



## An unusual presentation of Locally aggressive penile cancer in a young aged patient with no lymph node or distant metastasis

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### Abstract

Penile cancer is one of the rare diseases. It most commonly affects men between the ages of 65 to 74 years. Usual morphology of the cancer is squamous cell type. Evidence of HPV (Human Papilloma virus) infection is inevitable in half of these cases. Significant social and psychological stigma is being associated with this cancer which makes the cases to be presented to the clinic in an advanced stage. But however, that was inexact in our clinical scenario where young aged patient presented without any hesitancy to hospital with a premalignant lesion which underwent neoplastic transformation with no lymph node or distant metastasis.

**Keywords:** HPV, psychological stigma, hesitancy, squamous cell carcinoma

### INTRODUCTION

Penile malignancy is one of the rarest malignancies in the developing countries. The incidence of this malignancy is 1 case per 1 lakh population, whereas in Asian, African and South America continent the incidence is much higher. In India the prevalence rate of penile cancer is 3.32 cases per 1 lakh men. The incidence is more in older men and its chance of malignancy increases with the age of a person. The most common age group affected is between 50 to 70 years.(1) Squamous cell carcinoma (SCC) is the most common histological tumour of penis and the most important etiological factor is human papilloma virus (HPV) infection.(2) The other risk factors include phimosis, chronic inflammatory conditions of the penis, treatment with psoralen and ultraviolet A phototherapy, a history of multiple sexual partners and smoking(3) Since there is a lack of awareness about the disease along with social and psychological stigma which leads to delays in diagnosis and management(2).

Penile malignancy is usually diagnosed clinically with a characteristic of invasive growth and early metastatic

spread to lymph nodes. Thus to avoid treatment delay it is necessary to perform early biopsy for the suspected lesions.(4) Most of the cases are localized, nearly 25% of patients has regional involvement whereas distant disease is seen in 4% at the time of diagnosis. Nodal involvement remains the most powerful prognostic factor. Carcinoma in situ has a 5 year survival of around 90% which reduces to 60% with nodal involvement and around 20% on having metastatic disease.(3) The management of penile malignancy is done by Multidisciplinary discussions made at experienced centers with a consideration for risk of local, regional and systemic recurrence, along with morbidity of the proposed treatment.(2)

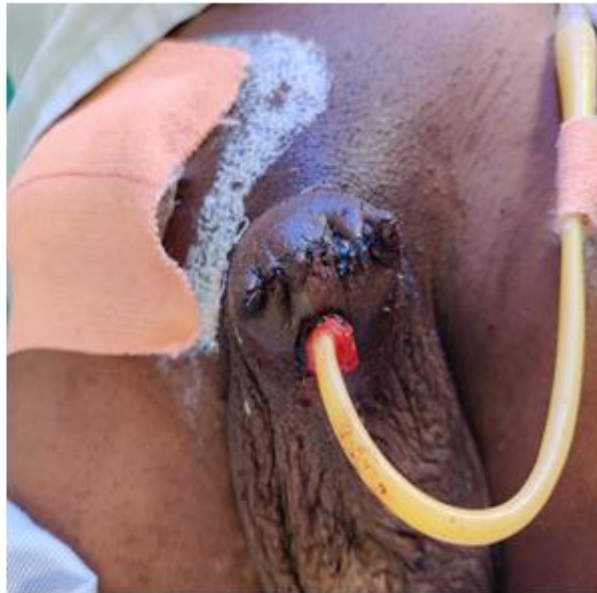
Our article comprises of the rare case report of a young patient with high tumour grade penile malignancy along with bilateral inguinal lymphnode hyperplasia on excision biopsy.

### CASE REPORT

A 36 years old male patient came to surgery OPD with complaints of lesion over the glans penis since 2 years.

The lesion was associated with pain throughout and intensity of pain use to worsen after the coitus. The patient has consulted the local doctor for the same and was advised for wedge biopsy. The histopathology report of biopsy was suggestive of warts. Since the lesion was spreading, he consulted our hospital for further management. Patient had history of smoking since 15 years. On examination warty lesion of size 4.5 x 4 cm covered a part of glans with bilateral multiple inguinal node enlargement. The lesion and lymph node were non tender on palpation and the largest lymph node measured around 2x1.5cm in size. All the lymph nodes were mobile on palpation. Patient was advised routine blood investigation like complete blood count, liver function test, kidney function test, urine routine which came out to be normal. Special investigation like serum calcium was performed which was within normal limits. Patient was planned for contrast enhanced computerised tomography (CECT) of abdomen and pelvis which shows irregular infiltrative polypoidal lesion involving the glans penis

suggestive of carcinoma of penis with bilateral inguinal lymphadenopathy. Patient underwent fine needle aspiration cytology (FNAC) from bilaterally enlarged lymph nodes which was suggestive of reactive lymphoid hyperplasia. Patient also underwent wedge biopsy from the lesion and the histopathology report was suggestive of well differentiated squamous cell carcinoma of penis. Patient was planned for partial penectomy and two lymph nodes from either side of inguinal region were sent for frozen section which was negative for malignancy. The final histopathological report was suggestive of well differentiated squamous cell carcinoma with malignant cells infiltrating the corpora cavernosa, corpora spongiosum along with urethral margin and the superficial lymph nodes from bilateral inguinal region were suggestive of reactive follicular hyperplasia. As per TNM staging it was pT3pN0pM0 stage II B. Post operatively patient recovered well and tumour board discussion was done with a decision advised for radiotherapy for further management.



