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KNOWLEDGE ATTITUDES AND PRACTICES OF AFRICAN DOCTORS TO REACTIVATION VIRAL B IN THE COURSE OF CHEMOTHERAPY

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ABSTRACT

Patients treated with chemotherapy for hematological or cancerous pathology have a risk of reactivation of hepatitis B virus (HBV). There is no data on viral reactivation B in Africa. The purpose of this work is to evaluate the knowledge and practices of African physicians on HBV testing during chemotherapy. Materials and methods: This was a prospective survey carried out from 04/05/2016 to 06/05/2016 at the VIIth Euro-African Congress of Oncology in Yaoundé. A pre-established questionnaire was provided to African prescribers of chemotherapy. The items in the survey included screening, knowledge of the viral hepatitis B profile, recommendations on viral reactivation B, treatment and physician experience. on viral reactivation B.Results: We interviewed 200 African doctors, 83 doctors answered either a participation rate of 41.5%. They came from 11 French-speaking African countries. There were 68 (81.9%) medical oncologists, the other participants were 15 or 18.1% of respondents. 47 (56.6%) physicians have no knowledge of reactivation of HBV. However, 6 (7.2%) physicians observed a case of viral reactivation.69 (83.1%) of the respondents do not know that there are recommendations on HBV screening before chemotherapy. As a result, the majority of respondents did not answer the question about the incriminated molecules in viral reactivation B.5 3 (63.9%) doctors recognize the high risk of reactivation for the patient profile cured and51 (61.4%) doctors for the patient chronic carrier. In contrast, 9 (10.8%) treat high-risk patients; 74 (89.2%) doctors do not do prophylaxis and 70 doctors (84.3%) do not vaccinate patients with HBV seronegative profile.Conclusion: knowledge of African doctors about viral reactivation is incomplete, practices and the attitudes of practitioners are inadequate.

Keywords : Reactivation B virus, chemotherapy.

INTRODUCTION

Infection with the hepatitis virus is a major public health problem; it is estimated that 2 billion people are infected with HBV, and HBV infection can be acute or chronic [1].

Africa is an area of high endemicity of HBV infection. Congo, a country in sub-Saharan Africa, is recognized as a country with a high prevalence of HBsAg [2,3].

Cancer patients receiving chemotherapy are at risk for reactivation of HBV. Viral reactivation B is recognized as a complication associated with the use of immunosuppressive chemotherapy [4,5]. It has been reported in patients with haematological malignancies and in patients with solid tumors [4].

To our knowledge, there is no African literature on viral reactivation Ben Sub-Saharan Africa. Thus the purpose of this study is to study the knowledge, attitudes and practices of African practitioners on viral reactivation B.

MATERIAL AND METHODS

On the occasion of the VIIth Euro-African Congress of Oncology taking place from 04/05/16 to 06/06/16 in Yaoundé, Cameroon. We interviewed African participants at this meeting of African Medical Oncology.

We considered eligible any chemotherapy prescriber (Oncologists, Hematologists, Radiotherapists, Rheumatologists, Oncology DES) who agreed to participate in our study.

This was a cross-sectional descriptive study conducted from 04 to 06 May / 2016.

The survey involved a representative sample of all the French-speaking African countries that participated in the congress, the total number of participants was about 200 participants.

We discussed individually each congressist to whom we presented the theme of our study, its interest and asked for its participation. To the willing delegates we presented the one-page questionnaire that the congressmen filled in themselves to avoid influencing the answers of each of them.

The variables studied were: General characteristics (country, occupation, specialty, grade), knowledge about screening (their pre-chemotherapy screening opinions, have they already prescribed screening, recommendations on HBV in oncology, what are the risks if positivity or negativity of HBsAg), the prescription of a preemptive treatment of viral hepatitis B, the prescription of vaccination against HBV if seronegative patients with viral hepatitis B, their experience on the viral reactivation B.

The capture and analysis of the data was carried out by the software EPI-DATA and excel; our results were expressed in percentages for the qualitative and quantitative variables.

RESULT AND DISCUSSION

During the study, we interviewed 83 African doctors out of nearly 200 participants, representing a participation rate of 41.5%. They came from 11 French-speaking African countries (Benin, Burkina, Cameroon, Congo, Gabon, Guinea Conakry, Mali, Morocco, Democratic Republic of Congo, Togo) Cameroonians were 27 participants (32.5%) who answered our questionnaire followed by Gabonese who were 23 (27.7%) who answered the questionnaire, the Congolese were 7 (8.4%), the Beninese were 6 (7.2%), the Burkinabe were 5 (6%), the Guineans (Equatorial were 3 (3.2%), Moroccans were 3 (3.2%), Congolese RDC were 2 (2.4%), Malians 1 (1.2%), and there were 1 (1, 2%) Togolese, 1 (1.2%) Guinean (Conakry).

The respondents to our survey were medical oncology specialists in 68 cases (81.9%); the other participants (Radiotherapist, Hematologist, Rheumatologist, DES in medical oncology) who answered the questionnaire represented 15 cases (18.1%).

More than half of the participants (56.6%) in our survey 47 are unaware of the risk of reactivation of viral hepatitis B. While 55 (66.6%) say they have already prescribed a test for HBV. In contrast, 69 (83.1%) of respondents do not know that there are recommendations for screening for HBV before chemotherapy.

