INTRODUCTION

Bladder cancer is the fourth most common cancer in men and the eighth most common in women. The incidence rate is about four times greater among men than women. It accounts for 7 percent of all cancers in men and 2 percent of those in women.

Carcinogens along with inherited factors that inhibit some people's ability to detoxify them seem to play a role in causing bladder cancer. For example, cigarette smokers develop bladder cancers four times as often as non-smokers. Chronic irritation due to urinary stones and parasitic infection also are predisposing factors.

Papillary tumors are the most common type of bladder tumor and resemble a tiny mushroom with its stalk attached to the inner lining of the (Continued on page 3)
Q & A #1

Q: How should I code squamous cell carcinoma of mandible?

A: Squamous cell carcinoma of mandible (C41.1) generates Error 0190 “Morphology not valid with site or not reportable to FCDS.” A careful review of these cases often reveals that the primary site was not the jaw bone itself. In a given medical record various doctors might describe the location of the tumor in slightly different ways. A recent example showed, after careful review, that a handwritten physical exam described a large tumor in the floor of the mouth. Elsewhere in the same record in a dictated summary, the tumor was described as “mandibular”. Other cases have revealed, upon review, that the tumor actually arose in the mandibular gingiva. Sometimes, the location of the tumor can be found in the gross description of a pathology report. Occasionally a registrar reports what is in the final pathologic diagnosis, such as “squamous cell carcinoma”, without reading the detail that precedes it in the gross description.

Q & A #2

Q: Why does “intraductal carcinoma mixed with other types of carcinoma in situ (8523/2)” of the breast generate Error 0190, “Morphology not valid with site or not reportable to FCDS?”

A: There are variations of this question. This example is quoted verbatim from a pathology report: “Breast mass, intraductal adenocarcinoma which is both solid and papillary type.” The code 8523/2 is correct, for the site C50. However, in ICD-O-3 the 8523 code only exists with a behavior of 3. This is a case where ICD-O-3 Rule F is applied: “Use the appropriate 5th digit behavior code even if the exact term is not listed in ICD-O.” Since this morphology/behavior requires an edit override at FCDS, documentation must be provided from the medical record.
Several of these papillary tumors may occur at once, and they are most likely to be malignant. Solid tumors that grow directly in the lining of the bladder and can invade its muscular wall are less common.

**ANATOMY OF THE BLADDER**

The empty bladder is about the size and shape of a pear. It is located in the lower pelvic cavity. Urine drains from the kidneys into the bladder through the ureters. From the bladder, urine is excreted through a tube called the urethra. In women, this tube is about 1.5 inches long and exits the body at the upper aspect of the vaginal opening. In men the urethra is about 8 inches long and passes through the penis, opening at its tip.

The bladder has flexible muscular walls three layers thick. As urine fills the bladder, these walls expand; they contract to expel urine. Although the bladder can hold about a pint of urine, the urge to urinate usually starts when it is about half full.

**BLADDER ANATOMY AND ICD-O-3**

![Bladder Anatomy Diagram](source: THI Atlas, 3rd edition, 2nd revision)
LAYERS OF THE BLADDER WALL

The wall of the bladder wall has three principal tissue layers or coats:

- mucosa
- submucosa
- muscularis

Mucous membrane (mucosa)--transitional epithelium; lines the bladder, ureters, and urethra

Epithelial layer--contains no blood vessels or lymphatic

Basement membrane--lies beneath epithelial layer; single layer of cells separating the epithelial layer from the lamina propria; a sheet of extracellular material serving as a filtration barrier and supporting structure for the mucosal layer

Submucous coat (lamina propria)--areolar connective tissue; interlaced with the muscular coat. This layer contains blood vessels, nerves, and in some regions, glands. A tumor which has spread to this layer can metastasize to the rest of the body via the lymphatics and blood vessels.

