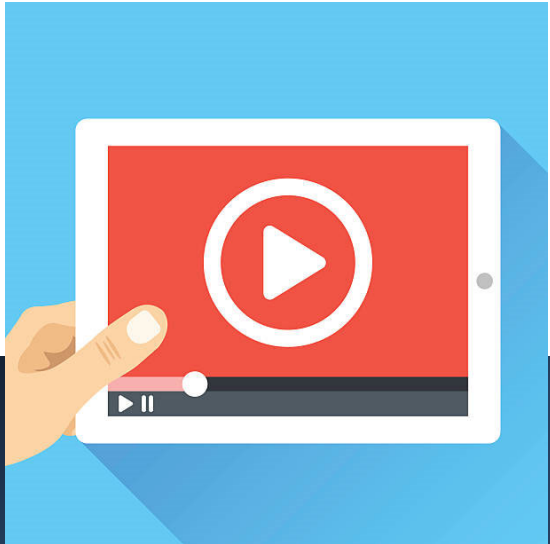



URINARY TRACT (BLADDER, RENAL PELVIS) EOD STAGE & TREATMENT

Presented by Lori Somers, RN
SHRI VIDEO TRAINING SERIES | Iowa Cancer Registry
Recorded 4/2023





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EOD Data v2.1 NAACCR 2022
SEER*RSA

[EOD Home](#) > [Schema List](#) > [Bladder](#)

Bladder


Primary Site	Histology
C670-C679	8000-8700, 8720-8790

BLADDER C670-C679

EOD PRIMARY TUMOR

EOD REGIONAL LYMPH NODES

EOD METASTASIS



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EOD

- General Coding instructions, 33 pg pdf
- https://seer.cancer.gov/tools/staging/eod/2018_Extent_of_Disease_General_Instructions.pdf
- Timing rules
- What to include re clinical or path findings
- Rules re neoadjuvant therapy
- Discrepancies between op/path



3

BLADDER EOD PRI TUMOR

- Note 1: Two main types of bladder cancer
 - **Flat (sessile)**
 - Called **in situ** when tumor has not penetrated basement membrane
 - **Papillary type**
 - Called **noninvasive** when tumor has not penetrated basement membrane



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EOD PRI TUMOR

- Note 2: Noninvasive **papillary** transitional carcinoma:
Pathologists use many descriptive terms for noninvasive **papillary** TCC. Frequently the path report does not contain a definitive statement of non-invasion.
 - **Non-invasion can be inferred from microscopic description**
 - List of terms in SEER*RSA schema



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Definite statements non-invasion 'for **papillary** TCC'

- Noninfiltrating
- Noninvasive
- No evidence of invasion
- No extension into lamina propria
- No stromal invasion
- No extension into underlying supporting tissue
- Neg lamina propria and superficial muscle
- Neg muscle and (subepithelial) connective tissue
- No infiltrative behavior/component



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Inferred descriptions of non-invasion 'for papillary TCC'

- No involvement of musc propria and no mention of subepithelium/submucosa
- No statement of invasion (microscopic description present)
- (Underlying) tissue insufficient to judge depth of invasion
- No invasion of bladder wall
- No involvement of muscularis propria
- Benign deeper tissue
- Microscopic description problematic (non-invas vs superficial invas)
- Frond surfaced by transitional cell
- No mural infiltration
- No evid of invasion (no sampled stroma)
- Confined to mucosa



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EOD PRI TUMOR

Note 3: Noninvasive (in situ) **flat** transitional cell carcinoma:

- "**confined to mucosa**"
 - Historically, coded localized
 - Also used as non-invasion
 - Invasion of mucosa, grade 1 vs grade 2 for noninvasion vs invasive carcinoma
 - To code accurately "confined to mucosa"... abstractors should determine: 5 criteria in note 3.