Only 6 (7.2%) have ever seen a case or have experience with viral reactivation B, 77 (92.8%) have no experience with HBV.

The majority of physicians interviewed, 79 (95.2%) did not answer the question about the immunosuppressive agents incriminated in viral reactivation B. Nevertheless, 76 (91.6%) recognize that HBV seronegative profile (negative HBsAg) , HBc negative, HBsAg negative) does not present a risk of reactivation of HBV.

The high risk of reactivation of HBV is recognized by 53 (63.9%) investigated for the profile of healed carriers and 51 (61.4%) of the respondents for the profile of chronic carriers of HBV.

Pre-emptive treatment (Lamivudine, Entecavir) is not prescribed by 74 (89.2%) physicians, only 9 (10.8%) physicians treat patients at risk for reactivation of HBV.

There were 70 (84, 3%) physicians who did not practice HBV vaccination in HBV seronegative patients before chemotherapy.

DISCUSSION

The knowledge on viral reactivation B during cancer chemotherapy is not only a concern of African doctors but also a global situation.

In China, a study reports that the reactivation rate of HBV is high in the order of 73%. Viral reactivation may delay chemotherapy, therefore antiviral therapy should be given immediately; however, this affects the effectiveness of treatment [5]. International recommendations for hepatitis B highlight the need to identify patients with viral hepatitis B who need antiviral prophylaxis before chemotherapy [6]. Viral reactivation has been well described with some chemotherapy regimens containing corticosteroids, anthracyclines, Rituxumab, Infliximab anti TNF, monoclonal antibody [1, 7,8]. The danger of reactivation of HBV is not only limited to positivity HBsAg in some patients, but may also involve HBsAg-negative patients with HBc-positive antibody [8]. Our study reports a hepatitis B screening rate in African medical oncologists in the order of 66.3%. prevent viral reactivation B when prescribing chemotherapy. Our results are superior to those of Fiona et al in Australia [9] which reports a screening rate of around 53% as well as Khokar et al. [10] USA, who found that 38% of oncologists perform HBV screening. priority to chemotherapy. The most common reason African oncologists have for screening for HBV is that it is part of the routine check-up before chemotherapy. But the American Society of Oncology does not recommend routine screening [1]. The American Society for the Study of Liver Diseases (ASSLD) recommends that all cancer patients scheduled for chemotherapy should be screened for HBV in particular by the realization of HBs antigen, anti HBs antibodies, anti HBc antibodies [1,10]. Many factors must be taken into account in determining the benefit of a universal HBV screening policy. The main clinical aspects to be considered are: the prevalence of chronic hepatitis B, the hidden epidemiology, the risk of reactivation with the proposed treatment, the potential clinical sequelae of reactivation [9]. In our study, 83.1% of practitioners are unaware that there are recommendations for screening for HBV prior to cancer chemotherapy. The lack of knowledge about the

recommendations of HBV screening explains the practice of screening for HBV in the routine. In addition, work on reactivation of HBV seems rare or almost non-existent in African literature. This may explain the ignorance of oncologists about the reactivation of hepatitis B; however, the reactivation of hepatitis B is reported directly in the medical oncology literature as early as 1989 [10]. The 2009 ASSLD guidelines recommended screening for HBV before the beginning of any immunosuppressive therapy [1] Currently, there are several guidelines from different professional societies including ASSLD, the European Society for the Study of Liver Diseases (EASL), the Pan Asian Association for the Study of Liver Diseases (APASL) and the Center for disease control (CDC). US companies, CDC and ASSSLD recommend screening for HBV in each patient likely to have chemotherapy [1, 9]. However, the American Society of Clinical Oncology does not recommend routine screening for HBV citing insufficient evidence to determine net benefit [1]. Recognition of the risk profile seems to be well known by oncologists. In fact, 91.6% recognize that a HBV seronegative patient (HBeAg negative, HBeAg negative, HBcAb negative) has no risk of reactivation of hepatitis B; 61.4% recognize that a chronic carrier (HBsAg positive, HBcAg IgG positive, HBsAg negative) has a high risk of reactivating HBV, 63.9% recognize that a patient with hepatitis viral B (negative HBsAg, anti HBsAb positive, anti HBc IgG positive) has a severe risk of reactivating HBV.The CDC recommends performing three serological tests for viral hepatitis B.The American Society of Clinical Oncology Interim opinion recommends the search for anti-HBc antibody in certain populations, for example patients with haematological tumors and patients with solid tumors [1, 6]. The prevalence of HBV is higher in the black population than in the white population [6]. In case of risk of reactivation of HBV, 83.4% do not treat hepatitis B, 7.2% treat hepatitis B , while 84.3% do not vaccinate HIV-negative patients. These results can be explained by the ignorance

CONCLUSION

Our study shows that 95.2% of oncologists did not answer the question about immunosuppressive agents that could lead to viral reactivation. This underlines the ignorance of oncologists about immunosuppressors, immunomodulators and monoclonal antibodies.Several immunosuppressive agents are associated with viral reactivation B among which anthracyclines, monoclonal antibodies, statins, corticosteroids, antis metabolites, agents alkylating agents [1,12]. The knowledge, attitudes and practices of African oncologists on viral reactivation B are not reassuring. Given the morbidity and potential mortality due to viral B reactivation during immunosuppressive treatments, the improvement of awareness of the community of African oncologists requires additional training on viral hepatitis B.

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