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Poster Presentation

A WINDOW TRANSMISSION OF HEPATITIS B THAT INDIVIDUAL DONATION HBV NAT WOULD HAVE PREVENTED (SP218)

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Background:

Hepatitis B (HBV) remains the last of the major transfusion transmissible viruses to have a significant risk of window period transmission (estimate of 1 in approximately 200,000). In this case report a repository sample retained from the implicated donation has documented that an individual donation nucleic acid test (idNAT) for HBV would have detected and prevented HBV transmission in this window period case.

Case Report:

A 22 year old female student gave a first time whole blood donation 3/13/2003. The recipient of the platelet component was completely seronegative on 3/5/2003, and subsequently became HBsAg positive 6/2/2003 and anti-HBcore positive 8/9/2003. All other donors for this patient were tested and found serologically negative for HBV. We were unable to locate this donor in a reasonable amount of time, so a repository plasma sample from the donation was tested by Chiron using their discriminatory HBV assay and found to be positive. Approximately one year later the donor was located and found to be positive for anti-HBcore and anti-HBs.

Conclusions:

HBV currently maintains a significant risk for window period blood donation and transmission through transfusion. The use of HBV idNAT on a repository specimen from the donation demonstrated sufficient sensitivity to detect early HBV infection where current HBsAg assays are unable to detect HBV during the window period. HBV idNAT would reduce significantly the risk of window period transmission of HBV.