

Seroprevalence of HDV Infection among HBsAg Positive Blood Donor in Baqubah City, Iraq

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Abstract

Background: Hepatitis B virus (HBV) is the most important causative agent of blood borne hepatitis in humans. Hepatitis D Virus (HDV) infection occurs either as a co-infection or super infection in HBV carriers.

Objective: To determine the seroprevalence of HDV among blood donors (HBsAg positive individuals) in Baqubah city.

Patients and Methods: Serum samples were collected from 89 HBsAg positive blood donation (66 males and 23 females, age range 19-60 years) from blood bank in Baqubah teaching hospital, during the period from 11th August 2016 till 17th January 2017. All of them were tested for HBsAg, HBcIgM, HBcIgG, HDVIgM and HDVIgG using separate ELISA kits and full information were collected from each participant by use questioner sheet which included the sociodemographic and clinical characteristics such as age, gender, educational level, marital status, economic, occupation, family history, blood transfusion, surgical operation, dental history, endoscope, any medical problem, tattoo and hjamaa also were recorded.

Results: In the present study minimum age group was 19 year and maximum was 68 year with mean age 36 year. According to ELISA technique, 5 cases (5.6%) were positive to HDV IgG and they all were males with mean age 49 year, while 84 (94.3%) were negative for HDV infection. Among study group the percentage in males (74.1%) was more than in females (25.8%). Also significant differences was found between the viral hepatitis infection and family history, blood transfusion, surgical operation, dental history, endoscope, tattoo and hjamaa, while there was no significant difference noticed in social state, economic and educational level.

Conclusion: Infection rate of HDV among blood donor is high, early screening of HDV is essential for establishing diagnosis and should be depended in routine work further investigation is needed to validate the findings.

Key words: Hepatitis, HBV, HDV, Blood donor.

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