, and will search for a cause that can be reversed such as dehydration or infection. Rapid kidney failure in people with cirrhosis who have ascites has a 90% chance of death if liver transplant is not performed.
- **Transjugular intrahepatic portosystemic shunt, or TIPS** procedure,
  TIPS is the placement of a shunt within the liver to improve blood flow. TIPS procedure is performed through the veins and does not require abdominal surgery. TIPS can help control bleeding from varices if other simple measures fail. In some cases it can also help to decrease fluid buildup (ascites). About 30% of patients develop increased mental confusion after TIPS, and in some cases the shunt must be closed back

down if this occurs. Rarely, progressive jaundice and liver failure develops after a TIPS procedure.

- **Liver transplant**
  Development of ascites as a complication of cirrhosis of the liver is a concerning sign. Liver transplant is the best treatment in appropriate candidates, but unfortunately, not all patients qualify for this procedure. Liver transplant should be considered in anyone having decompensated cirrhosis (see section on "About liver cirrhosis").

Managing Hepatic Encephalopathy

A poorly working liver may not be able to get rid of toxic substances like ammonia (which comes from the intestines), and it may allow these substances to go into the brain and cause confusion. Besides confusion, toxins in the brain cause changes in sleep, mood, concentration, and memory. If it gets really bad, these toxins can even cause a coma.



These changes are all symptoms of **hepatic encephalopathy**. If you have encephalopathy, you may have problems driving, writing, calculating, and performing other activities of daily living. Signs of encephalopathy are trembling and hand "flapping". Encephalopathy may occur when you have an infection or when you have internal bleeding. It may also occur if you are constipated or take too many water pills or take tranquilizers or sleeping pills.

Only an expert in liver diseases can diagnose Hepatic encephalopathy. Having elevated ammonia in the blood does not necessarily mean you have this diagnosis.

If you are not acting like yourself, if you are confused, or if you are very sleepy, **you must be taken to the emergency room immediately**. These symptoms could be a sign of a serious medical problem. **Do not drive** when you have these symptoms.

Effects of Hepatic Encephalopathy:

- **Even low levels of hepatic encephalopathy may cause problems with safe driving.** Patients, family member and doctors will discuss the issue of driving and decide if the patient is able to drive. If patients have any confusion they should not drive.
- Even when not confused, patients may have difficulty with normal sleeping cycles and may be more irritable, "cranky" and forgetful. They may have worsening handwriting and may not be able to complete simple arithmetic correctly. Family members need to supervise or take over financial calculations, bill paying, etc.
- Infections can bring on or worsen hepatic encephalopathy quickly. If patients rapidly become worse with confusion, the patient must be brought to an emergency room to evaluate them for infection, other blood problems or dehydration.
- Patients with cirrhosis and even early hepatic encephalopathy are very sensitive to drugs such as narcotic pain medications, valium-like drugs (benzodiazepines) and other sedating drugs. If a person with cirrhosis must take any of these drugs, she should take the lowest possible dose, and should be watched for increased confusion.

Treatment for hepatic encephalopathy consists of:

1. **Lactulose syrup taken daily.** Lactulose is an artificial sugar that cannot be digested by the stomach or intestines. It goes into the large bowel (colon). In the colon, it causes protein toxins to be held in the bowel (not absorbed in the body) and expelled in stool. Sometimes it is possible to take Lactulose as a powder (kristulose®) which is mixed with water or juice. The powder form is not sweet and many patients find it easier to take. Other laxatives will not do the same thing.

   Patients usually start with 2 or more tabelspoons of lactulose syruponce or twice a day. The dose is gradually increased until the patient is having 3 loose stools a day. **Lactulose is one of the only medicines where it is**

up to the patient and family to adjust the dose. Increase the dose if your stools are firm, if you are having fewer than 3 stools per day, or on days when you are more forgetful or confused. Decrease the dose if you are having more than 3 loose stools per day.

2. **Antibiotics that work only in the intestine.** These include rifaximin (Xifaxin®) and neomycin. These medications change the type of bacteria in the intestine to the kind that help get rid of toxins.

Managing Jaundice (yellowing of the eyes and skin)

A liver that is working poorly cannot get rid of bilirubin, a substance that produces a yellowing of the eyes and skin, called jaundice. Too much alcohol and some medicines can also lead to jaundice. If you have cirrhosis and notice jaundice for the first time, it may be a sign of worsening of your liver function, an infection, or other new problems.

If you suddenly develop jaundice, **call your doctor immediately**.

Living with Cirrhosis

Diet

- ✓ **Low sodium (salt)**

  A low salt diet is important for patients with liver disease, particularly those with leg swelling or ascites (fluid in the abdomen). The more salt you eat, the more fluid buildup you will experience.