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Confined to Mucosa

If...	CODE
Tumor confined to epithelium and is non-invasive papillary carcinoma	000
Tumor confined to epithelium and is non-invasive, non-papillary (transitional)	050
Tumor has penetrated basement membrane to invade lamina propria; then it is invasive. Lamina propria and submucosa tend to merge when no muscularis mucosa, so may be used interchangeably, along with stroma and subepithelial connective tissue.	100
Distinction between involvement of epithelium and lamina propria cannot be made, tumor coded as confined to mucosa NOS	100

Statements meaning confined to mucosa, NOS, for flat TCC:

- Confined to mucosal surface
- Limited to mucosa, no invasion of submucosa and muscularis
- No infiltration/invasion of fibromuscular and muscular stroma
- Superficial, NOS



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EOD Primary Tumor

- Note 4: In case of multifocal papillary noninvasive tumors and nonpapillary in situ (both 000 and 050), code to 050
- Note 5: Code 300 if only description of extension is **through full thickness of bladder wall**, no clear statement of whether cancer has extended into fat.



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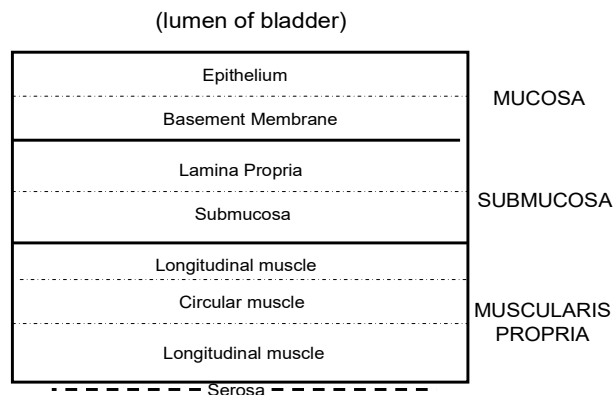
EOD PRI Tumor

- **Note 6:** An associated in situ component of tumor extending into the prostatic ducts, prostatic glands, or ureter **without invasion** is **disregarded** in staging classification. Assign the code that best describes depth of bladder wall invasion.
- **Note 7:** Direct invasion distal ureter classified by depth of greatest invasion in bladder or ureter. Code 100 if distal ureter is defined as below iliac vessel, within the pelvic brim is involved.
- **Note 8:** Code 130 Extension from bladder into subepithelial tissue of prostatic urethra.



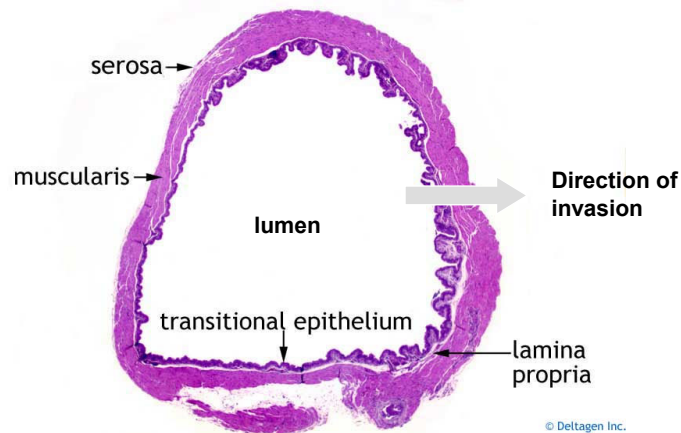
11

FIGURE C: Tissue Layers of Bladder Wall



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“Most Invasive” – Bladder Wall Cross Section of Bladder



Source: Deltagen.com Histology Atlas



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Code	Description
000	Papillary: (8130/2, 8131/2) Non-infiltrating; TCC stated to be non-invasive; TCC with inferred description of non-invasion
050	Nonpapillary: CIS, NOS; Sessile (flat)(solid) CIS; TCC CIS
100	Confined to mucosa
130	Lamina propria, stroma, subepithelial connective tissue, submucosa, subserosa, tunica propria
150	Localized, NOS