Muscular coat (muscularis propria)--three layers: inner longitudinal, middle circular, and outer longitudinal

Serous coat (serosa)--a reflection of the peritoneum which covers only the superior surface and the upper part of the lateral surfaces

Adventitia--in areas on bladder where there is no serosa, the connective tissue between organs merges

Perivesical fat--layer of fat surrounding bladder outside of serosa/adventitia

EQUIVALENT TERMS FOR LAYERS OF BLADDER WALL

**Mucosa**
- epithelium
- urothelium
- mucosal surface
- transitional mucosa

**Muscle**
- muscularis
- muscularis propria
- muscularis externa
- smooth muscle

**Submucosa**
- lamina propria
- suburothelial connective tissue
- subepithelial tissue
- stroma
- muscularis mucosa

**Perivesical fat**
- adventitia
- serosa

The most common sites for bladder tumors are the posterior and lateral walls. The superior wall is less frequently involved.
KEY WORDS: Regional diathesis, field defect—terms which mean a tendency for the lining of the urinary tract to develop multiple tumors; a generalized deterioration of the urothelium from the renal pelvis into the urethra showing premalignant changes.

REGIONAL LYMPH NODES

These are the lymph nodes below the bifurcation of the common iliac arteries and above the inguinal ligament:

- Common iliac;
- internal iliac (hypogastric);
- external iliac;
- obturator;
- sacral (lateral, presacral, promontory (Gerota’s);
- perivesical and pelvic and
- not otherwise specified (NOS).

ICD-O CODES FOR BLADDER CANCER

RELATED ADJECTIVES
Urinary Bladder = bladder, vesicle, vesico, cysto-

<table>
<thead>
<tr>
<th>ICD-O-2/3 CODES</th>
<th>ICD-O-2/3 TERM</th>
</tr>
</thead>
<tbody>
<tr>
<td>C67.0</td>
<td>Trigone of bladder</td>
</tr>
<tr>
<td>C67.1</td>
<td>Dome of bladder</td>
</tr>
<tr>
<td>C67.2</td>
<td>Lateral wall of bladder</td>
</tr>
<tr>
<td>C67.3</td>
<td>Anterior wall of bladder</td>
</tr>
<tr>
<td>C67.4</td>
<td>Posterior wall of bladder</td>
</tr>
<tr>
<td>C67.5</td>
<td>Bladder neck</td>
</tr>
<tr>
<td>C67.6</td>
<td>Ureteric orifice</td>
</tr>
<tr>
<td>C67.7</td>
<td>Urachus</td>
</tr>
<tr>
<td>C67.8</td>
<td>Overlapping lesion of bladder</td>
</tr>
<tr>
<td>C67.9</td>
<td>Bladder,NOS</td>
</tr>
</tbody>
</table>

MORPHOLOGY & GRADE

ICD-O MORPHOLOGY CODES

If the diagnostic term in the pathology report is not in the list below, be sure to consult ICD-O.

- Transitional cell carcinoma--81203; most common morphology
- Papillary carcinoma--81303
- Papillary and transitional cell carcinomas comprise 90-95% of all bladder cancers.

- Squamous cell carcinoma (80703)--occurs in 8% of all bladder carcinomas
- Adenocarcinoma (81403) of the bladder--very rare (2%) and almost impossible to distinguish from primary prostate carcinoma which has extended into the bladder.

- Leiomyosarcoma--88903; rare tumor arising in the muscle layer of the bladder.

Key words:
Sessile (flat or attached by a broad base)—infiltrating type; spread widely through the bladder wall and surrounding structures; less gross tumor formation in the bladder lumen.

- Papillary--most bladder tumors; will often occur and recur in multiple sites within the bladder. Papillary carcinomas are more frequently single, firmer, have broader stalk than benign tumors and form large, bulky, cauliflower-like growths.

- Synonyms for in situ carcinoma: CIS, Stage 0, confined to epithelium, intraepithelial, involvement up to but not including the basement membrane, noninfiltrating, noninvasive, no stromal involvement, papillary noninfiltrating, noninvasive papillary, stage “Ta”.

EXTENT OF DISEASE FOR BLADDER CANCER

COMMON METASTATIC SITES

LYMPHATIC SPREAD: Common iliac lymph nodes are second station (metastatic) nodes.

