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EPIDEMIOLOGY OF VULVAR CANCERS IN THE ONCOLOGY- RADIOTHERAPY DEPARTMENT OF UHC/JRA (MADAGASCAR)

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ABSTRACT

Introduction: The incidence of vulvar cancer tends to increase in developed countries, particularly in younger women. Few studies about this disease have been done in our country. Our study aims to describe the epidemiological, clinical and therapeutic profile of vulvar cancers in the Oncology-Radiotherapy Department of the University Hospital Center Joseph Ravoahangy Andrianavalona (UHC/JRA), Antananarivo Madagascar. **Method:** This was a retrospective and descriptive study from January 2008 to December 2015. All patients with vulvar cancers histologically proven were included. **Results:** We collected 32 cases of vulvar cancers, including women from 29 to 80 years old, with a mean age of 53.81 years. Patients from Analamanga represented 75%, and post-menopausal women represented 41% of the study population. Tumors over 2 cm in size were found in 71.88% of the cases, with a predominance of an ulcerated appearance (43.8%). Squamous cell carcinoma is the most common histological type (66%). More than 50% of the cases were diagnosed at the localised stage. Only 20 women received specific treatment, in which 8 had surgery combined with chemotherapy. Among the women who were treated, 9 patients had a remission after 1 month of treatment. **Conclusion:** Our recruitment of vulvar cancers was low. A multicentric study will estimate the actual impact in Madagascar.

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INTRODUCTION

Vulvar cancer is an uncommon pathology, essentially for the older women, representing 3-5% of the gynecological cancer, and 1% of the cancers in women (Renaud-Vilmer, 2008). Currently, it was noted a higher number of younger women affected by this disease due to their increasing exposure to the Human Papilloma Virus (HPV) (Jones, 2000 and Akerman, 2007). The most common revealing symptoms are itching and swelling. Clinically, the lesions appear as the infiltrated, ulcerated or budding form (Doh, 1995). Histologically, most of them are squamous cell carcinomas (Doh, 1995 and Dauplat, 1993).

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An early diagnosis and treatment improve the patient's chances of survival and prognosis. The main form of treatment used is surgery, which includes total vulvectomy and bilateral lymph node dissection. However, surgery is the source of most complications. Hence, the interest of a non-invasive treatment and an early diagnosis (Mathevet, 2012). The incidence of this pathology in Madagascar is still unknown. The authors report the epidemiological, clinical and therapeutic profile of vulvar cancers for a period of eight years.

MATERIALS AND METHODS

It was a monocentric, retrospective and descriptive study at the department of Oncology-Radiotherapy in the UHC/JRA during a period of eight years, from January 1st 2008 to the 31st of December 2015. All patients with histologically proven vulvar cancers were included. All incomplete files were excluded.

RESULTS

Among the 3832 gynecological files that were collected, we selected 32 cases of vulvar cancers, with a frequency of 0.83%. The mean age was 53.81 years old with range from 29 to 80 years. Seventy-five percent of the cases were from Analamanga. Forty-one percent of the women have reached their menopause. The different features of the patients are summarized in Table I.

Table 1. Features of patients with vulvar cancer

Features of patients	Results
Age	
Average	53.81 years
Range	29 to 80 years
Remunerative profession	
Yes	53.12%
No	46.88%
Hormonal status	
Menopausal	41%
Non-menopausal	22%
Not available	37%
Preexisting genital lesion	
Yes	21.9%
Not available	78.1%
Antecedent of smoking	
Yes	28.1%
Not available	71.9%
Antecedent of Sexually Transmitted Infections	
Yes	0.03%
Not available	99.97%

Three percent of the patients were infected by the Human Immunodeficiency Virus (HIV). The consultation period ranged from 1 to 13 months with a median of 5 months. Different circumstances led to the discovery of this disease, such as: the perception of a tumor (46.9%), bleeding (31.1%), vulvar pain (15.6%) or itching (6.3%). Regarding the tumor appearance, the ulcerated form predominated with 43.8% followed by the budding form (34.4%) and the ulcerated-budding form combined (21.9%). Two thirds of the patients had a lesion above 2 cm in size. Squamous cell carcinoma predominated with 66% of the cases. Figure 1 shows patient distribution according to histological types.

