Cirrhosis/Liver Disease

Cirrhosis refers to the replacement of normal liver tissue with non-living scar tissue. It is always related to other liver diseases.

What does the liver do?

Nearly all the blood that leaves the stomach and intestines passes through the liver before reaching the rest of your body. The liver takes the nutrients, drugs and other things we ingest and converts them into forms that are easier for the body to use or remove.

Your liver performs many tasks that are essential to life. Specifically, the liver:

- Converts food into nutrients and stored energy
- Detoxifies substances that are harmful to the body
- Processes the medications we take
- Stores vitamins, minerals and sugars
- Makes bile, which is essential for the digestion of fats

What is cirrhosis?

Cirrhosis is a potentially life-threatening condition that causes liver failure. It is always related to other liver diseases.

Cirrhosis refers to the replacement of normal liver tissue with non-living scar tissue. The process begins with inflammation that is caused by long-term liver disease. After many months or years of inflammation, healthy tissue is replaced by scar tissue.

As cirrhosis continues, the liver is not left with enough functioning tissue to function properly. If the process of cirrhosis is not slowed or stopped, the liver will no longer be able to perform its critically important functions.

What causes cirrhosis?

Cirrhosis is caused by long-term liver diseases that damage liver tissue. It can take many years for liver damage to lead to cirrhosis, and then it can take many years for cirrhosis to lead to liver failure. This is because the liver can function adequately with some damage, and it can even repair itself by replacing injured cells. But over time, if the underlying disease is not controlled, cirrhosis begins.

Alcoholism and cirrhosis

The most common cause of cirrhosis in the United States is chronic alcoholism. About 40 percent of the 26, 000 people who die from cirrhosis each year have a history of alcohol abuse.

The liver breaks down alcohol into toxic chemicals, some of which trigger the inflammation that leads to cirrhosis. Cirrhosis caused by alcoholism usually occurs after 10 to 15 years of heavy drinking. The amount of alcohol consumption required to cause cirrhosis varies from person to person, and not everyone who drinks excessively gets cirrhosis. However, nearly everyone who drinks excessively suffers some liver damage, and between 10 and 20 percent of heavy drinkers develop cirrhosis.

Other causes of cirrhosis

Chronic viral hepatitis. Hepatitis C is the second leading cause of cirrhosis. About one in four people with chronic hepatitis C develop cirrhosis. Long-term infection with the hepatitis B and D viruses also can cause cirrhosis, although hepatitis D is not common in the United States. It can take 20 years or longer for patients with chronic viral hepatitis to develop cirrhosis. However, cirrhosis can develop much faster in certain people who have chronic viral hepatitis and drink excessively.

Nonalcoholic steatohepatitis (NASH). Sometimes excess fat in the liver leads to inflammation, a condition called NASH. Eventually the inflammation may lead to cirrhosis. NASH is often linked to diabetes, obesity, coronary artery disease and protein malnutrition.

Bile duct disease. Bile is a digestive liquid made in the liver. It travels through the bile ducts to the gall bladder and the small intestine, where it helps digest fats. If the bile ducts become damaged or blocked from disease, bile backs up in the liver. This leads to inflammation and, eventually, cirrhosis. Two common forms of bile duct disease are primary sclerosing cholangitis, often linked to colitis, and primary biliary cirrhosis, which mainly affects women.

Inherited diseases and cirrhosis. Some diseases that are either inherited or present at birth (congenital) can lead to cirrhosis. These include:

- Hemochromatosis, the abnormal accumulation of iron in the liver
- Wilson disease, the abnormal accumulation of copper in the liver
- Alpha1-antitrypsin deficiency, the absence of a specific enzyme in the liver
- Glycogen storage diseases, which prevent the body from properly using sugars
- Autoimmune hepatitis, an abnormality of the body's immune system that leads to inflammation of the liver

What are the symptoms and complications of cirrhosis?

There are usually no symptoms of cirrhosis in its early stage. Over the years, as the scarring in the liver continues, cirrhosis may cause these symptoms and complications:

- Loss of appetite, fatigue, nausea and vomiting, weight loss
- Jaundice, a yellow discoloration of the skin and whites of the eyes
- Itching, caused by retention of bile products in the skin
- Fluid buildup and painful swelling of the legs (edema) and abdomen (ascites)
- Confusion and other mental changes, leading to coma
- Swelling or rupture of veins in the lower end of the esophagus from increased blood pressure in the vessels leading to the liver

How is cirrhosis diagnosed?

Your doctor may suspect that you have cirrhosis based on your medical history, since cirrhosis is always linked to other liver diseases. A liver that is harder or larger than usual is a sign of cirrhosis. To confirm the diagnosis, your doctor may need to do a liver biopsy, in which a small sample of liver tissue is removed with a needle and examined in a laboratory.

How is cirrhosis treated?

The goals of treatment are to stop or slow the progress of cirrhosis, in order to prevent further liver damage, and address the consequences of cirrhosis, which can be disabling or life-threatening. Specific medicines and surgical procedures may be required to treat the underlying cause of cirrhosis and its complications.

In general, if you are diagnosed with cirrhosis you should:

- Completely stop drinking alcohol
- Talk to your doctor about all your medications, including your use of nonprescription pain relievers such as aspirin, ibuprofen, acetaminophen and naproxen
- Reduce salt intake to prevent or reduce fluid buildup
- Talk to your doctor about getting immunized against hepatitis A and B

In cases where cirrhosis cannot be stopped, the liver will ultimately lose its ability to function, and a liver transplant will be necessary. Doctors will look at your overall health to determine whether you are a suitable candidate for a liver transplant, so it is important to stay as healthy as possible from the time you are first diagnosed with cirrhosis.

IMPORTANT REMINDER:
This information is intended only to provide general guidance. It does not provide definitive medical advice. It is very important that you consult your doctor about your specific condition.