# Management of vulva cancer in the gynecology obstetric service II of Hassan II UTH: (series of 12 cases and literature review)

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Abstract: Vulva cancer is a rare neoplastic condition which accounts for 3 to 5% of female genital cancers. This study was done at the University teaching hospital, Gynaecology and Obstetrics II service, Fez between 2019 and 2021 to report the epidemiology, anatomo-clinical, therapeutics aspects, and the prognosis of vulva cancer. We reported 12 cases of vulva cancers. In the light of these cases and the review of the literature, we were able to obtain certain conclusions concerning this cancerous localization and patient management. It was concluded that the condition is typically found in elderly women with the average age of 60 years. In our series 61.5% were multiparous, 23.07% were pauciparous and 15.38% were nulliparous All having attained menopause. The reason for consultation is essentially represented by the exaggeration of pruritus (60.3%) and by the perception of vulvar mass (93.2%). The budding and ulcerative-budding forms represent (61.53%) of cases. In 100% of cases the histological type is squamous cell carcinoma. Surgery was the cornerstone of treatment and depended mainly on the stage of the tumour. However, other therapeutic options remained available such as radiotherapy and chemotherapy. Skin grafts were performed in 5 cases. The prognosis depended on several factors, Cultural and social characteristics of patients in Morocco led to late diagnoses which influenced treatment outcomes with better outcomes when the tumour was small and the lymph nodes were not invaded. At the end of this study, we emphasize on the different methods of patient management, the seriousness of vulva cancer and the importance of early diagnosis of precancerous lesions that can improve the prognosis.

Keywords: squamous cell carcinoma, vulva, surgery

#### Introduction

Vulva cancer constitutes 5% of gynaecological cancers, this cancer primarily affects older women. Squamous cell carcinoma is the histological type that represents 90% of all vulva cancers, where the human papilloma virus (HPV) plays a major role in its carcinogenesis. The vast mode of clinical presentation of this cancer contrasts with the delayed diagnosis in most patients in Morocco, where culture and religious contexts often leads women to consult at an advanced stage when treatment options are limited. The objective of our study is to describe the epidemiological, clinical, histological, therapeutic and evolution of vulva cancer in our study cohort.

#### Materials and methods

This is a retrospective study, conducted at the at the University teaching hospital Hassan II, Gynaecology and Obstetrics II service, Fez between 2019 and 2021. We reported 12 cases of vulvar cancers. All epidemiological, clinical, histological, therapeutic and evolution data was collected from hospital archives and was analysed using Microsoft excel software to compare data on each treatment a patient received.

#### Results

We identified 12 patients; The extreme ages of our patients were 52 as the youngest and 80 as the oldest. The age group most affected was 50-59 years old and the average age of patients was 60 years old. In our series 58.3% had experienced more than one pregnancy, 25% had experience two pregnancies and 16.67% are nulliparous All having attained menopause. 75% of patients had comorbidities such as diabetes and hypertension 41.7% were obese. 16.7% of patients presented with precancerous lesions. The average time patients took to consult from the beginning of symptoms was 16 months (2 months - 8 years). The clinical signs were dominated by pruritus in 91.67% of cases, a revealing vulvar mass in 58.3% of cases, pelvic pain and leucorrhoea in 25% and 83.3% of cases, respectively. These lesions were multifocal (image 4) in 16.7% of cases, and ulcero-budding (image5,6)appearance in 66.7% of cases (Table 1).

Vulvar biopsy was performed for all patients, it revealed Squamous cell carcinoma found in 100% of cases including 9 (75%) cases were well differentiated, 2 (16.67%) moderately differentiated cases and no cases was weakly differentiated and 1 case of pagets disease associated (8.3%), By way of a distance and locoregional extension assessment, a pelvic MRI was performed for 41.7% of patients, a thoraco-abdominal CT scan for 75% of the patients, a lower digestive or urinary tract endoscopy was performed in 16.7% of patients (Table 2). At the end of the extension assessment, the tumors were classified as stage I in 33.3% of patients,

stage II in 8.3%, stage III in 25% and stage IV in 16.7% of patient. The curative therapeutic attitude was adopted in 83.3% of patients, radical surgery was performed in 66.7% of patients, a partial vulvectomy was proposed for 16.7% of patient. Bilateral inguinal dissection was performed in 66.7% of cases.

