PREVALENCE OF TRANSFUSION TRANSMITTED VIRUS (TTV) INFECTION IN PATIENTS WITH LIVER DISEASES ATTENDING TO ASSIUT UNIVERSITY HOSPITAL

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Abstract:

Background: In 1997 Transfusion Transmitted Virus (TTV) was isolated from the serum of a patient with post transfusion hepatitis of unknown etiology, in Japan. It's considered as a causative agent of non A to G hepatitis. Objective: To assess the prevalence of TTV infection among patients with liver diseases compared with healthy controls and the significance of TTV infection in patients with liver disease. Study design: This investigation was conducted on 76 patients with liver diseases, classified into four groups: Acute hepatitis group (20 patients), chronic liver diseases (30 patients), Liver cirrhosis (18 patients) and hepatocellular carcinoma (8 patients). In addition to the patient groups, the fifth group of 24 healthy blood donors as control group was included within the study. All patients and control groups were examined for the detection of TTV DNA by PCR. Thirty seven had history of blood transfusion and 23 patients were subjected to surgical manipulation. Results: TTV DNA was detected in 57.9% (44/76) of patients with liver diseases and in 45.7% (11/24) of healthy blood donors. The prevalence of TTV in the studied groups were 60%, 46.7%, 66.7% and 75% in acute hepatitis, chronic liver diseases, liver cirrhosis and hepatocellular carcinoma respectively. Conclusion: TTV is commonly present in patients with liver disease attended to Assiut University Hospitals as well as in blood donors. High prevalence of TTV in blood donors may indicate other routes of transfusion of this virus such as fecal-oral and sexual routes beside transfusion of blood and blood products. The blood transfusion and operative intervention are a major risk factor for transmission of TTV.

Keywords:

Keywords: TTV; Liver disease.

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