Other Liver Diseases

What Is Alcohol-Related Liver Disease?

Alcohol-related liver disease (ALD) is a major reason for liver transplantation in the United States. ALD is the result of liver damage caused by heavy consumption of alcohol. The liver processes what the body needs and discards what it doesn't, including alcohol. If there is too much alcohol, the livercan't process it, which increases the risk of liver damage. Over time, that damage can become serious.

ALD is a broad term applied to varying degrees of alcohol-related liver injury. These are categorized into three stages:

- Alcohol-related fatty liver disease
- Alcohol-related hepatitis
- Chronic hepatitis with hepatic fibrosis or cirrhosis

Alcohol-related fatty liver disease, or simple steatosis, is the mildest stage of ALD. The terms steatosis and fatty liver both refer to the accumulation of fat in the liver. At this stage, the injury to the liver is minimal.

Alcohol-related hepatitis (AH) is a more severe form of ALD. In addition to fat accumulation, there is inflammation of the liver. As a result, the liver can become scarred, which is known as fibrosis. If AH progresses, cirrhosis may develop. The severity of AH can range from mild to severe, and it can occur suddenly. Mild AH is reversible if a person stops drinking. If drinking continues, severe AH may cause serious complications including liver failure and death.

Alcohol-related cirrhosis is advanced AH and ALD. Cirrhosis occurs when scar tissue replaces healthy liver tissue and blocks the normal flow of blood through the liver. Cirrhosis is a serious condition and may lead to liver cancer, liver failure and death.

What causes ALD?

Alcohol-related liver disease is caused by drinking more alcohol than the liver can process. How much that is depends on the individual and the amount and frequency of alcohol use. Before discussing how much alcohol may cause ALD, here are standard measurements used in the United States to measure the amount of alcohol in drinks. A standard drink contains about 14 grams of alcohol. This is equivalent to:

- 12 ounces of regular beer
- 5 ounces of wine
- 1.5 ounces of distilled spirits

The ALD practice guidelines issued by the American Association for the Study of Liver Diseases say that men who drink 60 to 80 grams of alcohol per day for 10 or more years are at risk of developing cirrhosis. Women are at risk with as little as 20 grams per day in the same time span. One study found that the risk of cirrhosis in those who drank more than 100 kilograms in a lifetime, which is an average of 30 grams per day.

In standard drink measurements, a woman who drinks more than one drink per day may be at risk for liver injury. Men may tolerate higher amounts, but the amount is best kept to a maximum of two drinks.

People who drink alcohol during meals seem to have less of a risk than those who drink in between meals. Compared to wine drinkers, there may be more risk for cirrhosis among those who drink beer and spirits. However, this may be because wine is more likely to be consumed during meals. The presence of another liver disease, such as hepatitis C, family history and genetic factors also increase the risk of ALD.

What are the symptoms of ALD?

Fatigue, feeling weak and abdominal discomfort are the most common symptoms of alcohol-related liver disease, but some people may not have any complaints. Lab tests may determine whether liver enzymes, including ALT and AST, are elevated, an indication of a liver problem. However, a person with alcohol-related fatty liver disease may have normal liver enzymes.

If alcohol-related liver disease has progressed to hepatitis or cirrhosis, symptoms may include significant fatigue, appetite loss and various gastrointestinal complaints such as nausea, vomiting and pain. People may get fevers and jaundice (yellowing of the skin and whites of the eyes). The urine may turn a dark yellow or tea color, and the stools may be pale gray or whitish.

How is ALD diagnosed?

There is no simple test for alcohol-related liver disease. Health care providers make a diagnosis based on history of alcohol use, symptoms, a physical exam and blood tests. Liver biopsy and imaging studies, such as an MRI, may also be performed.

How is ALD treated?

The backbone of treatment for alcohol-related liver disease is abstinence from alcohol. In addition to stopping alcohol, nutritional support and medication may be prescribed.

If quitting is difficult, your health care provider may discuss alcohol cessation programs or other treatment. Alcohol-related fatty liver disease is reversible if a person stops drinking. Alcohol-relted

cirrhosis is generally not reversible, but stopping drinking can significantly improve the quality and length of life. A small study found that a few cups of coffee a day may ward off alcohol-related hepatitis among those who drink heavily. However, this is no substitution for abstinence from alcohol.

Sources:

American Association for the Study of Liver Diseases

National Institute on Alcohol Abuse and Alcoholism

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