(Continued on page 8)
EDUCATION AND TRAINING

FEBRUARY 2004

FCDS 2004 EDUCATIONAL TELEPHONE CONFERENCE SERIES

NEW REPORTING REQUIREMENTS FOR 2004

OBJECTIVE
To present new reporting requirements for Collaborative Staging and non-malignant brain and central nervous system tumors beginning with cases diagnosed on or after January 1, 2004.

FEBRUARY 25, 2004
2PM-3PM
Dial-in number: 888-422-7128
Host Code: 843742
Participant Code: 491062

HIMSS ANNUAL CONFERENCE AND EXHIBITION, 2004

The Healthcare Information and Management Systems Society (HIMSS) is holding its annual meeting February 22 through 26, 2004, in Orlando, FL. AHIMA is a proud co-sponsor of HIMSS’ annual conference, and we will be on-site and exhibiting throughout the conference. Be sure to stop by the AHIMA booth in the sponsor area for a special gift plus copies of the e-HIM report and a CD of guidance reports. For more information on the meeting and to register, visit the Healthcare Information and Management Systems Security website at http://conference.himss.org/ASP/index.asp.

AHIMA AUDIO SEMINAR MODIFIERS FOR PHYSICIAN REPORTING

On February 12, 2004 increase your knowledge of ICD-9-CM code selection for the respiratory system, and augment your coding knowledge with clinical discussion of the various types of respiratory infections. We’ll cover the different types of bacterial and viral infections of the respiratory tract, various chronic respiratory conditions, and how to use Coding Clinic advice pertaining to the respiratory system.

Plus, mark your calendars for May 27, 2004, when AHIMA will be presenting the audio seminar, "Preparing for ICD-10-CM and ICD-10-PCS: Getting from Here to There."

Two AHIMA CEUs are awarded for each audio seminar you attend.

THE CTR EXAMINATION REVIEW & BASIC SKILLS WORKSHOP

The CTR Examination Review & Basic Skills Workshop will take place at the Moffitt Cancer Center, February 12-13, 2004. Moffitt is located on the campus of the University of South Florida, Tampa, Florida.

For more details on registration, curriculum and lodging visit the Florida Cancer Registrars Association website at http://www.fcra.org/.
**MARCH 2004**

**ADVANCED CANCER REGISTRY TRAINING PROGRAM**

This advanced training program will specifically address: abstracting, staging, and coding really difficult cancer cases; bizarre, rare, and unusual cancer cases; calculating incidence, prevalence, age-adjusted, survival, and other rates; using registry data (preparation, analysis, annual reports, etc.); and using the Internet to locate comparable data and useful cancer information and resources. The course will be held at the Holiday Inn Express Hotel & Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University Area on March 29-31, 2004.

**Registration Fee**: $500 for the full 3 day training

Approved by NCRA for 20.5 CE hours

Complete details on the listed Emory courses are available on the training web-site at http://cancer.sph.emory.edu or contact Stephen Roffers, PA., CTR at (404)-727-4535.

**UPCOMING TRAINING, WORKSHOPS, & SEMINARS 2004**

**FCDS EDUCATIONAL TELEPHONE CONFERENCES**

**MAR 24TH  2PM-4PM  COLLABORATIVE STAGING PART I**

Dial-in number: 888-476-3762  
Host Code: 819551  
Participant Code: 359957

**APR 14TH  2PM-4PM  COLLABORATIVE STAGING PART II**

Dial-in number: 888-422-7137  
Host Code: 113138  
Participant Code: 175525

Mark your calendars for National Health Information Privacy and Security Week, April 11 through 17, 2004. The week is designed to raise awareness among healthcare professionals, their employers, and the public of the importance of protecting the privacy, confidentiality, and security of personal health information. During the week, AHIMA and its members will work to educate and inform these groups of their rights and responsibilities related to the use and disclosure of personal health information.

