

CIRRHOSIS

Cirrhosis is a disease in which the liver becomes severely scarred, usually as a result of many years of continuous injury. The most common causes of cirrhosis include alcohol abuse, chronic hepatitis B or C (viral infections that affect the liver), and fatty liver disease (often seen in people with obesity or diabetes). In its advanced stages, cirrhosis is usually irreversible, so treatment may involve liver transplant. In its earlier stages, cirrhosis may be reversible if the underlying cause can be treated.

CAUSES

Cirrhosis can be caused by many things, some known and others unknown:

- **Alcohol**—Using alcohol in excess is the most common cause of cirrhosis in the United States.
- **Chronic Viral Hepatitis**—Hepatitis B and Hepatitis C as well as other viruses can infect and damage the liver over a prolonged time and eventually cause cirrhosis.
- **Chronic Bile Duct Blockage**—This condition can occur at birth (biliary atresia) or develop later in life (primary biliary cirrhosis). The cause of the latter remains unknown. When the bile ducts outside the liver become narrowed and blocked, the condition is called primary sclerosing cholangitis. This condition is often associated with chronic ulceration of the colon (colitis).
- **Abnormal Storage of Copper (Wilson's Disease) or Iron (Hemochromatosis)**—These metals are present in all body cells. When abnormal amounts of them accumulate in the liver, scarring and cirrhosis may develop.
- **Drugs and Toxins**—Prolonged exposure to certain chemicals or drugs can scar the liver.
- **Autoimmune Hepatitis**—This chronic inflammation occurs when the body's protective antibodies fail to recognize the liver as its own tissue. The antibodies injure the liver cells as though they were a foreign protein or bacteria.
- **Cystic Fibrosis and Alpha 1-antitrypsin Deficiency**—These disorders are inherited.
- **Non-alcoholic fatty liver disease (NAFLD)**—The obesity epidemic in the United States has increased recognition and treatment of this condition. Many patients with NAFLD often seek attention for abnormal liver tests or changes in the texture of the liver found incidentally on a CAT scan or ultrasound done for other reasons. Patients with NAFLD often have the metabolic syndrome which consists of a high blood pressure, high cholesterol and lipids, and diabetes. If left untreated, NAFLD can progress to cirrhosis and eventually require liver transplantation.

SYMPTOMS

SIGNS AND SYMPTOMS

People with cirrhosis sometimes have no symptoms, but the condition can cause a long list of possible signs and symptoms, not all of which occur together. Some of the more common symptoms include:

- Loss of appetite
- Weight loss
- Weakness
- Jaundice (yellowing of the skin or eyes)
- Itching
- Signs of upper gastrointestinal bleeding (such as vomiting blood, or having bowel movements that look like tar or that contain blood)
- Swelling in the abdomen (caused by a condition called ascites, in which fluid builds up around the organs in the abdomen)
- Mood changes, confusion, or abnormal sleep patterns (caused by a condition called hepatic encephalopathy)
- Muscle cramps, which can be severe
- Absent or irregular menstrual bleeding (in women)
- Erectile dysfunction, infertility, or loss of sex drive (in men)
- Breast development in men
- Spider veins

Portal hypertension — Cirrhosis can cause a problem called portal hypertension, which is when the blood pressure inside the portal vein, the main source of blood for the liver, gets too high. This happens because scars in the liver obstruct blood flow through the organ. As the pressure builds up, blood backs up into nearby blood vessels, primarily in and around the esophagus and intestines.

Blood abnormalities — People with cirrhosis often have a number of abnormalities in their blood. For example, they can have abnormal levels of certain proteins and enzymes, and their blood may not clot as well as it should. Plus, they do not always have enough of certain blood cells.

DIAGNOSIS

If a doctor suspects cirrhosis, imaging test of the abdomen is typically ordered. A liver biopsy may also be ordered, which involves using a needle to get a sample of liver tissue so it can be examined for signs of damage.

TREATMENT

When treating people with cirrhosis, doctors have the following major goals in mind,

- Slow or reverse the cause of the liver disease
- Prevent, identify, and treat the complications of cirrhosis
- Protect the liver from other sources of damage
- Manage symptoms and blood abnormalities
- Determine if and when a liver transplant is needed

SUMMARY

Cirrhosis is a serious condition that has many causes. With early diagnosis, much can be done to prevent serious complications. Various treatments are available, depending on the cause of the liver injury and its complications. Ongoing medical research promises advances in treating cirrhosis in the future.