

# What I need to know about Cirrhosis



National Institute of  
Diabetes and Digestive  
and Kidney Diseases

National Digestive Diseases  
Information Clearinghouse



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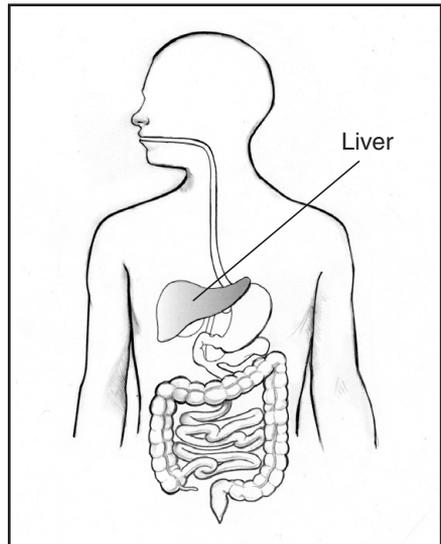


## What is cirrhosis?

**Cirrhosis\*** is scarring of the liver. Scar tissue forms because of injury or long-term disease. Scar tissue replaces healthy liver tissue and blocks the normal flow of blood through the liver.

### A healthy liver

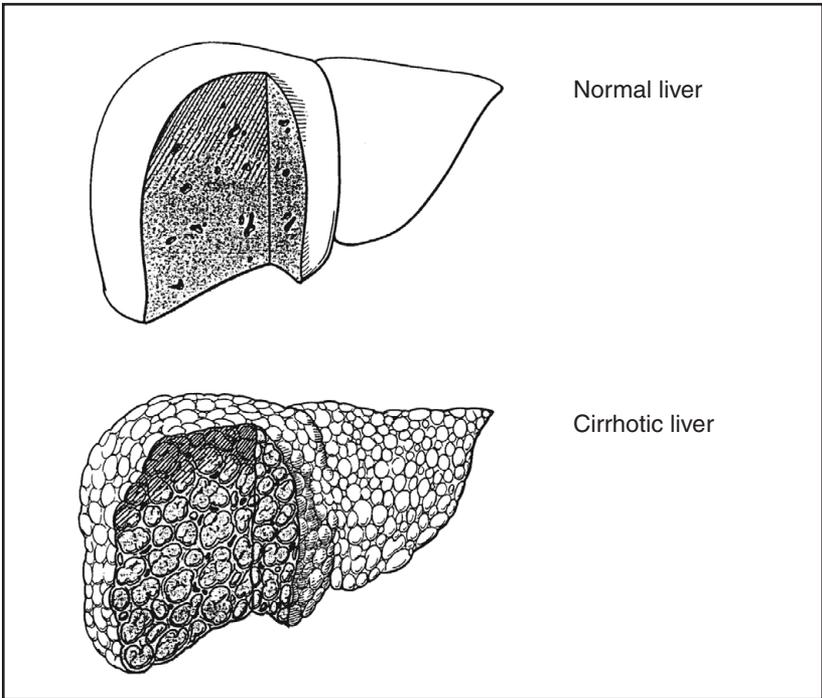
- makes proteins
- helps fight infections
- cleans the blood
- helps digest food
- stores a form of sugar that your body uses for energy



Cirrhosis is scarring of the liver.

\*See page 13 for tips on how to say the words in **bold** type.

A liver with too much scar tissue cannot work properly. You cannot live without a liver that works. But early treatment can control symptoms and keep cirrhosis from getting worse.



## What causes cirrhosis?

Causes of cirrhosis include

- heavy alcohol use
- some drugs, medicines, and harmful chemicals
- infections
- chronic **hepatitis B, C, or D**—viral infections that attack the liver
- **autoimmune** hepatitis, which causes the body's immune system to destroy liver cells
- nonalcoholic fatty liver disease, which is often caused by obesity
- diseases that damage or destroy bile ducts—tubes that carry bile from the liver

Some **inherited** diseases—diseases that are passed from parent to child—can cause cirrhosis:

- **hemochromatosis**, a disease that causes iron to collect in the liver
- Wilson disease, a condition that causes copper to build up in the liver
- **porphyria**, a disorder that affects the skin, bone marrow, and liver

## What are the symptoms of cirrhosis?

You may have no symptoms in the early stages of cirrhosis. As cirrhosis gets worse you may

- feel tired or weak
- lose your appetite
- feel sick to your stomach
- lose weight
- notice red, spider-shaped blood vessels under your skin

Cirrhosis can lead to other serious problems:

- You may bruise or bleed easily, or have nosebleeds.
- Bloating or swelling may occur as fluid builds up in your legs or **abdomen**—the area between your chest and hips. Fluid buildup in your legs is called **edema**; buildup in your abdomen is called **ascites**.
- Medicines, including those you can buy over the counter such as vitamins and herbal **supplements**, may have a stronger effect on you. Your liver does not break medicines down as quickly as a healthy liver would.

