

Presentation, Management, and Preliminary Outcomes of Penile Cancer in a Latin American Referral Cohort

Richard Sony Serna Sejas*, Chi Liang Tsou*, Rosalía Hinojosa Altamirano, Ricardo Miguel Nardone, Patricia Caballero, Cindy J. Hernández Usma, Héctor Natalio Malagrino, María Natalia Gandur Quiroga†



Universidad de Buenos Aires · Instituto de Oncología “Ángel H. Roffo” · Buenos Aires, Argentina



Background | Why This Cohort Matters

Penile cancer is rare in high-income settings, but disease burden is substantially higher in parts of South America, Africa and Southeast Asia, where it may account for 1–2% of male malignancies. Despite this geographic burden, these populations remain underrepresented in penile cancer research and clinical trials.

Real-world data from specialized Latin American referral centers may therefore help characterize presentation, treatment patterns and outcomes in an underrepresented population.

OBJECTIVE: to characterize clinical presentation, primary and nodal management, recurrence patterns, and exploratory survival outcomes in a long-term Argentine referral-center cohort.

Methods

Retrospective, single-center observational cohort (n=71). Variable-specific available-case denominators were used; missing data were not imputed. Categorical variables were reported as n/N (%). Stage–recurrence association was explored using Fisher’s exact test. Exploratory OS was estimated using the Kaplan–Meier method.

RESULTS

Study Population · Table 1

TOTAL COHORT 71 patients
DIAGNOSIS PERIOD May 2001–Oct 2019
AGE <40 12.7% · 40–65 62.0% · >65 25.4%
SQUAMOUS HISTOLOGY 67/70 (95.7%)
PALPABLE INGUINAL NODES 44/70 (62.9%)
STAGING DATA T n=42 · N n=39 · M n=35 Documented stage group n=25

DOCUMENTED STAGE GROUP · n=25		
I		7 (28%)
II		5 (20%)
III		7 (28%)
IV		6 (24%)
Stage group as documented in source records.		

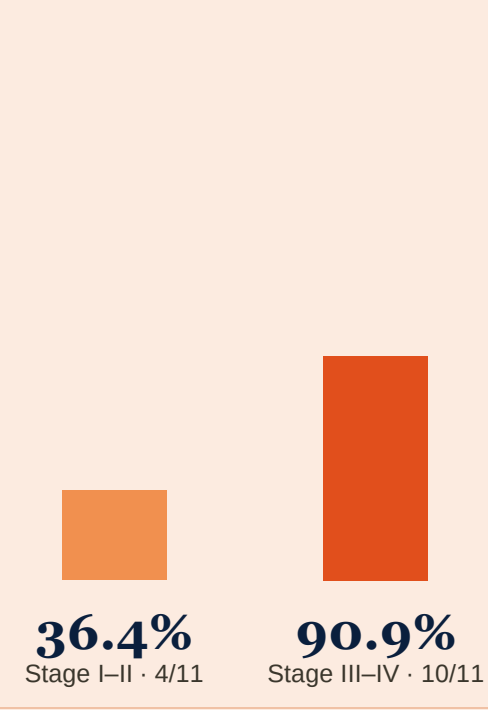
Presentation & Management

NODAL STAGING / MANAGEMENT	
SLN evaluation	47.8% 32/67
Inguinal LND	28.6% 18/63
PRIMARY SURGERY · n=61 CLASSIFIABLE	
Organ-preserving / partial	72.1% 44/61
Total penectomy	27.9% 17/61

RECURRENCE PATTERN	
Recurrence status available: 55/71 Documented recurrence: 26/55 (47.3%)	
Regional / inguinal	76.9% 20/26
Local	19.2% 5/26
Distant	3.8% 1/26

Recurrence by Documented Stage

Complete-case exploratory, n=22

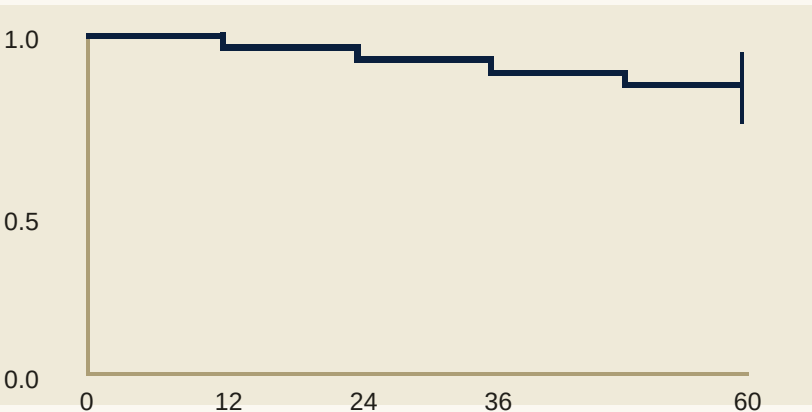


FISHER'S EXACT p = 0.024

No imputation; association, not causal.

EXPLORATORY OVERALL SURVIVAL

OS-analyzable cohort: n=61 with valid diagnosis and follow-up dates



82.9% 5-y OS · 95% CI 65.3–92.0 · median OS not reached

At risk 0/12/24/36/60mo: 61 / 40 / 29 / 24 / 22 · median follow-up 21.0mo (IQR 9.2–96.3)

Exploratory OS. Seven deaths were documented; exact dates of death were available for four patients. For the remaining three, the last documented clinical encounter was used as the operational event date.

QUESTIONS THIS COHORT RAISES

- Can standardized referral, staging and nodal pathways improve outcome capture and regional disease control?
- Which clinical, pathological and biological factors identify patients at greatest risk of regional recurrence?
- Can a multicenter network across underrepresented regions generate standardized clinical, pathological, outcome and translational data for this rare tumor?

FUTURE DIRECTION · Multicenter Collaborative Network (international, not yet existing)

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|---|----------------------|----------------------------------|--|
| 1. Clinical–pathological phenotyping | 2. HPV / p16 biology | 3. Immune / predictive profiling | 4. Molecular characterization & biobanking |
| Goal: identify determinants of regional recurrence and clinically actionable biological subsets for future therapeutic research. | | | |

CONCLUSION

High nodal burden, predominantly regional recurrence, and the exploratory stage–recurrence signal support standardized nodal assessment and prospective data capture in this underrepresented population.