

# Vulvar Cancer: One Case Report

Maha Lhaloui<sup>1\*</sup>; Hassnaa Sarhane<sup>2</sup>; Youssef Essebbagh<sup>3</sup>; Nada Essaidi<sup>4</sup>;  
Nermine Jilal<sup>5</sup>; Yasser Lemaati<sup>6</sup>; Amina Etber<sup>7</sup>; Amina Lakhdar<sup>8</sup>; Najia Zraidi<sup>9</sup>;  
Aziz Baydada<sup>10</sup>

<sup>1,2,3,4,5,6,7,8,9,10</sup>Gynecology-Obstetrics and Endoscopy Departement, Maternity Souissi, University Hospital Center Ibn SINA, University Mohammed V, Rabat, Morroco

Corresponding Author: Maha Lhaloui\*

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**Abstract:** Vulvar cancers are rare tumors that are often treated late due to symptoms being overlooked by patients. Surgery remains the best therapeutic option. Concurrent radiochemotherapy, conservative surgery with sentinel lymph node biopsy are used in early-stage cases. On the other hand, radical surgery and lymph node dissection are the preferred treatments for advanced stages, although they carry a high risk of morbidity.

**Keywords:** Vulvar Cancer, Diagnostic Stages, Vulvectomy, Chemotherapy, Sentinel Node, Vulvar Radiotherapy.

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## I. INTRODUCTION

Squamous cell carcinoma represents 80% to 90% of vulvar cancer cases [1], and predominantly affects postmenopausal women, with a mean age at diagnosis of 70 years[2].

Its progression is typically slow and often remains confined to the locoregional area. Distant metastases are uncommon [3].

Other histological subtypes are rare and include basal cell carcinoma, melanoma, small cell carcinoma, and sarcomas [4]. These variants generally present as exophytic, ulcerated, or infiltrative lesions [5].

### ➤ Patient and Clinical Observation

A 68-year-old patient, mother of four children delivered vaginally, postmenopausal for 15 years, with no significant medical history, presented with pruritus complicated by the appearance of a vulvar lesion, with no other associated symptoms.

### ➤ Clinical examination:

Clinical examination revealed an ulcerated, exophytic lesion involving both the right and left labia majora and minora, extending to the entire clitoris, with no involvement of the urethral meatus.



Fig 1 Clinical examination

- Speculum examination showed a normal-appearing cervix and clean vaginal walls, with no bleeding observed.
- No latero-uterine masses were noted on bimanual examination.
- Inguinal lymph node areas were free of enlargement.
- The remainder of the physical examination was unremarkable.

➤ *Vulvar biopsy :*

Vulvar biopsy confirmed a keratinizing, well-differentiated, ulcerated and exophytic squamous cell carcinoma.

➤ *Pap smear :*

Inflammatory smear with no evidence of neoplastic cells.



Fig 2 Pelvic ultrasound

- The uterus was retroverted and of normal size.
  - The endometrial stripe was regular.
  - The adnexa appeared normal.
- *Pelvic MRI*
- Presence of a vulvar lesion centered on the right side of the clitoris

- The lesion measures 40 x 39 mm with regular borders
- No signs of invasion of the perineal structures, notably the vagina and urethra
- Bilateral inguinal lymphadenopathy, the largest on the right measuring 17 mm
- No evidence of perineal extension