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Code	Description
170	Extension to distal ureter >Subepithelial connective tissue of bladder and/or distal ureter
200	Muscle (muscularis propria) of bladder only >Superficial muscle - inner half
250	Extension to distal ureter >Superficial muscle of bladder and/or distal ureter
300	Muscle (muscularis propria) of bladder only >Deep muscle--outer half Extension through full thickness of bladder wall BUT still contained within bladder wall
350	Extension to distal ureter >Deep muscle or extension through wall of bladder and/or distal ureter
370	Muscle (muscularis propria) invaded, NOS of bladder only



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Bladder EOD Regional LNs

Note 1: Code only regional nodes and nodes, NOS, in this field. Distant nodes are coded in EOD Mets.

Note 2: Regional lymph nodes include

- Iliac, NOS
 - Common
 - External
 - Internal (hypogastric)
- Obturator
- Pelvic, NOS
- Perivesical pelvic, NOS
- Sacral, NOS
 - Lateral (laterosacral)
 - Presacral
 - Sacral promontory (Gerota's)

Note 3: Code 800 if regional LNs involved, no indication which ones



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Code	Description
000	No regional lymph node involvement
300	SINGLE regional lymph node (excluding common iliac)
400	MULTIPLE regional lymph nodes (excluding common iliac)
700	Common iliac lymph node(s) WITH or WITHOUT other regional lymph node(s)
800	Regional lymph node(s), NOS Lymph node(s), NOS
999	Unknown; regional lymph node(s) not stated Regional lymph node(s) cannot be assessed Not documented in patient record Death Certificate Only



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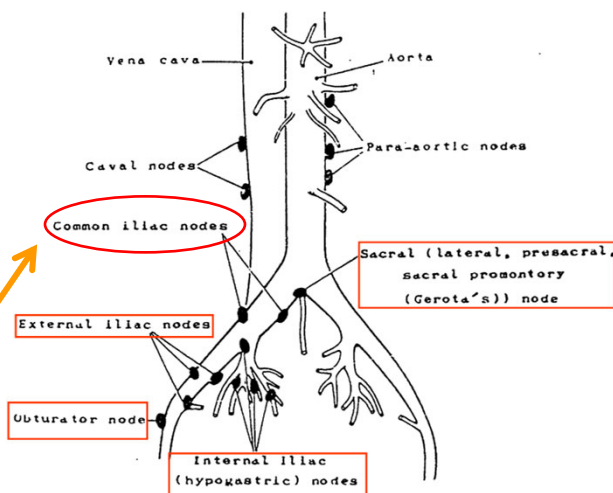
FIGURE D: Regional Lymph Nodes (RED)

BLADDDER Regional LNs:

Iliac :

Internal, (hypogastric)
External,
Obturator
Iliac NOS,
Perivesical NOS
Pelvic NOS
Sacral

**Secondary drainage:
Common iliac (700)**



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BLADDER EOD METS

- Note: Use code 70 for distant mets, NOS, no info on specific mets.
 - If specific mets documented that are not listed Codes 10-50, assign code 50 for other specified distant mets.



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Code	Description	SS2018 M
00	No distant metastasis Unknown if distant metastasis	NONE
10	Intraaortacaval Paracaval Superior mesenteric Distant lymph node(s), NOS	D
50	Other specified distant metastasis WITH or WITHOUT distant lymph node(s) Carcinomatosis	D
70	Distant metastasis, NOS	D
99	Death Certificate Only	U



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Bladder Grade Table [19]

Code	Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated Includes undiff and anaplastic
L	LG: Low-grade
H	HG: High-grade
9	Grade cannot be assessed (GX); Unknown

Adenoca, Squamous

Urothelial cancers use L, H, 9



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Bladder Grade Clinical

Note 1: Clinical grade must not be blank

Note 2: Assign highest grade from primary tumor assessed during clinical time frame

Note 3: Multiple tumors different grade, code highest grade

Note 4: Priority order for codes

Urothelial cancers: use codes L, H and 9

If only G1-G3 are documented, code 9.



