Results of a screening programme of HTLV I/II infection among blood donors in Spain

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Background: Human T-Lymphotropic virus (HTLV) type I and II can be transmitted by the hemoderivatives donation. To prevent this transmission during blood transfusion, a program was implemented to screen donors for virus antibodies. The aim of this study is shown the results of the screening program.

Materials/methods: 687 samples from donors from Latin America present in the blood bank of the Transfusion Comunitarian Centre from Asturias, Spain (Centro Comunitario de Transfusiones de Asturias, España) among January 2009 and November 2015 were studied. Sex, age and country of origin data were collected from each donor. The detection of HTLV-I and HTLV-II antibodies was conducted through sandwich immunological assay based on chemoluminiscence principle, using the Liaison®XL (DiaSorin Saluggia (VC) Italy) analysis.

Results: From 687 donors, 64% were women with an average age of 36 [8]. The main origin countries were Colombia (16.6%), Argentina (15%), Ecuador (14.4%), Brazil (10.5%), Venezuela (9.3%), Cuba (5%), Dominican Republic and Uruguay (3.5% each), Mexico, Paraguay and Peru (3% respectively), Chile (2.2%). In any case data from HTLV I/II infection in the family history were collected. Two positive cases were detected (0.3% of prevalence) which came from Cuba (3% prevalence) and Dominican Republic (26% prevalence). Both cases showed a positive HTLV I/II viral load. They are asymptomatic.

Conclusions: The prevalence of the HTLV virus infection in donors from endemic areas is low, but significantly higher in donors from Cuba and Dominican Republic. Owing to the transmission risk, systematic screening is necessary, especially in these population groups.