

## Vulvar melanoma: relevant aspects in therapeutic management\*

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**Abstract:** Cancer of the vulva accounts for at least 1% of malignant neoplasms among women. Although rare, vulvar melanoma is the second most common histological type of vulvar cancer, representing 7-10% of all malignant vulvar neoplasms. Initial symptoms are non-specific and complete excision of the lesion is indicated in cases with suspected diagnosis. Prognosis of patients with these neoplasms is poor and remains unchanged despite the treatment approach. Hemivulvectomy with lymph node dissection is the current procedure of choice, associated or not with adjuvant therapies. We report two cases of patients presenting with late diagnosed vulvar melanoma and the relevant aspects in their therapeutic management.

**Keywords:** Histology; Melanoma; Prognosis; Therapeutics; Vulvar neoplasms

### INTRODUCTION

Cancer of the vulva is a rare neoplasm, accounting for less than 1% of malignant neoplasms among women. It represents 3-5% of malignant neoplasms of the female genital tract and has an estimated incidence of 1-2 cases per 100,000 women/year.<sup>1</sup> The most frequent histological type is epidermoid carcinoma, responsible for over 90% of cases of cancer of this organ, followed by melanoma (5-6%). Sarcoma, basal cell carcinoma, and vulvar Paget's disease account for less than 2% of cases.<sup>1,2</sup> With regard to location, the labia majora is the most commonly affected site (52%) followed by the labia minora (18%), clitoris (10-15%) and Bartholin's glands (1-3%).<sup>2,3</sup>

Although rare, vulvar melanoma is the second most common histological type of vulvar cancer, representing 7-10% of all malignant vulvar neoplasms.<sup>5</sup> However, gynecologists and dermatologists may relatively often encounter this neoplasm, particularly within referral centers. Given that lesion size is a determinant for prognosis, early detection of the tumor is of vital importance.<sup>4,5</sup>

Two cases of advanced vulvar melanoma in patients treated at the pelvic oncology center of a college hospital are reported below.

### CASES REPORT

#### Case 1

A 50-year-old patient sought the hospital due to a complaint of a 2-month history painful lesion of the vulva. The lesion, situated on the left labia minora, was painful to the touch, particularly during sexual intercourse. The patient reported an absence of any other associated gynecological or clinical symptoms. Personal history included three lesions of basal cell carcinoma in the face that

had been previously treated. Concerning family history, her father presented with a melanoma on his back one year before.

Clinical examination of the vulva revealed a round tumor of 2.5cm in diameter, adhering to deep planes on the inside surface of the left labium minus, exhibiting phlogistic signs suggestive of abscess. A dark patch was found adjacent to this lesion, also on the labium minus, measuring approximately 10x4mm, which was flat and had poorly defined margins (Figure 1). Speculum exam, oncotoc colpocytology, colposcopy, and digital rectal exams were all normal. Inguinal lymph nodes were not palpable.

The lesion was submitted to excisional biopsy and pathology showed a melanoma *in situ*, Clark I, with horizontal growth, slight lymphocytic infiltration, absence of angiolymphatic or perineural invasion, and exiguous surgical margins. A left hemivulvectomy with ipsilateral superficial lymphadenectomy was carried out. Definitive histological examination showed an acral lentiginous melanoma in the vertical growth phase, Clark IV, and Breslow 6.5mm. It also revealed the presence of ulceration, mitotic index of 5/mm<sup>2</sup>, with slight peritumoral and intratumoral lymphocytic infiltration, absence of regression, presence of angiolymphatic and perineural invasion, absence of satellitosis, and surgical margins free of neoplasm.

Frozen-section evaluation of sentinel lymph node tested negative, with 1/5 lymph nodes affected on the assessment using the definitive immunohistochemistry assay (MELAN A).

Histologic examination was confirmed by immunohistochemistry assay, which revealed immunoexpression of S100 protein

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and HMB45 (CK7 negative), confirming the diagnosis of melanoma. The patient was referred to the Oncologic Dermatology outpatient unit where immunotherapy with Interferon-alpha (planned for two years) was indicated, a treatment currently underway. There have been no signs of local recurrences or distal metastases after a 7-month follow-up.

