

**PARTIAL VULVECTOMY WITH SENTINEL GANGLION IN VULVAR CANCER:  
HOPITAL MILITAIRE D'INSTRUCTION MOHAMED V. RABAT GYNECOLOGIE  
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**ABSTRACT**

Cancer of the vulva is a rare but serious cancer that affects preferentially the elderly woman but sometimes also the young woman and even the child. Surgical treatment is the cornerstone of its management. It is based on vulvectomies for which the obtaining of healthy margins with sufficient exeresis is the key point of their success. Inguinal lymphadenectomies are part of the treatment of invasive carcinomas. The morbidity of this inguino-vulvar surgery is important and leaves sequelae that are sometimes long-lasting and disabling. The combined use of adapted radical vulvar surgery and increasingly targeted lymph node surgery, the easy use of cover flaps, and the improvement of perioperative management of these patients, contribute, to varying degrees, to the reduction in frequency and severity of these complications, without losing therapeutic efficacy. Moreover, the judicious use of radiotherapy and/or chemotherapy contributes to the therapeutic success of the most advanced forms. Better screening of early forms by listening to patients and examining their vulva with biopsy at the slightest doubt, as well as regular monitoring of treated forms, will reduce the incidence of severe forms still too often encountered today. It is also likely that HPV vaccination will reduce the incidence of virus-induced forms.

**KEYWORDS:** Vulvar carcinoma, HPV, Vulvectomy, Santinel node, inguinal curage.**INTRODUCTION**

Vulvar cancer is a rare entity, most often secondary to human papilloma virus (HPV) infection in young women<sup>[1]</sup>, whereas in postmenopausal women estrogen deficiency would explain its genesis.<sup>[2]</sup> It is the fourth most common gynecological cancer after cervical, endometrial and ovarian cancer and accounts for about 6% of all malignant tumors of the female genital tract.<sup>[3]</sup> Squamous cell carcinoma of the vulva is the most frequent histological variety.<sup>[4]</sup> With a frequency of 3-5%, vulvar cancer is one of the rarest female neoplasia. It affects mostly elderly women, whose general condition is often weakened, which inevitably influences the management of the disease. On the other hand, this cancer can be observed in much younger women, for whom, in addition to the challenge of cure, the restoration of an anatomy compatible with the most normal sexual life possible is essential.<sup>[2,3]</sup> Squamous cell carcinomas represent 90% of the etiologies, followed by melanomas. Because of its local efficacy, and despite significant and sometimes lasting morbidity (body image, sexual disorders, incontinence, prolapse, lymphedema, etc.), surgery is and remains the treatment of choice for vulvar cancers, particularly in their invasive

forms, and is based on vulvectomy, the extent and degree of radicality of which depend on the size of the tumor, its histology, and its possible association with other vulvar lesions. As invasive lesions are lymphophilic, and current imaging is insufficient to reliably define lymph node status, inguinal lymphadenectomy, whose extent is also variable, is an integral part of this management.<sup>[3]</sup> Non-surgical treatments, adjuvant radiotherapy and chemotherapy are discussed based on the results of the initial surgery. However, the extent and evolution of the lesions as well as the general condition of the patients, which is often precarious, must be taken into account and ultimately modulate the relative indications of these three treatments for any primary or recurrent lesion.

This article successively considers the principles of vulvectomy, the methods of repairing loss of substance, lymph node surgery, the results and treatment of complications, the therapeutic indications and finally the methods of monitoring.

**II. PATIENT AND OBSERVATION**

Patient of 44 years old, mother of three children (G3P3EV3), with a history of cholecystectomy 19 years ago, caesarean section 9 years ago, no neoplasia in the

family, menarche at 12 years old, first coitus at 18 years old, notion of taking oestro-progestin contraception for 24 years, who consulted for a vulvar mass evolving for one year in a context of conservation of the general state. She underwent an exeresis in the peripheral health structure, with anatomo pathology, differentiated squamous cell carcinoma keratinizing and infiltrating, lesion measuring 30\*20mm.the lesions pass in non-tumoral zones (the deepest is at 0,5 mm). On examination: a scar of the vulvar fork lateralized to the left measuring 4cm was noted, of poor quality, ulcerated with budding borders; the lymph node areas were free.An extension workup was performed:

Thoracic-abdominal-pelvic computed tomography (TAP-CT): found a tissue thickening at the perineal level located between the anterior and posterior perineum, centered on the midline making 35\*33mm.Absence of visceral or secondary bone lesion at the abdomino-pelvic level. Magnetic Resonance Imaging (MRI): a lesion of tissue signal was present in the perineal soft tissues lateralized to the right, with blurred contours and poorly limited, measuring 26\*19mm with infiltration of the right ischial fossa. Some pelvic lymph nodes, the most voluminous external iliac lymph node is 7 mm in diameter. - Cervical and uterine smear is normal.- Screening mammography is classified as BIRADS IL The patient was staffed at the level of the Multidisciplinary Consultation Meeting (MCM) where it was decided to perform a partial vulvectomy plus bilateral sentinel lymph node (SG). She underwent a partial vulvectomy, complicated by an infection of the surgical site requiring a surgical resumption with 10 sessions of hyperbaric chamber. The patient was restaffed with decision of bilateral lymph node curage, carried out on 21/05/2022. The short and medium term operative consequences were simple.