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Bladder Grade Clinical cont'd

Note 5: G3 includes undifferentiated and anaplastic

Note 6: For bladder, a TURB qualifies for a clinical grade only

Note 7: Code 9 when:

Grade from pri site is not documented

Clinical workup is not done

Grade checked "not applicable" on CAP

Note 8: If only one grade, unknown if clinical or path, assume clinical grade. Code path grade 9 and blank for (yc) and (yp)



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Bladder Grade Pathological

Note 1: Must not be blank

Note 2: Preferred grading system for this schema: If clinical uses preferred term and path does not, do not record grade clin in grade path field. See examples.

Note 3: Assign highest grade from primary tumor

Note 4: Multiple tumors with different grades, code highest grade when multiple tumors abstracted as one primary



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Grade Pathological

Note 5: Priority order same as clinical

Note 6: G3 includes undiff and anaplastic

Note 7: **TURB does not qualify** for surgical resection.

- Cystectomy or partial cystectomy must be performed to code grade path



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Grade Pathological

Note 8: Code grade clinical from primary tumor based on:

- Behavior
 - Tumor behavior for clin/path same AND clin grade is highest
 - Tumor behavior for clin is invasive and path is in situ
- Surgical Resection
 - Surgical resection done on pri tumor, no grade from resection
 - Surgical resection done on pri tumor, no residual cancer
- No surgical resection
 - Surgical resection of pri tumor has not been done, but pos microscopic confirmation of distant mets during clinical time frame.



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Bladder Grade Post Therapy Clin (yc)

- Note 1 leave blank when:
 - No neoadjuvant therapy
 - Clin or path case only
 - Neoadjuvant therapy completed, no micro exam done prior to resection
 - Only one grade available, cannot determine if clin, path, yc or yp
- Note 2 Assign highest grade from micro sampled specimen of pri site following neoadjuvant therapy, systemic/radiation therapy



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Bladder Grade Post Therapy (yp)

- **Note 1:** Leave post therapy grade blank when:
 - No neoadjuvant therapy
 - Clinical or pathological case only
 - Neoadjuvant therapy completed; surgical resection not done
 - There is only one grade available and it cannot be determined if it is clinical, pathological or post therapy



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EOD Data v2.1 NAACCR 2022
SEER*RSA

EOD Home > Schema List > Kidney Renal Pelvis

Kidney Renal Pelvis

Primary Site	Histology
C659, C669	8000-8700, 8720-8790

Notes

8000-8700, 8720-8790

C659 Renal pelvis


C669 Ureter

KIDNEY RENAL PELVIS C659 & URETER C669

EOD PRIMARY TUMOR

EOD REGIONAL LYMPH NODES

EOD METASTASIS



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Kidney Renal Pelvis, Ureter

EOD Pri Tumor

Note 1: In case of multifocal non-invasive and in situ tumors, code 050


Note 2: Tumor involving both renal pelvis and ureter (unifocal or multifocal) is classified by depth of greatest invasion in either organ.

Note 3: Direct invasion of bladder by ureteral tumor is classified by depth of greatest invasion of the bladder or ureter.



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Code	Description
000	Noninvasive papillary carcinoma (8130/2, 8131/2)
050	In situ, intraepithelial, noninvasive (flat , sessile)
100	Subepithelial connective tissue (lamina propria, submucosa) of renal pelvis only OR Subepithelial connective tissue (lamina propria, submucosa) of ureter only Confined to renal pelvis, NOS Confined to ureter, NOS Localized, NOS
200	Renal pelvis and ureter (unifocal or multifocal) Subepithelial connective tissue Renal pelvis from ureter Ureter from renal pelvis Distal ureter from proximal ureter Extension to bladder from ureter Subepithelial connective tissue of distal ureter and/or bladder
300	Muscularis of renal pelvis only OR Muscularis of ureter only



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Kidney Renal Pelvis, Ureter EOD Regional Nodes

Note 1: Code only regional nodes and nodes, NOS in this field.
Distant nodes are coded in EOD Mets.

