

EARLY PREDICTORS OF CLINICALLY SIGNIFICANT BLEEDING IN ADULTS WITH DENGUE INFECTION

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Abstract. Hemorrhage is an important complication in dengue infection, but early predictors of clinically significant bleeding are undefined. This study aimed to determine clinical factors on admission associated with Type I bleeding, defined as gastrointestinal bleed, hematuria and menorrhagia, among adult patients with dengue infection. We carried out a retrospective study among 277 patients aged >15 years with serologically-confirmed dengue infection admitted to the Hospital for Tropical Diseases, Bangkok, Thailand during 2006-2009. Female gender ($p<0.001$), vomiting ($p=0.05$), severe thrombocytopenia (platelet count $< 25 \times 10^9/l$; $p=0.007$), high absolute lymphocyte count (ALC >500 ; $p=0.05$) and high aspartate aminotransferase level (AST >200 ; $p=0.02$) were significantly associated with hemorrhage on univariate analysis. Multivariate analysis revealed variables associated with bleeding were female gender [odds ratio (OR) 14.5; 95% confidence interval (CI) 0.16-0.56, $p<0.001$], thrombocytopenia (OR 4.7; 95% CI 0.13-0.9, $p=0.03$) and ALC >500 (OR 5.7; 95% CI 1.17-4.99, $p=0.02$). These data identify patients at high risk for developing clinically significant bleeding with dengue infection.

Keywords: dengue, adult, clinical factor, clinical bleeding

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