



Subject Area : Obstetrics and Gynaecology

VULVAL MALIGNANT MELANOMA - A RARE CASE REPORT

Dr. Neeta Meena

Department of obstetrics and gynaecology, Ambedkar Nagar hospital under (Delhi government)Dakshinpuri ,New Delhi, India

ARTICLE INFO	ABSTRACT
<p>Article History:</p> <p>Received 11th December, 2024</p> <p>Received in revised form 26th December 2024</p> <p>Accepted 13th January, 2025</p> <p>Published online 28th January, 2025</p>	<p>Vulval malignant melanoma is a rare and aggressive form of skin cancer. We report a case of a 34-year-old female presenting with a pigmented lesion on the vulva. Histopathological examination confirmed the diagnosis of malignant melanoma. Immunohistopathology staining was positive for S-100 protein, HMB-45, Melan A antibodies. The patient underwent wide local excision with inguinal lymph node dissection. Computed Tomography (CT) scan of the abdomen and pelvis revealed no evidence of metastatic disease. Lymph nodes were negative for metastasis. Adjuvant therapy with interferon-alpha was initiated. Regular follow-up is essential for early detection of recurrence.</p>
<p>Key words:</p> <p>CT (computed Tomography)</p>	
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INTRODUCTION

Vulvar melanoma is a rare illness developed from melanocytes and has a high incidence of metastatic spread; representing only 2–9% of vulvar malignancies. It usually arises after menopause in the sixth decade¹

It is more common in postmenopausal women, with a median age of 60 years. The prognosis is generally poor due to late presentation and aggressive nature of the disease. The prevention of vulvar melanoma requires awareness of health professionals on this rare disease, as well as patient education on self-examination of the genital tract and self-screening all atypical pigmented lesions.

CASE PRESENTATION

Mrs. Y, 34 years old, P2L2 lady presented with complaints of swelling in the right side labial region for two and a half months, associated with severe itching and irregular growth increasing day by day .

She also complained of white discharge per vagina for 2 months, which was non-foul smelling and not blood-stained. But she does not have a history of intermenstrual bleeding with loss of weight/appetite, and bowel/bladder complaints.

No significant medical/surgical past history.

On examination, vitals were found to be within normal limits.

P/A- soft, non tense ,non-tender, no organomegaly.

L/E -3 × 4 cm growth arising from labia majora, irregular surface, and hyperpigmented lesion with ulcerated surface (Figs. 1)



Figure 1 Finding on External Examination

Investigations

- Histopathological examination of the biopsy specimen revealed features of malignant melanoma, including atypical melanocytes, nuclear pleomorphism, and increased mitotic activity.
- Immunohistochemical staining was positive for S-100 protein, HMB-45, Melan A antibodies.

*Corresponding author: **Dr. Neeta Meena**

Department of obstetrics and gynaecology, Ambedkar Nagar hospital under (Delhi government)Dakshinpuri ,New Delhi, India

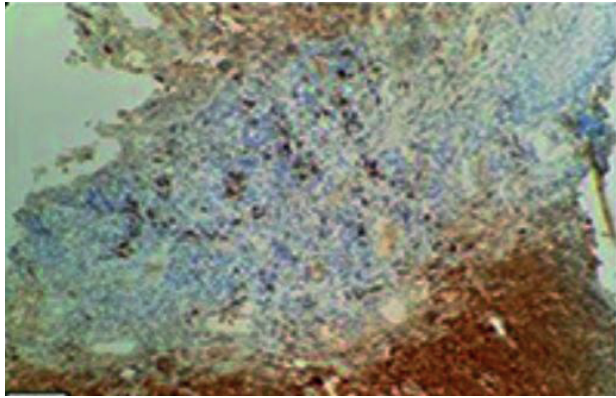


Figure 2. A

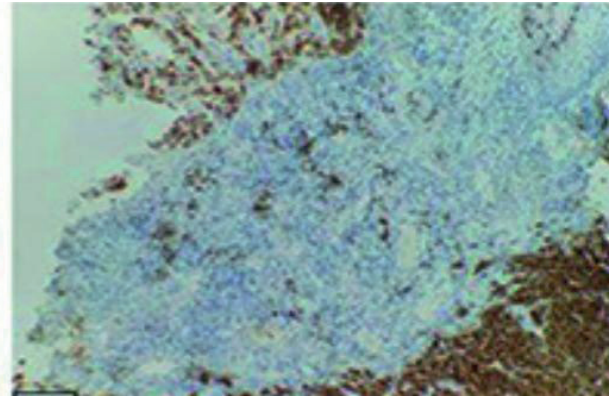


Figure 3. B

Vulva tissue infiltrated by melanoma cells within the papillary dermis and dermis A: S100 (x20). B: HMB45 (x20) (Figure no 2A& 3B)

Computed Tomography (CT) scan of the abdomen and pelvis revealed no evidence of metastatic disease. we had managed this case with Wide local excision of the tumor with a 3 × 4 cm margin was performed & Inguinal lymph node dissection was also performed, and the lymph nodes were negative for metastasis. Adjuvant therapy with interferon-alpha was initiated for 1 year. This patient is on regular follow-up, and there is no evidence of recurrence or metastasis after 2 years.

DISCUSSION

Vulval malignant melanoma is a rare and aggressive form of skin cancer. Early detection and treatment are essential for improving prognosis. Wide local excision with inguinal lymph node dissection is the standard treatment. Adjuvant therapy with interferon-alpha may be beneficial in reducing recurrence rates. Regular follow-up is crucial for early detection of recurrence.

The Immunohistochemical study is a valuable tool for validating the diagnosis based on positive immunostaining for S100 antibodies and HMB 45 and Melan A antibodies. According to sundry studies, there are several mutations that characterized the genetic profile of vulvar melanomas such as mutations of c-KIT genes. Also, the NRAS mutations and BRAF mutations have been reported in patients with metastatic melanoma. The discovery of these mutations allows using a tyrosine kinase inhibitor (Imatinibmesylate), MEK inhibitors in the event of NRAS gene mutations, or BRAF inhibitors to treat melanomas. The immune checkpoint inhibitors remain an emerging approach in the treatment of vulvar melanoma in patients who express the PD-L1 protein [5].

The clinical evaluation of lesions suspected vulvar melanoma is based on the ABCDE rule; -A-: means Asymmetry, -B-: means usually irregular Border, while nevus has smoother border, -C-: means Color, multiple colors (brown, black, red, blue, white) are signs of malignancy, while benign moles are often solid brown, -D-: Diameter, -E-: Elevation or evolution and all change in shape, size, structure, color or symptom is a potential indicator of malignancy [2].

A combination of chemotherapy involving cisplatin, vinblastine, dacarbazine, temozolomide, tamoxifen, IL-2, and IFN-A has a median survival of 10 months, with 36% having a partial response for advanced VMM.

Radiotherapy in VMM has improved local control, but it showed no benefit in overall survival.[3]

Currently, there are no standards or consensus guidelines in regard to the ideal management of VMM. Surgery is still the mainstay treatment of choice, especially in early stage disease.[4]

CONCLUSION

Vulval malignant melanoma is a rare but aggressive form of skin cancer. Early detection and treatment are essential for improving prognosis. Molecular Analysis has an identifiable role in VMM management. When tailored with targeted therapy or immunotherapy, it may improve progression- free survival and the outcome of the patient.

A multidisciplinary approach, including surgery, adjuvant therapy, and regular follow-up, is necessary for optimal management. The prognosis is very poor due to the delay in diagnosis and the high metastatic potential.

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