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Patient information: Cirrhosis (Beyond the Basics)

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CIRRHOSIS OVERVIEW

Cirrhosis is the term used to describe a diseased liver that has been severely scarred, usually due to many years of continuous injury. The most common causes include longstanding alcohol abuse, chronic hepatitis B or hepatitis C, and nonalcoholic steatohepatitis (a condition in which fat builds up in the liver and the liver becomes inflamed). Although cirrhosis cannot be cured, there are a number of things you can do to prevent the disease from worsening.

This topic discusses the symptoms, diagnosis, and treatment of cirrhosis. Related topics are discussed separately. (See "[Patient information: Hepatitis B \(Beyond the Basics\)](#)" and "[Patient information: Hepatitis C \(Beyond the Basics\)](#)" and "[Patient information: Alcohol use — when is drinking a problem? \(Beyond the Basics\)](#)".)

CIRRHOSIS CAUSES

The liver is a large organ (weighing about three pounds) that is located in the right upper abdomen beneath the rib cage ([figure 1](#)). It performs many functions that are essential to life.

The liver is able to repair itself when it has been injured. However, the process of healing involves the creation of scar tissue. Thus, repeated or continuous injury to the liver (such as occurs with heavy alcohol use) can cause significant scarring in the liver. The body is able to tolerate a partially scarred liver without serious consequences. Eventually, the scarring can become so severe that the liver is no longer able to perform its normal functions.

Some of the most common causes of liver injury include:

- Longstanding alcohol abuse (see "[Patient information: Alcohol use — when is drinking a problem? \(Beyond the Basics\)](#)")
- Chronic hepatitis (B or C) (see "[Patient information: Hepatitis B \(Beyond the Basics\)](#)" and "[Patient information: Hepatitis C \(Beyond the Basics\)](#)")
- Nonalcoholic steatohepatitis (see "[Patient information: Nonalcoholic steatohepatitis \(NASH\) \(Beyond the Basics\)](#)")

CIRRHOSIS SYMPTOMS

People with cirrhosis may or may not have symptoms early in the course of the disease. Some of the more common symptoms include:

- Scarring makes it difficult for blood to flow through the liver. As a result, pressure backs up, and veins in other areas outside of the liver become abnormally expanded. Abnormally expanded blood vessels are referred to as varices.
- One place where varices are commonly found is in the esophagus, the swallowing tube connecting the mouth with the stomach ([figure 2](#)). When the pressure in the varices reaches a certain level, the varices can burst, which can cause massive bleeding (known as variceal bleeding or variceal hemorrhage).
- Body fluids accumulate as a result of liver scarring and a decreased ability to manufacture blood proteins. Fluid is typically seen in the legs (edema) and abdomen (ascites) and sometimes in the lung (pleural effusion). (See "[Patient information: Edema \(swelling\) \(Beyond the Basics\)](#)".)
- Ascites causes the abdomen to enlarge as fluid accumulates, which can cause shortness of breath and a feeling of fullness. The fluid provides an environment where bacteria can grow, increasing the risk of infection.
- Patients with cirrhosis can have easy bruising and bleeding. Once bleeding starts (such as with variceal bleeding), it can be severe.
- Hepatic encephalopathy is a condition that develops when the liver is unable to break down toxins normally found in the bloodstream, such as ammonia. In this condition, confusion or even coma are caused by toxins that build up in the blood. In the early stages, there may be mild symptoms, such as difficulty sleeping or sleeping too much. Advanced hepatic encephalopathy can cause confusion, delirium, and even coma. Hepatic encephalopathy can develop suddenly and may become a medical emergency.
- Patients with cirrhosis have a weakened immune system and are at increased risk of infections.
- Malnutrition is common in patients with cirrhosis. Malnutrition can cause loss of muscle in various areas of the body.
- Many people with advanced cirrhosis have jaundice (yellowed skin or whites of the eyes).
- People with cirrhosis are at increased risk for developing liver cancer (hepatocellular carcinoma).
- Cirrhosis can cause fatigue and in some cases itching.

CIRRHOSIS DIAGNOSIS

Testing is performed to confirm the diagnosis of cirrhosis, determine the underlying cause, determine the severity of cirrhosis, and monitor for complications. (See "[Diagnostic approach to the patient with cirrhosis](#)".)

Liver biopsy — The best way to confirm the diagnosis of cirrhosis is a liver biopsy. This procedure is discussed in depth in a separate article. (See "[Patient information: Liver biopsy \(Beyond the Basics\)](#)".)

Imaging tests — Imaging tests, such as ultrasound, may be recommended to evaluate the condition of the liver or determine if there are cirrhosis-related complications. However, imaging tests are not usually performed to diagnose cirrhosis.