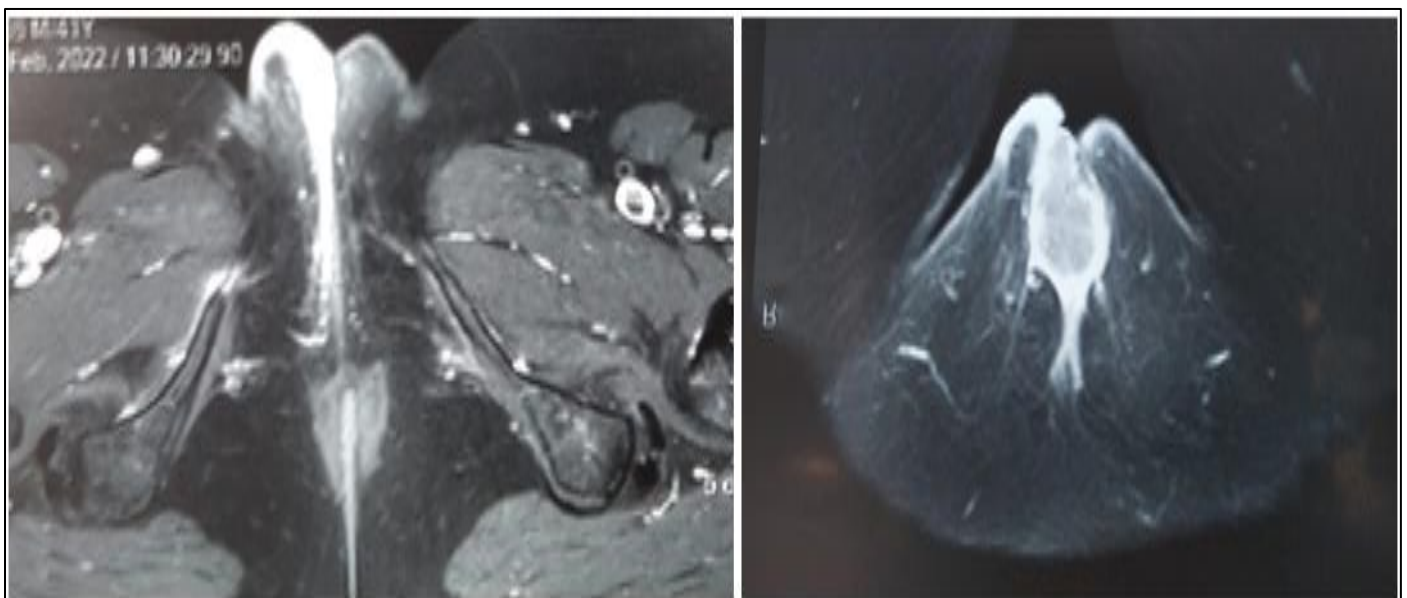


Fig 3 Vulvar Lesion Centered on the Right Side of the Clitoris.