**Fig. image représentant un cancer de la vulve bourgeonnant, ulcéré et saignant au contact.**



**Fig. 2: Image représentant la vulvécotomie partielle.**



**Fig. 3: Image Représentant Le Curage Inguinal Gauche.**

### III. DISCUSSION

Vulvar cancer is the fourth most common gynecologic cancer after cervical, endometrial, and ovarian cancer. It is a rare entity that comprises about 6% of all malignant tumors of the female genital tract. Its incidence increases with age.<sup>[7]</sup> Vulvar carcinoma mainly affects older women.<sup>[3]</sup> According to cancer statistics, there are more

than 6,000 cases and 1,150 deaths recorded each year in the United States.<sup>[8]</sup> Although the incidence of vulvar cancer is low, it has increased in recent decades, especially in young women. In young women, persistent genital HPV infection has been reported to be the primary cause of the development of vulvar neoplasia.<sup>[1]</sup> In HIV-positive women, HIV-induced immunodeficiency favors the occurrence and persistence of HPV infection, thus leading more easily to the development of genital cancers, especially of the vulva.<sup>[9]</sup> Indeed, HIV-infected women have a much poorer control of HPV infection than uninfected women<sup>[10]</sup> and, among HIV-infected women with a CD4+ T-cell count of less than 200 cells/mm<sup>3</sup> are less likely (71% reduction compared to women with a CD4+ T-cell count of more than 500 cells/mm<sup>3</sup>) to clear HPV infection than women with a CD4+ T-cell count of 200-500 cells/mm<sup>3</sup> (32% reduction compared to women with a CD4+ T-cell count of more than 500 cells/mm<sup>3</sup>).<sup>[11]</sup>

Depending on the histological type, these are mainly (90%) squamous cell cancers and rarely melanoma, Bartholin's gland adenocarcinoma or skin tumors. Like cervical and vaginal cancers, squamous cell carcinomas are preceded by lesions of the vulvar intraepithelial neoplasia (VIN) type, of which the transformation into invasive cancer is in the order of 5-10%, whether it is bowenoid papulosis, genital warts or Bowen's disease.<sup>[4]</sup> Our patient had a keratinizing squamous cell carcinoma of the vulva. The tumor is most often located on the labia majora (80%), followed by the labia minora (14.3%), and the clitoris (5.7%).<sup>[3]</sup> Our patient had extensive neoplasia on the lower third of the vulva. Clinically, squamous cell carcinoma of the vulva can manifest itself as chronic vulvar irritation, vulvar pruritus, burning sensation in the genitalia, dyspareunia or discolored areas on the labia. Therefore, careful gynecological examination of women is necessary for early detection of genital cancers.<sup>[1]</sup> Metastasis remains possible and occurs via the lymphatic system to the inguinal or femoral region but also through pelvic and distant lymph nodes. However, hematogenous spread is unusual.<sup>[2]</sup> The prognostic factors are: lymph node extension, tumor size and tumor recurrence.<sup>[3]</sup> The prognosis of vulvar cancer seems to be better in women with chronic papilloma virus (HPV) infection.<sup>[4]</sup> Radical surgery is still relevant in this era of organ conservation: radical vulvectomy associated with inguinal lymph node dissection and postoperative radiotherapy.<sup>[5]</sup> However, the perioperative mortality rate associated with this surgery can be as high as 10% and the incidence rate of complications is higher than 66.6%. In addition, it carries a risk of procedural morbidity, physical and sexual disfigurement, dysfunction, and a largely unknown influence on overall quality of life. Its 5-year survival rate is less than 50%.<sup>[16]</sup> Post-operative radiotherapy is performed when there are risk factors for local recurrence: a tumor volume greater than 4cm; a narrow surgical margin (less than 8mm) and deep lymphatic vascular invasion and positive lymph node status.<sup>[8]</sup> For the contribution of chemotherapy mainly based on

cisplatin or mitomycin, 5FU; complete tumor regression has been observed in 30 to 50% of cases in retrospective series. However, no randomized trial has been performed to date to evaluate the efficacy of CCR (radiation therapy and concurrent chemotherapy) compared to radiation therapy alone due to the small number of patients. Brachytherapy is rarely used, especially in the treatment of tumor remnants in contact with the urethra or in the lower third of the vagina or during conservative treatment of tumors smaller than 3cm.<sup>[7]</sup> Chemoradiotherapy is another therapeutic alternative but is not without side effects (severe skin toxicity of the vulva and perineum).<sup>[7]</sup>

#### IV CONCLUSION

Vulvar cancer is the 4th most common type of gynecological cancer. The high prevalence of HPV infection during HIV/AIDS exposes an increased risk of genital cancers, especially vulvar cancers. A biopsy with anamo-pathological examination should be performed for any suspicious lesion of the vulva in order to make an early diagnosis. Treatment is based on surgery plus or minus radiotherapy depending on the risk factors for local recurrence. Moreover, the judicious use of radiotherapy and/or chemotherapy contributes to the therapeutic success of the most advanced forms. A better detection of early forms by listening to the patients, and examination of their vulva with biopsy at the slightest doubt, as well as regular monitoring of treated forms will reduce the incidence of severe forms still too often encountered today.

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