Note 2: Regional nodes include bilateral and contralateral involvement of named nodes.

Note 3: Code 800 regional nodes NOS



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Kidney Renal Pelvis, Ureter EOD Regional Nodes

All sites

- > Lateral aortic (lumbar)
- > Paracaval
- > Renal hilar
- > Retroperitoneal, NOS

Renal Pelvis

- > Aortic (para-aortic, periaortic, NOS)

Ureter

- > Iliac (common, external, NOS)
- > Internal (hypogastric) (obturator)
- > Pelvic, NOS
- > Periureteral



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Kidney Renal Pelvis, Ureter EOD METS

- No notes for mets

Code	Description
00	No distant metastasis Unknown if distant metastasis
10	Distant lymph node(s), NOS
70	Carcinomatosis Distant metastasis WITH or WITHOUT distant lymph node(s) Distant metastasis, NOS
99	Death Certificate Only



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Kidney Renal Pelvis, Ureter Grade Table [19]

Code	Description
1	G1: Well differentiated
2	G2: Moderately differentiated
3	G3: Poorly differentiated Includes undiff and anaplastic
L	LG: Low-grade
H	HG: High-grade
9	Grade cannot be assessed (GX); Unknown

} Adenoca,
Squamous

 } Urothelial cancers
use L, H, 9



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WORKUP AND TREATMENT



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Work up

- Cystoscopy: Examination of the bladder using a fiberoptic instrument.
- IVP (Intravenous Pyelogram; filling defects in bladder seen
- Retrograde Pyelogram Cystogram: X-ray to visualize bladder
- Ultrasound or CT Scans
- Urine Cytology



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Urine Cytology

Reportable? SEER Manual pg 7

- xi. **Urine** cytology positive for malignancy is reportable for diagnoses in 2013 and forward
- **Exception:** When a subsequent biopsy of a urinary site is negative, do not report.
 - Code the primary site to C689 in the absence of any other information
 - Do not implement new/additional casefinding methods to capture these cases
- Do **not** report cytology cases with ambiguous terminology (see page 9 for ambiguous terms)



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Treatment- Bladder

- **Surgery**
 - Transurethral resection of bladder tumor*
 - Cystectomy for invasive tumor
- **Radiation**
 - External beam for superficial tumors
- **Chemotherapy**
 - Intravesical for superficial tumor*
 - Systemic for invasive tumor or metastases
- **Immunotherapy**
 - Intravesical BCG for superficial tumors



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Surgery- Bladder

- TURB with or without fulguration
- Segmental or partial cystectomy
- Urinary diversion (video next slide)
- Radical cystectomy



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SURGERY CODES

Kidney	+
Renal Pelvis, Ureter	+
Bladder	+
Urethra, Urinary Other	+

Appendix C Surgery Codes

<https://seer.cancer.gov/archive/manuals/2022/appendixc.html>

Appendix A STORE Manual Surgery Codes

<https://www.facs.org/media/f02pxglx/store-2022.pdf>



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Bladder C670-C679 Surgery Codes