- Waste materials from food may build up in your blood or brain and cause confusion or difficulty thinking.
- Blood pressure may increase in the vein entering your liver, a condition called **portal hypertension**.
- Enlarged veins, called **varices**, may develop in your **esophagus** and stomach. Varices can bleed suddenly, causing you to throw up blood or pass blood in a bowel movement.
- Your kidneys may not work properly or may fail.
- Your skin and the whites of your eyes may turn yellow, a condition called **jaundice**.
- You may develop severe itching.
- You may develop gallstones.

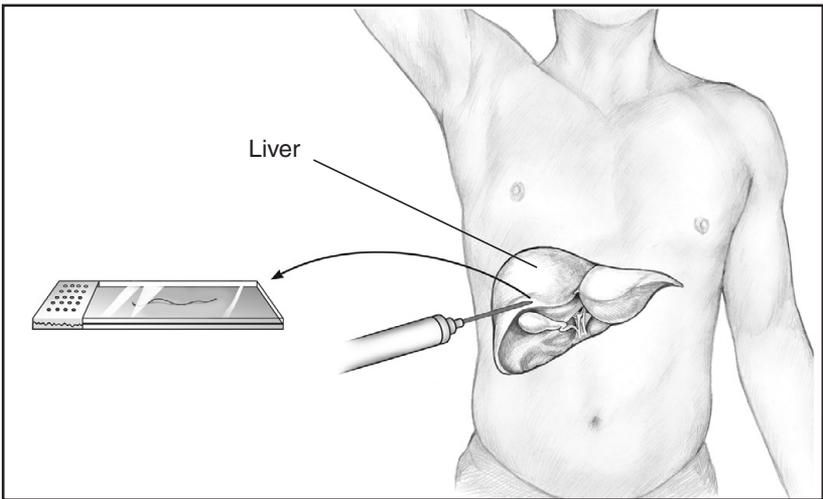
In the early stages, cirrhosis causes your liver to swell. Then, as more scar tissue replaces healthy tissue, your liver shrinks.

A small number of people with cirrhosis also get liver cancer.

## How is cirrhosis diagnosed?

Your doctor will examine you and may perform

- blood tests to see whether your liver is working properly
- imaging tests, which may show the size of your liver and show swelling or shrinkage
- a liver biopsy, in which a doctor uses a needle to take a small piece of liver tissue to view with a microscope to look for scar tissue



In a liver biopsy, a doctor uses a needle to take a small piece of liver tissue to view with a microscope.

## How is cirrhosis treated?

Once you have cirrhosis, nothing can make all the scar tissue go away. But treating the cause will keep cirrhosis from getting worse. For example, if cirrhosis is from heavy alcohol use, the treatment is to completely stop drinking alcohol. If cirrhosis is caused by hepatitis C, then the hepatitis C virus is treated with medicine.



Your doctor will suggest treatment based on the cause of your cirrhosis and your symptoms. Being diagnosed early and carefully following a treatment plan can help many people with cirrhosis. In the late stages of cirrhosis, certain treatments may not be effective. In that case, your doctor will work with you to prevent or manage the problems that cirrhosis can cause.

### **What if the cirrhosis treatment doesn't work?**

If too much scar tissue forms, your liver could fail. Then you will need a liver transplant. A liver transplant can return you to good health. For information about liver **transplantation**, see the booklet *What I need to know about Liver Transplantation* from the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK).

## How can I prevent cirrhosis if I already have liver disease?

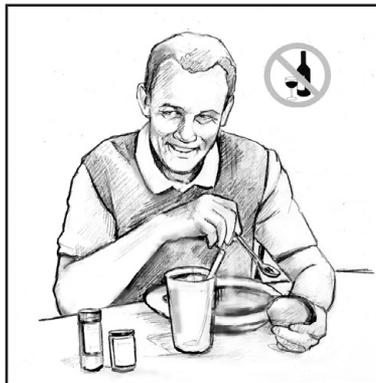
To prevent cirrhosis,

- see your doctor for treatment of your liver disease. Many of the causes of cirrhosis are treatable. Early treatment may prevent cirrhosis.
- try to keep your weight in the normal range. Being overweight can make several liver diseases worse.
- do not drink any alcohol. Alcohol can harm liver cells. Drinking large amounts of alcohol over many years is one of the major causes of cirrhosis.
- do not use illegal drugs, which can increase your chances of getting hepatitis B or hepatitis C.
- see your doctor if you have hepatitis. Treatments for hepatitis B, C, and D are available. If you are on treatment, carefully follow your treatment directions.
- if you have autoimmune hepatitis, take your medicines and have regular checkups as recommended by your doctor or a liver specialist.