- ✓ **How do I watch a low salt diet?**

  Read the label on all your foods, and try to eat less than **2,000 mg** of sodium per day. High salt foods include: all foods in restaurants or fast food places, most canned food, pickles, tomato juice, chips and crackers. Also, if you have a well with a water softener, this adds lots of salt to the water.

- ✓ **How can I make food taste good without salt?**

  Use "Mrs. Dash" or other spices. Avoid "salt substitutes" because they contain too much potassium. **Unfortunately, "sea salt" has just as much sodium as regular salt.**

- ✓ **What about sugar and fat?**

  These will not harm the liver when eaten in moderation. However, you may need to watch these if you have diabetes, heart disease, or high cholesterol.

- ✓ **What if I am told my "sodium level" is too low?**

  This is usually a result of too much water in the body. This does **not** mean that you should eat more salt! See below about fluid restriction.

- ✓ **Do I need to limit fluid intake?**

  Drinking lots of fluid will not make your ascites or leg swelling worse; only salt will do that. Most patients with cirrhosis do not need to limit fluid intake, unless your sodium level is less than 125 mmol/L. Ask your hepatologist (UM liver specialist) whether you need to watch your fluid intake.

Low-Salt Food Choices

Good Choices	Avoid
Meats and Meat Alternatives: • Fresh beef, pork, veal, lamb, poultry, fish • Eggs • Dried beans, peas, lentils • Unsalted nuts, unsalted peanut butter	• Processed meats (bacon, sausage, pepperoni, hot dogs, ham, luncheon/deli meats, corned beef, anchovies, sardines, caviar) • Meat alternatives/vegetarian entrees • Dried meat, smoked fish • Salted nuts, salted peanut butter • Microwave/frozen meals
Milk, Yogurt, Cheeses: • Milk or yogurt • Frozen yogurt, ice cream • Natural Swiss cheese • Low-sodium cheeses • Low-sodium cottage cheeses	• Buttermilk, malted milk • Processed cocoa • Processed cheese • Bleu, feta, and other salty cheeses • Regular cottage cheese
Breads, Cereal, Rice, and Pasta: • Bread, rolls, breadsticks without salt or cheese • Plain taco shells, tortillas • Pasta, barley, rice cooked without salt • Unsalted cooked cereal • Low-sodium crackers • Homemade soup with low-sodium ingredients	• Breads, rolls, breadsticks made with garlic/onion salt, or cheese • Stuffing mixes • Pasta or rice with seasoning packets • Instant hot cereals, ready-to-eat cereals • Salted crackers • Regular canned or dry soups, broths, bouillons • Baking mixes such as cakes, pancakes, waffle or muffins

Good Choices	Avoid
Vegetables: • Fresh/frozen vegetables without salt added • Homemade tomato sauces	• Canned vegetables, vegetable juices • Pre-made spaghetti/tomato sauces • Instant mashed potatoes, boxed • Sauerkraut, olives, pickled vegetables
Fruits: • Any kind of fruit or fruit juice, fresh, frozen, or canned	• Adding salt to fruits (such as melon) • Glazed or crystallized fruit
Snacks: • Fresh fruits and vegetables • Unsalted popcorn • Unsalted pretzels • Unsalted nuts • Unsalted crackers	• Potato chips, corn chips, taco chips • Regular popcorn • Regular pretzels • Regular nuts • Other salty snack foods
Beverages: • Water, fruit juices • Milk • Coffee, decaf coffee, teas • Cocoa made with milk • Soda with no sodium (limit 24 oz or less per day)	• Gatorade • Powerade • Vegetable juices (V-8) • Instant cocoa mixes • Instant cappuccino mixes
Desserts: • Gelatin desserts • Homemade tapioca or rice pudding • Custard made with milk • Hard candy • Homemade cake, cookies, pie, sherbet, ice cream (limit to 1 serving or less per day)	• Instant pudding or other pre-packaged dessert mix • Whipped topping • Frozen pies • Minced meat pies

Good Choices	Avoid
Fats and Oils (use sparingly): • Vegetable oil and mayonnaise • Unsalted butter or margarine • Unsalted or low-sodium salad dressing • Low-sodium cream, non-dairy creamers • Unsalted nuts • Avocado	• Salted spices (garlic and onion salts, etc) • Soy sauce, tartar sauce, teriyaki sauce • Salsa, Worcestershire sauce, bouillon • Sweet & sour sauces, steak and BBQ sauce • **Monosodium glutamate (MSG)** • Ketchup, relish, seasoning/coating mix, meat tenderizers, flavored vinegar • Cooking wine
Seasoning and Condiments: • Herbs and spices without salt (Mrs. Dash) • Lemon • Fresh garlic, onion • Fresh horseradish • Low-sodium ketchup, low-sodium hot sauce • Low-sodium chili sauce	• Salad dressings containing sodium • Bacon and bacon fat • Gravy made with mixes or bouillon • Snack dips made with processed cheese or instant soup mixes • **Avoid "salt substitute" as this contains high levels of potassium**

