

# Vulvectomy: Indications and Results in the General Surgery Department of the Ignace Deen Chu Hospital in Conakry

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## Abstract

**Introduction:** The aim of this study was to report the indications and evaluate the results of vulvectomy in the general surgery department of Ignace Deen Hospital, CHU Conakry. **Materials and Methods:** This was a retrospective descriptive study, conducted over a period of five (05) years from January 1, 2018 to December 31, 2022, in the general surgery department of Ignace Deen Hospital, CHU Conakry. We included in our study all patient records in whom vulvectomy was performed. **Results:** We recorded 15 cases of vulvectomy out of 453 perineal surgeries, *i.e.* 3.31%, with a mean age of 43.56 years and extremes of 35 and 69 years. Vulvar cancer was the most common diagnosis (46.67%), followed by Buschke-Lowenstein (33.33%) and anal canal cancer extending to the vulva (20%). Six patients had undergone biopsy (40%). Vulvectomy with lymph node dissection was performed in only 9 patients (60%), and all surgical specimens were sent to anatomical pathology (100%). **Conclusion:** Vulvectomy is a surgical technique most often indicated for the treatment of vulvar cancer.

## Keywords

Vulvectomy, Indications, Results, Ignace Deen, Conakry University Hospital

## 1. Introduction

Vulvar cancer is rare, accounting for 3% to 5% of all gynaecological cancers. Annual incidence is estimated at 2 to 3 per 100,000 women, and has been rising in recent years. The average age at diagnosis is 70 [1].

They mainly appear after the menopause. Squamous cell carcinomas are the most common, accounting for around 90% of all vulvar cancers. Vulvar malig-

nant melanoma is the second subtype (5% - 10%) of all vulvar cancers, and fewer than 200 cases have been described worldwide [2].

Vulvectomy is the surgical technique most frequently used to treat vulvar cancer [3].

The type of surgical excision depends on both the size of the lesion and the degree of deep infiltration, which dictate the treatment of lymph nodes [4].

The efficacy of this surgical management is satisfactory for these localized stages, with a recurrence rate varying between 1% and 10% depending on the study [5].

The surgery is potentially morbid and disfiguring, with a high risk of scar disunion [3]. It is associated with a risk of major complications, including delayed healing, lymphorrhea and lymphedema, which impact on quality of life [4].

However, these aesthetic and functional issues must not lead us to lose sight of the carcinological imperative of the surgical procedure [3].

In a study carried out in Rabat in 2007, Hanane Z. *et al.* reported 83 cases of vulvar cancer in the radiotherapy oncology department of Rabat University Hospital [6].

In France, the management of vulvar cancer is codified in the guidelines issued by the Société française d'oncologie gynécologique (SFOG) in 2008. These specify diagnostic procedures, complementary examinations and therapeutic strategies. Diagnosis of vulvar cancer is essentially clinical and histological. Few complementary examinations have proven their value. Treatment is based on surgery of the vulva and inguinal lymph nodes [1].

The aim of this study was to report on the indications and evaluate the results of vulvectomy in the general surgery department of Ignace Deen Hospital, Conakry University Hospital.

## 2. Materials and Methods

This was a retrospective descriptive study conducted over a period of five (05) years from January 1, 2018 to December 31, 2022, carried out in the general surgery department of Ignace Deen Hospital, CHU Conakry. We included in our study all patient records in whom vulvectomy was performed. The parameters studied were sociodemographic, clinical, paraclinical, therapeutic and evolutionary.

Target population: All women who consulted for gynaecological pathology during the study period.

Study population: All women who consulted for vulvar pathology during the study period.

- Inclusion criteria: all women who consulted and were managed for a vulvar pathology and who had an up-to-date medical record.
- Exclusion criteria: all women who consulted and were managed for a vulvar pathology and who did not have an up-to-date medical record.

We collected data using a pre-established survey form. Data were entered using Word and Excel and statistically analyzed using SPSS software version 21.0.

