GENOTYPES OF HEPATITIS B VIRUS AMONG CHILDREN IN CHIANG MAI, THAILAND

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Abstract. In sub-Saharan Africa, the Pacific, and particularly Asia, hepatitis B virus (HBV) infection is highly endemic, the most common route of transmission is perinatal. To minimize the number of horizontal transmissions, we determined the prevalence of HBV genotypes among children in northern Thailand. From a survey of 1,231 schoolchildren in Chiang Mai during 1998 to 2000, 55 (4.5%) were found positive for HBsAg. Fifty-three HBsAg-positive samples were available for this study. These came from 28 girls (52.8%) and 25 boys (47.2%), age 5-16 years, with a mean age of 12.8 (±2.6) years. The laboratory method was based on a multiplex-PCR for the detection of 6 HBV genotypes (A-F). Among 53 HBsAg positive cases, 48 (90.6%) were genotype C, followed by 4 cases of genotype B (7.5%), and 1 case (1.9%) with mixed infection with genotypes B and C. The high prevalence of HBV genotype C follow by genotype B is similar to that found among blood donors in northern Thailand and the nationwide epidemiological survey conducted in 2004. Perinatal transmission may play an important role in the spread of the virus in this area, as in other Asian countries, where genotypes C and B are highly prevalent.

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