

Hepatitis E virus: can it be transmitted parenterally?

<https://onlinelibrary.wiley.com/doi/abs/10.1046/j.1365-2893.1999.00141.x>

<https://doi.org/10.1046/j.1365-2893.1999.00141.x>

Cited in:

Journal of Viral Hepatitis 6 (2):161-164, 1999

Hepatitis E virus: can it be transmitted parenterally?

V. A. Arankalle L. P. Chobe

Dr (mrs) V. A. Arankalle Assistant Director & Head, Hepatitis Division, National Institute of Virology, 20-A, Dr.Ambedkar Road, Pune-411001, India

First published: 08 April 2002

Abstract

Of 200 voluntary blood donors screened for hepatitis E virus (HEV) RNA, employing the reverse transcription–polymerase chain reaction (RT–PCR), three were found to be positive (1.5%). None of the HEV RNA-positive blood donors had any symptoms at the time of blood donation or during subsequent follow-up. One donor was positive for immunoglobulin M (IgM) antibodies to HEV, with a raised serum alanine aminotransferase (ALT) level, whereas the other two donors were negative for both immunoglobulinG (IgG) and IgM antibodies to HEV. Follow-up blood samples collected 2–5months later from HEV RNA-positive blood donors demonstrated the presence of IgG anti-HEV antibodies. Overall seroprevalence of IgG anti-HEV was 18.6%. Retrospective studies on samples collected from commercial blood donors and haemophiliacs revealed IgG anti-HEV positivity to be 24.6% (46/191) and 24.4% (22/90) and statistically not different ($P>0.1$) from the prevalence among voluntary blood donors and an age-matched normal population, respectively. However, a highly significant proportion of the paid plasma donors, with a high prevalence of IgG antibodies to human immunodeficiency virus and hepatitis C virus, were positive for IgG antibodies to HEV (54/71, 76%, $P<0.001$), indicating a possible role of blood-derived HEV in the transmission of the virus among plasma donors. These results demonstrate the possible risk of transfusion-associated hepatitis E in hyperendemic areas.

References

Tandon BN, Gandhi BM, Joshi YK, Irshad M, Gupta H. Hepatitis virus non-A, non-B: the cause of major public health problem in India. Bull WHO 1985; 63: 931- 934.