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Vulvar Cancer: A 5-Year Retrospective Study at the University Hospital of Owendo (Gabon)

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Abstract

Introduction: Invasive cancers of the vulva are uncommon; it is a pathology of the elderly. More and more young women are concerned. **Objectives:** To study and analyze vulvar cancer in our context. **Patients and Method**: Retrospective, descriptive and analytical study carried out in the Gynecology Department of the Owendo University Hospital over a period of 5 years from 2020 to 2024. All cancer cases of the period were concerned and we included vulvar cancers. We studied the epidemiological, clinical and therapeutic aspects. **Results**: We collected 5 files, the median age was 41.8 years [30 - 57 years], the average consultation time was 18 months [12 - 36 months]. Ulcerated, budding, and itchy lesions were present in 80% of cases. Invasive squamous cell carcinoma was the histological type present in all patients. Surgery was performed in 40% of cases. Concomitant radiochemotherapy (CRC) was offered in all patients. HIV was the comorbidity found in 100% of cases. **Conclusion:** Vulvar cancers are rare. They are often seen at advanced stages because of their location, the taboo nature they represent on the one hand and underdiagnosis on the other.

Keywords

Cancer, Vulva, HIV, Advanced Stages, Owendo (Gabon)

1. Introduction

Invasive cancers of the vulva are uncommon. In Western countries, it is one case per 100,000 women per year, either 1000 cases per year in France in 2018, which represents less than 5% of women's cancers [1] [2]. In the USA, it is the 4th most common gynecological cancer. It accounts for 6% of all women's cancers and will

cause about 6470 new cases and 1670 deaths in 2023 [3]. It is a pathology of older women and the risk factors are well known [2] [3]. In our regions, the figures are not well known. It is a taboo subject like everywhere in the world. There is a silence about the vulva in society [4]. Although the incidence of vulvar cancer is low, it has increased in recent decades, especially in young women [3]. Persistent genital HPV infection is reported to be the main cause of the development of vulvar neoplasia [5] [6]. Our environment does not seem to be excluded by this trend and all age groups are concerned. HIV infection appears to be the main culprit [6] [7]. The authors report late consultation and cases at advanced stages [8] [9]. We report an evolution of the cases for which we have studied the socio-demographic, clinical and therapeutic aspects in the Gynecology Department of the Owendo University Hospital.

2. Patients and Method

We carried out a descriptive and analytical study with retrospective recruitment at the maternity ward of the Owendo University Hospital (OUH) from January 1, 2020 to December 31, 2024. That is 5 years. The OUH is located on the outskirts of Libreville, it is a trauma center. Motherhood is a secondary activity. Over time, his activity has evolved. It carries out about 5000 deliveries per year and is currently one of the reference centers for obstetrics and gynecology in Gabon. The study involved all patients who had a gynaecological and breast malignant tumor pathology in the ward of the period. We included all those with malignant vulvar tumors. The management of tumors deemed malignant is the subject of a procedure in our practices. Once the diagnosis has been made and the clinical stage established, the file is submitted to a staff during a weekly multidisciplinary consultation meeting (MCM) at the Libreville Cancer Institute (LCI). This will dictate the appropriate therapeutic care. The same applies to the management of chronic infections such as HIV. In this case, the treatment was antiretroviral drugs (ARVD). For vulvar cancer, the therapeutic arsenal is surgery, chemotherapy and radiotherapy. We excluded non-malignant pathologies as well as other gynaecological and breast cancers from the study. For all cases of malignant vulvar tumor, we described the socio-demographic, clinical, therapeutic and progressive aspects. The data was entered using Microsoft®'s Excell software with simplified analysis. Quantitative variables were expressed as a median and qualitative variables as a percentage.

3. Results

During the study period, 106 gynecological and breast cancers were treated and 5 (4.7%) vulvar cancers were recorded. Breast cancer accounted for 49% (52 cases) and cervical cancer for 26.41% (28 cases). Vulvar cancer is the 5th gynecological cancer in our context (**Table 1**).

