

Primitive Ocular Cancers in the University Hospital of Brazzaville

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Abstract

Introduction: With the exception of retinoblastoma and melanoma of the uveal tract, primitive ocular cancers originate from the accessory structures of the eye, especially the eyelids and the conjunctiva. While in developed countries these cancers are mostly encountered after 60 years, in black Africa their prevalence has increased in young adults.

Objective: To determine the epidemiological, clinical and histological profile of these tumors in the University Hospital of Brazzaville.

Methodology: Mini analysis of nine (9) of our publications, published between 2015 and 2017, in the journals: East African Medical Journal, Health Science and Diseases, EC Ophthalmology, and Revue de Médecine et de Pharmacie. HIV serology has been systematically requested except for cases of retinoblastoma. Histological evidence was made in all cases.

Results: 86 patients had been seen. Average age 31.2 years (2 years - 75 years), sex ratio equal to 1.08. Reasons for consultation: exophthalmia (44), mass (35%), leucocoria (20%) and palpebral wounds (1%). Affected structures: conjunctiva (38%), retina (35%) and eyelid (27%). Histological types: squamous cell carcinoma (55.5%), retinoblastoma (25.9%), basal cell carcinoma (8.5%), sebaceous carcinoma (5.5%), Kaposi's sarcoma (3.5%) and acral melanoma lentiginous (1.1%). HIV serology was positive in 38% overall, but in 100% of conjunctival cancers.

Conclusion: Primitive ocular cancers are dominated in children by retinoblastoma. In young adults, these are essentially opportunistic cancers in the context of HIV / AIDS.

Keywords: Eye, Cancer, Retinoblastoma, Carcinoma, Kaposi, HIV/AIDS

Introduction

Ocular cancers may be of interest to all ocular structures. They are either primitive when the initial malignant cell is derived from an organ of the visual system, or secondary when the initial malignant cell originates from a nearby organ or tissue located far from the eye.

With the exception of retinoblastoma and melanoma of the uveal tract, primitive ocular cancers originate from the accessory structures of the eye, especially the eyelids and the conjunctiva [1-3]. While in developed countries these cancers are mostly encountered after the age of 60, in black Africa their prevalence has increased in young adults [1,4]. This work aimed to determine the epidemiological, clinical and histological profile of primitive ocular cancers in the University Hospital of Brazzaville.

Methodology

This was a mini analysis of nine (9) of our publications, published between 2015 and 2017, in the following journals: East African Medical Journal, Health Science and Diseases, EC Ophthalmology and Revue de Médecine et de Pharmacie [5-13].

HIV serology has been systematically requested except for cases of retinoblastoma. The histological nature of all cancers had been confirmed.

Results

A total of 86 patients had been seen. The average age was 31.2 years (2 years - 75 years) and the sex ratio was 1.08. Figure 1 shows the different structures affected by these cancers. The reasons for consultation are shown in Figure 2. The histological types of cancers encountered are shown in Table 1. Table 2 shows the different types of cancers according to the structures affected. HIV serology was positive in 38% overall, but in 100% of conjunctival cancers.

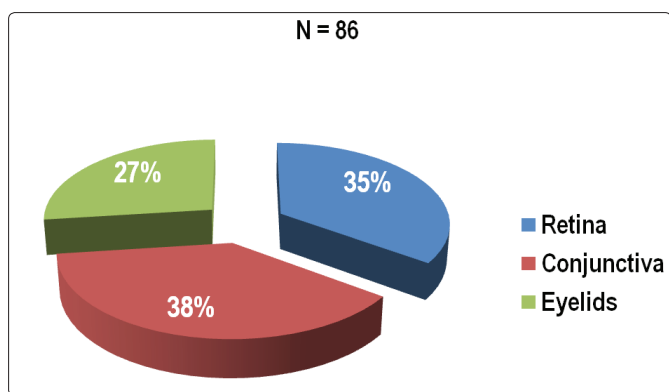


Figure 1: Structures affected by primitive ocular cancers in the University Hospital of Brazzaville between 2015 and 2017

