

# Histological Profile of Vulvar Cancers Observed at the Paraclinical Unit for Training and Research in Anatomy and Pathological Cytology of the Joseph Ravoahangy Andrianavalona University Hospital Center

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## ABSTRACT

Vulvar cancer is a rare gynecologic malignancy whose primary treatment is surgical. They most often occur in older women. Our objective is to reviews the epidemiology and diagnosis of vulvar cancer. This is a retrospective and descriptive study of women with vulvar cancer, carried out at the Paraclinical Training and Research Unit in Anatomy and Cytology Pathological, over a period of 10 years, from January 2010 to December 2019. During the period of study, we collected 24 cases, with an average age of 62.33 years. The clinical symptomatology was dominated by vulvar swelling. Squamous cell carcinoma was the most common histological type.

**Keywords:** Histology; Squamous Cell Carcinoma; Vulvar Cancer

## Introduction

Cancer of the vulva is a rare type of cancer that affects women. They often develop at the expense of the skin or mucous membrane [1,2]. Most of those affected by vulva cancer are older women over the age of 65. Its diagnosis is easy but must be early. Histologically, there are several histological types, but squamous cell carcinoma is the most common form. The interest of this study is to determine the epidemiological and histological aspects of vulvar cancers observed at the Paraclinical Unit for Training and Research in Anatomy and Pathological Cytology.

## Materials and Methods

This is a retrospective, descriptive study conducted over a 10-years period from January 2010 to December 2019, at the Paraclinical Training and Research Unit in Anatomy and Cytology Pathological of the University Hospital of Antananarivo Joseph Ravoahangy Andrianavalona. All histologically confirmed vulvar cancers were included. The parameters studied were age, clinical information and histological types. The data was processed with Excel 2010 software.

## Results

During the period of study, 24 cases were collected, representing 2.3% of all gynecological samples. The average age of our patients was 62.33 years with extremes of 20 and 80 years. The age groups between 61 and 80 were the most affected (Figure 1). The main revealing symptoms were the presence of tumor (75%), nodules,

erythroderma, recurrent Bartholinitis, condyloma, bleeding and whitish lesions with 4.17% each. The types of samples were biopsy in 62.5%, excision in 29.17% and biopsy-excision in 08.33%. Histologically, squamous cell carcinoma was the most common (58.33%), followed by Bowen's disease (20.83%), verrucous carcinoma (12.5%), adenosquamous carcinoma (4.17%) and adenocarcinoma (4.17%).