**PRINCIPLES AND PRACTICE OF CANCER REGISTRATION, SURVEILLANCE, AND CONTROL**

This intensive and comprehensive training program is taught by a staff of recognized experts in cancer registration, surveillance, and control. The instructors are accomplished trainers and are internationally recognized as leaders in their fields. The training will be held at the Holiday Inn Select Hotel and Suites, 2183 North Decatur Road, Decatur, Georgia 30033, located in the Atlanta-Emory University Area on March 5-9, 2004.

**Registration Fee**: $500 for the full 3 day training

Approved by NCRA for 20.5 CE hours

Complete details on the listed Emory courses are available on the training web-site at http://cancer.sph.emory.edu or contact Stephen Roffers, PA., CTR at (404)-727-4535.

**AHIMA CODING WORKSHOPS**

Plan now for acquiring the latest and most expert coding knowledge:

- Arlington, VA, May 11-12, at the Marriott Key Bridge Hotel
- Seattle, WA, June 3-4, at the Hilton Seattle Airport
- Kansas City, MO, June 16-17, at the Hyatt Regency Crown Center

For further information on upcoming AHIMA Coding Workshops visit the AHIMA website at: http://www.ahima.org/coding/coding_meetings.cfm
HEMATOGENOUS SPREAD: Lung, bone, liver

EXTENT OF DISEASE EVALUATION

DEFINITIONS

Key words/involvement: terms which indicate possible involvement by tumor. Common terms are provided, but the list is not all-inclusive.

Other words/no involvement: other terms seen in reports which indicate an abnormality but do not indicate a neoplastic process. Common terms are provided, but the list is not all-inclusive.

Key information: information to look for in the report of the study. Key information helps define the extent of disease.

DIAGNOSTIC STUDIES--PHYSICAL EXAM

Key information: abdominal mass, palpable extension beyond bladder; fixation of bladder; accessible lymph nodes, secondary masses; pelvic examination in females; rectal examination, palpable lymph nodes, distention, abdominal tenderness, organomegaly (hepatosplenomegaly, hepatomegaly, splenomegaly)

DIAGNOSTIC STUDIES--LABORATORY STUDIES

Alkaline Phosphatase
Urinalysis
BUN (Blood Urea Nitrogen)

DIAGNOSTIC STUDIES--IMAGING

Key information: size and location of primary tumor, extension into pubic bone; spread to adjacent tissues or organs; regional lymph nodes; sites of distant organs or lymph nodes involved

Chest X-ray
KUB (Kidneys-ureter-bladder)
IVP (Intravenous Pyelogram)

Retrograde Pyelogram
Cystogram: x-rays to visualize the bladder after the introduction of radiopaque contrast via urethral catheter. After the patient voids, air may be used as a second contrast agent. Also called cystography, double contrast cystogram.

Key words/possible involvement by tumor: stricture, mass, mass effect, metastases, lytic lesion, osteolytic lesion, blastic lesion, osteoblastic lesion, surface irregularities of bladder, filling defect in the bladder, non-functioning kidney, ureteral obstruction

Other words/no involvement: if there is no specific reference to abnormality in the bladder

Lymphangiogram
Pelvic Ultrasound
Imaging, Abdomen/pelvis
Imaging, Bone
Imaging, Brain
Imaging, Liver/spleen

DIAGNOSTIC STUDIES--TUMOR MARKERS

Key information: prognostic (what treatment to use if the tumor should recur)

TPA (Tissue Polypeptide Antigen)--an antigen marker for cancers of bladder, lung, and gynecologic sites; non-specific to bladder cancer; elevated levels indicate presence of malignancy

DIAGNOSTIC STUDIES--ENDOSCOPIES

Key information: largest size of tumor, gross description of tumor, presence of multiple tumors, degree of induration of bladder wall, extravesical extension

Cystoscopy--examination of the bladder using a fiberoptic instrument.

