Tumors and HIV infection in the Infectious Diseases Department in Yalgado Ouédraogo University Hospital

Medical Science

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Objective: Describing the tumors diagnosed in patients with HIV, hospitalized in the Department of Infectious Diseases of the CHU YO.

Patients and method:
It was about a cross-sectional study of the prospective collection of tumors diagnosed in HIV patients hospitalized in the Department of Infectious Diseases from 1st January 2013 to 28th February 2014. All HIV-positive patients with a diagnosed tumor pathology in the department were included.

Results:
During the study period, nine tumors were diagnosed out of a total of 55 patients living with HIV; it represents a prevalence of 16.4%. The tumors were represented by three Kaposi diseases, three cases of post-hepatitis B carcinoma, two suspected cases of lymphoma, and one case of pancreatic head tumor. Patients were predominantly female (7/9). The average age of our patients was 41 years [33-54]. The average TCD4 lymphocyte count was 263 cells / mm3. Tumor manifestations occurred as a result of a failure of ARV treatment in three cases, as part of an immune restoration syndrome in one case, after viral hepatitis B in three patients, and in two naive antiretroviral treatment patients. Four out of nine patients presented tumors not classified as AIDS. Four deaths were recorded, representing a lethality of 44.4%.

Conclusion: Post-hepatitis B carcinomas were with Kaposi's disease, the most frequently diagnosed.

KEYWORDS:
HIV-infection, Tumors, cancer, Infectious diseases, Burkina Faso

Introduction
The advent of highly active antiretroviral therapy has made a lasting difference in the prognosis of HIV-infected patients. But tumor pathologies are a new challenge in the treatment of these patients [1]. They include malignant tumors classified as AIDS, such as Kaposi's sarcoma, malignant non-Hodgkin's lymphomas and invasive cervical cancer, and cancers that not classifying AIDS [1]. A significant proportion of HIV-associated tumors is related to infections with oncogenic viruses such as Epstein-Barr viruses, Herpes simplex virus (HHV8), and papillomavirus-like viruses. The introduction of active antiretroviral therapy has been accompanied by a decline in the incidence of certain tumors classifying AIDS, with appearances of others not classifying. These tumors are causes of morbidity and mortality of HIV-infected patients in the Department of Infectious Diseases [2]. This is why we wanted to describe these tumors with the aim of contributing to better care.

Patients and method
Context of the study:
The Department of Infectious Diseases is one of the services of care for patients living with HIV.

Type of study:
It was about a cross-sectional study of the prospective collection of tumors diagnosed in HIV patients hospitalized in the Department of Infectious Diseases from 1st January 2013 to 28th February 2014. All HIV + patients with a diagnosed tumor pathology in the department were included. Were not included the diseases in whom the clinical examination suspected a tumor but of which the patient was unable to perform a medical imaging examination.

The classification of HIV infection is that of WHO [3]. Tumors have been diagnosed from clinical, echographic and / or computer tomography, and / or pathologic, and biological rationale.

Data collection:
For each selected patient, socio-demographic, clinical and biological variables were collected using a data collection form.

Results:
During the study period, nine suspected malignant tumors were diagnosed out of a total of 55 patients living with HIV; that is a prevalence of 16.4%. Only one case of digestive Kaposi's sarcoma was confirmed in the pathologic examination. The patients were predominantly female (7/9), sex ratio H / F = 0.1. The average age of the patients was 41 years [33-54]. Among the tumors diagnosed, there were three cases of Kaposi's disease, three cases of post-hepatitis liver carcinoma, two cases of lymphoma, and one case of pancreatic head cancer. HIV infection was detected in the department in three hospitalized patients (two in WHO stage IV and one in stage III). The average TCD4 lymphocyte count was 263 cells / mm3 [68-612]. Tumor manifestations occurred as a result of a failure of antiretroviral therapy in three patients as part of an immune restoration syndrome in a patient following viral hepatitis B in three patients. Two patients were naive about antiretroviral therapy at the time of diagnosis of the tumors. Four out of the nine patients had non-AIDS-classified carcinomas (three post-hepatitis B carcinomas and pancreatic head carcinoma). Four deaths during hospitalization were recorded, including two cases due to Kaposi's disease, one case due to lymphoma and one case due to the tumor of the pancreas head. The lethality was 44.4%.

Comment:
Patients were predominantly female, unlike the Kadjro series where male sex was predominant [9]. Post-hepatitis B carcinomas and Kaposi diseases were the most frequently diagnosed in our series. In the French series, are reported in addition to these two tumors, others such as breast cancers, lung cancers, Hodgkin's disease and cervical cancers [5,6]. Prior to the advent of antiretroviral combinations, three classifying cancers dominated oncology of patients living with HIV (PLWHIV); It was Kaposi's sarcoma, non-Hodgkin's lymphoma and cervical cancer. But the range of cancers has changed significantly with the advent of antiretroviral therapy, which has been accompanied by the appearance of other cancers such as anal canal cancer, skin cancers, lip cancer, lung and liver cancer [6]. Four of our patients had unclassified cancers. In fact, the incidence of non-classifiable AIDS cancers is increasing in HIV-infected persons. This increase is correlated with the number of years of exposure to low TCD4 lymphocyte levels [7]. Among the malignant tumors not associated with AIDS, Jean Philippe [2] added that the most frequently reported are Hodgkin's disease, malignant germ cell tumors, skin cancers, cancers of the upper aerodigestive tract and bronchial cancer. The new combinations of antiretroviral drugs have greatly reduced the incidence of AIDS-classified cancers, even if they remain highly above that of the general population. [8] Three of our patients had developed Kaposi's disease as in 8.6% of patients in the series of Bonacini [9]. Kaposi's disease is related to the oncogenicity of Herpes HHV-8 virus [7,10]. This oncogenic herpes virus is also associated with cavity lymphoma, with some cases of multicentre Castelman disease and other rare lymphomas [7]. While in the Caucasus, Kaposi is the prerogative of male homosexuals, in Africa, it affects heterosexuals [7]. Whereas in the male homosexual population, mainly in the United States and Europe, Herpes HHV-8 is transmitted mainly during sexual
contact, transmission in Africa is mainly from mother to child and then between children with not negligible transmission by saliva [7]. Two cases of ganglionic lymphoma had been diagnosed in our series. In fact, lymphomas are diagnosed in about 5% of patients living with HIV, but this frequency increases with the prolongation of the life expectancy, in spite of effective antiretroviral treatments [7]. Three patients had post-hepatitis B carcinoma. HIV-HBV co-infection increases the risk of hepatocellular carcinoma [5,9]. Almost all diagnosed tumors were of infectious origin, corroborating Barro-Traoré's findings in Burkina [11].

Conclusion
It is important to establish multidisciplinary frameworks for better care of these tumors in PLWHIV. Therefore, it seems important to improve the accessibility of pathological examinations to confirm the diagnosis of tumors. Finally, screening and early care of HIV infection in the general population will help reduce the prevalence of these tumor pathologies.

References