#### Case 2

A 58-year-old patient with a complaint of right vulvar le-



FIGURE 1: Case 1 - Round tumor, 2.5 cm in diameter, adhering to deep planes on the internal surface of the left labium minus, with central ulceration and some dark pigmented areas



FIGURE 2: Case 2 - A flat pigmented lesion on the right labium minus measuring approximately 4 cm in diameter; a raised, vegetative reddish area can be seen on the medial face of the tumor

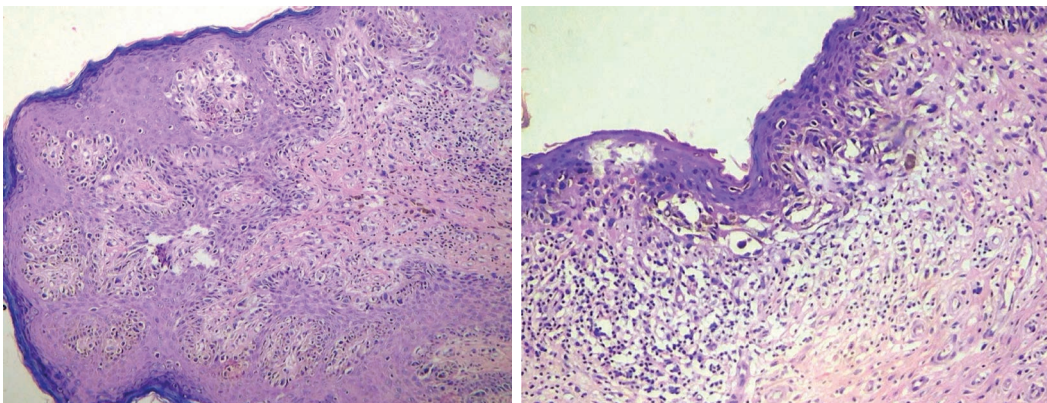


FIGURE 3: Malignant melanoma of the vulva with vertical growth. (Hematoxylin & eosin x100, Hematoxylin & eosin x200)

sion concomitant with pruritus and a 2-month history of progressive growth, in addition to discharge of foul yellowish secretion. The patient denied any other associated clinical or gynecological symptoms. She denied personal or family history of cancers. Vulvar inspection revealed a flat darkened lesion on the right labium minus, with irregular borders measuring approximately 4cm; there was a raised reddish vegetation on the medial aspect of the main lesion, with a drainage point of yellowish fetid secretion (Figure 2). Speculum examination, oncotic colpocytology, colposcopy, and digital rectal exams were all normal. Inguinal palpation revealed a mobile, painless lymphadenomegaly to the right side measuring 2cm. A biopsy of the lesion was performed and the anatomopathological results showed malignant melanoma of the vulva with vertical growth. The patient was submitted to right hemivulvectomy with superficial and deep bilateral lymphadenectomy. Histological examination confirmed the diagnosis of a malignant melanoma of the vulva, measuring 2.6x5cm (depth of 2cm), with nodular pattern, Clark IV, Breslow 20.5mm, vertical growth, mitotic index of 14/10 cga, moderate peritumoral lymphocytic infiltration and absent intratumoral invasion, ulceration present, satellitosis absent, tumor necrosis present, perineural and lymphatic invasion present, and no areas of regression (Figure 3). All margins were free of neoplastic invasion; metastasis was detected in 1/5 right superficial lymph nodes, while no metastases were observed in the left lymph nodes. The patient was referred for radiotherapy owing to the advanced stage of the lesion. She has not returned yet after radiotherapy treatment.

#### DISCUSSION

Vulvar melanoma is a rare disease whose histological types, in order of incidence, are mucosal lentiginous (27-57%), nodular (22-28%), unclassified (12-16%), and superficial spreading (4-56%).<sup>5</sup>

Complete excision of the lesion is indicated in cases with suspected diagnosis. Currently, surgery still remains the best option albeit without the need for radical procedures. A number of studies have shown that radical surgery does not increase patient's survival with initial disease compared to local excision with margins, and is associated with greater morbidity and anatomical disfiguring. Consequently, radical vulvectomy with bilateral lymphadenectomy is becoming a questionable and obsolete treatment approach. Alternatively, wide local excision with a 1cm surgical margin is rec-

ommended for lesions with a depth of less than 1mm and *en bloc* resection for deeper lesions, with a safety margin of 2-3 cm and regional lymphadenectomy (inguinal-femoral).<sup>6</sup> Adjuvant treatment with immunotherapy, chemotherapy, and radiotherapy may be recommended in specific cases and for local recurrences and distal metastases.<sup>7</sup>

The main prognostic factors include tumor site, depth of invasion, presence of ulceration, and occurrence of lymph node metastases. In addition, patient's age and tumor stage also appear to be critical factors in the survival of women with vulvar melanoma.<sup>8</sup> Irrespective of stage, the literature shows that 5-year survival rates are around 20-56%.<sup>9</sup> The behavior of primary malignant vulvar and

extragenital cutaneous melanomas appear to be similar. However, some studies have shown that the general prognosis of patients with vulvar melanoma is worse than that of women with extragenital melanoma and squamous cell carcinoma of the vulva, showing a greater tendency for local and distal recurrence.<sup>7,10</sup>

Although rare, vulvar melanoma can be relatively often encountered in Oncology referral centers. The condition must be diagnosed as early as possible in order to improve the prognosis and survival of patients. □

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