Key words/possible involvement by tumor: bullous

(Continued on page 9)
edema, lesion, tumor invasion, extrinsic mass, tumor infiltration, invasion of bladder mucosa, extension of tumor into bladder wall

Other words/no involvement: if there is no reference to tumor or abnormality in the bladder

DIAGNOSTIC STUDIES--OPERATIVE REPORT

Key information: surgeon's description of involved tissues and nodes; fixation of bladder; invasion of adjacent organs; exact location of lesion(s); description of epithelial surface of bladder

Examination under Anesthesia (EUA): bimanual examination of the pelvis and external abdomen while patient is anesthetized, using one hand in the pelvis and the other hand to press on the organs externally.

DIAGNOSTIC STUDIES--PATHOLOGY

Key information: cell type; depth of invasion (mucosa, submucosa, muscular layer, perivesical fat, serosa and connective tissue); size of lesion; adjacent tissue involved (prostate, urethra, parametrium); involvement of regional lymph nodes; multifocal tumors; invasion of papillary stalk

Cytology Reports: cytologic examination of urinary sediment for malignant cells; fine needle aspiration of a cyst or tumor (detects 70% of bladder cancers); also pleural effusion (thoracentesis) or ascites (paracentesis)

Bladder Washings: instillation of saline solution into the bladder. After the solution is allowed to contact surfaces in the area for about five minutes, it is aspirated and sent for cytologic examination.

BLADDER CANCER STAGING

Criteria for TNM Clinical Staging: Physical examination and history, histologic confirmation of tumor, bimanual examination under anesthesia, cystoscopy, urinary cytology, pyelography, imaging (radiographic and computer assisted), and other evaluations to determine metastatic involvement; lymphography (CT or lymphangiography) is required for nodal evaluation. Confirmation of extent of disease should include a biopsy deep enough to assess the depth of invasion at the base of the tumor.

Criteria for TNM Pathologic Staging: Total cystectomy and lymph node resection are required for pathologic staging.

The TNM staging system is a refinement of the Jewett system.

<table>
<thead>
<tr>
<th>TNM 6TH ED.</th>
<th>JEWETT – STRONG-MARSHALL</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tis</td>
<td>CIS</td>
<td>Limited to mucosa, flat insitu</td>
</tr>
<tr>
<td>Ta</td>
<td>0</td>
<td>Limited to mucosa, papillary</td>
</tr>
<tr>
<td>T1</td>
<td>A</td>
<td>Lamina propria invaded</td>
</tr>
<tr>
<td>T2a</td>
<td>B1</td>
<td>&lt;halfway through muscularis</td>
</tr>
<tr>
<td>T2b</td>
<td>B2</td>
<td>&gt;halfway through muscularis</td>
</tr>
<tr>
<td>T3</td>
<td>C</td>
<td>Perivesical fat</td>
</tr>
<tr>
<td>T4a</td>
<td>C</td>
<td>Prostrate, uterus or vagina</td>
</tr>
<tr>
<td>T4b</td>
<td>C</td>
<td>Pelvic wall or abdominal wall</td>
</tr>
<tr>
<td>N1-N3</td>
<td>D1</td>
<td>Pelvic lymph node(s) involved</td>
</tr>
<tr>
<td>M1</td>
<td>D2</td>
<td>Distant metastases</td>
</tr>
</tbody>
</table>

(Continued on page 10)
1. **Who gets kidney cancer?**

Kidney cancer strikes more than 28,000 Americans each year—many of whom have no overt symptoms. The majority of people with kidney cancer are past the age of 40, and it strikes men twice as often as women. It is one of the fastest-growing cancers in the United Kingdom.

2. **Why do people get kidney cancer?**

We just don’t know in the majority of cases. There are several genetic factors that predispose people to kidney cancer but this only happens in 5% of the cases. Occupational hazards include exposure to petroleum, asbestos, lead, cadmium and trichloroethylene. Smoking, obesity, and use of diuretics also increase risk.

3. **When symptoms occur, which ones are most common?**

Painless urination of blood (even once and even if it clears up), an abdominal mass, pain in the back or flank, weight loss, anemia, and tiredness.

