Q&A

- Please submit all questions concerning webinar content through the Q&A panel.

Reminder:
- If you have participants watching this webinar at your site, please collect their names and emails.
  - We will be distributing a Q&A document in about one week. This document will fully answer questions asked during the webinar and will contain any corrections that we may discover after the webinar.

Fabulous Prizes
Agenda

- Overview
- Treatment
- MP/H Rules
- Quiz
- Collaborative Stage
- Quiz
- Case Scenarios

Key Statistics

- Estimated new cases and deaths from bladder cancer in the United States in 2013:
  - New cases: 72,570
  - Deaths: 15,210
- Three times more common in men than women
- Median age at diagnosis is 65
  - Rarely found in individuals under 40

Prognosis

- Invasive tumors that are confined to the bladder muscle on pathologic staging after radical cystectomy are associated with approximately a **75% 5-year progression-free survival rate**.
- Patients with more deeply invasive tumors, which are also usually less well differentiated, and those with lymphovascular invasion experience **5-year survival rates of 30% to 50% following radical cystectomy**.
- When the patient presents with locally extensive tumor that invades pelvic viscera or with metastases to lymph nodes or distant sites, **5-year survival is uncommon**.
Field Effect Theory

- The field effect theory suggests that the urothelium has undergone a widespread change, perhaps in response to a carcinogen, making it more sensitive to malignant transformations. As a result, multiple tumors arise more easily.

Histologies

- Urothelial cell (transitional cell) carcinoma
- Pure squamous cell carcinoma
  - 5% of all bladder tumors
- Pure Adenocarcinoma
  - 2% of all bladder malignancies
- Small cell Carcinoma

Papillary vs. Flat Bladder Tumors

Types of Bladder Tumors

- Papillary
- Flat
- "Squamous"
Bladder Cancer Grade

- Grade is a prognostic factor for bladder cancer
  - High grade tumors have a worse prognosis
  - Low grade noninvasive tumors in young patients have a better prognosis
- If the term low grade (LG) or high grade (HG) is indicated for a urothelial primary, assume it is a WHO/ISUP grade.

Regional Lymph Nodes

Bladder
- Perivesical (A)
- Iliac, internal (hypogastric) (B)
- Obturator (C)
- Iliac, external (D)
- Sacral (E), presacral
- Pelvic, NOS (all nodes within shadowed area)
- Iliac, common (F)

Regional Lymph Nodes

Renal Pelvis
- Renal Hilar
- Paracaval
- Aortic
- Retroperitoneal, NOS

Ureter
- Renal Hilar
- Iliac
- Paracaval
- Periureteral
- Pelvic NOS
Distant Metastasis

**Bladder**
- Retroperitoneal lymph nodes
- Lung
- Bone
- Liver

**Renal Pelvis and Ureter**
- Lung
- Distant lymph nodes
- Bone
- Liver

TREATMENT

Bladder, Ureter, Renal Pelvis

**Bladder**
- Non-muscle invasive disease
- Muscle invasive disease
- Metastasis
Non-Muscle Invasive

• Approximately 70% of new bladder cases are non-muscle invasive
  – 70% are exophytic papillary tumors confined to the mucosa (Ta)
  – 25% are Exophytic papillary tumors invading the submucosa (T1)
  – 5% are flat high grade tumors (Tis)
• Tend to recur at the same or higher stage

Non-Muscle Invasive

• Cystoscopy
• CT or MRI if tumor appears sessile, high grade, or suggests muscle invasion
• Transurethral Resection of the Bladder (TURBT)
• Re-TURBT (if necessary)
• Intravesical therapy if there is thought to be a high probability of recurrence

TURBT

• 20 Local tumor excision, NOS
  – 26 Polypectomy
  – 27 Excisional biopsy
Combination of 20 or 26–27 WITH
• 21 Photodynamic therapy (PDT)
• 22 Electrocautery
• 23 Cryosurgery
• 24 Laser ablation
  – 25 Laser excision
**Muscle Invasive**

