SEROPREVALENCE OF HEPATITIS C VIRUS INFECTION AMONG BLOOD DONORS IN A TEACHING HOSPITAL IN NORTHEASTERN MALAYSIA

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Abstract. The aim of this study was to determine the prevalence of HCV infection and the signal/cutoff (S/CO) value for false reactive, false positive, indeterminate and true positive HCV infection among apparently healthy blood donors in our area. This retrospective study was conducted at the Transfusion Medicine Unit, Hospital Universiti Sains Malaysia from June 2008 to June 2009. Blood samples were screened for anti-HCV using enzyme immunoassay (EIA). Reactive cases were confirmed by recombinant immunoblot assay (RIBA). Sixty-one blood donors were found to be reactive after the first screening test. Twenty-nine blood donors had reactive repeat screening, with only 9 samples being true positives. The S/CO for false reactive, false positive, indeterminate and true positive anti-HCV samples were 1.02 to 1.45, 1.01 to 2.09, 1.07 to 2.43 and 35.95 to 119.89, respectively. The analysis showed the low incidence of HCV infections among blood donors in our area, however, thorough donor screening and stringent selection criteria are still recommended to eliminate high risk donors to improve our blood transfusion service.

Keywords: hepatitis C infection, anti-HCV seropositive, anti-HCV screening, blood donor, Malaysia

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