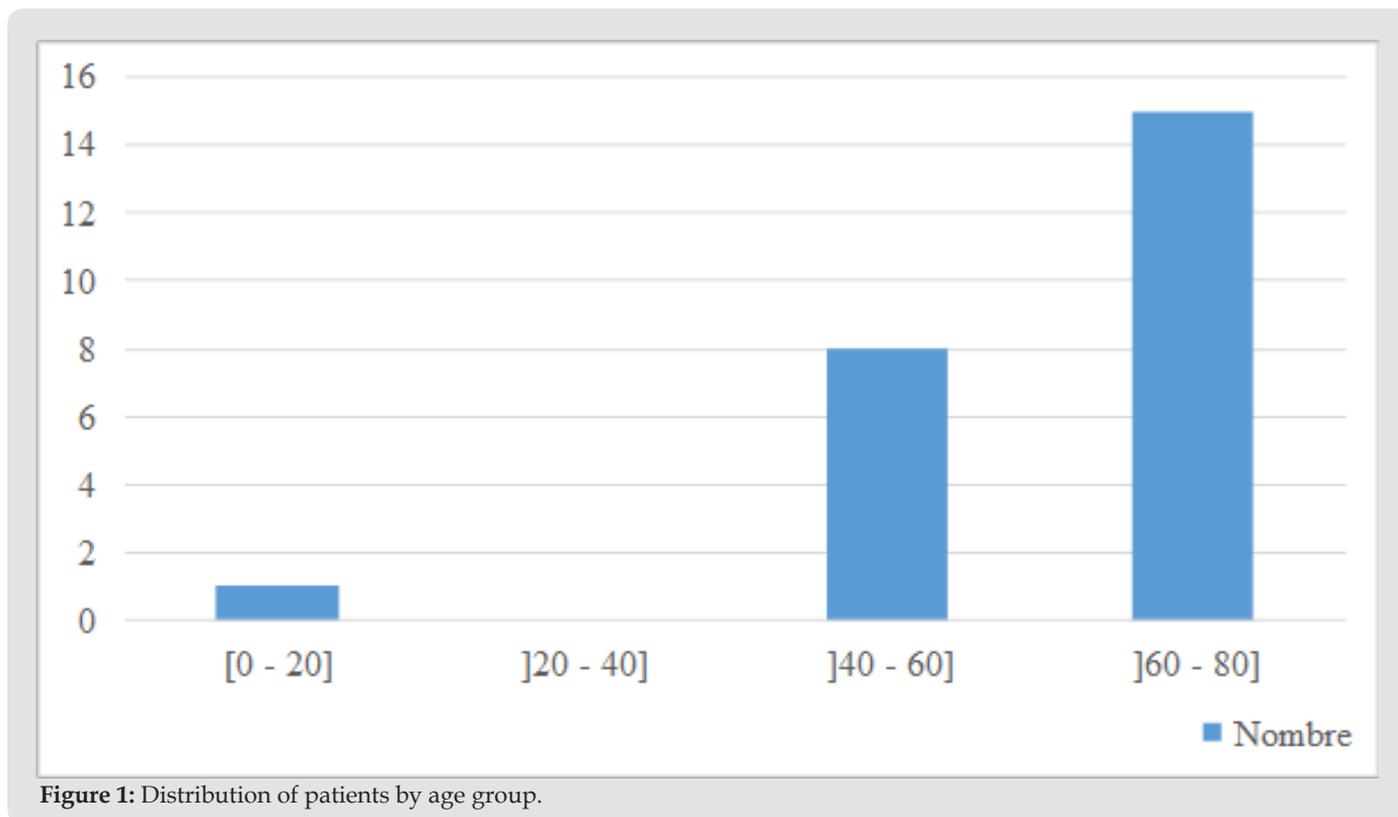


Figure 1: Distribution of patients by age group.

## Discussion

Vulvar cancer is one of the rare gynecological neoplasms. Globally, vulvar cancers are accounting for 3 to 5% of cancers female genitals [1]. It is a particular cancer that mainly affects women over 65 years of age [3], whose general condition is readily weakened, which inevitably affects the treatment modalities. The exact cause of vulvar cancer is unclear, but the risk of developing the condition is increased by the following factors: increasing age, vulvar intra-epithelial neoplasia, persistent infection with certain versions of the human papillomavirus, skin condition affecting the vulva, such as lichen sclerosis, smoking. The cancer of the vulva develops electively on a ground of the chronic vulvar dystrophy. Diagnosis is easy but must be early. For in situ cancer, the age of affected patients varies between 20 and 69 years. A study by Judson found predominance between 30 and 50 years [4]. On the other hand, invasive cancer preferentially affects women over 65 years old. Novak ER & Woodruff JD [5] reported the highest percentage of vulvar cancer between 60 and 70 years old. Collins C [6] in a study of

109 cases reported the highest percentage between 40 and 50 years old. We see therefore to a rejuvenation of the affected population. Invasive cancer does not spare the young woman but he reaches it with a low percentage. In our series, the age of patients with invasive cancer varies between 45 and 80 years. For the average age, it differs depending on the series. Lacour & Cohen J [7] in a series of 163 cases found a mean age of 62 years. This is identical to our study with an average of 62.33 years. On the other hand, a study carried out in China by Sun [8] and in the United States by Ruth [9] found an average of 36 years and 40 years respectively.

Clinically, the series by Mahjoub in Tunisia [10], as well as our study indicated that the tumor was the most frequently found reason for consultation. On the other hand, Rochette [11] objected to pruritus in 54.3% of cases. The biopsy is the key examination which provides the definitive histological diagnosis, and should be done if there is any doubt about a vulvar lesion. Usually, a single sample of the lesion is sufficient to make the diagnosis. But it is preferable to take several samples in different

areas, at the level of the lesion, at the periphery and a little at a distance from clinically suspect areas. In our study, the biopsy was the most common type of sample. Macroscopically, they usually present in a budding, ulcerated and / or infiltrating form [12]. The appearance of vesicular lesions in vulvar cancer is unusual. The practitioner, if he is not vigilant, can potentially be directed towards a rather infectious etiology, more than tumor, hence the interest of performing biopsies systematically. Squamous cell carcinoma is the most common histological type found in vulvar cancer. It is caused by oncogenic human papilloma virus [1]. What has been seen both in our series and in the literature. The other histological types are rare, they are represented by basal cell carcinoma, melanoma, small cell carcinoma and sarcoma [2]. According to a study conducted by Hou JL [13], Carol [14] and Ahizechukwu [15], adenocarcinoma ranks second, which is different from our study where we found Bowen's disease in second place. The main treatment for vulva cancer is surgery to remove the cancerous tissue from the vulva. Radiotherapy and chemotherapy may be used without surgery if the patient isn't well enough to have an operation, or if the cancer has spread and it's not possible to remove it all. The outlook for vulva cancer depends on things such as how far the cancer has spread, the age and the general health. Squamous cell carcinoma progresses slowly and often remains in a locoregional location. Distant metastases are rare [16].

## Conclusion

Vulvar cancer is a rare condition affecting mostly middle-aged women. Its prevalence increases over the years. Squamous cell carcinoma remains by far the most frequent cancer of the vulva, the percentage of which found in our series is 58.33%. This study allowed us to highlight the epidemiological and histological aspects of these cancers.

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