The evolution of the annual cancer rate has been gradual. Five cases (4.71%) were reported in 2020 and 43 cases (40.56%) in 2024. For vulvar cancer, no cases

were recorded in 2022 and no more than 2 cases per year until 2024 (Table 2). In this case, the median age of the patients was 41.8 years with extremes of 33 to 57 years. They were single (100%), without gainful activity (100%) and 4/5 cases (80%) had a history of sexually transmitted infection (STI). All of them were patients living with HIV (PLHIV) for several years. Downward socioeconomic conditions appeared to be significantly associated with vulvar cancer as well as sexually transmitted infections. One in 5 (20%) regularly followed their treatment and the rest had stopped treatment for several months for various reasons. The reason for consultation was pruritic vulvar lesions (80%), ulcerative budding lesions (40%), retractile and ulcerative lesions with purulent discharge (20%). They were located at the level of the labia majora (100%) and for 60% around the anal margin (Figures 1(a)-(c), Figure 2). Inguinal lymphadenopathy was found in 80% of cases. The median time for consultation was 18 months with extremes of 6 to 36 months and for 40% of cases, treatment by application of ointments mixed with decoctions and traditional baths had been undertaken. The biopsy had been performed. The patient found moderately differentiated invasive squamous cell carcinoma (40%), poorly differentiated invasive squamous cell carcinoma (40%) and squamous cell carcinoma with little to medium differentiation (20%). Thoraco-abdominopelvic computed tomography (TAP-CP) had objectified a vulvar tumor with external and bilateral common iliac lymph node extension (60%) and a localized vulvar tumor with inguinal lymphadenopathy (40%). At the end of the MCM, 3 patients (60%) received concomitant radiochemotherapy (CCR) and 2 (40%) received a vulvectomy with bilateral inguinal lymphadenectomy (Figure 3, Figure 4). For one, the definitive histological results showed invasive vulvar squamous cell carcinoma. The limits of the excision were in the healthy zone of 2 cm. The left inguinal dissection had resulted in 2 positive and 5 negative lymph nodes. The right dissection 7 negative lymph nodes. For the other, the definitive histological findings were in favour of moderately differentiated invasive vulvar carcinoma. The left and right inguinal dissection had brought back 15 lymph nodes and 1 was positive. The 2 had subsequently benefited from an CCR. All of these patients had resumed the HIV-related antiretroviral protocol. No deaths have been recorded today.

Table 1. Types of cancer.

Type of cancer	*n*	*%*
Breast	52	49
Collar	28	26.4
Endometry	12	11.3
Ovary	9	8.5
Vulva	5	4.7
Total	**106**	**100**

Table 2. Annual evolution of cancers.

	Years					
Type of cancer	**2020**	**2021**	**2022**	**2023**	**2024**	**Total**
Breast	1	0	18	14	19	52
Collar	4	1	7	4	12	28
Endometry	0	0	3	2	7	12
Ovary	0	1	2	2	4	9
Vulva	0	1	1	2	1	5
Total	**5**	**3**	**31**	**24**	**43**	**106**

(a)

(b)

(c)

Figure 1. (a)-(c) Ulcerative, budding and retractable vulvar and perianal lesions.

Figure 2. 10 cm budding ulcer lesion on the left labia majora, at a distance from the urethra and the anal margin.

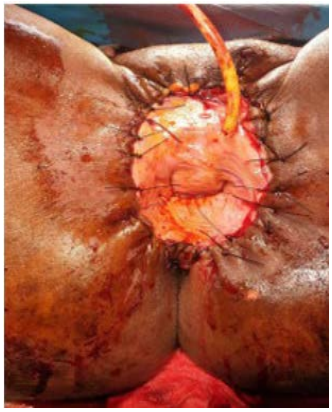

Figure 3. Appearance after vulvectomy.

Figure 4. Control after 2 months of the CCR.

4. Discussion

We have found 5 cases in 5 years. In view of the taboo nature of this pathology, other cases must exist. However, these tiny cases allowed us to draw up the social profile of women with vulvar cancer in our context. They are vulnerable women with debilitating comorbidities. N. Zongo and other authors have made the same observation [7] [8]. It is a rare cancer. In our series, it is 1 case per year and a cumulative frequency of 4.7%. In 2020, Alassane Dièye and Zineb Dahbi pub-