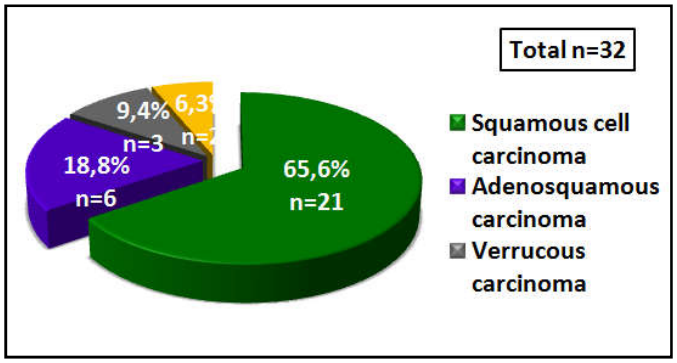

Figure 1. Distribution of patients according to histological type of vulvar cancer

More than half were diagnosed at an early stage, stages I (19%) and II (40%). Stages III and IV represented 22% and 19% respectively. One third of the patients did not receive a specific treatment, in other words, 12 patients were not treated and 20 were treated. Curative treatment with a large surgical excision without adjuvant treatment was performed on 8 patients; 2 patients received adjuvant concurrent radiochemotherapy and 7 had neoadjuvant chemotherapy. Figure 2 illustrates patient distribution according to treatment. Among the women who were treated, 45% had a remission after 1 month of treatment, 20% were out of sight 1 month after the treatment, 15% in a stationary state, 5% in progression and the remainder were not specified.

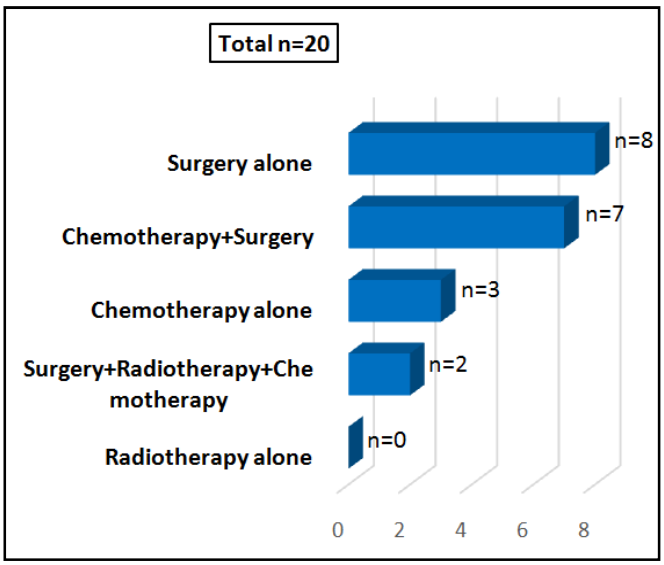

Figure 2. Distribution of patients according to treatment of vulvar cancer

DISCUSSION

Vulvar cancers are rare worldwide, representing 3 to 5% of gynecological cancers (Doh, 1995). Their incidence is estimated between 1 and 2 among 100,000 women each year (Sturgeon, 1992 and Monaghan, 2007). Table II shows that the frequency wavers between 1.27% and 4.34% without surpassing 5% in different world cases (Nkyekyer, 2000; Sharma, 2010; Rabemarokoto, 2001).

Table 2. Global distribution of vulvar cancers

Authors	Countries	Years	Frequency
Nkyekyer [9]	Ghana	2000	2.21%
Sharma [10]	India	2010	3%
Cárcamo [11]	Spain	2010	3%
American cancer society [12]	USA	2011	4.34%
Rabemarokoto [13]	Madagascar	2001	1%

The frequency in our period of study was 0.38% which was similar to a study done in the same department, but is lower compared to other studies done in different countries. This can be explained by the fact that some patients had surgery in other departments and were not transferred to the Oncology department. Vulvar cancer mainly touches the elderly women above 65 years old, with a pic in the incidence curve between 60 and 70 years old (Daniel Dargent, 1997). The mean age in our study was 53.81 years, similar to other studies observed in different countries, with the exception of China's results showing a very young mean age of 36 years and in the United States with a very old mean age of 71 years. Table III shows the age distribution according to different published studies (Cárcamo, 2010; Rabemarokoto, 2001; Sun, 2010; Ruth, 2000). Currently, a much younger population is concerned with this pathology since the discovery of the Human Papilloma Virus (Mahjoub, 2008 and Hampl, 2008).

