

CASE REPORT

Evaluation and Prevalence of Hepatitis be among Blood Donors in January - June 2013 Gabon

Mintsa S^{1*}, NDjoyi Mbiguino A², R rambhyia L³, Nzengui GF²

¹*Departement de Bacteriologie-Virologie du CHU Aristide le Dantec de Dakar, Unite de Biologie Moleculaire, Faculte de Medecine d'Odontologie de luniversite Tcheik Anta Diop de Dakar, Senegal*

²*Laboratoire de Bacteriologie-Virologie, Virologie, de la Faculte de Medecine, Science de la Sante, Gabon*

³*Centre National de Transfusion Sanguine, Gabon*

***Corresponding author:** Mintsa S, Departement de Bacteriologie-Virologie du CHU Aristide le Dantec de Dakar, Unite de Biologie Moleculaire, Faculte de Medecine d'Odontologie de luniversite Tcheik Anta Diop de Dakar, Senegal, Tel: +0024102469277, E-mail: mintsasandrine@yahoo fr

Citation: Mintsa S, NDjoyi Mbiguino A, R rambhyia L, Nzengui GF (2022) Evaluation and Prevalence of Hepatitis be among Blood Donors in January - June 2013 Gabon. J AIDS Immune Syst 2: 103

Abstract

Introduction : Infection with the hepatitis B virus (HBV) according to WHO, is a worldwide Public health problem. Very few data available on the prevalence of HBs antigen in blood donors in the national context in Gabon. To better understand the epidemiological aspects necessary to develop a program to fight against viral hepatitis, including HBsAg in blood donors in Gabon.

Objective : The objective of our study was to evaluate the prevalence of HBs antigen in blood donors at the National Blood Transfusion Centre in Gabon, from two quarters of 2013.

Materials and methods : This is a cross-sectional study, descriptive, held in January 2013 to June 2013 two quarters, performed on blood donors collected in the National Blood Transfusion Centre in Libreville, Gabon. The population of our study was to 10200 blood donors aged 18 to 63 years, divided into two quarters: 4653 donors in the first quarter January March 2013 and 5547 donors for the second quarter April to June 2013 Gabon. Screening for viral markers (HBsAg, anti-HIV 1 and 2, anti HCV and HTLV I and II) is using the device Abbott PRISM— with Bio Rad reagents (France).

Result : The HBsAg remains the leading cause of destruction of the pockets with a prevalence rate of 4.17% in the 1st quarter (January-March 2013). The Q2 prevalence rate of 3.73% (April-June 2013).

Conclusion : The prevalence of HBsAg in Q1 2013 is 4.17% higher than the second quarter was 3.73%. Despite these reassuring data in Gabon, the fact remains that among the main potential transfusion-transmissible infections is hepatitis B, which continues to have the highest risk.

Keywords : Hepatitis B Blood Transfusion ; Donor voluntary ; Voluntary Gabon ; WHO

Introduction

Infection with hepatitis B virus (HBV) according to WHO is a worldwide public health problem. The HBsAg test is one that is traditionally used for screening blood donors for HVB. Very few data available on the prevalence of HBs antigen in blood donors in the national context in Gabon. To better understand the epidemiological aspects necessary to develop a program to fight against viral hepatitis, including HBsAg in blood donors in Gabon, the objective of this work was to evaluate the prevalence of HBsAg in blood donors at the National blood Transfusion Centre in Gabon, from two quarters of 2013.

Materials and Methods

This is a cross-sectional study, descriptive, held in January 2013 to June 2013 two quarters, performed on blood donors collected in the National Blood Transfusion Centre in Libreville, Gabon. The selection of blood donors was reached on eligibility criteria, according to blood safety rules. After completing the questionnaire, the patient will be able to donate blood in an interview with a nurse if the patient is doing well the day of donation and is 18 years and older. The population of our study was 10200 blood donors aged 18 to 63 years, divided into two quarters: 4653 donors in the first quarter January March 2013 and 5547 donors for the second quarter April to June 2013 Gabon. Being whole blood donor was included and excluded all plasma donors or platelet designated.

