

The Relationship between Glucose 6 Phosphate Dehydrogenase Deficiency and Hepatitis B Virus Infection

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OBJECTIVE : To determine the role, if any, of glucose 6 phosphate dehydrogenase (G6PD) deficiency in the susceptibility to hepatitis B virus infection.

BACKGROUND : G6PD deficiency has been reported by Morrow *et al.* (1) to be associated with both the incidence and the severity of viral hepatitis in West Africa. We sought such an association between G6PD deficiency and evidence of hepatitis B virus infection in Thailand.

METHODS : Professional blood donors at the Pramongkhitkiao Hospital blood bank were selected for the study. Serum of each individual was assayed for hepatitis B virus surface antigen (HB Ag) and antibody to HB Ag (anti-HB) by immunoelectrophoresis (IEOP). The level of G6PD was determined by the method of Gall *et al.* (2).

RESULTS : Of 163 human sera, 18 (11%) contained HB Ag and 45 (27.6%) contained anti-HB. These findings are similar to previous studies on Thai blood donors (3). G6PD deficiency was found in 6.1% of the 163 persons and showed no association with hepatitis B infection (Table 1).

REFERENCES :

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Table 1. Glucose 6 Phosphate Dehydrogenase Deficiency and Evidence of Hepatitis B Virus Infections

Subjects	Number	G6PD Deficiency Number	%
HB _s Ag +	18	1	3.2
Anti-HB _s +	45	1	5.6
Total	63	2	3.2
Not HBV Infected	100	8	7.8