



# CIRRHOSIS

## WHAT IS CIRRHOSIS?

Cirrhosis is severe scarring of the liver. This serious condition can be caused by many forms of liver diseases and conditions, such as hepatitis or chronic alcoholism.

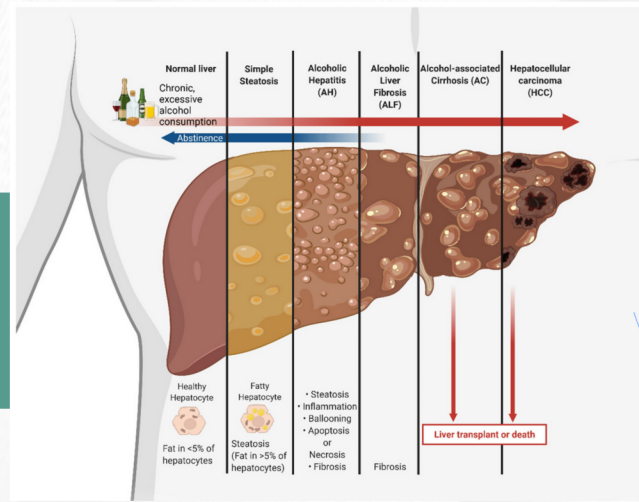
Each time your liver is injured — whether by excessive alcohol consumption or another cause, such as infection — it tries to repair itself. In the process, scar tissue forms. As cirrhosis gets worse, more and more scar tissue forms, making it difficult for the liver to do its job. Advanced cirrhosis is life-threatening.

## SYMPTOMS

- Fatigue.
- Easily bleeding or bruising.
- Loss of appetite.
- Nausea.
- Swelling in the legs, feet or ankles, called edema.
- Weight loss.
- Itchy skin.
- Yellow discoloration in the skin and eyes, called jaundice.
- Fluid accumulation in the abdomen, called ascites
- Spiderlike blood vessels on the skin.
- Redness in the palms of the hands.
- Pale fingernails, especially the thumb and index finger.
- Clubbing of the fingers, in which the fingertips spread out and become rounder than usual.
- For women, absence of or loss of periods not related to menopause.
- For men, loss of sex drive, testicular shrinkage or breast enlargement, known as gynecomastia.
- Confusion, drowsiness or slurred speech.

## CAUSES

- Long-term alcohol abuse.
- Ongoing viral hepatitis (hepatitis B, C and D).
- Nonalcoholic fatty liver disease,
- Hemochromatosis, a condition that causes iron buildup in the body.
- Autoimmune hepatitis, which is a liver disease caused by the body's immune system.
- Destruction of the bile ducts caused by primary biliary cholangitis.
- Hardening and scarring of the bile ducts
- Wilson's disease, a condition in which copper accumulates in the liver.
- Cystic fibrosis.
- Alpha-1 antitrypsin deficiency.
- Poorly formed bile ducts, a condition known as biliary atresia.
- Inherited disorders of sugar metabolism
- Alagille syndrome, a genetic digestive disorder.
- Infection, such as syphilis or brucellosis.
- Medications, including methotrexate or isoniazid



## RISK FACTORS

- Drinking too much alcohol. Excessive alcohol consumption is a risk factor for cirrhosis.
- Being overweight. Being obese increases your risk of conditions that may lead to cirrhosis, such as nonalcoholic fatty liver disease and nonalcoholic steatohepatitis.
- Having viral hepatitis. Not everyone with chronic hepatitis will develop cirrhosis, but it's one of the world's leading causes of liver disease.

## COMPLICATIONS

- High blood pressure In the veins that supply the liver (portal hypertension)
- Swelling In the legs and abdomen
- Enlargement of the spleen
- Bleeding
- Infections
- Malnutrition
- Buildup of toxins In the brain
- Jaundice
- Bone disease
- Increased risk of liver cancer
- Acute on chronic cirrhosis

## PREVENTION

- Do not drink alcohol If you have cirrhosis
- Eat healthy diet
- Maintain healthy weight
- Reduce your risk of hepatitis / vaccinations



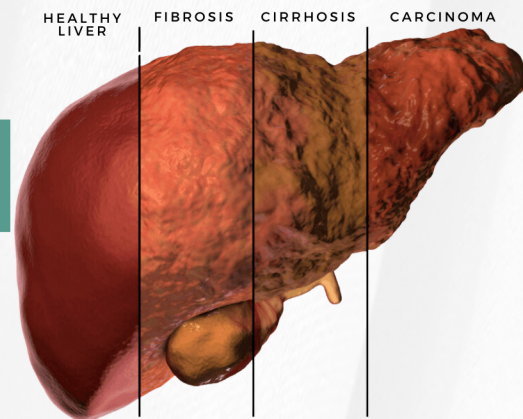
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## HOW IS CIRRHOSIS DIAGNOSED?

- **Blood Tests**
  - Check for signs of liver malfunction
    - high bilirubin levels
  - Check kidney function (creatinine)
  - Screened for hepatitis viruses
  - INR level (body's ability to clot)
- **Imaging Procedures**
  - Certain imaging tests, including transient or magnetic resonance elastography (MRE), may be recommended. These noninvasive imaging tests look for hardening or stiffening of the liver. Other imaging tests, such as MRI, CT and ultrasound, also may be done.
- **Biopsy**
  - A tissue sample, called a biopsy, is not necessarily needed for diagnosis. However, your provider may use it to find out how severe liver damage is and what's causing it.

## TREATMENT FOR UNDERLYING CAUSE

- Treatment for alcohol dependency
  - If you have cirrhosis, it is very important to stop drinking since any amount of alcohol is toxic to the liver.
- Weight loss and blood sugar control
- Medication to control hepatitis
  - Medicines may limit further damage to liver cells caused by hepatitis B or C through specific treatment of these viruses.
- Medication to control other causes and symptoms of cirrhosis
  - Medicines may slow the progression of certain types of liver cirrhosis.



## TREATMENT FOR COMPLICATIONS

- A buildup of fluid in your body - low sodium diet and medication to prevent ascites and swelling
- Portal hypertension - controlled with blood pressure medications
- Infection - treated with antibiotics and vaccinations may be recommended
- Increased liver cancer risk - regular blood tests and ultrasound exams
- Hepatic encephalopathy - medication to help reduce the risk of toxin buildup in blood by poor liver function

## LIFESTYLE AND HOME REMEDIES

- Don't drink alcohol
- Eat a low sodium diet
- Eat a healthy diet
- Protect yourself from infections
- Use over the counter medication carefully
  - Don't take Aspirin, Ibuprofen and Tylenol