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PERIMENOPAUSAL BLEEDING IN A REPRODUCTIVE AGE WOMEN IS A COMOUFLAGE FOR A HIDDEN VULVAL CARCINOMA

Dr. Thummala Ramyatha[1], Dr. P. Sudhir babu[2], Dr. Valishetty yashwanth rani[3]
[1]Junior resident dept of obstetrics & gynecology SVSMCH , MBNR
[2]Professor & HOD of dept of OBG SVSMCH , MBNR
[3]Junior resident dept of obstetrics & gynecology SVSMCH , MBNR

Corresponding Author

Dr. Thummala Ramyatha
Junior resident dept of obstetrics & gynecology SVSMCH , MBNR

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Abstract

Vulval cancer is a relatively rare gynecologic malignancy, predominantly affecting postmenopausal women. Currently, there aren't any established population-based screening protocols for its early detection. As such, the most effective strategy for reducing its incidence remains the timely identification and treatment of predisposing conditions and preneoplastic lesions, such as vulval intraepithelial neoplasia (VIN), that are associated with its pathogenesis.

Although vulval cancer may be asymptomatic in its early stages, the majority of patients present with symptoms such as pruritus, pain, or the detection of a vulvar mass, lesion, or ulcer. Consequently, any suspicious vulvar lesion warrants prompt biopsy to assess for invasive disease.

Squamous cell carcinoma is the most prevalent histological subtype of vulvar cancer. The therapeutic approach is primarily guided by histopathological findings and surgical staging. Surgery remains the cornerstone of treatment for early-stage disease, particularly in cases of squamous cell carcinoma. However, for advanced-stage tumors, concurrent chemo radiation has demonstrated efficacy and may serve as an appropriate alternative or adjunct to surgery.

Optimal management of vulvar cancer necessitates an individualized, multidisciplinary approach, ideally within a specialized cancer center with expertise in the diagnosis and treatment of rare gynecologic malignancies.

Keywords: Vulvar Cancer, Squamous Cell Carcinoma, Vulvar Intraepithelial Neoplasia (VIN)

INTRODUCTION

Vulvar cancer is relatively a rare malignancy , accounting for approximately 4% of all gynecologic malignancies. Squamous cell carcinoma (SCC) constitutes the most prevalent histological subtype and primarily affects postmenopausal women. However, recent epidemiological trends indicate a decreasing mean age at diagnosis, a shift primarily attributed to the increasing global incidence of human papillomavirus (HPV) infection. [1 ,2] Geographic and regional variations in incidence and age at presentation have been documented and are likely influenced by disparities in HPV prevalence, as well as additional risk factors such as ethnic and genetic predispositions, tobacco use, chronic vulvar inflammation or atrophic changes, and the prevalence of human immunodeficiency virus (HIV) infection.[3 - 6]

CASE

A 40 year old P2 L2 with two previous LSCS non-Tubectomised came with the complaints of heavy menstrual bleeding since three months which is not relieved on medical management. She is a k/c/o case of Rheumatoid arthritis since 13 years and on tablet ..methyl prednisolone 2MG per OD.

On examination : Her vitals stable.

Bilateral hands showed Swann neck deformity and ulnar deviation of both hands.

Local Examination : 2×2 cm hyper pigmented violace Verrucous plaque present over right labia Minor, which is non-tender and red mass present over right lower labia minora, there is no lymphadenopathy .

ROUTINE INVESTIGATIONS :

Hemogram revealed : Microcytic hypochromic anemia [Moderate anemia with HB 9g/dl]

Remaining investigations are within normal limits

USG ABDOMEN AND PELVIS: There aren't any sonological abnormalities. EXCISION BIOPSY : showed squamous cell carcinoma of Vulva

DISCUSSION

Squamous cell carcinoma (SCC) of the vulva, while comprising only approximately 5% of all malignant neoplasms of the female genital tract, accounts for the vast majority—approximately 95%—of vulvar and vaginal malignancies. The estimated annual incidence of malignant vulvar tumors in the United States is 1.5 cases per 100,000 women, with a clear correlation between increasing age and disease prevalence. The median age at diagnosis typically falls within the seventh to eighth decades of life. Given the ongoing demographic trend toward an aging population, a proportional increase in the absolute number of vulvar SCC cases is anticipated in the coming decades.[7]

Vulvar squamous cell carcinoma (SCC) can be broadly classified into two distinct etiologic subtypes, each characterized by unique precursor lesions and pathogenic pathways. The first subtype is associated with persistent infection by high-risk oncogenic strains of human papillomavirus (HPV), most notably HPV type 16. This HPV-associated variant tends to affect younger women and typically arises from high-grade squamous intraepithelial lesions (HSIL), previously referred to as usual-type vulvar intraepithelial neoplasia (uVIN).

