

## CASE REPORT

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

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### 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.

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