Table 3. Age distribution according to different published studies

Authors	Countries	Range	Mean age
Sunn	China	23 to 80 years	36 years
Cárcamo	Spain	32 to 92 years	58 years
Ruth	USA	40 to 75 years	71 years
Rabemarokoto	Madagascar	30 to 75 years	65 years
Our study	Madagascar	29 to 80 years	53.81 years

In our study, 46.88% were without a remunerative profession. Studies about cervical cancers done by LANKAONDE (Lankoande, 1998 and Hasiniatsy, 2012), and HASINIATSY (Hasiniatsy, 2012) found respectively that 92.5% and 69% had no remunerative profession. In the study of vulvar cancer performed by RABEMAROKOTO [13], 63.63% of the patients were farmers. In fact, patients with low socio-economic status are the most vulnerable to be infected by the HPV. The majority of the patients consult several months after the beginning of the symptoms, with an average of 5 months. This can be explained by the lack of financial resources, ignorance or beliefs. It is frequently observed that many patients prioritize the traditional treatment, which delays the diagnosis (Chebraoui, 2007). Regarding the antecedents, about 60% of the invasive vulvar cancers develop on patients who had lichen sclerosus (Lei bowitch, 1990). In our study, two thirds of the women were not asked about the presence of genital lesions. According to several studies, tobacco is a risk factor for vulvar cancer. We found that 28.1% of our patients were smockers. LANNEAU GS (Lei bowitch, 1999) reported that 77% of the patients with vulvar cancer were smockers. GREGORY J (Gregory, 2012), reported that a woman with a precancerous lesion and smocker of more than 30 cigarettes per day has a higher risk of rapidly developing invasive cancer than a woman smocking less than 10 cigarettes per day. The study done by EL KERROUMI (El Kerroumi, 2011), described the same fact. Along with hormonal factors, several authors had recently mentioned viral risk factors such as HPV and Herpes Simplex Virus 2 (HSV2). In a recent meta-analysis (Vuyst, 2009) the prevalence of HPV was 36% in vulvar cancer and 76% in the Vulvar Intraepithelial Neoplasia (VIN). In our study, none of our patients benefited from the direct research of the HPV due to its expensive cost.

Three percent of the patients in our study were infected by the HIV. Cellular immunodeficiency especially HIV promotes the development of invasive carcinoma in young women (Elit, 2005). Indeed, SAWO (Sawo, 2002) observed that the risk of having vulvar cancer is five times higher in HIV-positive women than in HIV-negative women. This risk increases if there is an association between HIV seropositive and vulvar condyloma. Hence, the necessity of having an AIDS serology of all the women with vulvar cancer. Clinically, vulvar cancers appears as swelling, plaque, ulcer, nodule, pruritus, bleeding, postmenopausal vaginal discharge, dyspareunia or inguinal lymphadenopathy. The majority of literature sources mentioned that the perception of swelling and pruritus are the main revealing symptoms. DOH (Doh, 1995), found 55.6% with pruritus, ZAIDI (Zaidi, 2013), found 95% with pelvic swelling and 73% with pruritus. Our study showed a predominance of tumor perception with 46.9% of the cases. The presence of itching was in only 6.3% of the cases. About the vulvar pain, BODY (Body. 1983) and ZAIDI (Zaidi, 2013) found respectively 14.4% and 10.54% of the cases, like our study which showed 15.6% of the cases. Similar to the other authors (Doh, 1995; Abboud, 1995), at the moment of diagnosis 71.88% of our patients had a tumor above 2 cm. Histologically, the squamous cell carcinoma was the most common from 63.6% to 100% (Doh, 1995 and Dauplat, 1983). Our results were consistent with the literature because it showed a rate of 66%. For most authors, patients who had vulvar cancer consulted at an early stage of the cancer (Mahjoub, 2008 and Perno, 1996). In our study, more than half of the vulvar cancers were diagnosed at an early stage, stages I (18%) and II (38%), unlike a study on gynecological cancers reported by HASINIATSY in the same department showed that over half of the cervical cancers were at an advanced stage (Hasiniatsy, 2012).

