Frequency of hepatitis B virus DNA in anti-HBc positive, HBsAg negative blood donors in Rasht, northern Iran.


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ABSTRACT

One of the important factors in the ensuing safety of blood transfusion is to use a sensitive screening assay for detection of blood-born infective agents such as HBV which transmits through transfusion. To improve the detection rate of HBV infection in blood donors, a cross-sectional study was conducted in Rasht, which is the largest city in the north of Iran to explore the possibility of using anti-HBc as a screening test.

A total of 2041 blood samples negative for HBsAg, Anti-HCV, Anti-HIV I, II and RPR were tested to detect anti-HBc and then the positive anti-HBc samples were further checked for the presence of HBV DNA.

The prevalence of anti-HBc positive samples was 3.8% and HBV DNA was detected in only one sample.

This study showed that anti-HBc positive blood donors may be a source of HBV transmission and further study for evaluation of HBV DNA in anti-HBc positive blood units is needed.