As part of blood safety, all blood donations routinely undergo biological qualification based on haematological tests and communicable disease screening through blood! Screening for viral markers (HBsAg, anti-HIV 1 and 2, anti HCV and HTLV I and II) is using the device Abbott PRISM— with Bio Rad reagents (France). This device is designed to detect, by the chemiluminescence technique, the presence of Ag in a large volume of samples. When one of these tested positive virological markers, the gift is automatically unused and the donor is permanently banned from donating blood.

Statistical analysis

In Gabon, the blood donation as a principle to be: voluntary and non-voluntary Familiaux-rénuméré. This allows for a voluntary free consent of the donor for blood sampling. During the interview preceding the donation, the nurse informs the future donor different biological tests to be done on his collection. The donor anonymity is respected during laboratory tests, and confidentiality is required at the Centre National de Transfusion Sanguine Libreville in Gabon. We made the analysis of data on a consolidated basis, so we do not have access at any time to the identity of donors. * As our study is within the framework of standard blood safety objectives of the National Blood Transfusion Center of Gabon.

Therefore, we have not resorted to the approval of the ethics committee prior to the completion of our research project. However, our study is within the framework of a thesis, the Director of the None.

References

1. Amat-Roze JM (2003) L'infection à HIV/side en Enriquer subsaharienne, propos géographiques. *Hérodote* no 111, La découverte, 4e trimestre. 117-55.
2. Ankra-Badu GA, Ahmad M, Sowayan S, et al. (2001) Demographic characteristics of seropositive donors in Al-Khobar. *Ann Saudi Med.* 21 :113-6.
3. Barreto CC, Sabino EC, Gonzalez TT, et al. (2005) Prevalence, incidence, and residual risk of human immunodeficiency virus among community and replacement first-time blood donors in Sao Paulo, Brazil. *Transfusion* 45 :1709-14.
4. Cruz JR, Pérez-Rosales MD (2003) Availability, safety, and quality of blood for transfusion in the Americas. *Rev Panam Salud Publica.* 13 :103-10.
5. Ejele OA, Nwauche CA, Erhabor O (2005) Seroprevalence of HIV infection among blood donors in Port Harcourt, Nigeria. *Niger J Med.* 14 :287-9.
6. Ghomsi E, Johnson N, Simon C, et al. (2002) The recruitment of blood donors through voluntary HIV testing: an experience carried out at the provincial hospital of Bamenda (Cameroon). *Int Conf AIDS* 14.
7. Loua A, Magassouba FB, Camara M, et al. (2004) Bilan de quatre ans de sérologie HIV au Centre national de transfusion sanguine de Conakry. *Bull Soc Pathol Exot.* 97 :139-41.
8. Mbanya DN, Tayou C (2005) Blood safety begins with safe donations update among blood donors in Yaounde, Cameroon. *Transfus Med.* 15 :395-9.
9. Minga AK, Huét C, Coulibaly I, et al. (2005) Profil des patients infectés par le HIV, despites au Centre national de transfusion sanguine d'Abidjan, Côte-WIvoire, 1992-1999. *Bull Soc Pathol Exot.* 98 :23-6.
10. Asif N, Khokhar N, Iahi F (2004) Seroprevalence of HBV, HCV and HIV infection among voluntary non remunerated and replacement donors in northern Pakistan. *Pak J Med Sci.* 20 :24-8.
11. OMS (2007) Sécurité transfusionnelle et don de sang. Rapport juillet.
12. Pereira A, Sanz C, Tassies D, et al. (2002) Do patient-related blood donors represent a threat to the safety of the blood supply? *Haematologica.* 87 :427-33.
13. Sarkodie F, Adarkwa M, Adu-Sarkodie Y, et al. (2001) Screening for viral markers in volunteer and replacement blood donors in West Africa. *Vox Sang.* 80 :142-7
14. Schutz R, Savarit D, Kadjo JC, et al. (1993) Excluding blood donors at high-risk of HIV infection in a west African city. *BMJ* 307 :1517-9.
15. Sharma RR, Cheema R, Vajpayee M, et al. (2007) Prevalence of markers of transfusion transmissible diseases in voluntary *Infect Dis* 11 :407-412.
16. Sultan F, Mehmood T, Mahmood MT (2004) Infectious pathogens in volunteer and replacement blood and replacement blood donors in Pakistan : à ten-year experience. *Int J donors. Natl Med J India.* 17 :19-21