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## A CASE REPORT

# Presenting with Ulceration and Nodal Involvement: 2 Case Reports

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**ABSTRACT**

**INTRODUCTION**

Penile cancer which presents very rarely but is of high importance because of difficult diagnosis and therapeutic challenges. Neoplasm of the penis is relatively rare in most regions representing 0-2% of cancers worldwide**(1)**. Penile cancer as the GLOBOCAN Cancer Statistics estimated 36,068 (0.2%) new cases of penile cancer and 13,211 (0.1%) penile cancer related deaths worldwide in 2020 **(2)**.Penile cancer is rare, and the oncological details about its occurrence in under 45 are unclear and unidentified. Penile cancer in men under 45 is very rare with an incidence rate of 0.1 to 0.8/100,000 **(3)**. There are different types but most common is squamous cell carcinoma of penis which accounts for about 95% of penile cancer **(4)**. Penile squamous cell carcinoma shows prevalence of 0.1-1 per 100,000 men in high-income countries, but it constitutes up to 10% of malignancies in men in some African, Asian and South American regions (5). About 40% of penile cancers re associated with HPV infection **(5)**. Incidence of penile cancer is less than 1% in Pakistan because of the neonatal circumcision factor. The most common site for lesion is glans or foreskin (in uncircumcised male). The risk factors include HPV infection, poor hygiene, primroses, absence of neonatal circumcision. Its early diagnosis aids in its treatment, prognosis and quality of life.

**Keywords:** Penile squamous carcinoma,Lymphatic metastasis,Ulcerated penile lesion,eoplasm staging

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Ensile carcinoma of young adult is very rare but its incidence ratio is increasing day by day with no well-known cause. In this case report we presented two cases of penile squamous cell carcinoma.

**Fig 1: showing 2 cases of squamous cell carcinoma of penis**


**CASE 1:**

We reported a young adult male presented with penile lesions that was subsequently diagnosed as squamous cell carcinoma of the penis. A 26.5 years old circumcised male presented with history of fun gating ulcerative lesion on glans and distal shaft of penis, associated with bilateral inguinal lymphadenopathy. On clinical examination, there is a large ulcero-proliferative lesion with purulent discharge and mild thickening of skin over the distal part of urethra. Bilateral inguinal lymph nodes were enlarged firm, and mobile. MRI of pelvis was performed without contrast using routine protocols which showed an infiltrative mass at the glans extending into distal penile shaft, with enlarged bilateralinguinal lymph nodes. For biopsy two specimens were collected, an incisional biopsy from ulcer margin 3 and 9 o'clock position and other specimen an excised Inguinal lymph node, bisected and examined, in which the appearance is tan white fleshy. On result for biopsies, lesion of glans penis diagnosed as moderately differentiated squamous cell carcinoma with involved multiple bilateral enlarged inguinal lymph nodes showing metastatic squamous cell carcinoma.Due to invasive nature of tumour and nodal involvement, for treatment we performed partial appendectomy with bilateral iliac lymph node dissection. Oue management went successful and patient is still healthy with no recurrence in follow up period of 1 year.

