

Common Gastrointestinal Problems

A Consumer Health Guide

Alcoholic Liver Disease

Alcoholism is a common problem with an estimated 17 to 20 million Americans suffering from alcoholism. Men are more commonly afflicted than women. Young men with a family history of alcoholism and difficulties with interpersonal relations are at the greatest risk for alcoholism. Specific biologic markers for the risk to develop alcoholism have not been identified.

Does alcoholism cause liver disease?

Most people who consume alcohol do not suffer clinically significant damage to the liver. However, chronic excessive consumption of alcohol can cause a variety of liver problems including excess fat in the liver (fatty liver), alcoholic hepatitis (inflammation in the liver) and cirrhosis (permanent scarring of the liver).

Alcoholic hepatitis and alcoholic cirrhosis develop in approximately 15-20 percent of chronic alcoholics. This means that roughly one out of five people with heavy alcohol consumption will develop the devastating health problem of liver cirrhosis. These patients may die from liver failure, caused by gastrointestinal hemorrhage, infection, or failure of the kidneys. A liver transplant is only offered to those who abstain from alcohol intake for several months.

Why some people who drink alcohol get liver disease and others do not is not fully understood, but there is some research suggesting a possible genetic connection. Some people are genetically more susceptible to the effects of alcohol than others. Unfortunately, there is not yet a laboratory test to identify who is at highest risk for alcoholic related liver disease.

In the United States, cirrhosis is among the 7 leading causes of death. The most common cause of cirrhosis is alcohol abuse. In addition, excess alcohol consumption increases the risk of pancreatitis (inflammation of the pancreas), cardiomyopathy (damage to the heart muscle), trauma (accidents occurring during drunkenness), and the development of fetal alcohol syndrome (damage to the unborn child from excess alcohol during pregnancy).

How much alcohol must I drink to damage my liver?

The amount of alcohol consumed before liver damage occurs is extremely variable. Some people are exquisitely

sensitive to the effects of alcohol, while others are seemingly invulnerable to its harmful effects. In general the greater the amount and the longer the duration of alcohol consumption the more likely that injury to the liver will occur. Women are more susceptible to the damaging effects of alcohol than men.

Daily consumption of one pint of wine, or three 12 ounce beers or 4 ounces of distilled spirits (vodka, whiskey) is about 20-40 grams of alcohol and will result in liver damage over time in most women. A man drinking 80 grams of alcohol daily will, on average, develop cirrhosis of the liver in 10 years. A woman drinking 80 grams daily of alcohol will develop cirrhosis in 5 years.

Why are women more susceptible to alcohol than men?

The answer to this question is not known. When the amount of alcohol consumed by men and women is adjusted for differences in body size, women still appear to be at greater risk of liver damage at lower quantities of alcohol. Women have lower levels of an enzyme known as *alcohol dehydrogenase*, found in the stomach lining. This enzyme breaks down alcohol before it is absorbed and decreases the concentration of alcohol that reaches the blood stream. This may also explain why some women feel the effects of alcohol at a smaller amount of alcohol when compared to men. The important message is, "liver damage occurs in women with consumption of lesser amounts of alcohol."

What kinds of liver disease are caused by excess alcohol ingestion?

Fatty Liver

This condition can occur with significant intake of alcohol, even in individuals who are not alcoholics. In fatty liver, large fat droplets accumulate in the liver, leading to enlargement. A blood test can identify early damage to the liver. When alcohol consumption is stopped, the fat in the liver will disappear and the liver should completely heal.

Alcoholic Hepatitis

This is a serious condition where the liver has been severely damaged by the effects of alcohol. The illness is characterized by weakness, fever, loss of appetite, nausea,

What Everyone Should Know About ALCOHOLIC LIVER DISEASE

vomiting and pain over the liver. The liver is often inflamed causing many individual liver cells to die. Unlike fatty liver, alcoholic hepatitis often heals with permanent scarring called *fibrosis*. The right sided stomach pain is often hard to distinguish from other conditions such as a gallbladder attack. Your doctor may need to order special blood tests and x-rays to diagnose the condition. Alcoholic hepatitis can be life-threatening and require hospitalization. Recovery from alcoholic hepatitis is common, but the fibrosis or scarring of the liver is irreversible.

Alcohol-Induced Cirrhosis

This is the final stage of damage to the liver from alcohol. Cirrhosis is a permanent irreversible form of liver damage. The fibrosis or scarring of the liver seen in cirrhosis leads to obstruction of blood flow through the liver. This prevents the liver from performing its critical functions of purifying the blood and nutrients absorbed from the intestines. The end result is liver failure. Some signs of liver failure include accumulation of fluid in the abdomen (*ascites*), malnutrition, confusion (*encephalopathy*) and bleeding from the intestines. Some of these conditions can be managed by diet, medicines and special procedures, but the spontaneous recovery of the liver to normal and return of good health is rare.

Cirrhosis is the seventh leading cause of death in the United States. Although alcohol is the cause of over half of the cases of cirrhosis in the United States, not all cases of cirrhosis are due to alcoholism. Some are caused by genetic disorders, such as hemochromatosis or viral infections, such as hepatitis.

How can you diagnose whether a person has a fatty liver, alcoholic hepatitis, or cirrhosis?

Blood tests and scans are usually very helpful in the evaluation of the liver, but a biopsy of the liver is often required to make the diagnosis of cirrhosis and determine the cause. A liver biopsy is performed in the hospital or in a same day surgery clinic. Often the liver biopsy is performed with mild local anesthesia such as lidocaine or with mild sedatives given through the vein. The discomfort from the liver biopsy is usually mild and lasts only for a short time. Most patients can return to work the following day with only a restriction on heavy lifting and exercise.

Are there complications associated with alcoholic liver disease?

Yes, roughly a third of patients with alcoholic liver disease suffer from a liver infection caused by the hepatitis C virus and

nearly half will have gallstones. Those with cirrhosis are more likely to suffer from diabetes, kidney problems, ulcers, and severe bacterial infections.

Will alcoholic liver disease affect me when taking medicine?

Since one of the functions of the liver is to process drugs and other chemicals in your body, if you have liver disease you may process medications differently from other people. Always consult with your doctor about the dosage of both over-the-counter and prescription medicines. Similarly, alcohol alone, even without liver disease known to be present, may affect the processing of certain medications. For example, even moderate amounts of alcohol may cause adverse effects with some pain medications. If you use alcohol, check the labeling of over-the-counter medications to alert yourself to any limitations on their usage. You should check with your physician about precautions in taking your prescription medications if you have been drinking any alcohol. You should never use an alcoholic beverage to take medication.

How is alcohol-related liver disease treated?

Of all treatments for alcoholic liver disease, the most important is to stop drinking **completely**. Sometimes the liver can recover from the injury of alcohol enough to allow a normal life, unfortunately the scarring of the liver is permanent and the liver remains vulnerable to any alcohol or infections.

When alcoholic cirrhosis advances to an end-stage complicated by life-threatening intestinal bleeding, confusion, ascites, failure of the kidneys, and infection, the only treatment is liver transplantation. For liver transplantation to be successful, a patient must be very compliant with medicines and follow instructions reliably. Only persons completing a successful alcohol detoxification and rehabilitation program are considered as candidates for liver transplantation.

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