



## Medical consequences of alcohol – The damage does not stop with the liver

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Alcohol is legal, socially acceptable and easily available. Some even call it a social lubricant. Alcohol is a growing problem in our community. Alcohol by itself is not evil or dangerous if one has a drink now and then socially. Alcohol becomes a problem when you find yourself drinking more than you intended.

Some people enjoy one or two drinks socially and are able to put a limit after that. However, someone who is an alcoholic or suffers from what is now termed Alcohol Use Disorder or AUD, is unable to stop after that first drink. Such a person will likely continue to drink until passing out. The sound judgment is lost.

In previous issue of Tiranga I had described the various ways alcohol affects the liver and how that affects other organs in the body. In this issue I will describe how alcohol adversely affects rest of the body. Alcohol has a negative effect on practically every organ in the body. Women are more susceptible at lower amounts of alcohol consumption.

Let us start at the top with the brain. Alcohol intoxication is a common cause of accidents and head trauma. Often the signs of head trauma can be confused with alcohol intoxication and effective treatment may be delayed. Head trauma can

cause bleeding inside the head (subdural hematoma). Excessive alcohol ingestion can also increase the risk of brain stroke as a result of hemorrhage (bleeding inside brain) or ischemia (decreased blood flow to the brain). Thiamine (vitamin B1) deficiency is common in alcoholics and can result in Wernicke-Korsakoff disease which results in confusion and loss of balance. This can also take a chronic form as Wernicke-Korsakoff syndrome manifesting as chronic memory impairment. Chronic alcohol ingestion can also result in dementia. Alcohol can cause damage to cerebellum, a part of brain that helps maintain balance and has other functions. This results in irreversible ataxia and incoordination of movements. Alcohol also affects the peripheral nerves causing what is termed peripheral neuropathy. This can result from pressure on a nerve when intoxicated or toxicity from alcohol. This results in burning sensation, pain and numbness in hands and feet.

Gastrointestinal complications due to alcohol are common. Drinking is toxic to the lining of the stomach and results in gastritis which causes nausea, vomiting, burning sensation in stomach, and hematemesis (vomiting blood), which can be life-threatening. It causes inflammation of the food pipe (esophagus) and duodenitis (inflammation of section of small

intestine). And, as discussed in my previous article, it can cause fatty liver, hepatitis and cirrhosis of the liver. Chronic alcohol use increases the risk of liver toxicity due to a common pain medication, acetaminophen (ingredient in Tylenol and many other brands of pain medication).

Alcohol can have a serious effect on pancreas which produces various enzymes and insulin. Acute pancreatitis can result in severe abdominal pain and is often a medical emergency. Some will experience chronic pancreatitis resulting in malabsorption of important nutrients from the intestines, abdominal pain, increased blood sugar and diabetes mellitus.

Alcohol can suppress the bone marrow which manufactures red and white cells in the blood. White blood cells help the body to fight infections. Leukopenia (decreased white blood cells) hampers the body's ability to fight infection. Thrombocytes, other types of cells manufactured in the bone marrow, helps with clotting of blood. Decrease in thrombocytes increases the risk of bleeding. Drinking can also cause anemia as a result of acute or chronic bleeding in the stomach and intestines.

Alcohol can have negative effects on the heart and blood vessels. Alcohol withdrawal is commonly as-

sociated with hypertension (high blood pressure). Chronic alcohol use is associated with chronic hypertension. Chronic heavy alcohol use can result in cardiomyopathy, irregular heart beat and congestive heart failure.

Acute intoxication can result in rhabdomyolysis. Rhabdomyolysis is the breakdown of muscle tissue that leads to the release of muscle fiber contents into the blood. These substances are harmful to the kidney and often cause kidney damage and kidney failure.

We have heard of "walking like a drunk." Alcohol can cause problems with balance and coordination and increase the risk of injury. No one will argue with the fact that alcohol can impair judgment.

Excessive alcohol consumption can result in osteopenia or thinning of bones with increased risk of fractures. Alcohol use increases the risk of a number of cancers, e.g. cancer of the lip, mouth, throat, esophagus (food pipe), stomach, breast, liver, prostate and colon.

Excessive alcohol ingestion depresses respiration. This has caused many deaths on college campuses across the country. An individual with alcohol intoxication may develop aspiration pneumonia. Aspiration pneumonia occurs when food, saliva, liquids, or vomit is breathed into the lungs or airways leading to the lungs, instead of being swallowed into the esophagus and stomach.

Alcohol use can cause sexual dysfunction in men. This is secondary

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to direct effect on the testes and through secondary effects from chronic alcohol liver disease. In women, alcohol can cause menstrual disorders. As little as one drink per week has been known to be associated with decreased fertility in women.

When someone who drinks on a regular basis goes in for surgery especially when it is unplanned, can have serious problems and complications during recovery because of alcohol withdrawal syndrome.

Vitamin deficiencies are common in alcoholics due to poor dietary intake and also malabsorption. Deficiency of thiamine (vitamin B1) causes confusion and loss of balance.

People with drinking problem often need a drink to help with sleep.

Sleep problems are very common in those who drink. Alcohol results in disrupted sleep and causes daytime fatigue. It can worsen obstructive sleep apnea. After someone stops drinking, it may take six months for sleep to be stabilized. Severe sleep difficulties can cause or contribute to relapse.

Alcohol use among women, including South Asian women and especially amongst those of the younger second generation, has increased. Even moderate drinking during pregnancy can result in mental retardation and other neurobehavioral deficits in children. Fetal Alcohol Syndrome is a well-known complication in children born to alcoholic mothers. There is no treatment for the effects of alcohol on the fetus. This persists into adulthood. Fetal Alcohol Syndrome is manifested

by craniofacial (head and face) abnormalities, neurological abnormalities and growth retardation. It is safest to avoid drinking during pregnancy.

As you can see, alcohol affects practically every organ in the body. Good news is that many of the effects described above are reversible when alcohol consumption is stopped. Body has great ability for resilience and healing. But there is a limit to everything. So, next time you pick up a drink, think of all the organs in your body.

If you know someone that has a drinking problem and has a desire to quit visit [www.samhin.org/alcoholics-anonymous/](http://www.samhin.org/alcoholics-anonymous/) or call 732-902-2561 to learn about free program or if you have any questions. You can also write to us at [info@samhin.org](mailto:info@samhin.org).