**Work-up**
- Cystoscopy
- MRI or CT
- TURB

**Definitive Treatment**
- Radical Cystectomy
  - Cystoprostatectomy in men
  - Cystectomy and hysterectomy in women
- Partial Cystectomy
  - May be done if tumor is on the dome of the bladder
  - Laparotomy Pelvic Lymph Node Dissection
- Neoadjuvant Chemotherapy with or without radiation

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**Muscle Invasive**

- 60 Complete cystectomy with reconstruction
  - 61 Radical cystectomy PLUS ileal conduit
  - 62 Radical cystectomy PLUS continent reservoir or pouch, NOS
  - 63 Radical cystectomy PLUS abdominal pouch (cutaneous)
  - 64 Radical cystectomy PLUS in situ pouch (orthotopic)

- 70 Pelvic exenteration, NOS
- 71 Radical cystectomy including anterior exenteration
- 72 Posterior exenteration
- 73 Total exenteration
- 74 Extended exenteration

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**Muscle Invasion**

- Adjuvant Therapy
  - Chemotherapy
    - May delay recurrences
    - Generally for tumors T3 or greater
  - Adjuvant Radiation
  - Adjuvant Chemoradiation

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Metastatic Disease
- Chemotherapy
- Radiation
- Chemoradiation
- Palliative treatment

Renal Pelvis and Ureter-Diagnosis
- Symptoms
  - May present as renal mass or hematuria
- Work-up
  - Cystoscopy
  - Imaging

Renal Pelvis-Treatment
- Low grade localize tumor
  - Nephroureterectomy with a cuff of bladder removed
  - Nephron-sparing procedure
    - Tranureteroscopic or percutaneous
    - With or without intrapelvic chemotherapy
- High Grade or Regional Extension
  - Nephroureterectomy with a cuff of bladder removed
  - Neoadjuvant chemotherapy in some instances
- Metastatic Disease
  - Systemic Treatment similar to urothelial bladder cancer
Ureteral Tumors

Upper Ureter
- May be managed endoscopically
- Nephroureterectomy with a cuff of bladder
  - Regional node dissection for high grade tumors

Mid Ureter
- Small low grade
  - Excision and ureterostomy
  - Nephroureterectomy with a cuff of bladder and regional lymphadenopathy
- Larger or high grade tumors
  - Nephroureterectomy with a cuff of bladder and regional lymphadenopathy

Ureteral Tumors

Distal Ureter
- Distal ureterectomy and reimplantation of the ureter
- Nephroureterectomy with a cuff of bladder
  - Regional lymph nodes for high grade tumors

Adjuvant Treatment (all subsites)
- No adjuvant treatment for tumors confined to the subepithelial layer of the ureter (pT1)
- Patients with extensive disease should receive chemotherapy regimen similar to those prescribed for metastatic bladder tumors

Renal Pelvis, Ureter, Bladder and Other Urinary Multiple Primary Rules (C659,C669,C670-C679,C680-C689)

MULTIPLE PRIMARY AND HISTOLOGY
**Urothelial Carcinoma**

<table>
<thead>
<tr>
<th>Urothelial/Transitional Cell Tumors</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>With squamous differentiation</td>
<td></td>
</tr>
<tr>
<td>With glandular differentiation</td>
<td></td>
</tr>
<tr>
<td>With trophoblastic differentiation</td>
<td>B120</td>
</tr>
<tr>
<td>Nested</td>
<td></td>
</tr>
<tr>
<td>Microcystic</td>
<td></td>
</tr>
<tr>
<td>Transitional cell, NOS</td>
<td></td>
</tr>
</tbody>
</table>

**Urothelial Carcinoma**

<table>
<thead>
<tr>
<th>Urothelial/Transitional Cell Tumors</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Papillary carcinoma</td>
<td>B130</td>
</tr>
<tr>
<td>Papillary transitional cell</td>
<td></td>
</tr>
<tr>
<td>Micropapillary</td>
<td>B131</td>
</tr>
<tr>
<td>Lymphoepithelioma-like Plasmacytoid</td>
<td>B082</td>
</tr>
<tr>
<td>Sarcomatoid</td>
<td>B122</td>
</tr>
<tr>
<td>Giant cell</td>
<td>B031</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>B020</td>
</tr>
</tbody>
</table>