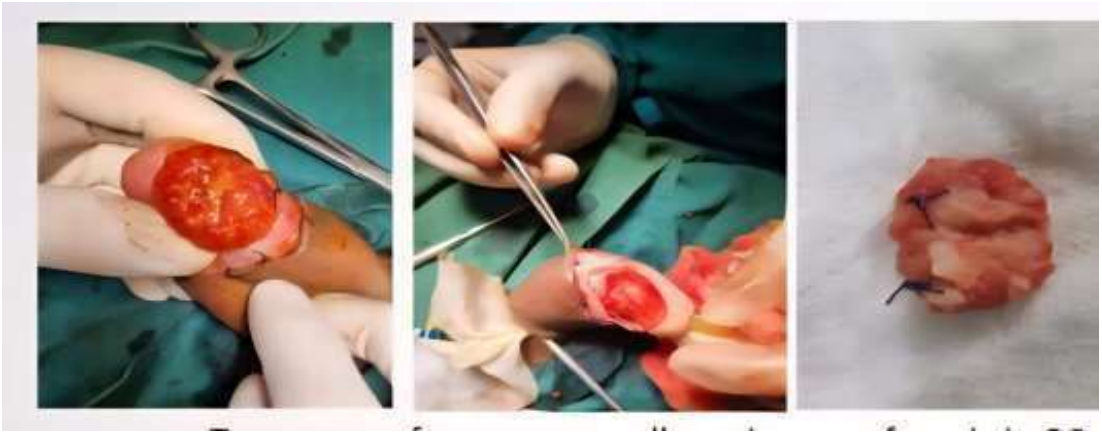
**Fig 2: showing partial penectomy**


**Fig 3: showing inguinal lymph node dissection**

**CASE 2:**

A 24-year-old circumcised male presented with a 3-month history of an ulcerative, exophytic lesion on the glans penis. He had previously received empirical treatment from general practitioners, including topical antibiotics and steroid creams, without clinical improvement. A dermatologist performed a needle biopsy of the lesion, which revealed squamous cell carcinoma (SCC).On examination, a 2×2 cm fungating mass was noted on the dorsal aspect of the glans. The lesion was non-tender, with no discharge, and there was no palpable induration involving the corpora cavernosa of the distal penile shaft. Further evaluation, including MRI and staging investigations, confirmed a localized squamous cell carcinoma of the glans penis.The patient underwent wide local excision of the lesion under spinal anaesthesia without intraoperative complications. His postoperative recovery was uneventful. Histopathological analysis of the excised specimen confirmed localized squamous cell carcinoma with clear margins.The patient has remained healthy and disease-free with no evidence of recurrence or progression during a 24-month follow-up period.

**Fig 4: Showing localized glandular squamous cell carcinoma of Penis**



## DISCUSSION

Squamous cell carcinoma (SCC) of the penis is extremely rare in individuals under 45 years of age, making early recognition particularly important due to its challenging diagnosis. Owing to its low incidence in younger men, the underlying pathogenesis remains poorly defined. Current evidence suggests that penile SCC may arise either from malignant progression of penile intraepithelial neoplasia or develop de novo, potentially influenced by one or more associated risk factors (6). Recent epidemiological observations have shown a sustained increase in new penile cancer cases among men ≤50 years, consistent with data from the Office of National Statistics and Cancer Research UK reporting a general rise in overall penile cancer diagnoses (4). Our study similarly identified two unusually young patients—aged 24 and 26 years—highlighting the increasing incidence of this malignancy in younger populations. A long-term population-based analysis reported that the incidence of penile SCC increased steadily between 1956 and 2015, with the most pronounced rise observed among younger men (7). Whether this trend reflects environmental influences, changes in tumor biology, or shifts in host microenvironments is still unknown. A cohort study comparing young versus older patients demonstrated that younger men were more likely to present with nodal involvement and had poorer cancer-specific survival (3). In alignment with these findings, our patient also exhibited inguinal lymph node involvement, indicating the aggressive and metastatic potential of the tumour. Nonetheless, the prognostic impact of early-age diagnosis remains uncertain, as published studies report mixed outcomes (8).The rising incidence among young adults lacks a clearly established cause. Some ecological studies have explored the role of circumcision as a potential risk-modifying factor. One case–control study reported that neonatal circumcision—but not circumcision performed later in life—was associated with a threefold reduction in penile cancer risk; however, approximately 20% of affected individuals in the same study had undergone neonatal circumcision, suggesting that circumcision alone does not eliminate risk (9). Although the absence of neonatal circumcision appears to be one of the strongest epidemiological risk factors (11), circumcision itself is not sufficient to fully account for disease distribution. Evidence suggests that infant circumcision may offer partial protection, but further research is needed to clarify its long-term impact (10).Management outcomes worsen significantly once lymph node metastasis occurs. A large series reported a 5-year survival rate of only 10%–30% in patients with nodal involvement (12). In our case, inguinal lymph node dissection was successfully performed, and the patient remains disease-free to date. Regarding diagnostic strategies, squamous cell carcinoma antigen has limited sensitivity for determining tumor severity but may hold prognostic value in predicting disease-free survival following surgery (13). For patients with aggressive primary tumors and clinically no palpable nodes, modified (superficial) inguinal lymph node dissection and dynamic sentinel lymph node biopsy are recommended for accurate staging (14). Consistent with these guidelines, we performed an inguinal lymph node biopsy to assess metastatic spread. Treatment options for penile SCC include surgery, chemotherapy, and radiotherapy. Surgery remains the cornerstone of management, although it may significantly affect quality of life. Chemotherapy is beneficial for bulky nodal disease or distant metastases, whereas radiotherapy has shown improved responses in HPV-positive cases. Primary surgical treatment has been associated with an overall survival rate of approximately 60%, with reported follow-up ranging from 1 month to 7 years (15-16). In our patient, surgical intervention was preferred due to the severity of the ulcerative lesion and nodal involvement, resulting in a successful outcome and favorable clinical recovery.

## CONCLUSION:

Current evidence on penile cancer highlights several modifiable risk factors, underscoring the importance of preventive strategies such as preventing phimosis, managing chronic inflammatory conditions, minimizing PUVA exposure, smoking cessation, and prophylactic HPV vaccination. Early detection remains crucial; therefore, persistent penile lesions—regardless of the patient's age—should prompt timely clinical evaluation, biopsy, and appropriate imaging to ensure accurate diagnosis and reduce delays in management.

**Declaration Of Competing Interest**

The authors declare that they have no known competing financial interests or personal relationships that could have appear to influence the work reported in this Study.

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**Authors Contributions**

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