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VERRUCOUS PENILE CARCINOMA IN A NEGLECTED ELDERLY MALE- A CASE REPORT.

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ABSTRACT

Verrucous carcinoma (VC) is a distinct variant of squamous cell carcinoma characterized by its low-grade malignancy and locally invasive behavior. When it occurs in the penile region, it poses unique diagnostic and therapeutic challenges due to the rarity of the condition, potential for misdiagnosis, and implications for patient quality of life. In this case report, we discuss the pathophysiology, clinical presentation, diagnostic criteria, and treatment options for verrucous carcinoma of the penis, supported by recent literature.

KEYWORDS

INTRODUCTION:

Verrucous carcinoma was first described by Lauren V. Ackerman in 1948 as a "verrucous" or warty growth with distinct histopathological features. On a cellular level, this tumor is characterized by well-differentiated squamous cells, minimal atypia, and a pushing rather than infiltrative growth pattern (1). The tumor tends to spread locally but has a minimal risk of distant metastasis. The etiology of penile verrucous carcinoma is multifactorial, involving chronic irritation, poor hygiene, human papillomavirus (HPV) infection, and phimosis (2,3). HPV types 6 and 11, which are typically associated with benign lesions like genital warts, have been implicated in some cases of verrucous carcinoma (4). Patients with penile verrucous carcinoma often present with a slowly enlarging, exophytic lesion that are typically non-tender and can involve various parts of the penis, including the glans, foreskin, or shaft. The average age of diagnosis tends to be between 50 and 70 years, and there is often a delay in seeking medical attention due to embarrassment or lack of awareness (2). This delay can lead to extensive local tissue invasion at the time of diagnosis.

CASE REPORT:

A 65 year old homeless male came with complaints of ulceroproliferative growth in the penis for the past 5 months and discharge from penis for the past 15 days. The discharge was foul smelling but not blood stained. There was no history of pain, trauma, burning micturition or hematuria. There was no history suggestive of systemic metastases. On examination, non tender 4×3 cm ulceroproliferative growth involving the whole of the glans penis was noted. The mass was fungating with a papillary surface (Figure 1).There was a surrounding induration extending 1 cm beyond the margin. There was also a foul smelling discharge. No inguinal nodes were palpable bilaterally. Ultrasonography of the inguinal region showed no significant nodal involvement. Edge wedge biopsy showed squamous cell carcinoma of verrucous type (Figure 2). Hence partial penectomy was done and the patient was kept under regular follow up.

DISCUSSION:

The diagnosis is primarily based on histopathological examination. Biopsy findings reveal thickened, hyperkeratotic epithelium with broad, bulbous rete ridges that extend into the underlying tissue(1). These histological features help distinguish verrucous carcinoma from more aggressive forms of squamous cell carcinoma and other penile lesions, such as condylomas and pseudoepitheliomatous hyperplasia(6). Despite its benign cytological appearance, it is essential to recognize that incomplete biopsy or superficial sampling can lead to an underestimation of the lesion, causing potential misdiagnosis (2,6).

Treatment options for the tumor depends on the size, location, and extent of the tumor. Surgical excision remains the mainstay treatment and involves local excision with clear margins to minimize the risk of recurrence (1,2,5). In cases where the lesion is extensive, partial or total penectomy may be necessary. Penile-preserving techniques, such as laser ablation and Mohs micrographic surgery, have been employed to achieve oncological control while maintaining function and appearance(7,8).

Radiotherapy is generally not recommended due to aplastic transformation into a more aggressive squamous cell carcinoma. Additionally, chemotherapy has limited effectiveness in treating verrucous carcinoma, given the low mitotic activity of the tumor cells (9).

The prognosis for patients with verrucous carcinoma of the penis is generally favorable when the tumor is detected early and treated appropriately (10). However, recurrence rates can be significant if margins are not adequately cleared during surgery (8). Long-term follow-up is essential, including regular physical examinations and imaging when indicated, to detect any signs of local recurrence (2).

CONCLUSION:

Verrucous carcinoma of the penis, while rare, is a unique form cell carcinoma that requires careful diagnostic and treatment strategies. Early diagnosis through awareness and proper biopsy techniques can lead to effective management and favorable outcomes. Multidisciplinary approaches, involving urologists, pathologists, and oncologists, are vital in managing complex cases and preserving quality of life for affected patients.

Figure 1: Proliferative growth occupying the entire glans penis.

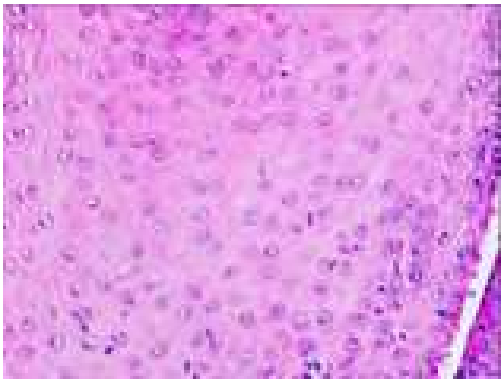

Figure 2: High power histopathological image showing well differentiated squamous cells with hyperkeratosis, parakeratosis and minimal cellular atypia.

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