The Prevalence of Hepatitis C Infection In General Population In Shiraz, Southern Iran

Seyedeh Azra Shamsdin*1; Mohamad Reza Fattahi2

1-Gastroenterohepatology Research Center, Shiraz University of Medical Sciences, Shiraz. Professor Alborzi Clinical Microbiology Research Center, Shiraz University of Medical Sciences, Shiraz, Iran
2-Gastroenterohepatology Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

shamsrozita@hotmail.com

Background & Objectives: Hepatitis C virus (HCV) infection is a major blood-transfusion infection with silent epidemic and major global public health problem and diverse prevalence worldwide. To determine the prevalence of HCV infection in general population of Shiraz city, Fars province in Iran, and evaluate the real risk factors in these areas.

Methods: A cross-sectional study was performed from March 2010 to April 2011. All of Iranian participants aged equal or above 35 years old were evaluated for HCV antibody with enzyme-linked immunosorbent assay (ELISA). They confirmed with polymerase chain reaction (PCR).

Results: Fifteen out of 2080 (1181 men and 899 women with minimum age of 35 years and maximum of 83 years old) participants were anti-HCV positive (prevalence 0.72%). The highest prevalence was seen in age ≤45 years old. A statistically significant correlation was found between blood transfusion and presence of anti-HCV antibody (p<0.001). Those with a history of blood transfusion had fifteen fold higher risks for anti-HCV positivity. No statistically significant correlation was found among other variants and positive anti-HCV.

Conclusion: Due to non-significant correlation between other variants and anti-HCV+ except blood transfusion, further evaluation for detection of risk factors is recommended. Moreover, it is emphasized that the donated bloods be evaluated with PCR and the importance of sterility of instruments in medical and non-medical conditions and education of transmission routes be taken into account.

Keywords: Hepatitis C; General Population; Shiraz; Iran