## What can I do to keep cirrhosis from getting worse?

To keep cirrhosis from getting worse,

- do not drink any alcohol.
- talk with your doctor before taking any medicines, including those you can buy over the counter such as vitamins and herbal supplements. Cirrhosis makes your liver sensitive to certain medicines.
- get **vaccinated** against hepatitis A and hepatitis B. Although hepatitis A does not cause cirrhosis, it can damage your liver.
- ask your doctor about getting a flu shot and being vaccinated against **pneumonia**.
- avoid eating raw oysters or other raw shellfish. Raw shellfish can have bacteria that cause severe infections in people with cirrhosis.



## Points to Remember

- Cirrhosis is scarring of the liver. Scar tissue replaces healthy liver tissue.
- Some common causes of cirrhosis include heavy alcohol use, hepatitis infections, and nonalcoholic fatty liver disease.
- In the early stages of cirrhosis, you may have no symptoms. As the disease gets worse, cirrhosis can cause serious problems.
- Once you have cirrhosis, nothing can make all the scar tissue go away. But treatment can prevent cirrhosis from getting worse.
- If too much scar tissue forms and your liver fails, you will need a liver transplant.
- You can take steps to prevent cirrhosis or keep it from getting worse.

## Hope through Research

The NIDDK's Division of Digestive Diseases and Nutrition supports research into liver diseases such as cirrhosis. Researchers are studying new ways to

- prevent cirrhosis
- prevent and treat symptoms of cirrhosis
- reverse scarring of the liver

Participants in clinical trials can play a more active role in their own health care, gain access to new research treatments before they are widely available, and help others by contributing to medical research. For information about current studies, visit *www.ClinicalTrials.gov*.

## Pronunciation Guide

**abdomen** (AB-doh-men)

**ascites** (uh-SY-teez)

**autoimmune** (AW-toh-ih-MYOON)

**cirrhosis** (sur-ROH-siss)

**edema** (eh-DEE-muh)

**esophagus** (uh-SOF-uh-guhss)

**hemochromatosis**

(HEE-moh-KROH-muh-TOH-siss)

**hepatitis** (HEP-uh-TY-tiss)

**inherited** (in-HAIR-it-ed)

**jaundice** (JAWN-diss)

**pneumonia** (noo-MOH-nyuh)

**porphyria** (por-FIHR-ee-uh)

**portal hypertension** (POR-tuhl)

(HY-pur-TEN-shuhn)

**supplements** (SUH-pluh-muhnts)

**transplantation** (TRANZ-plan-TAY-shuhn)

**vaccinated** (VAK-sih-nayt-ed)

**varices** (VAIR-ih-seez)

## **For More Information**

### **American Liver Foundation**

39 Broadway, Suite 2700

New York, NY 10006

Phone: 1-800-GO-LIVER (1-800-465-4837),

1-888-4HEP-USA (1-888-443-7872),

or 212-668-1000

Fax: 212-483-8179

Email: [info@liverfoundation.org](mailto:info@liverfoundation.org)

Internet: [www.liverfoundation.org](http://www.liverfoundation.org)

### **Hepatitis Foundation International**

504 Blick Drive

Silver Spring, MD 20904-2901

Phone: 1-800-891-0707 or 301-622-4200

Fax: 301-622-4702

Email: [hfi@comcast.net](mailto:hfi@comcast.net)

Internet: [www.hepfi.org](http://www.hepfi.org)

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The National Digestive Diseases Information Clearinghouse (NDDIC) is a service of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK). The NIDDK is part of the National Institutes of Health of the U.S. Department of Health and Human Services. Established in 1980, the Clearinghouse provides information about digestive diseases to people with digestive disorders and to their families, health care professionals, and the public. The NDDIC answers inquiries, develops and distributes publications, and works closely with professional and patient organizations and Government agencies to coordinate resources about digestive diseases.

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