The median time between consultation and surgery was 8 weeks. Radiotherapy was indicated in 91.2% of patients, it was preoperative in 16.7% of cases, 75% of cases in postoperative. The median time between surgery and adjuvant radiotherapy was 4 weeks. Palliative chemotherapy was proposed for 8.3% of patients (Table 3).

After a period average follow-up of 50 months (24 months-81 months), the median of three-year overall survival is 66.7%, we observed 16.7% locoregional and distant recurrence, of which 8.3% benefited from salvage surgery, 8.3% from radiotherapy, and 8.3% from palliative chemotherapy.

parameters	variables	numbers	Percentages (%)
Age (year)	>60	9	75%
	<60	3	25%
Menopause status	menopause	12	100%
	Non menopause	0	0%
parity	nulliparous	2	16.67%
	Two pregnancies	3	25%
	multiparity	7	58.3%
Precancerous lesions		6	50%
comorbidities	diabetes	6	50%
	High blood pressure	3	25%
	obesity	5	41.7%
	Other cancers	1	8.3%

## Table 1: epidemiological parameters of the patients in the series

Table 3: therapeutic methods used for patients in our case series

variable	number	percentage	
Surgery	12	100	
Surgery +radiotherapy	9	75	
Neoadjuvant Radiotherapy +	2	16.7	
surgery			
Palliative chemotherapy	1	8.3	
Other healthcare received	3	25	

Image 6



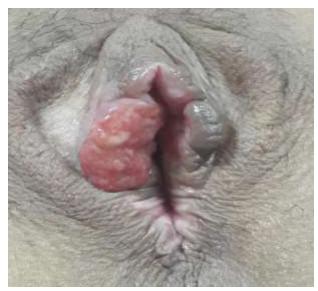


image 5: ulcero-budding lesion presented by one of the patinets in our series in the gynecology and obsterics seervice 2 UTH fes moroc

image 5

Image 6: ulcerous vulvar lesion presented by one of the patinets in our series in the gynecology and obsterics seervice 2 UTH fes morocc

Image 4 : multifocal ulcero-budding lesion lesion presented by one of the patinets in our series in the gynecology and obsterics seervice 2 UTH fes morocco



Image 1,2,3: steps to a total vulvectomy performed by professor Melhouf on one of the patinets in our series in the gynecology and obsterics service 2 UTH fes morocco

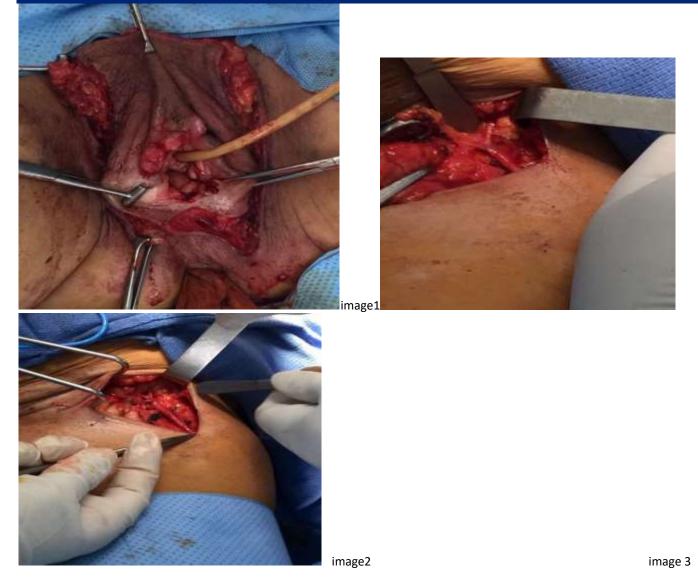


Image 7: 2 years post op vulvectomy one of the patinets in our series in the gynecology and obsterics seervice 2 UTH fes morocco



