

TT Virus Infection in Transfusion-Dependent Thalassemia Patients

Viroj Wiwanitkit*

Department of Laboratory Medicine, Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand 10330

Viral hepatitis is an important public health threat for millions of people all over the world. Recently, some hepatitis viruses are detected. Hepatitis TT virus (TTV) is an unenveloped virus with a single-stranded, circular DNA genome of 3,818-3,853 nucleotides (nt) that infects humans and non-human primates ⁽¹⁾. Recent reports indicate that TTV can be transmitted via blood/blood products ⁽²⁾. There are some previous reports on the prevalence of TTV-DNA among blood donors. The purpose of this study was to summarize the prevalence of TTV-DNA among transfusion-dependent thalassemia patients in the previous reports.

This study was designed as a descriptive retrospective study. A literature review on the papers concerning the prevalence of TTV-DNA among transfusion-dependent thalassemia patients was performed. The author performed the literature review to find the report of the prevalence of TTV-DNA from database of the published works cited in the Index Medicus and Science Citation Index. The published works till August 2004 were reviewed. The reports without complete data, those not focusing on the transfusion-dependent thalassemia patients and those in a language other than English, were excluded and 4 literatures ⁽³⁻⁶⁾ were finally recruited. Of 290 documented transfusion-dependent thalassemia patients, there were 147 cases with TTV-DNA positivity. The summative percentage for TTV-DNA positivity was 50.7%. There is no significant association between the ethnicity of the donors and the TTV-DNA

positivity ($P > 0.05$). According to this study, the HGV infection seems to show no preference for a special ethnicity, implying the global importance of this hepatitis virus infection. The prevalence of TTV in multi-transfused thalassemics is more than that of blood donors ^(7, 8), implying the higher risk among the patients receiving blood transfusions.

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* Correspondence:

Viroj Wiwanitkit, M.D., Wiwanitkit House, Bangkhae, Bangkok, Thailand 10160; Visiting Professor, Hainan Medical College, Hainan, China.

Tel/Fax: +668 92346632

E-mail: wviroj@yahoo.com

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