How to Collect High Quality Cancer Surveillance Data

(Pre-2007 multiple primary/histology rules are used for all sites except CNS)

Case 1: Prostate

Discharge Summary

This 75-year-old man was transferred from the nursing home where he lived to the hospital late at night on 4/11 through the Emergency Department in complete urinary obstruction. After catheterization, the patient underwent cystoscopy on 4/13. On 4/14 the patient underwent a transurethral resection of the prostate and was discharged back to the nursing home later that day with voiding improved. Final diagnosis was adenocarcinoma of the prostate. Because of his mental status and general debility, the patient's family declined additional treatment.

Laboratory

None

Procedures

4/13 Cystoscopy: Blockage of the urethra by a markedly enlarged prostate.

4/14 Transurethral resection of prostate: 45 grams of tissue were sent to the Pathology Department for analysis.

Pathology

4/14 Transurethral resection of prostate: Well differentiated adenocarcinoma, microacinar type, in 1 of 25 chips of prostatic tissue.

Case 1 Prostate	Answer	Rationale
Date of Dx	04/14	Date of TURP; FORDS, p. 89
Primary Site	C61.9	TURP path; FORDS, p. 91
Histology	8550/31	Path report; SEER Program Coding and Staging Manual (PCSM) 2004, p. 87, histology coding rules for single tumor #6
CS Extension	13	TURP path, clinically inapparent tumor, 1/25 is less than 5% of resected tissue; <i>Collaborative Staging (CS) Manual,</i> p. 518
CS Lymph Nodes	00	Inaccessible site rule; CS Manual, p. 14
CS Mets at Dx	00	Inaccessible site rule; CS Manual, p. 14
SSF 3	097	No prostatectomy; CS Manual, p. 524
Surg Primary Site	22	TURP for incidental CA; FORDS, p. 277
Scope Reg LN Surg	0	FORDS, p. 138
Surg Proc/Other Site	0	FORDS, p. 142
Rad Reg Treatment Mod	00	FORDS, p. 155
Chemotherapy	00	FORDS, p. 171
Hormone Therapy	00	FORDS, p. 175
Immunotherapy	00	FORDS, p. 179
Hem Tsplt & End Proc	00	FORDS, p. 183
Other Treatment	0	FORDS, p. 186

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Case 2: Prostate

Physical Examination

This 71-year-old man went to his primary care physician for a routine physical. His only complaints were nocturia times two and a gradual "slowing down" feeling. The physical examination on 1/29 was within normal limits except for the digital rectal exam which revealed an asymmetric prostate gland with nodularity, R>L. PSA was elevated. The differential diagnosis for the visit was abnormal prostate, suggestive of CA.

Imaging

2/16 CT pelvis: Irregular indentation of bladder. Seminal vesicles enlarged. Streaky densities in periprostatic fat consistent with transcapular spread to periprostatic plexus. Impression: prostatic malignancy with extracapsular extension and probable regional node metastasis.

2/16 Bone scan: Negative for distant metastasis.

Laboratory

PSA: 32.1

Procedures

2/11 Transrectal needle biopsy of prostate:

2/16 Pelvic lymphadenectomy and radical prostatectomy

Pathology

2/11 Prostate biopsy: Moderate to poorly differentiated adenocarcinoma in the right lobe and poorly differentiated cribriform carcinoma in the left lobe of prostate.

2/16 Lymphadenectomy and prostatectomy: Frozen section of removed pelvic lymph nodes demonstrated metastatic adenocarcinoma in one lymph node in the right obturator fossa. Therefore, the radical prostatectomy was canceled. Final pathology diagnosis: Pelvic lymphadenectomy; left obturator fossa, single negative lymph node. Right obturator fossa; metastatic adenocarcinoma in 1/5 lymph nodes. Largest involved node 1.5 cm.

Oncology

3/2: Patient began external beam radiation therapy to the pelvis.

