Cirrhosis is the scarring of the liver. Hard scar tissue replaces soft, healthy tissue.

Cirrhosis is caused by chronic (long-term) liver diseases that damage liver tissue.

Leading risks for cirrhosis include chronic hepatitis C, excessive use of alcohol, and Nonalcoholic Steatohepatitis (NASH).

Other causes of cirrhosis include:
- Autoimmune Hepatitis
- Alpha-1 antitrypsin deficiency
- Hemochromatosis
- Hepatitis B
- Primary Biliary Cholangitis
- Primary Sclerosing Cholangitis
- Wilson's Disease

People may not look or feel ill even though they have cirrhosis. It is important to speak to your doctor about your risk of liver disease.

Research has shown that cirrhosis can reverse in some people. For others, medical treatment may prevent progression of liver damage and may improve patient outcomes.

Treatment choices for cirrhosis depend on the cause and level of liver damage.

In some cases, people with cirrhosis may need to consider liver transplant.
THE LIVER is your body’s largest internal organ, weighing between three and five pounds. Your liver is located on the right side of your upper body, below the lungs, taking up most of the space in your rib cage. Your liver is shaped like a football that is flat on one side.

The liver is responsible for many jobs, including those related to metabolism. It assists with converting food to energy, breaking down food to the basic building blocks needed by your body, and eliminating harmful substances.

What is cirrhosis?
Cirrhosis is the late stage of scarring in the liver. Cirrhosis is caused by many forms of liver disease.

Each time your liver is injured, inflammation (swelling) occurs. This swelling leads to scar development. Over time, this hard scar tissue builds and replaces the soft, healthy tissue of the liver.

Common causes of liver diseases that can lead to cirrhosis include:

- Viruses
- Genetics
- Autoimmune disease
- Excessive use of alcohol
- Poor diet and/or obesity
- Reactions to medications, street drugs, or toxic chemicals

Most liver diseases damage your liver in similar ways and for many, the progression of liver disease looks the same regardless of the underlying cause.

What are symptoms of cirrhosis?
The liver can continue to function even when it becomes badly scarred. Because of this, some people may not have severe symptoms or high liver enzyme tests even though they have cirrhosis. These individuals have compensated cirrhosis. Some people with cirrhosis experience serious symptoms and complications because their livers are too damaged to function. These individuals have decompensated cirrhosis.

Symptoms of compensated cirrhosis may include:
- Loss of appetite
- Feeling tired or weak
- Nausea and vomiting
- Loss of weight without trying
- Spider angiomas, small red spots and tiny lines on the skin
- Mild pain or discomfort in the upper right side of your abdomen
- Fever
- Bruising and bleeding easily

Symptoms of decompensated cirrhosis may include:
- Jaundice, a yellowing of the skin or whites of the eyes
- Edema, a painful swelling of the legs
- Ascites, a painful swelling of the abdomen from fluid buildup
- Varices, enlarged veins in the lower esophagus (esophageal varices) and digestive tract which can bleed
- Hepatic encephalopathy, mental confusion caused by a buildup of toxins in the brain
- Hepatocellular carcinoma, a type of liver cancer that can occur in people with liver disease
- Hepatorenal syndrome, a type of kidney failure that can occur in people with severe liver damage

How is cirrhosis diagnosed?
Cirrhosis is diagnosed through a patient’s symptoms, blood tests, medical history, physical examination, and imaging tests. A liver biopsy may be needed to check how much of the liver has been damaged. During a biopsy, a small piece of liver tissue is removed using a needle and studied in the lab.

How is cirrhosis treated?
Treatment choices for cirrhosis depend on the cause and level of liver damage. Treatment for someone with cirrhosis often means managing the symptoms of cirrhosis and preventing further damage to avoid liver failure.

Someone with cirrhosis is at a very high risk of developing liver cancer. It is very important to receive routine liver cancer surveillance if you have cirrhosis. Liver cancer surveillance typically means routine imaging tests (ultrasound, MRI, or CT scan). Doctors may also treat liver cancer with a transplant. It is important to note that people often live with cirrhosis for a long time before the option of liver transplant is discussed.

What is the best way to manage cirrhosis?
- Stay in touch with your healthcare provider to monitor your overall health as well as your liver-related health. Have regular check-ups and keep all medical appointments.
- Cirrhosis puts you at higher risk for liver cancer, so talk to your healthcare provider about the need for routine liver cancer surveillance.
- It is important to avoid things that could damage your liver further like alcohol, certain medications, and fatty food.
- Maintain a healthy weight through good nutrition and appropriate physical activity. Speak with your healthcare provider, dietitian, or fitness professional to find out what is right for you.
- Eating too much salt can make your body retain fluid, so cut back on salt in your diet to lower your chances of developing edema or ascites.
- Raw or undercooked shellfish can be harmful to people with liver disease, so be sure to fully cook all shellfish.
- Make sure you tell your doctor about all the medicines (even non-prescription “over-the-counter” medicines, vitamins, and supplements) that you are taking.
- Talk to your doctor about getting the hepatitis A and B vaccines so you are protected against those viruses. Also ask your doctor about how to stay safe against the hepatitis C virus.
- Ask your doctor about getting an annual flu shot and the pneumococcal vaccine.
- Talk to your doctor about prevention and/or treatment of underlying liver diseases (e.g., viral hepatitis, NASH, etc.)