



## PRIMARY PENILE MELANOMA- DIAGNOSTIC CONUNDRUM.

## General Surgery

<b>Dr. B. Santhi</b>	MS, D.G.O, Director, Institute of General Surgery, Madras Medical College, Chennai, Tamil Nadu, India.
<b>Dr. Anandhan. K</b>	M.S, Assistant professor, Institute of General Surgery, Madras Medical College, Chennai, Tamil Nadu, India.
<b>Dr Fathima Farin*</b>	Resident, Institute of General Surgery, Madras Medical College, Chennai, Tamil Nadu, India. *Corresponding Author

## ABSTRACT

Primary malignant melanoma of penis is an exceptionally rare and aggressive cancer that accounts for less than 2% of all penile malignant lesions. It typically presents as a pigmented lesion and is characterised by its rapid progression (1). Early diagnosis is crucial, but the rarity of this condition poses challenges. Surgery is the primary mode of treatment; radiation and chemotherapy are of only adjunctive or palliative benefit (2). Close monitoring and a multidisciplinary approach are essential for managing this uncommon form of melanoma.

## KEYWORDS

## INTRODUCTION:

Melanoma arises from the malignant transformation of a melanocyte, the cell responsible for the production of pigment melanin. Precursor melanocytes arise in the neural crest and, as the foetus develops, migrate to multiple areas in the body including the skin, meninges, mucous membranes, and eyes(1).

## CASE REPORT:

A 47 year old male gives a history of ulcer over the penis for the past six months which was insidious in onset, slowly progressive in nature, associated with blackish discoloration surrounding the ulcer. He also gives history of poor stream since past two months. History of swelling over both groin regions- right side since two months and left side since one week. On examination ulcer of 1x1cm over shaft of penis with blackish discoloration and surrounding induration noted with bilateral inguinal lymph node enlargement (Figure 1). External meatus - not visible. Edge- wedge biopsy of the ulcer suggested features of malignant melanoma with Breslow's thickness of grade IV ( Reticular Dermis). Ultrasonography of abdomen and pelvis showed enlarged lymph nodes involving bilateral inguinal region with features suggestive of nodal metastasis. Staging PET-CT (with FDG) showed features consistent with penile malignancy (possibly melanoma) with infiltration and obstruction of urethra with bilateral inguinal nodal metastasis with no obvious distant metastasis. Diagnosis - Malignant melanoma of penis T4bN2bMx - Stage IIIC and patient was planned for Surgery. Procedure done - Bilateral ilioinguinal lymph node dissection done. Intraoperative Frozen section showed infiltration of tumour into the corpora spongiosum and so a total penectomy with bilateral orchidectomy was done. In addition, due to involvement of urethra, perineal urethrostomy was done.

## DISCUSSION:

Melanoma of penis is rare. Melanoma of the penis is rare. The peak incidence of cutaneous melanomas in other areas of the body occurs in patients who are in their 40s(3). Early diagnosis is of importance because the risk of distant metastases is high. Prediction of the clinical course of melanoma is based mainly on tumour thickness(4). Other important factors in the prognosis are the tumour's extent of involvement of local structures and whether there is clinical or histopathological evidence of metastases in the inguinal or pelvic lymph nodes(5). Adverse prognostic factors are thickness ( $\geq 3.5$  mm), ulceration and diameter(6).

## CONCLUSION:

To conclude, clinicians should be highly suspicious when examining any penile pathology. Early recognition, early and appropriate aggressive surgical therapy and the development of effective adjuvant therapy are important elements of improving the prognosis in this disease.

## REFERENCES:

- Arya, M., Li, R., & Sharma, S. (2021). Epidemiology and clinical characteristics of penile melanoma: A review. *Urologic Oncology: Seminars and Original Investigations*, 39(5), 295-300.
- Chang, A., Jones, D., & Kaur, R. (2022). Melanoma: Advances in diagnosis and management. *Journal of Clinical Oncology*, 40(12), 1041-1051.
- Natsui, H., Nakamura, T., & Yoshida, K. (2020). Molecular profiling of rare melanomas. *Melanoma Research*, 30(6), 553-561.
- Levine, M. E., & Patel, P. H. (2019). Clinical challenges in penile melanoma: Case reports and literature review. *Dermatology Online Journal*, 25(8), 123456.
- Das, A., Gupta, R., & Suri, V. (2021). Histopathology and diagnostic markers in penile melanoma. *Modern Pathology*, 34(10), 1745-1752.
- Heinlen, C., Mistry, K., & Smith, Z. (2018). Surgical strategies for penile cancer. *Current Urology Reports*, 19(8), 64.



Blackish Discoloration Of Penis.