**Multiple Primary Rules**

- **Rule M1**
  - When it is not possible to determine if there is a single tumor or multiple tumors, opt for a single tumor and abstract as a single primary.
- **Rule M2**
  - A single tumor is always a single primary.
Multiple Tumors

• Rule M3
  – When no other urinary sites are involved, tumor(s) in the right renal pelvis AND tumor(s) in the left renal pelvis are multiple primaries.

• Rule M4
  – When no other urinary sites are involved, tumor(s) in both the right ureter AND tumor(s) in the left ureter are multiple primaries.

Multiple Tumors

• Rule M5
  – An invasive tumor following a non-invasive or in situ tumor more than 60 days after diagnosis is a multiple primary.

Multiple Tumors

• Rule M6
  – Bladder tumors with any combination of the following histologies are a single primary:
    • Papillary carcinoma (8050)
    • Transitional cell carcinoma (8120-8124)
    • Papillary transitional cell carcinoma (8130-8131)
Collecting Cancer Data: Bladder, Renal Pelvis, and Ureter

Multiple Tumors
- Rule M7
  - Tumors diagnosed more than three (3) years apart are multiple primaries

Multiple Tumors
- Rule M8
  - Urothelial tumors in two or more of the following sites are a single primary
    - Renal pelvis (C659)
    - Ureter (C669)
    - Bladder (C670-C679)
    - Urethra/prostatic urethra (C680)

Multiple Tumors
- Rule M9
  - Tumors with ICD-O-3 histology codes that are different at the
    - first (Xxxx)
    - second (xXxx) or
    - third (xxXx)
  Number are multiple primaries.
Multiple Tumors

• Rule M10
  – Tumors in sites with ICD-O-3 topography codes with
  – Different second (Cxxx) and/or
  – Third characters (CxXx) are multiple primaries

Multiple Tumors

• Rule M11
  – Tumors that do not meet any of the above criteria are a single primary.
Single Tumor

• Rule H1
  – Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available.

• Rule H2
  – Code the histology from the metastatic site when there is no pathology/cytology specimen from the primary site

Single Tumor

• Rule H3
  – Code 8120 (transitional cell/urothelial carcinoma) when there is:
    • Pure transitional cell carcinoma
    • Flat (non-papillary) transitional cell carcinoma
    • Transitional cell carcinoma with squamous differentiation
    • Transitional cell carcinoma with glandular differentiation
    • Transitional cell carcinoma with trophoblastic differentiation
    • Nested transitional cell carcinoma
    • Microcystic transitional cell carcinoma

Single Tumor

• Rule H4 Code 8130 when there is:
  – Papillary carcinoma or
  – Papillary transitional cell carcinoma or
  – Papillary carcinoma and transitional cell carcinoma
**Single Tumor**

- **Rule H5**
  - Code the histology when only one histologic type is identified
  - *Note:* Only code squamous cell carcinoma (8070) when there are no other histologies present (pure squamous cell carcinoma).

- **Rule H6**
  - Code the invasive histologic type when a single tumor has invasive and in situ components.

**Single Tumor**

- **Rule H7**
  - Code the most specific histologic term

  *Example:*
  - Carcinoma NOS and urothelial carcinoma
  - Code: urothelial carcinoma 8120

- **Rule H8**
  - Code the histology with the numerically higher ICD-O-3 code.