Medications (over-the-counter and prescribed by other doctors)

- Patients with cirrhosis must avoid pain medications called "**non-steroidal anti-inflammatories (NSAIDS)**". These include over-the-counter medications such as ibuprofen (Motrin®, Advil®), naprosyn (Aleve®), as well as some prescription medications. Ask your doctor if any of your medications are NSAIDS.

- For mild to moderate aches and pains, **it is safe to use Tylenol® (acetaminophen) at doses of 2,000 mg/day or less** (no more than 6 regular strength or no more than 4 extra strength each day AND no more than 20 regular strength or no more than 15 extra strength each week). Some cold medicines and prescription pain medicines contain acetaminophen, so read the labels and make sure you don't take too much by mistake.
- Most other prescription medications are safe for the liver. You are not at increased risk of side effects just because you have cirrhosis. In particular, **statins** such as Lipitor® and Zocor® can be used for treating cholesterol in patients with liver disease. You will require the same monitoring like other patients without liver disease.

Surgery

- Surgery can be quite risky in patients with cirrhosis. If you are considering having any type of surgery, please be sure to ask your hepatologist (UM liver specialist) if this is safe for you. If there are any concerns, please ask your surgeon to talk to your hepatologist.

Hospital stays

- It is very important for us to keep track of any hospital stays you have. Please call the Liver Management Nurses if you are admitted to an outside hospital, and call again once you are discharged.

Screening for liver cancer

- People with cirrhosis are at increased risk for liver cancer – the risk is about 1 in 100 per year (each year, out of 100 patients with cirrhosis, one will develop liver cancer). All patients with cirrhosis should have an ultrasound and blood test called an alfa-fetoprotein (AFP) **every 6 months**.
- Although these tests are not perfect, they can often detect the tumor when it is small, before people develop symptoms. If the ultrasound or AFP is abnormal, the next step is MRI or CT scan. Since MRI and CT scan

have gotten so good, in many cases a biopsy is not needed to make the diagnosis.

Vaccination

- If you have never been vaccinated against hepatitis A or B, we will check to see if you are immune (already have protection). If not, we will recommend vaccination, which can be arranged to be done near your home. The schedule is shots at 0, 1, and 6 months.
- The yearly influenza vaccination (flu shot) is also recommended**. It is important that you receive the inactivated vaccine (injection), not the live form (nasal drop).**

My Healthcare Team

Primary Care Doctor:

Name	Address	Telephone

Specialist doctors(s):

Name and Specialty	Address	Telephone

Health Insurance Information:

Insurance Company:	
Insured's Name:	
Patient's Name:	
Group #:	
Pharmacy Phone #: Pharmacy Fax #:	

Ask your doctor for a 3 month prescription if you do a mail order

Current Medication List

Last updated:

Medication Name	Prescribing doctor	Strength (ex: mg)	Frequency (ex: 3 times per day)	Number taken at a time (ex: 2 tabs)	Dose changed on:

Medication Name	Prescribing doctor	Strength (ex: mg)	Frequency (ex: 3 times per day)	Number taken at a time (ex: 2 tabs)	Dose changed on:

Medication Name	Prescribing doctor	Strength (ex: mg)	Frequency (ex: 3 times per day)	Number taken at a time (ex: 2 tabs)	Dose changed on:

My Appointment Planner

Date	Time	Appointmen type	Appointment location	Refills needed?	Do I need a Driver for appointment?
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No

Date	Time	Appointment type	Appointment location	Refills needed?	Do I need a driver for appointment?
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No
				Yes / No	Yes / No

Weight Log

Weight	Diuretic (water pill) dose:	Date

Weight	Diuretic (water pill) dose:	Date

Schedule for Bloodwork

– Keep lab orders in attached sleeve

– Have outside labs faxed to UM at 734-763-4574

Appointment	Location	Phone/Fax # of lab	Date

Appointment	Location	Phone/Fax # of lab	Date

Disclaimer: This document is for informational purposes only and is not intended to take the place of the care and attention of your personal physician or other professional medical services. Talk with your doctor if you have Questions about individual health concerns or specific treatment options.

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