According to SANDO, the anatomical position of the vulva explains the diagnosis of the disease at an early stage. Since it is an external organ, it is easily accessible for clinical and paraclinical investigations (Sando, 2014). In our study, 62% benefited from a specific treatment and 38% could not be treated. The lack of treatment was due to financial resources, infections, poor performance status and/or malnutrition. Surgery is the reference treatment of non-metastatic vulvar cancer, whether it is followed or not by adjuvant treatments such as radiotherapy alone or associated with chemotherapy (Mathevet, 2012 and Dauplat, 1983). In our study, 25% of our patients benefited from surgery only, and 21.88% had surgery and chemotherapy. The use of chemotherapy can be explained by the absence of radiotherapy in Madagascar during our study. Among the patients who benefited from a specific treatment, 45% were in remission after 1 month of treatment, which is similar to the literature's result (Mathevet, 2012 and Zaidi, 2013). However, 20% became out of sight a month after the treatment. Compared to other studies done in the same department on cancer, RANAIVOMANANA (Ranaivomanana, 2013), observed that the majority of patients seen in oncology were out of sight. This could be explained by the concerns of the Malagasy women regarding their intimate part.

Conclusion

Vulvar cancer remains a rare entity and underdiagnosed in Madagascar. The local swelling is the most common symptom. It's a cancer diagnosed at an early stage. Due to the lack of radiotherapy, the neoadjuvant or adjuvant treatment with surgery is chemotherapy. The early detection of risk groups and precancerous lesions is the best method to fight against this disease. Other more refined studies, by analytical studies, on different risk factors are necessary to promote primary prevention as well as a multicentric study to determine the true incidence of vulvar cancers in Madagascar.

Conflicts of interest: None.

REFERENCES

Abboud J, Attieh E, Atallah D, Dergham S. Le traitement chirurgical radical du cancer épidermoïde de la vulve. Résultats de 10 ans d'expérience. J Gynécol obstet Biol Reprod. 1995 ;24:595-99.

Akerman, Dussor C, Haddad B, et al. Epidemiology of vulvar intra-epithelial neoplasias. Gynecologie, obstetrique et fertilite. 2007;35(12):1251-56.

American Cancer Society. Cancer facts et Figures 2011. Atlanta, USA : American Cancer Society, 2011.

Body G, Guillard Y, Guillere J.C. Cancer de la vulve. Aspects diagnostiques et thérapeutiques à propos d'une série de 90 cas. J Gynécol Obstet Biol Reprod. 1983;12:135-42.

Cárcamo M, Orellana JJ, Gayán P et al. Survival of patients with vulvar cancer Rev Med Chil. 2010;138(6):723-8.

Chan JK, Sugiyama V, Pham H, Gu M, Rutgers J, Osann K, et al. Margin distance and other clinico-pathologic prognostic factors in vulvar carcinoma: a multivariate analysis Gynecol Oncol. 2007;104:636-41.

Chebraoui Y. Cancer de la vulve: à propos de 338 cas [Thèse]. Medecine: Rabat; 2007. 72p.

Daniel Dargent. Cancer de la vulve. La Revue du Praticien (Paris). 1997 ;47:1684-89.

Dauplat J, Giraud B. Le cancer invasif de la vulve. Encycl Méd Chir - gynécologie. 1983;520(1):10-2.

Doh AS, Kalsa J.M, Shasha W. Le cancer de la vulve à Yaoundé (Cameroun). . Revue du gynécologue. 1995;3(4) :220-23.

El Kerroumi M, Ennachit M, Hissane M. Les cancers de la vulve : les cancers gynéco-mammaires. Esp méd A. 2011;177(8):242-46.

Elit L, VorugantI S, Simunovic M. Invasive vulvar cancer in a woman with human immunodeficiency virus: case report and review of the literature. Gynecol Oncol. 2005;98:151-54.

Gregory J, Holly H.A. Human Papillomavirus: Clinical Manifestations and Prevention. Am Fam Physician. 2012;10(82):1212.

Hampl M, Deckers-Figiel S, Hampl JA, Rein D, Bender HG. New aspects of vulvar cancer: Changes in localization and age of onset. Gynecologic Oncology. 2008;109:340–45.

Hasiniatsy R, Razakanaivo M, Randriamanovontsoa E et al. Réanimation et Oncologie : la situation à Antananarivo en 2012. Rev Anesth Réanim Med Urg. 2012: S1-S17.