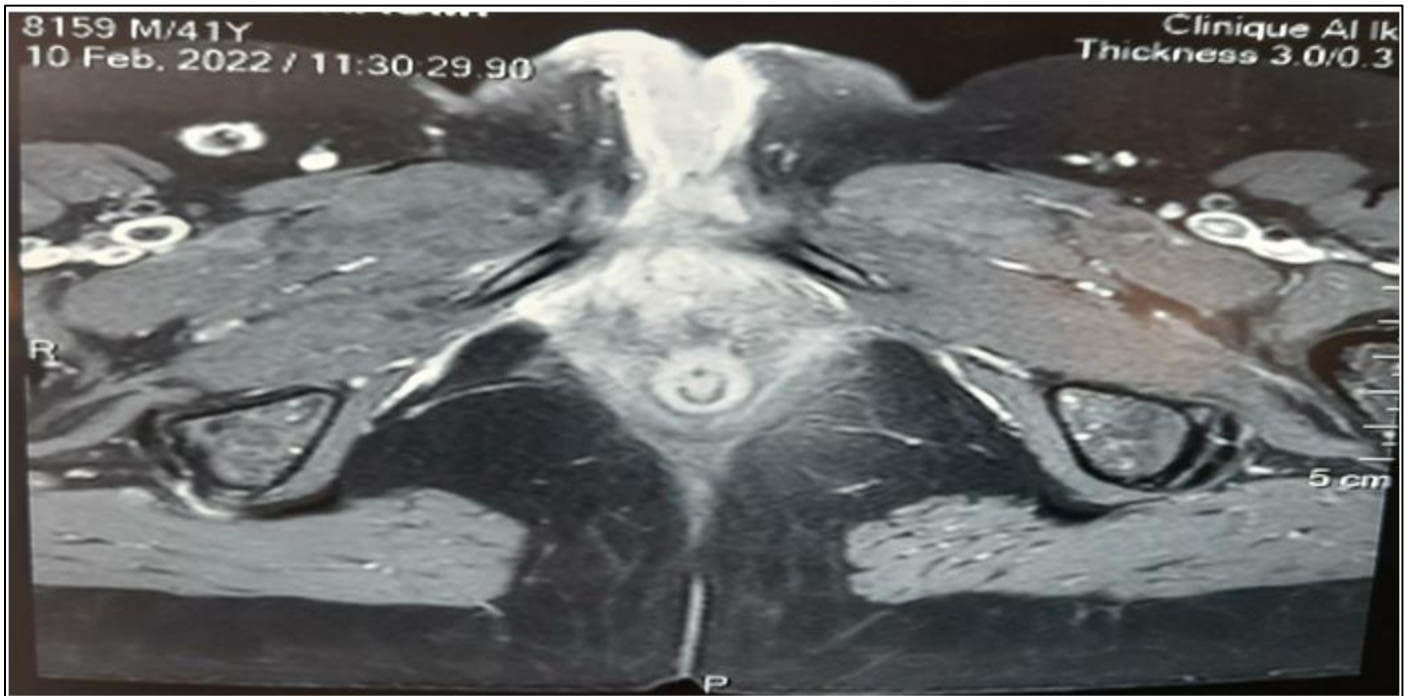


Fig 4 Bilateral Inguinal Lymphadenopathy

A total vulvectomy with bilateral inguinal lymph node dissection was performed.



Fig 4 Operative Specimens

#### ➤ Histopathological Examination

- Moderately differentiated high-grade squamous cell carcinoma.
- Numerous tumor emboli were noted. The tumor margins were located two centimeters from the resection edge.
- Lymphadenectomy yielded 18 lymph nodes, of which eight were positive.
- Postoperative course was uneventful.

## II. DISCUSSION

Malignant tumors of the vulva are generally exophytic, ulcerated, and/or infiltrative [6]. The average five-year survival rate is approximately 50%, but varies significantly depending on the stage [7–8]. The diagnosis of vulvar cancer is primarily clinical and histological. Few additional examinations have proven their usefulness. Treatment is based on vulvar surgery and dissection of the inguinal lymph node basins. The type of surgical excision depends both on the size of the lesion and on the depth of infiltration, which guide the management of



the lymph node areas. This surgery is associated with a risk of major complications, including delayed wound healing, lymphorrhea, and lymphedema, which impact quality of life[9].

Currently, understanding the etiopathogenic mechanism of vulvar cancer has no impact on the treatments offered. However, preliminary studies suggest a better prognosis for HPV-related vulvar cancers [10]. Adjuvant radiotherapy is mainly reserved for cases with metastatic lymph nodes. Brachytherapy has limited indications, primarily for tumors located at the vulvovaginal junction[11].

The sentinel lymph node technique has gained significant importance, indicated in stage I and II disease [12]. The overall three-year survival rate is close to 100%. This technique is the best for determining lymph node status, as neither imaging modalities such as MRI or PET-CT

nor fine needle aspiration have demonstrated superiority over sentinel lymph node biopsy [13]. In our clinical case, a total vulvectomy with bilateral lymphadenectomy was performed with clear resection margins.

For tumors smaller than four centimeters, unifocal, without clinically or radiologically suspicious lymphadenopathy, the sentinel lymph node technique is indicated. In contrast, for tumors metastatic stage IVB tumors, platinum-taxane based chemotherapy is the preferred treatment, with or without targeted therapies[14–15]. Early diagnosis and/or preoperative concurrent chemoradiotherapy in locally advanced stages can allow for conservative treatment, improved quality of life, and better survival rates[16,17]. Follow-up must be prolonged, as recurrences can occur several years later [18]. In our patient, no recurrence was noted during the surveillance period."

### III. CONCLUSION

Delayed diagnosis of vulvar cancers necessitates morbid surgical management and prolonged surveillance due to the risk of recurrence. Conversely, concurrent chemoradiotherapy as a neoadjuvant or palliative treatment remains a non-curative therapeutic option.

#### ➤ *Ethical Approval :*

Ethics approval has been obtained to proceed with the current study

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#### ➤ *Author Contribution*

Maha LHALOUI, Hassnaa SARHANE, Youssef ESSEBBAGH, Nada ESSAIDI, Nermine JILAL, Yasser LEMAATI: picture editing, manuscript editing, paper writing, data analysis

Amina ETBER, Amina LAKHDAR, Najia ZRAIDI, Aziz BAYDADA : littérature review, supervision

#### ➤ *Guarantor*

The corresponding author is the guarantor of submission.

#### ➤ *Research Registration Number*

Not applicable.

