

Decreasing Risk of Viral Transfusion-transmitted Diseases in Croatia

Damir Grgièeviæ, Melita Balija, Dubravka Pirc-Tiljak, Ivanka Mihaljeviæ, Ira Gjenero-Margan¹, Silva Županiæ-Šelek², Pavel Macek³

Croatian Institute of Transfusion Medicine; ¹Croatian Institute of Public Health; ²Zagreb University Hospital Center; and ³Dr. Fran Mihaljeviæ University Hospital for Infectious Diseases, Zagreb, Croatia

Aim. To assess the risk of viral transfusion-transmitted infections in Croatia.

Methods. The following parameters were analyzed: frequency of blood donations repeatedly reactive for HBsAg and anti-HCV (1993-1999); blood donations confirmed positive for HBsAg and anti-HCV (1997-1999), anti-HIV1/2, and syphilis reactivity (1993-1999); number of registered patients with hepatitis B and C; transfusion-associated hepatitis B and hepatitis C; and frequency of HBV, HCV and HIV markers in patients with congenital bleeding disorders (1993-1998).

Results. The frequency of repeatedly reactive HBsAg and anti HCV markers and confirmed positive HBsAg, anti-HCV, and syphilis markers in blood donors decreased in the study periods, whereas the frequency of anti-HIV1/2 positivity did not change. The frequency of confirmed positive donors in 1999 was 0.068% for HBsAg, 0.035% for anti HCV, 0.002% for anti HIV1/2, and 0.0056% for syphilis. The number of patients with hepatitis B, hepatitis C, and transfusion-associated hepatitis B and C steadily decreased during the 1993-1998 period. The number of transfusion-associated hepatitis patients leveled off in 1997. From the beginning of the follow-up of AIDS patients in 1987, only 7 (2%) of hemophiliacs were HIV-infected, all before 1990 and due to non-inactivated coagulation factor concentrates. There were no cases of transfusion-associated HIV2 infection in patients with congenital bleeding disorders or of transfusion-associated HIV1 infection through transfusion with labile blood components.

Conclusion. The safety of transfusion therapy in Croatia has improved, and the present risks of viral transfusion transmitted diseases are very low.

Key words: AIDS; blood banks; blood donors; blood transfusion; Croatia; hepatitis B; hepatitis C; HIV seropositivity; syphilis