

# Cirrhosis

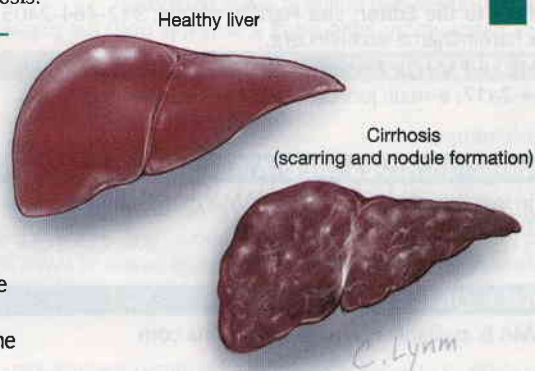
**C**irrhosis is the end stage of any condition in which the liver progressively becomes scarred. It is diagnosed based on physical findings as well as a microscopic examination of liver tissue from a **biopsy** (tissue sample) or evidence from other diagnostic tests such as ultrasound. Under the microscope, cirrhosis appears as widespread bands of **fibrous** (made up of fibers) tissue that divide the liver into **nodules** (small knots or collections of tissue). Eventually, cirrhosis interferes with the function of the liver and can lead to liver failure or liver cancer. The February 22/29, 2012, issue of *JAMA* includes an article on diagnosing cirrhosis.

## COMMON RISK FACTORS

- Hepatitis B or C infection
- **Autoimmune liver diseases**, which include autoimmune hepatitis, primary biliary cirrhosis, and primary sclerosing cholangitis
- Nonalcoholic fatty liver disease, often found in obese individuals who do not drink alcohol. Although it can have a benign course, it can sometimes progress to cirrhosis.
- **Hereditary metabolic liver diseases**, such as hemochromatosis (iron overload), Wilson disease (copper overload), and  $\alpha_1$ -antitrypsin deficiency (inability to make a type of protein)
- Long-term exposure to excess amounts of alcohol can lead to inflammation in the liver, which eventually causes cirrhosis.

## PHYSICAL FINDINGS

- Because the liver does not appropriately process **bile** (a fluid that helps absorb digested fats) and **bilirubin** (a waste product), **jaundice** or yellowing of the skin may occur.



## FOR MORE INFORMATION

- Mayo Clinic  
[www.mayoclinic.com/health/cirrhosis](http://www.mayoclinic.com/health/cirrhosis)