### 3. Results

We recorded 15 cases of vulvectomy out of 453 perineal surgeries, *i.e.* 3.31%. We cannot increase the sample size, as these pathologies are rare in our practice, with an average age of 43.56 years and extremes of 35 and 69 years. Vulvar cancer was the most common diagnosis, accounting for 7 cases (46.67%), followed by 5 Buschke-Lowenstein cases (33.33%) and 3 cases of anal canal cancer extending to the vulva (20%). **Table 1** illustrates the therapeutic diagnosis. Abdominal and pelvic CT scans were performed in 6 patients (40%). Six patients had undergone biopsy (40%) compared with 9 who had not (60%). The average management time was 30 days, with extremes of 18 and 54 days. Vulvectomy with lymph node dissection was performed in only 9 patients (60%). **Table 2** illustrates the surgical procedures performed. All surgical specimens were referred to anatomical pathology (100%). The most common histological type was squamous cell carcinoma in 8 cases (53.33%), followed by adenocarcinoma in 26.67% (4 cases) and cutaneous melanoma in 20% (3 cases). Post-operative follow-up was straightforward in 13 cases (86.67%), with complications such as surgical site infection in 2 cases (13.33%). We did not record any cases of death. The average length of stay was 27.8 days, with extremes of 14 and 58 days.

### 4. Discussion

Vulvectomy is indicated for vulvar cancer, Buchke-Lowenstein and cutaneous melanoma. There are two main indications for vulvectomy: excision surgery and surgery to treat progressive complications [7].

**Table 1.** Distribution by therapeutic diagnosis.

Diagnosis	Number	Percentage (%)
<b>Vulvar cancer</b>	<b>7</b>	<b>46.67</b>
Buchke-Lowenstein	5	33.33
Cancer of the duct extending to the vulva	3	20
<b>Total</b>	<b>15</b>	<b>100</b>

**Table 2.** Breakdown by surgical procedure.

Gestes	Number	Percentage (%)
<b>Vulvectomy + lymph node curage</b>	<b>9</b>	<b>60</b>
Vulvectomy + lymph node dissection + temporary iliac colostomy	4	26.67
Abdominopelvic amputation + vulvectomy	2	13.33
<b>Total</b>	<b>15</b>	<b>100</b>

A distinction is made between total vulvectomy and superficial excision. It removes the diseased skin and the first 5 mm of subcutaneous fat, and partial vulvectomy or wide exeresis, which consists of exeresis limited to the most pathological zone, while preserving the same radicality [7]. We performed total vulvectomy in all our patients.

Partial vulvectomy may be indicated in the early stages, and the role of the sentinel lymph node in the surgical treatment of vulvar cancer is currently being evaluated [8]. Inguinal curage, whether unilateral or bilateral, was rarely performed [6]. In our study, this procedure was performed in more than half the patients.

Iliac curage does not appear to be recommended, as it makes the surgical procedure considerably more cumbersome and does not appear to alter the prognosis [6].

Recovery techniques have evolved in recent years [3].

The size of the defect is the main factor determining the choice of flap in vulvoperineal reconstruction surgery [9]. We have used a skin graft in cases where the two edges cannot be brought together.

Postoperative care is essential to achieve the fastest possible healing. Twice-daily local care is provided from the first postoperative day, with wound cleansing with betadine serum and drying [3].

Nevertheless, this procedure is prone to complications such as lymphoedema, infection and scar disunions, which explains why practitioners are reluctant to perform it [4].

The quality of the resection and inguinal lymph node invasion are major prognostic factors [8].

These risk factors for lymph node invasion are lesion size, depth of invasion, degree of differentiation, presence of vascular or lymphatic emboli, “perineural” invasion and clinical lymph node status. However, to date, there is no technique that can reliably predict inguinal lymph node invasion: palpation of the inguinal fossa has a sensitivity of 57% and a specificity of 62%, ultrasound of the inguinal fossa is operator-dependent, ultrasound-guided cytology is associated with too many false negatives, MRI cannot differentiate healthy from pathological lymph nodes by T1 and T2 sequences [10], magnetic resonance lymphography using Ultra Small Iron Oxide Particles (USIOP) is effective in detecting invaded nodes in penile cancer, but its application has not been demonstrated for vulvar cancer, nor has PET-CT [10].

## 5. Conclusion

Vulvectomy is a surgical technique most often indicated for the treatment of vulvar cancer in our surgical context, where skin repair after resection poses an aesthetic problem for the patient.

## Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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