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Commentary

Brief Note on Diagnosis and Causes of Cirrhosis

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DESCRIPTION

Cirrhosis, sometimes referred to as liver cirrhosis, hepatic cirrhosis, and end-stage liver disease, is an impairment of liver function brought on by the development of fibrosis—a type of scar tissue—as a result of liver disease damage. Damage results in tissue healing and the subsequent creation of scar tissue, which over time may take the place of normally functioning tissue and cause cirrhosis, which is characterized by reduced liver function. The condition often takes months or years to develop slowly. The first signs and symptoms may include fatigue, weakness, loss of appetite, sudden weight loss, nausea, vomiting, and abdominal discomfort in the right upper quadrant. As the condition progresses, itching, swelling in the lower legs, fluid retention in the abdomen, jaundice, readily bruising, and the emergence of spider-like blood capillaries in the skin are just a few symptoms that may appear.

Diagnosis

A person's cirrhosis diagnosis is dependent on a variety of variables. Laboratory results, a physical examination, and a patient's medical history can all point to cirrhosis. Typically, imaging is obtained to assess the liver. The diagnosis will be confirmed by a liver biopsy, however it is typically not necessary.

Causes

- ALD, also known as alcoholic cirrhosis, affects 10-20% of people who drink heavily for ten years or longer. By preventing the proper metabolism of protein, lipids, and carbs, alcohol appears to harm the liver. Acetaldehyde, which is produced when alcohol is consumed, causes this damage.
- The hepatitis C virus infection known as chronic hepatitis C results in liver inflammation and varying degrees of organ damage. Cirrhosis can result from this inflammation and damage over many years. 20–30% of people who have chronic hepatitis C go on to develop cirrhosis. The most frequent causes of liver transplantation are alcoholic liver disease and cirrhosis brought on by hepatitis C. Additionally, heroin addiction might be linked to cirrhosis caused by hepatitis C and hepatitis B.
- Cirrhosis can develop as a result of the liver damage and inflammation brought on by chronic hepatitis B over many years. When hepatitis B and hepatitis D are co-infected, cirrhosis progresses more quickly.
- The bile ducts are harmed by an autoimmune process in primary biliary cholangitis, formerly known as primary biliary cirrhosis. The liver is harmed as a result.Patients might not exhibit any symptoms Others might exhibit weariness, itchiness, or skin discoloration. The liver is typically enlarged which is referred to as hepatomegaly. Levels of bilirubin, cholesterol, and alkaline phosphatase increase. The majority of patients have anti-mitochondrial antibodies
- The liver is attacked by lymphocytes in autoimmune hepatitis. This results in cirrhosis, inflammation, and ultimately scarring. Elevations in serum globulins, particularly gamma globulins, are among the findings.
- Skin hyperpigmentation, diabetes mellitus, pseudogout, or cardiomyopathy are the most common manifestations of hereditary hemochromatosis. These are all symptoms of an excess of iron. It's also typical to have cirrhosis in the family.
- Wilson's illness is an autosomal recessive condition marked by decreased ceruloplasmin levels in the blood and elevated liver copper levels.
- Urine copper levels are also increased. In addition, patients may experience altered mental status and corneal Kayser-Fleischer rings.
- A type of neonatal cholestasis known as "Indian childhood cirrhosis" is characterised by copper buildup in the liver.
- Low levels of the enzyme alpha-1 antitrypsin cause the autosomal co-dominant condition known as alpha-1 antitrypsin deficiency.
- Chronic right-sided heart failure, which causes liver congestion, is the cause of cardiac cirrhosis
- Galactosemia
- Type IV glycogen storage disease
- Cystic fibrosis

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- Toxins or medications that are hepatotoxic, such as amiodarone, methotrexate, or acetaminophen (paracetamol).