**MULTIPLE TUMORS ABSTRACTED AS A SINGLE PRIMARY**

- **Rule H9**
  - Code the histology documented by the physician when there is no pathology/cytology specimen or the pathology/cytology report is not available

- **Rule H10**
  - Code the histology from the metastatic site when there is no pathology/cytology specimen from the primary site.
**Multiple Tumors**

- Rule H11
  - Code 8120 (transitional cell/urothelial carcinoma) (See Table 1)
- Rule H12
  - Code 8130 (papillary transitional cell carcinoma) (See table 1)
- Rule H13
  - Code the histology when only one histologic type is identified

**Multiple Tumors**

- Rule H14
  - Code the histology of the most invasive tumor.
    - If one tumor is in situ and one is invasive, code the histology from the invasive tumor.
    - If both/all histologies are invasive, code the histology of the most invasive tumor.

**Multiple Tumors**

- Rule H15
  - Code the histology with the numerically higher ICD-O-3 code.
Collaborative Stage Data Collection System (CSv02.04)

BLADDER

CS Extension: Bladder

- Noninvasive papillary carcinoma
  - Codes 010, 030
- Carcinoma in situ: flat tumor
  - Codes 060, 100
- Subepithelial connective tissue invasion
  - Codes 155 – 170; 300
CS Extension: Bladder

- Flat tumors confined to mucosa
  - Code 060: Confined to epithelium
  - Code 100: Confined to mucosa NOS
  - Code 155: Penetrated basement membrane to invade lamina propria

CS Extension: Bladder

- Muscularis propria invasion
  - Codes 210 - 245
- Perivesical tissue invasion
  - Codes 411 - 431
- Other organ and tissue invasion
  - Codes 630 - 810

CS Tumor Size/Ext Eval: Bladder

- Information from TURBT used to code CS Tumor Size/Extension
  - Assign code 1
Pop Quiz

- 12/7/12 TURBT: Invasive urothelial carcinoma invading superficial muscularis propria.
- 1/17/13 Cystectomy: Flat transitional cell carcinoma with no evidence of invasion.

Pop Quiz

- What is the code for CS Extension?
  - 030: Papillary transitional cell carcinoma with inferred description of noninvasion
  - 060: Nonpapillary – sessile (flat) (solid) carcinoma in situ
  - 210: Muscle (muscularis propria) of bladder only – superficial muscle, inner half
  - 240: Muscle (muscularis propria) invaded, NOS of bladder only
- What is the code for CS TS/Ext Eval?
  - 1: TURBT
  - 3: Surgical resection

CS Lymph Nodes: Bladder

- Single regional node metastasis in true pelvis
  - Code 150
- Multiple regional node metastasis in true pelvis
  - Code 250
- Common iliac lymph node metastasis
  - Codes 350-450
- Regional nodes NOS, not stated if single or multiple
  - Code 505
CS Mets at DX: Bladder

- Code 00: None
- Code 11: Distant lymph nodes
- Code 40: Distant metastases except distant lymph nodes
- Code 55: Distant lymph nodes and distant metastases
- Code 60: Distant metastasis NOS; Stated as M1 with no other info on metastases

SSF1: WHO/ISUP Grade

- Code 010: Low grade urothelial carcinoma
- Code 020: High grade urothelial carcinoma
- Code 987: Not applicable — not a urothelial morphology
- Code 998: No pathologic exam of primary site
- Code 999: Unknown WHO/ISUP grade; Not documented in

Pop Quiz

- TURBT: Papillary transitional cell carcinoma, grade IV, of lateral bladder wall
- What is the code for SSF1?
  - 020: High grade urothelial carcinoma
  - 987: Not applicable: Not a urothelial morphology
  - 998: No pathologic examination of primary site
  - 999: Unknown WHO/ISUP grade; Not documented in patient record
**SSF2: Size of Metastasis in Lymph Nodes**

- Code exact size of largest metastasis in a regional node to the nearest mm
  - 001-979
- Code size of involved regional node if size of metastasis is not documented
- Use code 999 when regional nodes are involved but size is not stated; unknown if regional nodes involved; no information on size of lymph node metastasis or size of node