Jones RW, Rowan DM. Spontaneous regression of vulvar intraepithelial neoplasia. Obstet Gynecol. 2000;96(3):470–2.

Lankoande J et coll. Le cancer du col utérin dans le service de Gynécologie obstétrique du centre hospitalier national Yalgado Ouedraogo de Ouagadougou (Burkina Faso) : Aspects épidémio-cliniques et anatomo-pathologiques. Médecine d'Afrique Noire. 1998;45(7): 442-45.

Lanneau GS et coll. Vulvar cancer in young women : demographic features and outcome evaluation. Am J Obstet Gynecol. 2009;200(6):645.

Lei bowitch M, Neill S, Pelisse M, Moyal-Barracco M. The epithelial changes associated with squamous cell carcinoma of the vulva : a review of the clinical, histological and viral find ings in 78 women. Br J Obstet Gynecol. 1990;97:1135-39.

Mahjoub S, Ben Brahim F, Ben Hmid R, Zehai D, kallel N, Sebai N et al. Prise en charge des tumeurs malignes de la vulve. La Tunisie Médicale. 2008;86(12).1055-59.

Mahjoub S, Ben F, Hmid R et al. Prise en charge des tumeurs malignes de la vulve. Tunis. Med., 2008;86(12) :1055-59.

Mathevet P. Approches thérapeutiques actuelles dans les cancers vulvaires. Journal de Gynécologie Obstétrique et Biologie de la Reproduction. 2012;41:519-25.

Monaghan JM. The management of carcinoma of the vulva. Clinical gynaecological oncology. 1990;75:1225-36.

Nkyekyer K. Pattern of gynecological cancers in Ghana. East Afr Med J. 2000;77(10):534-8.

Perno M, Guillemin F, Hoffstetter S, Carolus J.M. La curiethérapie a-telle une place dans le traitement des carcinomes de la vulve ? Ann. Médicales de Nancy et de l'est. 1996 ;35:113-16.

Rabemarokoto ATNH. Réflexion sur les cancers de la vulve vus dans le service d'oncologie HJRA Antananarivo [thèse].Médecine:Antananarivo;2001.54p.

Ranaivomanana AHM. Les cancers vus au service d'oncologie du CHU/JRA 2009 - 2010 [Thèse]. Médecine: Antananarivo; 2013. 83p.

Renaud-Vilmer C, Lasry S, Labib A, Cavelier-Balloy B. Pathologie maligne vulvaire chez l'adulte. Encycl Méd Chir – Gynécologie. 2008;1:1- 27.

Ruth A, Kosary C, Hildesheim A. New Malignancies Following Cancer of the cervix Uteri, Vagina, and Vulva. Seer cancer registries. 2000;8:210.

Sando Z, Fouogue JT, Fouelifack FY, Fouedjio JH, Mboudou ET, Essame JLO. Profil des cancers gynécologiques et mammaires à Yaoundé - Cameroun. Pan Afr Med J. 2014;17:28-38.

Sawo D, Chiasson A, Bush J. HIV infection and risk of vulvu vaginal and preanal condyloma acuminate and intraepithelial neoplasia. Lancet. 2002;359:108-13.

Sharma D, Goura K, Sunesh K et al. Treatement outcome of patients with carcinoma of vulva : Experience from a tertiary cancer center of India. J Cancer Res Ther. 2010;6:504

Sturgeon SR, Brinton LA, Devesa SS et al. In situ and invasive vulvar cancer incidence trends (1973 to 1987). Am J Obstet Gynecol. 1992;166:1482–85.

Sun L, Wu Ly, Li Xg, Bai P, Zhang HT. Clinical characterization of vulvar epithelioid sarcoma. Zhonghua Zhong Liu Za Zhi. 2010;32(12):935-8.

Vuyst H, Clifford GM, Nascimento MC, et al. Prevalence and type distribution of human papillomavirus in carcinoma and intraepithelial neoplasia of the vulva, vagina and anus: a meta-analysis. Int J Cancer. 2009:124(7):1626-36.

Zaidi H, Mouhajir N, El Mejjaoui S et al. Cancers primitifs invasifs de la vulve : expérience de l'Institut National d'Oncologie de Rabat. Pan Afr Med J. 2013;15(1):125-36.

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