In contrast, the second subtype is unrelated to HPV infection and predominantly occurs in postmenopausal or elderly women. It is commonly associated with chronic dermatologic conditions, particularly lichen sclerosus (LS), and is thought to arise from differentiated-type vulvar intraepithelial neoplasia (dVIN), a non-HPV-related precursor. This variant generally exhibits a more aggressive clinical behavior and is often diagnosed at a more advanced stage.[7]

PREVENTION

1] PRIMARY PREVENTION :

The introduction of prophylactic HPV vaccination as a primary prevention strategy for cervical cancer has also demonstrated efficacy in reducing the incidence of non-cervical HPV-associated premalignant lesions, including those of the vulva, among vaccinated populations with efficacy of >90%. [9,10] Epidemiological analyses, such as those conducted by the Norwegian Cancer Registry, have yielded encouraging projections indicating a future decline in the incidence of HPV-related vulvar carcinomas within HPV-vaccinated cohorts.[11]

2]SECONDARY PREVENTION (SCREENING)

Currently, there isn't any evidence to support the implementation of routine population-based screening protocols for vulvar cancer. patient education and regular self-examination should be advocated to facilitate early detection of suspicious vulvar changes.[12]

Moreover, clinicians should maintain a high index of suspicion when evaluating patients who present with symptoms commonly associated with vulvar pathology. In all such cases, timely biopsy of any suspicious lesion is essential to exclude intraepithelial neoplasia or invasive malignancy and to ensure appropriate management [13]

3]TERTIARY PREVENTION (MANAGEMENT OF PREMALIGNANT LESIONS)

Lichen sclerosus remains without a definitive cure, and management is focused on symptom control and prevention of progression. Key measures include avoiding precipitating factors such as local trauma and moisture, alongside the use of potent or ultrapotent topical corticosteroids as first-line therapy. Alternative treatments—such as topical calcineurin inhibitors, retinoids, or photodynamic therapy—may be considered in corticosteroid-resistant cases.[14]

For vulvar high-grade squamous intraepithelial lesions (HSIL), multiple therapeutic options exist, with simple surgical excision being the most common. Excision with 5-mm lateral and 4-mm deep margins provides both therapeutic benefit and histological evaluation to rule out invasion.[15]

TREATMENT :

The management of vulvar cancer is primarily guided by tumor histology and clinical staging. Additional factors influencing therapeutic decision-making include patient age, comorbid conditions, and overall performance status. Surgical intervention remains the mainstay of treatment, particularly for squamous cell carcinoma, with the goal of achieving oncologically safe margins. In cases of locally advanced disease or when radical procedures such as pelvic exenteration would otherwise be required, concurrent chemoradiation serves as an effective alternative modality. [16]

Systemic therapies, including chemotherapy and emerging immunotherapeutic agents, are generally reserved for metastatic or palliative contexts, or for the management of rare histologic subtypes such as vulvar melanoma.

Comprehensive care should also address psychosocial well-being. Psychosexual counselling services ought to be integrated into the multidisciplinary management of all women with preinvasive or invasive vulvar disease, beginning at the time of diagnosis and continuing throughout the treatment and thereafter.[17]

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CONCLUSION

Vulvar cancer remains a relatively rare but clinically significant gynecologic malignancy, predominantly affecting postmenopausal women. Squamous cell carcinoma (SCC) is the most prevalent histologic subtype.

Given the absence of population-based screening programs, prevention and early detection rely heavily on the recognition and management of predisposing conditions and precursor lesions such as vulvar intraepithelial neoplasia (VIN). The introduction of prophylactic HPV vaccination has shown substantial promise in reducing the incidence of HPV-related vulvar lesions and underscores its critical role in primary prevention.

The cornerstone of vulvar cancer management remains surgical excision, tailored by tumor stage and patient-specific factors. For locally advanced disease, concurrent chemoradiation offers an effective alternative or adjunct to radical surgery. Optimal care requires a multidisciplinary approach involving gynecologic oncologists, radiation and medical oncologists, pathologists, and allied health professionals. Attention to quality of life, including psychosexual support, is essential to the holistic care of affected women.

Future efforts should prioritize public health strategies that enhance HPV vaccination coverage, improve awareness of vulvar carcinomas, and facilitate timely diagnosis of premalignant lesions (excision biopsy) and intervention—particularly among high-risk groups. Ongoing research into novel therapeutics, including immunomodulatory agents, may further expand the treatment landscape for advanced or refractory vulvar cancers.

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