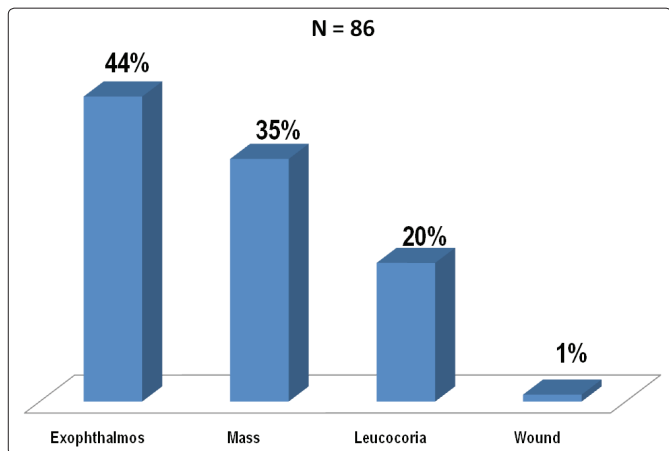


Figure 2: Reasons of consultation for patients with primitive ocular cancers in the University Hospital of Brazzaville between 2015 and 2017

Table 1: Histological types of primitive ocular cancers encountered in the University Hospital of Brazzaville between 2015 and 2015 (N = 86)

Histological types	Frequency (%)
Squamous Cell Carcinoma	55.5
Retinoblastoma	25.9
Basel Cell Carcinoma	8.5
Sabaceous Carcinoma	5.5
Kaposi's Sarcoma	3.5
Acral Melanoma Lentiginous	1.1
Total	100

Table 2: Types of primitive ocular cancers according to the structures affected in the University Hospital of Brazzaville between 2015 and 2015

Structures affected	Types of cancers
Conjunctiva	Squamous Cell Carcinoma
	Kaposi's Sarcoma
Eyelids	Basal Cell Carcinoma
	Sebaceous Carcinoma
	Squamous Cell Carcinoma
	Acral Lentiginous Melanoma
Retina	Retinoblastoma

Discussion

Primitive ocular cancer pathology affects all age groups. It is present in both men and women in similar proportions [1,2,14]. In Brazzaville these cancers develop mainly at the expense of three structures, the conjunctiva, the retina and the eyelids.

In the conjunctiva, two types of cancer were diagnosed, squamous cell carcinoma and Kaposi's sarcoma. Patients are usually seen in consultation for a mass of varying size and color. When it overflows from the inferior conjunctival cul-de-sac, this mass often lets out a seropurulent fluid. These patients are either already informed of their serological status (serology positive for HIV) or after the biological assessment. It is accepted that the prevalence of certain so-called opportunistic cancers is proportional to the number of cases of patients infected with HIV [1,15-17]. This situation is particularly acute in countries like Congo-Brazzaville where the vast majority of patients do not have access to antiretroviral treatment. The exact figure is not known, but it is admitted that less than 50% of HIV-positive patients in Congo-Brazzaville are on treatment. This figure is even lower in rural areas.

At the level of the retina only one type of cancer is found, retinoblastoma. This tumor is the first primitive childhood eye cancer. This cancer is of genetic origin. Clinically it can be expressed in two ways. Either very early at the age of 1 year, it is the so-called hereditary forms that are bilateral. Either started around 2 to 3 years, it is the so-called nonhereditary forms that are unilateral. In more than 60% of the cases the inaugural signs, for both forms, are leucocoria and strabismus [18,19]. In our exercise context where social security is non-existent and poverty is a reality, parents most often consult late, when traditional treatments or other paranormal medicines have failed. The child is then seen in consultation for an exophthalmos.

This partly explains the high proportion of exophthalmia as a reason for consultation during this survey.

Because of its vascular wealth and the multitude of structures that compose it (skin, muscles, lacrimal glands), the eyelid may be the site of several types of cancer [1,20,21]. An exceptional case of acral lentiginous melanoma on the edge of the outer canthus was diagnosed in a black albino patient.

Conclusion

Retinoblastoma is the only cancer diagnosed in children. Basal cell carcinoma, which has a few cases, is related to age, it is a disease of the subject aged over 60 years. Most cancers are of interest to young adults. Immunosuppression linked to HIV infection is the determining factor in the occurrence of these cancers. Better care for people living with HIV can help reduce the prevalence of primitive eye cancers in Brazzaville.

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