Malignant Vulvar Melanoma: A Rare Case Report

Author
Dr Anusha A.M1, Dr Annamalai P.T2

1Associate Professor, Department of Pathology, Dr PK DAS Institute of Medical Sciences, Palakkad, Kerala
2Professor, Department of Biochemistry, Jubilee Mission Medical College, Thrissur, Kerala

Abstract
Background: Malignant melanomas of the vulva are rare and ranges from 0.1–0.19 per 10,00,000 women. In India only a few cases are reported owing to late onset and less reporting. The most common vulvar malignancy is squamous cell carcinoma followed by malignant melanoma, which accounts for 4-10%. Even though the incidence is low, due to delayed diagnosis and high propensity to metastasize, it has poor prognosis. A case report of vulvar melanoma of vulva is presented with relevant aspects.

Keywords: Malignant melanoma, vulva, vulvar melanoma.

Introduction
Malignant melanoma is the second most common malignancy of the vulva and constitutes 8-10% of the entire vulvar malignancies. Vulvar melanoma is a disease of the elderly, and peaks in the 5th to 8th decades of life. Mean age of occurrence is 69 years. Also, 5 year survival is rare as it is associated with worse prognosis.[1] The etiology of cutaneous melanoma is ultraviolet radiation, but cannot be regarded as the causative agent for vulvar melanoma. Studies suggest that some irritants, viral infections or chronic inflammatory states can cause vulvar melanoma.[2] Vulvar melanomas are not associated with genital-type HPV (HPV-16), but epidermodysplasia verruciformis-type HPV (HPV-38) and cutaneous type HPV (HPV-3) have been detected in some cases.[3] They arise from glabrous skin when compared to the hairy area. The most common location is labia (minora and majora), next being clitoris.[4] The different types of malignant melanoma are superficial spreading, nodular and acral lentiginous melanoma.

Case Report
A 55 year old postmenopausal female, married for 35 years, Para 3, came to the Department of Obstetrics and Gynecology with complaints of itching and a small mass over vulval region for 7 months. The mass has progressively increased since 3 months. She also complained of loss of weight and appetite. Her vitals were normal. Local examination revealed a blackish nodule (M) 2x1cm on labia minora (left). The mass was ulcerated with yellowish discharge oozing from it. No other lesion/ lymph node were palpable. FNAC was done and immediately send to Department of Pathology for provisional diagnosis. Routine investigations were within normal limits. Imaging studies revealed no metastasis. FNAC smears showed highly cellular smears with mainly dispersed cells of variable...
number of loose clusters. Individual cell had eccentric uniform hyperchromatic nuclei, prominent nucleoli with abundant cytoplasm. Melanin pigment in tumor cells was also noted. The report was given as suggestive of malignant melanoma (Figure 1). The patient was advised to undergo excision biopsy and the specimen was sent to the Department of Pathology.

Gross: Received a deep brown or blackish nodular mass attached to an ellipse of skin together (M) 3x2x1.5 cm, the nodule (M) 2x1cm. C/s deep brown. Microscopy: Sections showed portions of lesion lined by ulcerated squamous epithelium with a tumour formed of sheets or masses of polygonal cells and scant intervening stroma. Tumor cells had large round to ovoid or elongated hyperchromatic nuclei exhibiting anisonucleosis, prominent nucleoli and pink cytoplasm, containing plenty of melanin deposits (Figure 2 & 3).

Thus diagnosis of malignant melanoma was made with stage 1A according to AJCC (American Joint Committee on Cancer), TNM (tumor, nodes, metastasis) classification 2002. Clark’s level II and Breslow thickness 0.76mm was given. The patient was followed up monthly for 6 months and showed no signs or symptoms of any recurrent disease.

**Figure 1**: Photomicrograph of FNAC smears (40x) showing highly cellular smears with dispersed cells. Individual cells are large with eccentric uniform hyperchromatic nuclei, prominent nucleoli with abundant cytoplasm. Few binucleated cells also noted.

**Figure 2**: Photomicrograph of histopathological sections (10x, 40x) showing a tumor formed of sheets, masses and clusters of polygonal cells with scant intervening stroma and containing plenty of melanin deposits.

**Figure 3**: Photomicrograph of histopathological sections (40x, 100x) showing tumor cells having large round to ovoid or elongated hyperchromatic nuclei exhibiting anisonucleosis, prominent nucleoli, abundant pink cytoplasm and plenty of melanin deposits.
Discussion
Vulvar melanomas are rare malignant tumors arising from labia (minora/majora) or clitoris. Gold standard for diagnosis is histopathological examination.\cite{4} Average age of presentation is 67 years with 5 year survival of 35%.\cite{2} Radical vulvectomy with bilateral inguino-femoral lymphadenectomy remains the treatment of choice.\cite{5} Due to poor prognosis, deaths results from widespread metastases.\cite{6}

Conclusion
Vulvar melanoma is the second commonest vulval malignancy with poor prognosis. A well defined therapy is lacking, still detection and removal of melanomas at an early stage with pathologically confirmed clear margins confers the best chance of cure.

References