

PREVALENCE OF HUMAN PEGIVIRUS IN A POPULATION OF BLOOD DONORS FROM THE STATE OF PARÁ, BRAZIL

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Human Pegivirus (HPgV), previously called hepatitis G virus or GB virus C, was discovered in 1995. It was originally described as a hepatitis virus, however the subsequent studies did not show any association between the virus and acute or chronic liver disease. Recently, an association between HPgV and non-Hodgkin's lymphoma has been reported. HPgV infection is transmitted by sexual, parenteral, and vertical mechanisms and it has a considerably high prevalence in populations worldwide, HPgV is known to be a lymphotropic virus and has the ability to produce a persistent infection in about 25% of infected individuals. It has a considerably high prevalence in populations worldwide, but, there are few studies that address the prevalence of HPgV in the general population of Brazil, especially in regions such as the north of the country. Thus, the objective of the present study was to investigate the prevalence of HPgV in plasma samples from blood donors in the state of Pará, Brazil. For doing this, 83 samples were used to detect the presence of HPgV RNA in plasma from blood donors. The samples were submitted to RNA and PCR extraction techniques and Nested-PCR reactions for amplification and detection of HPgV RNA. All data were stored in a database using Microsoft® Excel 2010. As a result, we detected a prevalence of 9.6% (8 out of 83) across the study population, with women being 11.6% (5 of 43) and male 7.5% (3 out of 40). The most affected age group was from 27 to 36 years old, with 50% of all samples, among those ages, positive. The best documented form of HPgV transmission is parenteral, especially for blood transfusions and the findings of this study did not present significant difference with those of other previous studies. The high presence of HPGV RNA in healthy donors can be attributed to the different forms of transmission that this virus possesses.

Keywords: Human Pegivirus, Blood donors, RT/PCR.

Development Agency: CNPq