

URETHRAL CARCINOMA

General Overview

- Very rare
- Presentation: mostly bloody discharge, bladder outlet obstruction, pain, visible mass
- Histology: urothelial carcinoma (+- 60%), squamous (+- 20%) or adenocarcinoma (+- 14%, but >40% in woman)

Diagnostic work up and staging

- Clinical examination of meatus and inguinal lymph nodes
- Urethrocystoscopy with biopsy
- CT urography
- CT Tx-abdomen
- Pelvic MRI

Primary Tumor (T)	Regional Lymph Nodes (N)	Distant Metastasis (M)
Male penile urethra and female urethra Tx: Primary tumor cannot be assessed T0: No evidence of primary tumor Ta: Noninvasive papillary carcinoma Tis: Carcinoma in situ T1: Invasion subepithelial connective tissue T2: Invasion corpus spongiosum, periurethral muscle T3: Invasion corpus cavernosum, anterior vagina T4: Tumor invades other adjacent organs (invasion of the bladder)	Nx: LN cannot be assessed N0: No regional LN N1: Single regional LN N2: Multiple regional LN Reg LN: <ul style="list-style-type: none"> - Proximal 1/3 of female urethra and posterior male urethra: pelvic - Distal 2/3 of female urethra and anterior male urethra: inguinal and pelvic 	M0: No distant M+ M1: Distant M+
Prostatic urethra Tx: Primary tumor cannot be assessed T0: No evidence of primary tumor Ta: Noninvasive papillary carcinoma Tis: Carcinoma in situ involving the prostatic urethra or periurethral or prostatic ducts without stromal invasion T1: Invasion urethral subepithelial connective tissue immediately underlying the urothelium T2: Invasion prostatic stroma surrounding ducts either by direct extension from the urothelial surface or invasion prostatic ducts T3: Invasion periprostatic fat T4: Invasion other adjacent organs (bladder wall, rectal wall)		

Prognostic stage group	TNM
0is	Tis N0 M0
0a	Ta N0 M0
I	T1 N0 M0
II	T2 N0 M0
III	T1 N1 M0
	T2 N1 M0
	T3 N0 M0
	T3 N1 M0
IV	T4 N0 M0
	T4 N1 M0
	Any T, N2, M0
	Any T, any N, M1

Treatment

Localized disease (cTa-2N0)

- Prostatic urethra:
 - Ta-Tis-T1: repeat TUR + BCG.
 - If BCG-unresponsive or extensive: consider cystoprostatectomy +/- urethrectomy + lymphadenectomy.
 - T2: cystoprostatectomy + urethrectomy + lymphadenectomy.
- Non-prostatic urethra: urethrectomy (partial or complete)

Locally advanced (cT3-4 or N1-2):

- Urothelial histology: neo-adjuvant chemo (cis-gem/dd-MVAC) + urethrectomy (incl lymphadenectomy for N1-2)
- Squamous histology:
 - concurrent chemoradiotherapy
 - alternative: urethrectomy (incl lymphadenectomy for N1-2) + adjuvant radiotherapy

Local relapse: Salvage radiotherapy or surgery

Metastatic disease: Systemic therapy depending on histology. For urothelial carcinoma, follow MIBC guidelines