2years post op

#### Table 2:clinical and radiological parameters of patients in our case series

parameters	variables	number	percentages
Clinical signs			
	pruritus	11	91.67
	Vulva mass	7	58.3
	Pelvic pain	3	25
	leucorrhea	10	83.3
Locoregional extension			
	location		
	unifocal	4	33.3
	Multifocal	2	16.7
	Tumor extension		
	localized	1	8.3
	Spread: below	8	66.7
	Urethra/ vagina/ anus		
	Spread: above	3	25
	Urethra/bladder/rectum/pelvis		
	Lymph node extension		

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	Absence of lymph nodes	3	25
	Unilateral inguinal lymph	5	41.7
	nodes		
	Bilateral inguinal lymph nodes	4	33.3
metastasis			
	Pulmonary metastasis	1	8.3
	Hepatic metastasis	2	16.7
	other		
staging			
	IB	4	33.3
	11	1	8.3
	IIA	2	16.7
	IIIB	3	25
	IVB	2	16.7

#### Discussion

Vulvar cancer represents 6% of gynaecological cancers [1]. Its incidence increases with age, with a global trend to occur in younger and younger women [2]. Zineb Dhabi et al [3] reported One patient in their case series who presented with squamous cell carcinoma of the vulva at the age of 25 years old, the early age of a patients first sexual intercourse as well as the absence of vaccination against HPV are factors of carcinogenesis potential [4]. The time and onset of the first symptoms and the consultation were also studied in our series, they were identified as a prognostic factor on which patients' overall survival depended. In a retrospective series published by the team of the National Institute of Oncology in Morocco, this delay was 7 months, versus 16 months for our patients [5]. A delay in consultations explains the frequency of locally advanced stages in our study.

The main treatment for vulvar cancer is surgical, it is based on a total vulvectomy associated with bilateral inguinal dissection with separate incisions; (image 1.2.3) this is the standard treatment of localized vulvar cancers. It was performed in 66.7% of cases. Prognostic factors justifying this type of treatment include the quality of resection as well as lymph node invasion and inguinal pain. Partial vulvectomy may be indicated in early stages, the place of the sentinel lymph node in surgical treatment for vulvar cancer is being evaluated.

Suture release and lymphoedema are the main complications of surgical treatment. The rate of these postoperative complications observed in patients in our series is similar to that described in the literature [6]. Squamous cell carcinoma of the vulva is considered a radiosensitive cancer, radiation therapy can be discussed as a neo adjuvant treatment in patients with locally advanced tumours (> T2,N+) to allow for tumor down-staging and carcinologic resection surgery thereafter, adjuvant radiotherapy on the other hand is considered as a therapeutic standard in case of nodal invasion, in the event of tumor limits or tumor larger than 4cm, or if there are vascular emboli or perineural sheathing, after surgical excision. Exclusive radiotherapy may be offered in patients who were surgically rejected for medical reasons, in cases of very locally advanced tumors deemed unresectable, or in case of local tumor recurrence [7, 8]. the median time between surgery and adjuvant radiotherapy was 4 weeks.All stages combined, a correlation statistically significant was found between the treatment proposed and overall survival, in favor of radiotherapy association adjuvant and radical surgery, which seem to be superior to exclusive concomitant radio-chemotherapy which is also superior to surgery alone. A result that agrees globally with the results of the literature [5, 10]. The use of chemotherapy as a palliative treatment has been proposed for 8.3% of patients in our series, in the literature, its use remains little studied and the available results are disappointing. The overall survival rate of patients treated for vulvar cancer, all stages combined, is 57 to 62.5%, which approximates the rates described for our series [11, 12].

## Conclusion

Late consultation finding locally advanced tumors was the leading factor that influenced the treatment and results of patients in our case series. efforts of additional prevention and sensitization are to be carried out in order to reduce the incidence of locally advanced stages, and allow curative treatment for this population.

## State of current knowledge on the subject

Cancer of the vulva is now gynaecological cancer which has benefited the least from the therapeutic advances known the world of modern oncology; Because of its rarity, the literature has few publications concerning it, these are mainly retrospective journals. **Contribution of our study to knowledge** 

Our work is a bent on current therapies proposed, by our institution, for the patients with vulvar cancer, as well as their survival results.

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