4. **How is kidney cancer diagnosed?**

Your doctor will usually order a number of tests including a CAT scan with contrast. If this test shows a solid tumor in the kidney, there is a 95% likelihood of kidney cancer.

5. **What is the best treatment for kidney cancer contained within the kidney?**

Surgery is the standard treatment for contained kidney cancer. Various surgical options may be available to you, depending on tumor size and location within the kidney capsule. Such surgery is performed by a urologic surgeon.

6. **What if the cancer has already spread outside the kidney capsule?**

Then you will want to consult with an oncologist who specializes in treating kidney cancer. Call us for a referral.

7. **Is kidney cancer treated like other cancers?**

Radiation and chemotherapy are not very effective in treating kidney cancer. Biologic therapies are used more frequently.

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**Jewett Staging**

Pathologist H.J. Jewett proposed this classification system in 1946. It was revised by Marshall in 1956, so it is also called Jewett-Marshall Staging and AUS (American Urologic System). This is a histologic staging based on depth of tumor invasion through bladder wall. Jewett’s staging does not consider grade of tumor, local recurrence rate or multicentricity of tumors.

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**ABOUT KIDNEY CANCER...**

The National Kidney Association Website: http://www.kidneycancerassociation.org
DEADLINES AND REMINDERS

QUARTERLY ACTIVITY STATUS REPORT

FCDS has generated the Quarterly Status Report for the period of October 1, 2003 through December 31, 2003. The report was sent out January 12, 2004.

The report consists of two sections, The Quarterly Activity Summary and The Annual Case Summary.

The Quarterly Activity Summary reflects the FCDS file activity and data submissions for each facility on a quarterly basis. It highlights information about the total number of cases submitted and the quality of the data. FCDS requires that inpatient facilities submit data at least every quarter. Monthly submissions are recommended for facilities with an annual caseload greater than 500. Thus, all facilities should show some activity quarterly.

The Annual Case Summary reflects all cases submitted to FCDS by the facility during the past four reporting years.

Please contact Meg Herna at (305) 243-2625 should you have any questions about the report.

Abstractor Code Renewal Deadline

FCDS Cancer Abstractor Codes expire on June 30th, 2004. You must fill out a new form to continue submitting work to FCDS. Completed forms should be sent to your Field Coordinator during the month of June, 2004.

On July 1, during the database conversion work, (v.10 to v.10.1) we will take all the requests mailed in, and renew the expiration date to June 30, 2005.

The renewal form is located on the FCDS IDEA page of our website: http://fcds.med.miami.edu/inc/idea.shtml.

Please note: This is the 3 letter/number code (ex: 3GV) coded on the abstract. This is not the FCDS IDEA user id (ex: mrudolph). The Path and Radiation users don't need the 3 letter code.

Radiation Therapy Centers Cancer Case Identification Program

Beginning with the 2003 patient encounters, Radiation Therapy Centers are responsible for identifying and reporting all of their cancer cases to the Florida Cancer Data System using the FCDS-IDEA Single Entry or the File Upload modules. The deadline to submit the cases is June 30, 2004. Please log on to the FCDS website fcds.med.miami.edu or call Betty Hallo at (305) 243-2627 for additional information.

Path Lab Reporting

Every anatomic pathology laboratory that reads biopsy and surgical resection specimens collected from patient encounters within the state of Florida MUST electronically submit the specified data for every malignant cancer case. Specimens read between January 1, 2003 and June 30, 2003 were due to FCDS on December 31, 2003.

(July 1, 2003 through December 31, 2003 data are due June 30, 2004.)
Cumulative Path Data Received

Number of Records

- 1800,000
- 1600,000
- 1400,000
- 1200,000
- 1000,000
- 800,000
- 600,000
- 400,000
- 200,000
- 0

Cumulative path data received from:
- Sep-02
- Oct-02
- Nov-02
- Dec-02
- Jan-03
- Feb-03
- Mar-03
- Apr-03
- May-03
- Jun-03
- Jul-03
- Aug-03
- Sep-03
- Oct-03
- Nov-03
- Dec-03

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