**SSF3: Extranodal Extension (ENE) of Regional Lymph Nodes**

- Code 010
  - No ENE documented in reports
  - Documented on reports that nodes are involved but no mention of ENE
  - Involved nodes are clinically mobile
- Code 020
  - ENE is present per path report or clinical statement
  - Involved nodes are clinically fixed or matted
- Code 030
  - Documentation of involved nodes but no mention of ENE and no reports to review

**Collaborative Stage Data Collection System (CSv02.04)**

RENAL PELVIS
CS Extension: Renal Pelvis & Ureter

- Papillary noninvasive carcinoma
  - Code 050
- Carcinoma in situ
  - Code 060
- Subepithelial connective tissue invasion
  - Codes 105-150; 300
- Muscularis invasion
  - Codes 200-230; 370

CS Extension: Renal Pelvis & Ureter

- Tumor involves renal pelvis & ureter (unifocal or multifocal)
  - Code 120: Subepithelial connective tissue invasion
  - Code 220: Muscularis invasion
- Tumor of ureter directly invades bladder
  - Code 130: Subepithelial connective tissue of distal ureter and/or bladder
  - Code 230: Muscularis of distal ureter and/or bladder

CS Extension: Renal Pelvis & Ureter

- Adjacent connective tissue invasion
  - Codes 400, 600, 610
- Other organ and tissue invasion
  - Codes 630 - 810
Collecting Cancer Data: Bladder, Renal Pelvis, and Ureter

Pop Quiz
• Left nephroureterectomy: Urothelial cell carcinoma of the left ureter, high grade, 2 cm in size, invades muscularis. 3 cm renal pelvis tumor, high grade urothelial carcinoma, involves lamina propria.

Pop Quiz
• What is the code for CS Extension?
  – 105: Subepithelial connective tissue of renal pelvis only
  – 120: Subepithelial connective tissue renal pelvis and ureter
  – 200: Muscularis of ureter only
  – 220: Muscularis renal pelvis and ureter

CS Lymph Nodes: Renal Pelvis & Ureter
• Metastasis in a single regional node 2 cm or less in greatest dimension or size not stated
  – Codes 100, 110
• Metastasis more than 2 cm but not more than 5 cm in greatest dimension in a single regional node OR Metastasis in multiple regional nodes, none more than 5 cm in greatest dimension or size not stated
  – Codes 200, 210
CS Lymph Nodes: Renal Pelvis & Ureter

- Metastasis in regional lymph node more than 5 cm in greatest dimension
  - Code 300
- Single or multiple nodes not stated, size not stated
  - Code 505

CS Mets at DX: Renal Pelvis & Ureter

- Code 00: None
- Code 10: Distant lymph nodes
- Code 40: Distant metastases except distant lymph nodes
- Code 50: Distant lymph nodes and distant metastases
- Code 60: Distant metastasis NOS; Stated as M1 with no other info on metastases

SSF1: WHO/ISUP Grade

- Code 010: Low grade urothelial carcinoma
- Code 020: High grade urothelial carcinoma
- Code 987: Not applicable – not a urothelial morphology
- Code 998: No pathologic exam of primary site
- Code 999: Unknown WHO/ISUP grade; Not documented in
**SSF2: Depth of Renal Parenchyma Invasion**
- Use code 000 if renal parenchyma invasion not present
- Code exact depth of renal parenchymal invasion to nearest mm
  - 001-979
- Use code 998 if there was no histologic exam of primary tumor

**Pop Quiz**
- Left nephroureterectomy: Papillary urothelial cell carcinoma of the left ureter, high grade, 3 cm in size and 2 cm from the renal pelvis, invades through the muscularis into the underlying fat.

**Pop Quiz**
- What is the code for SSF2?
  - 000: Renal parenchymal invasion not present/not identified
  - 020
  - 030
  - 999: Unknown
Coming up!

- 6/6/13
  - Collecting Cancer Data: Kidney
- 7/11/13
  - Topics in Geographic Information Systems

Certificate phrase:

QUIZ 2

Fabulous Prize Winners Are ......
Thank You!

[Image of a globe with the text "Thank You!"]