Case 2 Prostate	Answer	Rationale
Date of Dx	02/11	Prostate biopsy; FORDS, p. 89
Primary Site	C61.9	Biopsy path; FORDS, p. 91
Histology	8201/33	Biopsy path; SEER Program Coding and Staging Manual (PCSM) 2004, p. 86, histology coding rules for single tumor #5
CS Extension	41	CT pelvis; extracapsular extension; <i>Collaborative Staging</i> (CS) Manual, p. 518
CS Lymph Nodes	10	Lymphadenectomy path, 1 positive node; CS Manual, p. 520
CS Mets at Dx	00	Bone scan negative; CS Manual, p. 521
SSF 3	097	No prostatectomy; CS Manual, p. 524
Surg Primary Site	00	Prostatectomy cancelled; FORDS, p. 277
Scope Reg LN Surg	5	Lymphadenectomy path, 6 LNs removed; FORDS, p. 138
Surg Proc/Other Site	0	FORDS, p. 142
Rad Reg Treatment Mod	20	External beam; FORDS, p. 155
Chemotherapy	00	None; FORDS, p. 171
Hormone Therapy	00	None; FORDS, p. 175
Immunotherapy	00	None; FORDS, p. 179
Hem Tsplt & End Proc	00	None; FORDS, p. 183
Other Treatment	0	None; FORDS, p. 186

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Case 3: Prostate

Physical Examination

6/25 The patient is a 63-year-old executive who was seen by his physician for a company physical. He stated that he was in excellent health and led an active life. His physical examination was normal for a man of his age. Chest X-ray and chemical screening blood work were within normal limits. His PSA was elevated.

Imaging

6/25 Chest X-ray: Normal.

7/9 CT scan of abdomen and pelvis: No abnormalities.

Laboratory

PSA: 14.6

Procedures

7/2 Ultrasound guided sextant biopsy of prostate: Digital rectal exam performed at the time of the biopsy showed a 1+ enlarged prostate with normal seminal vesicles.

Pathology

7/2 Prostate biopsy: Left apex: adenocarcinoma, moderately differentiated, Gleason's score 3 + 4 = 7/10. Maximum linear extent in apex of tumor was 6 mm. Left mid region prostate: moderately differentiated adenocarcinoma, Gleason's 3 + 2 = 5/10. Left base, right apex, and right mid-region and right base: negative for carcinoma.

Treatment

The patient opted for interstitial prostatic implants of I-125. It was performed as an outpatient on 8/10.

Case 3 Prostate	Answer	Rationale
Date of Dx	07/02	Prostate biopsy; FORDS, p. 89
Primary Site	C61.9	Biopsy path; FORDS, p. 91
Histology	8140/33	Prostate path; Gleason's score takes precedence, FORDS, p. 14 & SEER Program Coding and Staging Manual (PCSM) 2004, p. 95
CS Extension	15	Biopsy path, clinically inapparent tumor identified by biopsy for elevated PSA; <i>Collaborative Staging (CS) Manual</i> , p. 518
CS Lymph Nodes	00	CT of abdomen and pelvis; CS Manual, p. 520
CS Mets at Dx	00	Chest X-ray, normal; CS Manual, p. 521
SSF 3	097	No prostatectomy; CS Manual, p. 524
Surg Primary Site	00	FORDS, p. 277
Scope Reg LN Surg	0	FORDS, p. 138
Surg Proc/Other Site	0	FORDS, p. 142
Rad Reg Treatment Mod	50	Brachytherapy, interstitial NOS; FORDS, p. 156
Chemotherapy	00	FORDS, p. 171
Hormone Therapy	00	FORDS, p. 175
Immunotherapy	00	FORDS, p. 179
Hem Tsplt & End Proc	00	FORDS, p. 183
Other Treatment	0	None; FORDS, p. 186

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Case 4: Prostate

Physical Examination

7/5 Patient is a 46-year-old white male seen for annual physical exam and had an incidental PSA elevation of 4.0. All other systems were normal.

Procedures

7/18 Sextant biopsy of the prostate

7/25 Radical prostatectomy: Excised prostate including capsule, pelvic lymph nodes, seminal vesicles, and small portion of bladder neck.

