Hepatitis B, Hepatitis C, HIV, and Syphilis Seroprevalence of Blood Donors: The Results of Balcalı Hospital Blood Bank

Filiz Kurt[1], Gülser Karaboğa[1], Derya Serbes[1], Aynur Gümüştepe[1], Tansel Bilgiç[1], Mevhibe Terkuran[1], A. Kadir Bayar[1], Birol Güvenç[1,2,3]

[1] Balcalı Hospital Blood Center, University of Çukurova

[2]Hemapheresis, Stem Cells and Cryopreservation Unit of Balcalı Hospital, University of Çukurova

[3]Balcalı Hospital, Department of Internal Medicine, Department of Hematology, University of Çukurova, Adana, Turkey

Purpose: Blood transfusion is a very suitable way to transmission of lots of microorganism. For this reason, infection agents of blood and blood components prepared in blood bank must be screened. In this study, the results of screening tests of blood donors in our blood bank were evaluated and compared with previous results reported from our country.

Methods: This was a retrospective study. The medical records of 39777 blood donors were evaluated. Donor Record Form (DRF) was filled by all donors admitted to our blood center from January 2011 to July 2012. Physical examination and whole blood count analysis were evaluated and blood donation was acquired from accepted individuals according to the procedures. Donated blood tested for HbsAg, anti-HCV, anti-HIV_{1-11} by ELISA method by Vitross ECIQ system and syphilis tested by RPR card method.

Results: Of the donors, 482 (1.21%) had positive HbsAg, 263 (0.66%) had positive anti-HCV, 59 (0,14%) had positive anti-$HIV_{1-11,}$ and 82 (0.20%) had positive RPR test.

Conclusion: In our study, HBsAg positivity rate was found higher than other test's rates. However, HBsAg positivity rate was found lower than previous reports (average rate reported between 0.52%-12.5%) of our country. Other tests (anti-HCV, anti-HIV_{1-11}, RPR) were found similar with previous reports of our country.

Finally, transfusion related infections are still important risk in blood transfusion. Blood bank should be informed donors about filling the DRF correctly regarding the prevention from blood-borne and sexually transmitted diseases. In addition, training program should be used for all staff members about donor selection/eligibility criteria in blood bank.

Keywords: Blood donors, HBsAg, anti-HCV, anti-HIV_{1-11}, RPR