

Tumors Of The Penis

Epidemiology

- Common in India (2-3); Rare in west (1). Brazil (8) Very common in Africa:
- Age 50 – 60 yrs.
- Etiology:
 - Phimosis & Circumcision. (11X)
 - Smegma and Hygiene.
 - Psoralene and UV therapy
 - Virus – HPV Types 16, 18, 31, 33, 35, and 39 have a higher assoc with malignant disease.
 - Sexual practice – multiples partners/early age. (5X)
 - Tobacco use. (5X)

Precancerous Lesions

- Bowenoid papulosis
- Balanitis xerotica obliterans (BXO)
- Leukoplakia
- Cutaneous Keratin Horn
- Pseudoepitheliomatous, Micaceous & Keratotic Balanitis





Carcinoma in Situ

- Bowens disease or erythroplasia of Queyrat – red plaque with crusts (may co-exist with invasive cancer).
- Dx by Bx.
- Treatment – Circumcision and Imiquimod or 5FU cream, laser excision.



Carcinoma Of Penis - Pathology

- Majority Squamous cell carcinoma
 - Site: glans, prepuce, shaft
 - Gross path: papillary / ulcerative
- Grading
 - Verrucous Ca 5 – 15% (WDSCC)
 - 3 Grades and Sarcomatoid.
- Basal Cell Ca, Melanoma, Kaposi Sarcoma & 2°
- Spread:
 - Local → corpora, urethra, bone.
 - LN – Femoral, Iliac. Glans drainage (B/L).
 - Vascular Esp. with corporal inv. (lung, bone, liver, brain)
- LN erodes skin / vessel.

Staging - Jackson

- I. Glans / prepuce
- II. Shaft
- III. Operable LN
- IV. Inoperable or metastases.

Staging - TNM

- Tx, T0, TIS – Usual meanings
- Ta – Noninvasive Verrucous Ca
- T1 – Subepithelial connective tissue
 - T1a: Not T1b! And T1b: G3(HG) or LVN invasion
- T2 – Corpus spongiosum or Urethra
- T3 – Corpus Cavernosum
- T4 – Prostate/ Bone / scrotum
- NX – Usual meaning
- N0 – No LN
- N1 – Upto two U/L femoral (Inguinal) LN
- N2 – B/L Femoral (Inguinal) LN or U/L > 2 LN
- N3 – Perinodal extension or Pelvic LN
- MX, M0, M1 – Usual meanings

Clinical Findings

Symptoms: Ulcer, discharge, phimosis, bleed, pain, & leg swelling in delayed presentation.

Signs: Ulcer indurated necrotic, infiltrating, destructive foul.

In clinically palpable LN

1. Inflammation
2. Metastasis

Iliac LN

Liver, Lungs, Bones – Appropriate signs

Disseminated disease <10% at presentation





Investigations

- **Lab:** Hb ↓, WBC ↑, Calcium (20%) ↑, SAP
- **Radiology:** CXR
- CECT pelvis if groin in +ve or difficult to palpate;
- MRI if CECT contraindicated
- ¹⁸FDG PET-CT if pelvic LN +ve for mets
Sn 90 – 100% Sp 98-100%
- Bones scans if needed (Ca↑/SAP↑)
- X-Ray bones



Differential Diagnosis

- STD: Chancre (Syphilis), Chancroid etc.
Clinical features; if doubt Bx.

Management

- Establish Diagnosis ☐ Biopsy – if Ca.
proceed with staging.

Management-Primary Tumor

- Stage T1 to T3 lesion >3cm from Penoscrotal junction / Penopubic Jn.
- Partial penectomy with 1 cm margin + Follow Up
- Stage T1 to T3 lesion <3cm from Penoscrotal junction / Penopubic Jn.— total penectomy + perineal urethrostomy + Follow Up

Management Of Lymph Nodes

- 50% inflammatory; So FNAC; If +ve IILND
- If Neg Antibiotics → 4 – 6 week, reassess; rethink on this strategy.
- If LN enlarged – IILND – Ipsilateral and C/L Superficial LND; if +ve IILND
- **If regress**
 - **It Ta or T1a**: Follow up every 3 months
 - **If $\geq$ T1b** : DSNB / Modified (superficial) lymphadenectomy; if +ve IILND
- On follow up if +ve U/L IILND

Organ preserving techniques

- Tis, Ta, T1a – optimal candidates
- To maintain sexual quality of life. The goals
 - to maintain glanular tissue for sensory purposes when possible and/or
 - to maintain penile length.
- Surgical modalities - limited excision strategies, Mohs surgery, laser ablation
- Radiotherapy (Tumor<4cm).
- Local recurrence rates higher; however, early survival not adversely affected.

Advanced Disease

- Inoperable / advanced –
- Chemotherapy – Palliative
- Chemotherapeutic agents
 - Cisplatin, 5FU, Bleomycin, Mtx, taxotere, Ifosfamide
- Most effective single agent - Cisplatin
- Combination Chemotherapy useful
- Promising results – PF, VBM, PMB
- More recent TIP, TPF

Prognosis

- T1-3, N0, M0 – 90%
- T1-T3, N1, M0 - 85%
- T1-3, N2, M0 – 40-50%
- T4/N3/ M1 – 15 – 0 %

Other Tumors

- BCC, Melanoma, Kaposi sarcoma (AIDS)

Scrotal Cancer

- SCC, RARE, Chimneysweep, Chemical
- Treatment – WLE + LND as above.
Prognosis as above