Summary and conclusion

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The hepatitis C virus (HCV) is one of the most important causes of chronic liver disease It accounts for about 15 percent of acute viral hepatitis, 60 to 70 percent of chronic hepatitis, and up to 50 percent of cirrhosis, end-stage liver disease,and liver cancer.

A distinct and major characteristic of hepatitis C is its tendency to cause chronic liver disease in which the liver injury persists for a prolonged period if not for life. About 75 percent of patients with acute hepatitis C ultimately develop chronic infection.

Chronic hepatitis C varies greatly in its course and outcome. At one end of the spectrum are infected persons who have no signs or symptoms of liver disease and have completely normal levels of serum enzymes, the usual blood test results that indicate liver disease. Liver biopsy usually shows some degree of injury to the liver, but the extent is usually mild, and the overall prognosis may be good.

At the other end of the spectrum are patients with severe hepatitis C who have symptoms, high levels of the virus (HCV RNA) in serum, and elevated serum enzymes,and who ultimately develop cirrhosis and end-stage liver disease. .

In the middle of the spectrum are many patients who have few or no symptoms, mild to moderate elevations in liver enzymes,and uncertien prognosis.

The main injury caused by hepatitis C virus is the hepatic fibrosis, as a result of a chronic inflammatory process in the liver characterized by the deposit of components from the extracellular matrix.

The fibrosis development leads to the modification of the hepatic architecture,of the hepatocellular function and to irregularities in the microcirculation.

Biopsy is generally recommended for initial assessment of patients with chronic HCV infection. It is useful for staging the severity of disease (fibrosis stage) and for grading the amount of necrosis and inflammation.

Biopsy can also be helpful in ruling out other causes of liver disease such as alcoholic features,non-alcoholic steato-hepatitis,autoimmunehepatitis,drug-induced liver disease,or iron overload. .

Viral load tests are blood tests that indicate the presence and measure the amount of hepatitis C (HCV) in the blood. HCV RNA can be quantified by means of target amplification techniques (competitive PCR or real-time PCR) or signal amplification techniques (branched DNA (bDNA) assay).it is often used before and during treatment to find out how long treatment needs to be given and to check how will treatment working.

It remains controversial as to whether viral load in circulation has a role in determining the extent of liver disease or not.Also the pathogenesis of HCV-induced hepatic injury remains unclear and could be attributable to either direct cytopathic damage by HCV or immune medited hepatic injury induced by HCV.it is possible that both may act simultaneously.

In this study we try to evaluate the correlation between the degree of viral load with the degree of liver injury by comparing serum HCV-RNA with transaminase levels and histopathological findings in HCV patients and we prove that there was no correlation between them.

In conclusion,this study shows that viral load doesnot predict the degree of liver injury.Thus ,the histological evaluation would be the gold standard to accurately assess the degree of liver damage.