**Fig 1(left) & 2(right) : pre-operative(1) and post-operative(2) clinical photograph of penis**

## DISCUSSION

As per the study done by Stecca *et al*(2021), human papilloma virus (HPV) infection, smoking, circumcision and social risk factors are considered as important risk factors for penile malignancy.(2) According to Hakenberg *et al*(2018), there are

various epidemiologically risk factors include HPV infection, phimosis and chronic inflammation (balano – posthitis, phimosis), smoking that leads to development of penile cancer.(4) In our present study, the risk factor that the patient had was chronic inflammation and smoking history. As per Montes

**Cardona CE et al (2017)**, the age group most commonly affected by penile cancer is between 50 to 70 years. (1)**As per Richer Suzanne et al(2013)**,it was observed that cases of penile cancer was mostly seen in men between the ages of 65 to 74 years.(3) In our study the patient age was 36 years who developed the penile cancer at a very young age **According to Solakhan M and Bulut E(2018)**,the most commonly observed histological type of penile malignancy was squamous cell carcinoma.(5) **As per Hansen B et al (2018)**, majority was patient of penile malignancy suffered from squamous cell carcinoma.(6) In our study also our patient had suffered with squamous cell carcinoma only. **A study by Hakenberg et al(2018)**, in a case of ca penis with palpable,suspicious inguinal lymph node it is mandatory to remove the suspicious lymph node and sent for histologic confirmation by means of intraoperative frozen-section analysis.(4) **According to Jaun Chipollini et al (2018)**,for a case of suspicious, enlarged inguinal lymph nodes intraoperative frozen section is must to do inguinal lymph node dissection.(7) In our study also we undertook a frozen section since bilateral lymph node was positive but it came out to negative for infiltration of malignant cell for inguinal lymph node dissection was not perform in our case.

### Conclusion

To conclude this case is a rare case of carcinoma penis which was seen in a patient in his 3<sup>rd</sup> decade of life. This study also shows that the tumour was high grade tumour with bilateral reactive nodes which is also a infrequent phenomenon as per various studies.

### Bibliography

1. Montes Cardona CE, García-Perdomo HA. Incidence of penile cancer worldwide: systematic review and meta-analysis. *Rev Panam Salud Publica*. 2017;1–10.

2. Stecca CE, Alt M, Jiang DM, Chung P, Crook JM, Kulkarni GS, et al. Recent Advances in the Management of Penile Cancer: A Contemporary Review of the Literature. *Oncol Ther*. 2021 Jun;9(1):21–39.
3. Richter S, Ruether JD, Wood L, Canil C, Moretto P, Venner P, et al. Management of carcinoma of the penis: Consensus statement from the Canadian Association of Genitourinary Medical Oncologists (CAGMO). *CUAJ*. 2013 Dec 5;7(11–12):797.
4. Hakenberg OW, Dräger DL, Erbersdobler A, Naumann CM, Jünemann K-P, Protzel C. The Diagnosis and Treatment of Penile Cancer. *Deutsches Aerzteblatt Online [Internet]*. 2018 Sep 28 [cited 2021 Jul 9]; Available from: <https://www.aerzteblatt.de/10.3238/arztebl.2018.0646>
5. Mehmet S, Ersan B. Penile Cancer: Case Report. *Int Arch Urol Complic [Internet]*. 2018 Dec 31 [cited 2021 Jul 9];4(2). Available from: <https://www.clinmedjournals.org/articles/iauc/international-archives-of-urology-and-complications-iauc-4-045.php?jid=iauc>
6. Hansen BT, Orumaa M, Lie AK, Brennhovd B, Nygård M. Trends in incidence, mortality and survival of penile squamous cell carcinoma in Norway 1956-2015: Trends in penile squamous cell carcinoma. *Int J Cancer*. 2018 Apr 15;142(8):1586–93.
7. Chipollini J, Tang DH, Manimala N, Gilbert SM, Pow-Sang JM, Sexton WJ, et al. Evaluating the accuracy of intraoperative frozen section during inguinal lymph node dissection in penile cancer. *Urologic Oncology: Seminars and Original Investigations*. 2018 Jan;36(1):14.e1-14.e5.