Hepatitis B virus (HBV) presents a high residual risk of transmission by transfusion. Photo credit: WHOHepatitis B virus (HBV) remains a major public health problem worldwide. Egypt is considered an area of intermediate endemicity for the virus. HBV transmission by hepatitis B surface antigen (HBsAg) negative components occurs partly during the serologically-negative window period, but more often during later stages of infection, which is known as occult HBV infection (OBI). Most OBIs are asymptomatic and would only be detected by systematic screening of large populations.

A cross-sectional study was conducted in Egypt to determine the prevalence of anti-hepatitis B core antibody (anti-HBC) positivity in blood donors, highlight the residual risk of transmitting HBV in blood banks through blood transfusion and determine whether routine anti-hepatitis B core antigen screening of blood donations provides any concrete benefits with regard to HBV transmission risk reduction.

The study was undertaken on 3167 blood donors negative for anti-hepatitis C virus (HCV), anti-human immunodeficiency virus (HIV) and HBsAg: 16.6% of blood units were positive for total anti-core, of these 64% were anti-HBsAg positive. Results showed that:

anti-core screening would possibly eliminate the risk of unsafe blood donation;

nucleic acid amplification should be considered as the primary screening method for high risk recipients;

a specific management strategy for OBI should be implemented.

Citation: Said ZN, et al. Occult hepatitis "B" virus infection among Egyptian blood donors, 2011 | Study abstract [pdf 692kb]

This study recieved technical and financial support from the Regional Office Special Programme for Research and Training in Tropical Diseases Small Grants Scheme.

Tuesday 9th of April 2024 03:44:57 PM