#### ➤ *Consent*

Written informed consent was obtained from the patient for publication of this case report and any accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal.

Availability of data and materials

Supporting material is available if further analysis is needed.

Declaration of competing interest

The authors declare that they have no competing interests.

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### REFERENCES

- [1]. Giles GG, Kneale BL. Vulvar cancer: the Cinderella of gynaecological oncology. *Aust N Z J Obstet Gynaecol* 1995;35(1):71–5.
- [2]. Douay-Hauser N, Akerman G, Tulpin L, Morel O, Malartic C, Desfeux P, et al.
- [3]. Smith JS, Backes DM, Hoots BE, Kurman RJ, Pimenta JM. Human papillomavirus type-distribution in vulvar and vaginal cancers and their associated precursors. *Obstet Gynecol* 2009;113:917–24.
- [4]. Leroy JL, Vinatier D, Collier F, Thomas P. Diagnostic d'une néoplasie intraépithéliale vulvaire (VIN). *Gynecol Obstet Fertil* 2008;36:190–9.
- [5]. Carter JS, Downs LS. Vulvar and vaginal cancer. *J Obstet Gynecol Clin North Am* 2012;39:213–31.
- [6]. Mulvany NJ, Allen DG. Differentiated intraepithelial neoplasia of the vulva. *Int J Gynecol Pathol* 2008;27:125–35.
- [7]. Coleman MP, Gatta G, Verdecchia A, Esteve J, Sant M, Storm H, et al. EURO CARE-3 summary: cancer survival in Europe at the end of the 20th century. *Ann Oncol* 2003;14:v128–49.
- [8]. Trétarre B, Sauvage M, Molinié F, Aude AM, Danzon A, Guizard AV, et al. Vulve et vagin. In: *Survie des patients atteints de cancer en France. Étude des registres du réseau FRANCIM*. Paris: Springer-Verlag; 2007. p. 233–40.
- [9]. Gould N, Kamelle S, Tillmanns T, Scribner D, Gold M, Walker J, et al. Predictors of complications after inguinal lymphadenectomy. *Gynecol Oncol* 2001;82:329–32.

- [10]. Querleu D, Bonnier P, Morice P, Narducci F, Lhomme C, Haie-Meder C, et al. Prise en charge initiale des cancers gynécologiques : référentiels de la Société française d'oncologie gynécologique (SFOG). *Gynecol Obstet Fertil* 2008;36:338—52
- [11]. Blake P. Radiotherapy and chemoradiotherapy for carcinoma of the vulva. *Best Pract Res Clin Obstet Gynaecol* 2003;17: 649—61.
- [12]. Sanguin, S.; Daraï, E.; Brzakowski, M.; Gondry, J.; Fauvet, R. Cancer de la vulve : enquête de pratique de la prise en charge chirurgicale en France. Faut-il se diriger vers des centres de références ?
- [13]. Selman TJ, Luesley DM, Acheson N, Khan KS, Mann CH. A systematic review of the accuracy of diagnostic tests for inguinal lymph node status in vulvar cancer. *Gynecol Oncol* 2005;99:206—14
- [14]. Deppe G, Mert I, Belotte J, Winer IS. Chemotherapy of vulvar cancer: a review. *Wien Klin Wochenschr* 2013;125(6):119–28
- [15]. Baiocchi G, Rocha RM. Vulvar cancer surgery. *Curr Opin Obstet Gynecol* 2014;26(1):9–17.
- [16]. Oonk MHM, Planchamp F, Baldwin P, Bidzinski M, Brännström M, Landoni F, et al. European Society of Gynaecological Oncology Guidelines for the management of patients with vulvar cancer. *Int J Gynecol Cancer* 2017;27(4):832–7.
- [17]. Deppe G, Mert I, Winer IS. Management of squamous cell vulvar cancer: a review. *J Obstet Gynaecol Res* 2014;40(5):1217–25.  
<http://dx.doi.org/10.1111/jog.12352> [Epub 2014 Apr 21.. PMID: 24750413].
- [18]. Klapdor R, Hillemanns P, Wölber L, Jückstock J, Hilpert F, de Gregorio N, et al. Outcome after sentinel lymph node dissection in vulvar cancer: a subgroup analysis of the AGO-CaRE1 study. *Ann Surg Oncol* 2017;24(5):1314–21.