

# Sero-Epidemiological Study of Hepatitis E Virus among Thalassemia as High Risk Patients: A Cross-Sectional Survey in Jahrom, Southern, Iran.

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## Abstract

Hepatitis E virus (HEV) could be cause of viral hepatitis in the developing countries and cause severe epidemics. According to other studies, blood transfusion as a probable route of HEV infection has been suggested. An infection with hepatitis agents such as HEV causes active liver failure in multi-transfusion patients in particular thalassemia. The purpose of this study determines the seropositivity of anti-HEV antibodies in thalassemia individuals in Jahrom. In a cross-sectional study, sera from 110 thalassemia were collected between 2013 and 2014. Enzyme-linked immunosorbent assay (ELISA) method was performed to detection of anti-HEV antibodies. Individuals' data were collected such as, demographic and clinical, for statistical analysis. Our results show that 10% and 1.8% of the enrolled patients were HEV Ig-G and Ig-M positive antibodies respectively. In addition, there was statistically significant difference in age groups for prevalence of anti-HEV Ig-G ( $P = 0.01$ ). Also the serum levels of liver enzymes such as ALT and AST in the HEV Ig-G and Ig-M positive samples were significantly higher than anti-HEV negative samples. But there were no significant difference between sex and splenectomy with anti-HEV positive samples. The results indicate more study are needed to assess HEV screening of blood products to these patients that those have a probably risk of exposure to HEV especially in higher years old.