CASE REPORT

Residual Risk of HIV-1 Transmission: The Case of a Seroconverter

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SUMMARY

In the present report we describe the case of a repeat blood donor infected with HIV-1. In January 2000 the donor was found to be repeatedly reactive to HIV1/2 antibodies and HIV-1 RNA screening tests. The donation was confirmed to be HIV-1 positive by Western blot. During the post-test counselling session, the donor reported a risk sexual behaviour denied during the pre-donation interview, and he recalled that in May 1998 he had undergone a check-up including the test for the detection of HIV1/2 antibodies, which was negative. This check-up was dated four months the next to the donor’s previous donation in January 1998, which had been found HIV1/2 antibody negative, too. Serum and plasma specimens, properly stored at -80 °C, were available at the hospital where the donor had undergone the HIV antibody test in May 1998. Thus, the specimens dated May 1998 and the specimen of the last donation in January 2000 were investigated again by using the most sensitive tests currently available in the setting of donation screening. On the whole, the results suggest that in May 1998 the donor was in the pre-seroconversion period for HIV-1 infection.

The case reported here stresses that a residual risk for HIV transmission through blood products still relies on the possibility that an individual may be accepted as blood donor during the asymptomatic pre-seroconversion window period of HIV-1 infection. Actually, this phase of the infection cannot be detected by the routine antibody/antigen-based HIV1/2 screening tests but only by using more sensitive techniques such as genomic screening. (Clin. Lab. 2002;48:283-286)