

## Abstract

This study was to investigate seroprevalence of anti-HCV positive and the risk factors in seaboard and interiors villages which areas, Masagou, Chiquansan, Shiuejia, Lioujia, Shiayin, and Liuying, located at southwestern Taiwan. After stratified sampling by age and sex, 1702 subjects were included in this survey. In addition, it was to understand the relationship of HCV infection and liver disease developing, that we followed 190 infected HCV cases who were selected from previous investigation areas. The study results showed that the seroprevalence of anti-HCV positive was 32.2% in seaboard village, 18.5 in interiors villages. Needle injection in past medical activities (O.R=1.9), blood transfusion in hospital (O.R=2.7), and dental care by unlicensed dental practitioners (O.R=2.2) were significantly related to HCV infection after age adjustment in seaboard villages. There was one possible transmission route, blood transfusion in hospital being significantly related to anti-HCV positive after age and educational level adjustment in interiors villages. Three kinds of genotypes were found from 190 HCV infected cases that were 65.2% in Ib, 28.4% in IIa, and 6.4% in IIa. 2 cases (1.1%) of liver cancer and 7 cases (3.7%) of liver cirrhosis were detected from 190 HCV infected cases during one-year-following. It was significant difference between HCV infected cases and non-infected cases for abnormal rates of GOT, GPT, A/G ratio, and platelet. We hope the study results can provide the health team to managing and preventing HCV transmission in community.

**Keywords:** Hepatitis C virus, Prevalence, Transmission route, Genotype, Liver disease