Facts At-A-Glance

- 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.
- Chronic hepatitis C and chronic alcoholism are the leading causes of cirrhosis.
- Other causes of cirrhosis include: Alpha-1 antitrypsin deficiency, autoimmune hepatitis, hemochromatosis, hepatitis B, nonalcoholic steatohepatitis (NASH), primary biliary cholangitis (PBC), primary sclerosing cholangitis (PSC) and Wilson’s Disease.
- In its early stages, cirrhosis often has no symptoms. In later stages, symptoms may include tiredness, loss of appetite, nausea, weight loss, and spider-like blood vessels.
- Research has shown that cirrhosis can be reversed. Although this may not occur for all patients, treatment can also prevent progression and may improve patient outcomes.
- Treatment options for cirrhosis depend on the cause and the level of liver damage.
- If cirrhosis cannot be treated, a liver transplant may be needed.
Why is the liver important?
The liver is the second largest organ in your body and is located under your rib cage on the right side. It weighs about three pounds and is shaped like a football that is flat on one side.
The liver performs many jobs in your body. It processes what you eat and drink into energy and nutrients your body can use. The liver also removes harmful substances from your blood.

What is cirrhosis?
Cirrhosis is the scarring of the liver — hard scar tissue replaces soft healthy tissue.
As cirrhosis becomes worse, the liver will have less healthy tissue. If cirrhosis is not treated, the liver will fail and will not be able to work well or at all.

What causes cirrhosis?
Cirrhosis is caused by chronic (long-term) liver diseases that damage liver tissue. It can take many years for liver damage to lead to cirrhosis.

Chronic Viral Hepatitis
Viral hepatitis causes the liver to swell, which over time can lead to cirrhosis. Chronic hepatitis C is the leading cause of cirrhosis in the United States. About one in four people with chronic hepatitis C develop cirrhosis. Chronic hepatitis B and hepatitis D also can cause cirrhosis.

Chronic Alcoholism
Chronic alcoholism is the second leading cause of cirrhosis in the United States. Drinking too much alcohol can cause the liver to swell, which over time can lead to cirrhosis. The amount of alcohol that causes cirrhosis is different for each person.

Nonalcoholic Steatohepatitis (NASH)
Fat build up in the liver that is not caused by alcohol use, is nonalcoholic steatohepatitis (NASH). NASH can cause the liver to swell and can lead to cirrhosis. People with NASH often have other health issues including diabetes, obesity, high cholesterol and heart disease.

Bile Duct Disease
Bile duct disease limits or stops bile from flowing to the small intestine. The bile backs up in the liver causing the liver to swell and can lead to cirrhosis. Two common bile duct diseases are primary sclerosing cholangitis and primary biliary cholangitis.

Genetic Diseases
Some genetic diseases can lead to cirrhosis. These diseases include Wilson disease, hemochromatosis, glycogen storage diseases, Alpha-1 antitrypsin deficiency, and autoimmune hepatitis.

What are symptoms and complications of cirrhosis?
There are usually no symptoms of cirrhosis in its early stage. Over time, cirrhosis may cause symptoms and complications:

Symptoms
- Loss of appetite
- Tiredness
- Nausea
- Weight loss
- Spider-like blood vessels
- Severe itching
- Jaundice, a yellow discoloration of the skin and whites of the eyes

Complications
- Fluid build up and painful swelling of the legs (edema) and abdomen (ascites)
- Bruising and bleeding easily
- Enlarged veins in the lower esophagus (esophageal varices) and stomach (gastropathy)
- Enlarged spleen (splenomegaly)
- Stone-like particles in gallbladder and bile duct (gallstones)
- Mental confusion (hepatic encephalopathy)
- Liver cancer (hepatocellular carcinoma)

How is cirrhosis diagnosed?
Cirrhosis is diagnosed by 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 and studied in the lab.

How is cirrhosis treated?
Treatment options for cirrhosis depend on the cause and the level of liver damage. Depending on the disease causing cirrhosis, medications or lifestyle changes may be used for treatment. The goals of treatment are to prevent further liver damage and reduce complications.

When cirrhosis cannot be treated, the liver will not be able to work and a liver transplant may be needed. Doctors will determine whether a liver transplant is the best treatment option.

What is the best way to manage cirrhosis?
It is possible to prevent further liver damage with proper management of cirrhosis.
- Maintain a healthy lifestyle (eat a healthy diet and exercise regularly) to achieve a normal BMI (body mass index)
- You may need to reduce salt intake if you experience edema or ascites (swelling caused by a buildup of fluids)
- Avoid raw shellfish
- Stop drinking alcohol
- Talk to your doctor about all of the medications, vitamins and supplements you take
- Talk to your doctor about hepatitis A and hepatitis B vaccinations
- Talk to your doctor about an annual flu shot and the pneumococcal vaccine
- Talk to your doctor about prevention and treatment of underlying liver disease (e.g., viral hepatitis, NASH, etc.)