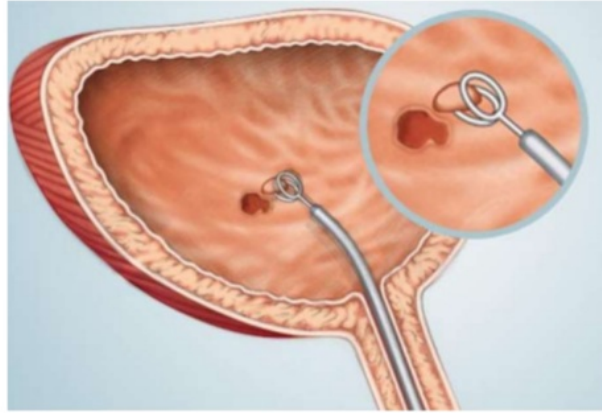
- Refer to Manual:
 - TURB code 27 {use in clinical grade only}
 - TURB with fulguration code 22
 - Partial cystectomy code 30
 - Simple/total/complete cystectomy code 50
 - Complete cystectomy w/reconst
 - SEER Note: use code 71: cystoprostatectomy or cystectomy with hyst
 - Codes 61-64 radical cyst PLUS...
 - Pelvic exenteration, NOS Codes 70-74



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Trans Urethral Resection

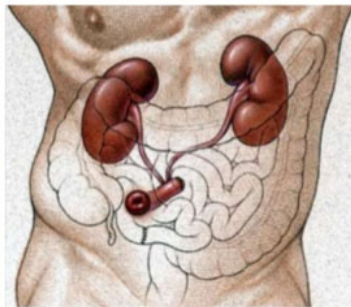


TURB

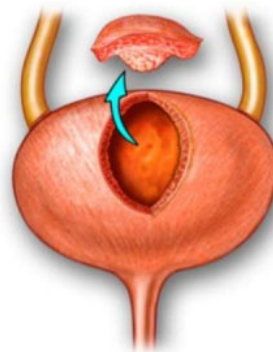


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Surgery



Total Cystectomy



Partial Cystectomy



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- Robotic neobladder procedure

<https://youtu.be/zYeoQFH5fY>



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Kidney C649, Renal Pelvis C659, Ureter C669 Surgery Codes

- Refer to Manual
 - Polypectomy code 26
 - Excisional BX code 27
 - Partial or subtotal nephrectomy (kidney or renal pelvis) or partial ureterectomy (ureter) (segmental or wedge resection) code 30
 - Nephroureterectomy (includes bladder cuff or renal pelvis or ureter, kidney parenchyma) code 40

Other codes apply more for
Kidney parenchyma primary cancers



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Documentation

- **H & P:**

Admission Date: Chief complaint, symptoms, Admission DX or IMPRESSION.

Physical exam: bimanual ABD and rectal exam to reveal firm or hard nodularity of bladder wall.
(NOTE IF Bladder is FIXED on physical exam)

- **LABS:**

Dates: Urine cytology not necessary to document unless positive.

(There are no specific tumor markers for bladder cancer which are documented).

- **XR/SCANS:**

Dates: IVP, US; note tumor location.

CXR, CT Scan, or Bone Scan which reveal any metastatic cancer. Note negative findings.

- **SCOPES/EXPLORATORY:**

Dates: Cystoscopy and BX (and/or random mapping bx's of bladder): note size of tumor, location and appearance of lesion or lesions in bladder. Look for any drugs instilled during TURB.

- **SURGERY:**

Dates: TURB and/or partial or total cystectomy with or without lymph node dissection, or radical cystectomy: document any pertinent findings of spread or metastatic disease noted during surgery.

- **PATHOLOGY:**

Dates: BX of bladder- Final diagnosis as stated, note invasion if stated. (usually won't get tumor size from bx's or TURB path specimens, use size from observation from scope or surgery).

Dates: TURB or Cystectomy with or without LNs: DX- histology, invasion and extent to spread, # reg LNs examined and # reg LN positive.

- **DISCHARGE SUMMARY:**

Date of Discharge: Final DX and comments on discharge summary report, any other treatment started such as radiation or chemo. Any future plans for treatment or follow up. Discharged or transferred to another hospital or nursing home.



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SEER*Educate

Training | Coding CEs

- Dx 2021-2023 EOD, SS, Grade, SSDI

- Bladder 1-5

- Dx 2018-2023 Solid Tumor Rules

- Urinary 1-5



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