

## Is there a Correlation between Degree of Viremia and Liver Histology in Chronic Hepatitis C?

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### Abstract

**Objective:** To determine the correlation between degree of histological liver damage and serum HCV RNA level in patients of chronic hepatitis C, in order to evaluate the usefulness of HCV RNA estimation as an alternate to liver biopsy.

**Methods:** This non-interventional descriptive study, was carried out at the department of Pathology, Army Medical College, Rawalpindi, Pakistan between April and September 2002. Core needle liver biopsies of fifty five patients of chronic hepatitis C were evaluated according to Knodell's histological activity index system. The patients were categorized into four subgroups depending upon the grade and stage of disease according to Desmet's classification, and into three groups according to degree of viremia.

**Results:** Five patients had mild viremia, 43 moderate and 7 had severe viremia. Seven patients had minimal disease, 9 mild, 22 moderate and 17 had severe chronic hepatitis. Eight patients had no fibrosis, 20 had fibrous portal expansion, 19 bridging fibrosis, and 8 patients had cirrhosis. No significant correlation was found between serum HCV RNA levels and grade or stage of the disease, with correlation coefficients of  $r_s = -.054$  and  $r_s = .034$  respectively. Moreover, no individual component of the HAI correlated with serum HCV RNA levels.

**Conclusion:** Serum HCV RNA level does not determine the degree of hepatic injury precisely and liver biopsy is necessary to accurately evaluate the extent of liver damage (JPMA 54:476;2004)..