

Liver cancer

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3/23/2023

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Abstract:

The tragic effect of liver disease on the population is an increasing one. As our battle with diabetes and obesity wages on the problem of liver cancer is even more apparent. The stages as well as the treatments and causes of liver disease are widely known but not very well integrated into most Americas lifestyle.

Introduction:

In response to chronic liver damage that results in portal hypertension and end-stage liver disease, cirrhosis is described as the uncontrolled development of regenerating cells in the liver. The care, quality of life, and life expectancy of cirrhotic patients have improved as a result of recent research in our understanding of the disease, and complications of cirrhosis. Currently, liver transplantation is the only curative option available for a specific subset of patients, however pharmaceutical medicines that can slow the progression of cirrhosis to decompensated cirrhosis or even reverse it are being researched. The main interests as well as topics of this paper are cirrhosis's diagnosis, certain and possible outcomes, and treatment, as well as recent advances in science and medicine to help prevent and even cure cirrhosis.

The precursor to cirrhosis is fatty liver disease, which is permanent scarring of the liver from excess fat. There are two different kinds of liver disease. Nonalcoholic fatty liver disease and alcoholic disease.

Nonalcoholic liver disease normally stems from type 2 diabetes and obesity while alcoholic liver disease stems from numerous years of heavy and excessive drinking. This disease is common in older alcoholics who drink especially hard liquor. This is an interesting disease because in the last decade, obesity has been on the rise among Americans, especially children. Research has shown that inflammatory oils and refined sugar as well as processed foods play a detrimental role in the downfall of American health. Modifying your way of living can prevent or even halt the accumulation of excess fat in and around your liver while also having a very large impact on one's lifestyle. However there are steps one can take to halt or even reverse the effects of non-alcoholic fatty liver disease but not cirrhosis.

Cirrhosis is unfortunately irreversible, as it permeant scarring and lifelong damage to ones liver. By taking vitamins such as vitamin C. This is an immune booster that protect against free radicals and could help slow the effects of non-alcoholic fatty liver. Another essential vitamin for liver function is milk thistle, this vitamin restores ones liver enzymes which in turn acts as a dietary supplement for cirrhosis and diabetes.

Losing weight is another approach to undo

the consequences. When someone is overweight in the abdomen or middle section, harmful amounts of fat build up around the organs like the liver, pancreas, and colon. Due to this, these organs deteriorate gradually over time. Also, avoiding refined sugar, inflammatory and seed oils such as canola, vegetable, and soy bean oils will help drastically in the future.

If not taking the proper precautionary measures, fatty liver will normally lead to cirrhosis or liver cancer. Once a liver has turned cancerous it is critical to have a liver transplant as soon as possible. The human body cannot function properly without a functioning liver as your body will not be able to filter toxins. Those toxins accumulate as the liver fails over time.

Progression of liver disease to cancer is as follows. The first stage is Hepatitis (Inflammation), severe and unregulated inflammation drives the progression of liver disease forward. The second stage is Fibrosis (scarring), this is the second stage of liver disease that involves constant inflammation. This causes scar tissue throughout the liver leading to hardening of the tissue “When someone has liver disease, their liver enters into a very dangerous cycle. (Persistent inflammation), or hepatitis, sends nonstop signals to repair cells to continue depositing collagen.”(American Liver Foudation, et al 2023). The third stage is Cirrhosis (severe scarring), permanent damage of the liver and intense scarring. The final and most severe stage is Liver cancer (hepatocellular

carcinoma), when the cells in ones liver become cancerous and almost always caused by excessive drinking but can also be induced by severe case of type 2 diabetes.

Individuals with liver cancer cannot live without treatment. Usually treatment does not begin until a certain diagnosis is made through either a CT (computed tomography) scan or MRI (magnetic resonance imaging). “The major role of radiography is for the detection and quantitation of complications of cirrhosis, i.e., ascites, HCC, and hepatic or portal vein thrombosis” (Schuppan, Afdhal et al, 2009). The natural progression of early tumors on the liver is seldom known because the majority of patients receive treatment as soon as possible. There is no sure fire way or specific treatment that holds the best regard as a go to method. As there are many factors that play into which treatment works best such as underlying liver function, the severity and location of the tumor, and finally the age and overall condition of the individual. However there are multiple treatment methods that have shown promising results in many studies.

References:

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