lished 1 case and others published more important figures [7] [9] [10]. Recent figures report 5.3% of gynecological cancers [2]. Once the prerogative of postmenopausal women, vulvar cancers are induced in 30% to 69% of cases by the presence of papillomaviruses (HPV), particularly strains 16 and 18 [5] [11]. They can also occur in the context of dermatosis, particularly lichen planus sclerosus [3] [6]. Since the advent of HIV, we have observed cases of cancer in young women [6] [7]. Zineb Dahbi reports a 25-year-old woman [10] and Alpha Boubacar Conte a 61-year-old woman in Rabat [1]. In our series, the median age of patients is 41.8 years, 60% are under 36 years old. The youngest is 30 years old and all are infected with HIV with poor adherence to treatment. Age does not appear to be a risk factor for vulvar cancer. Vulvar cancers are in the majority of HPV cases induced on an immunodeficient basis [12]. In HIV-positive women, HIV-induced immunodeficiency promotes the onset and persistence of HPV infection, thus leading more easily to the development of genital cancers, particularly of the vulva and cervix [6] [7]. Indeed, HIV-infected women control HPV infection much less well than uninfected women [13]. In our study, all of our patients were HIV positive. This situation is consistent with Alassane Dièye's study, although the sample is not representative enough [7]. HIV-infected women, especially those with CD4 T cell counts less than 200/mm^3, are less likely to clear HPV infection than women with CD4+ T cell counts between 200 and 500/mm^3. When the CD4 T cell count is less than 200/mm^3, the difficulty of viral elimination is estimated at 71% compared to those with a CD4 T cell count greater than 500/mm^3 or the difficulty of elimination is estimated at 32% [13]. In the literature, there are no direct correlations between CD4 T cell count and the occurrence of vulvar cancers, nor are there any correlations between CD4 count and the macroscopic appearance of vulvar lesions [12]. However, Rogers LJ recommends looking for HIV status in the presence of suspicious vulvar lesions [14]. The average consultation time is 18 months [6 - 36 months] in our series. Zineb Dahbi in Morocco finds 16 months [10]. In our study, this delay was justified by the taboo nature of the site of the lesions on the one hand, but also by self-medication with the use of medical topicals or traditional plants on the other hand. The associated therapeutic non-compliance (ARVD) could explain the progressive nature of these lesions. In Morocco, the ignorance and especially the modesty of the population may be the explanation for this delay. Vulvar pruritus is the precursor sign of lesions in all our patients, followed by ulcerated or budding lesions. Other authors find plaques, and nodules. Sometimes it is post-menopausal vaginal bleeding or discharge. Dyspareunia or inguinal lymphadenopathy may be circumstances of discovery [6] [8] [14]. Budding ulcerative lesions are the most frequent and these lesions are locally advanced. This result is identical to those of other series, particularly with regard to the evolved character of the lesions [7]-[9]. Squamous cell carcinoma is the most common histological type in the literature [5] [8]. This is the case of us as well as that of Zineb Dahbi in Oujda in Morocco [3] [10]. Surgery, when possible, retains its place. At the end of the MCM, the first surgery is performed on 2 of our pa-

tients. These are 2 total vulvectomies with bilateral lymphadenectomy. The histopathological study confirmed the diagnosis of invasive squamous vulvar cancer postoperatively. Radiation therapy can be used in neoadjuvant, adjuvant or palliative situations concomitant with chemotherapy as described by Madsen BS [5] [15] [16]. In locally advanced tumors, concomitant radiochemotherapy or chemotherapy in a neoadjuvant situation facilitates and makes surgery less aggressive, with safer excision margins. This allows the reduction of the size of tumors, and can treat possible micrometastases [17]-[19]. All our patients were discussed in MCM. Concomitant neoadjuvant radio-chemotherapy has been proposed as a 1st intensive in view of the extent of lesions and distant secondary locations as suggested by some authors [15] [17] [20]. ARVD have been reintroduced in patients who have been discontinued. After surgical treatment, our 2 patients benefited from RCC in order to minimize a recurrence.

5. Conclusion

Vulvar cancer has been on the rise since the advent of HIV infection, and adequate management of HIV infection reduces the incidence of induced HPV cancers. This requires good awareness, a healthy lifestyle and rapid intervention in the face of any suspicious lesions of the vulva. Any suspicious vulvar lesions should motivate systematic investigation of HIV infection.

Conflicts of Interest

The authors do not declare any conflict in this sense, and the informed consent of the patients has been obtained. The Establishment Medical Council (EMC) and the HUO ethics committee have given the approval for the publication of these exceptional clinical cases.

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