Pathology

7/18 Prostate biopsy: Right lobe, negative. Left lobe, small focus of adenocarcinoma, Gleason's 3 + 3 in approximately 5% of the tissue.

7/25 Radical prostatectomy: Negative lymph nodes. Prostate gland showing moderately differentiated infiltrating adenocarcinoma, Gleason 3 + 2 extending to the apex involving both lobes of the prostate, mainly right. Tumor overall involved less than 5% of the tissue. Surgical margin was reported and involved at the apex. The capsule and seminal vesicles were free.

Discharge Note

Patient has made good post-op recovery other than mild urgency incontinence. His post-op PSA is 0.1 mg/ml.

Case 4 Prostate	Answer	Rationale
Date of Dx	07/18	Prostate biopsy; FORDS, p. 89
Primary Site	C61.9	Prostate path; FORDS, p. 91
Histology	8140/32	Path report; Gleason's conversion table, FORDS, p. 14 & SEER Program Coding and Staging Manual (PCSM) 2004, p. 96
CS Extension	15	Biopsy path, clinically inapparent tumor, biopsy because of elevated PSA; Collaborative Staging (CS) Manual, p. 518
CS Lymph Nodes	00	Radical prostatectomy path, negative LNs; <i>CS Manual,</i> p. 520
CS Mets at Dx	00	PE, all other systems normal; CS Manual, p. 521
SSF 3	040	Radical prostatectomy path, surgical margin involved at apex; CS Manual, p. 523
Surg Primary Site	50	Radical prostatectomy; FORDS, p. 277
Scope Reg LN Surg	3	Radical prostatectomy op report, pelvic LNs removed, number not stated; <i>FORDS</i> , p. 138
Surg Proc/Other Site	0	FORDS, p. 142
Rad Reg Treatment Mod	00	FORDS, p. 155
Chemotherapy	00	FORDS, p. 171
Hormone Therapy	00	FORDS, p. 175
Immunotherapy	00	FORDS, p. 179
Hem Tsplt & End Proc	00	FORDS, p. 183
Other Treatment	0	FORDS, p. 186

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Case 5: Prostate

History & Physical

Date: 3/15/XX

History of Present Illness: The patient is a 62-year-old male with a Gleason score 8 adenocarcinoma of the prostate involving the left and right lobes. He has a PSA of 3.1, with a prostate gland size of 41 grams. This was initially found on rectal examination with an abnormality on the right side of the prostate, showing enlargement relative to the left. He has undergone evaluation with a bone scan that showed a right parietal lesion uptake and was seen by Dr. X and ultimately underwent an open biopsy that was not malignant. Prior to this, he has also had a Prostascint scan that was negative for any metastatic disease. Again, he is being admitted to undergo a radical prostatectomy, the risks, benefits, and alternatives of which have been discussed, including that of bleeding, and a blood transfusion.

Past Medical History: Coronary stenting. History of high blood pressure, as well. He has erectile dysfunction and has been treated with Viagra.

Medications: Lisinopril, Aspirin, Zocor, and Prilosec.

Allergies: Penicillin.

Social History: He is not a smoker. He does drink six beers a day.

Review of Systems: Remarkable for his high blood pressure and drug allergies, but otherwise unremarkable, except for some obstructive urinary symptoms, with an AUA score of 19.

Physical Examination

HEENT: Examination unremarkable.

Breasts: Examination deferred.

Chest: Clear to auscultation.

Cardiac: Regular rate and rhythm.

Abdomen: Soft and non-tender. He has no hernias.

- Genitourinary: There is a normal-appearing phallus, prominence of the right side of prostate.
- Extremities: Examination unremarkable.
- Neurologic: Examination nonfocal.

Impression

- 1. Adenocarcinoma of the prostate.
- 2. Erectile dysfunction.

Plan: The patient will undergo a bilateral pelvic lymphadenectomy and radical retropubic prostatectomy. The risks, benefits, and alternatives of this have been discussed. He understands and asks that I proceed ahead. We also discussed bleeding and blood transfusions, and the risks, benefits and alternatives thereof.

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Discharge Summary (Case 5: Prostate)

Admit Date: 3/15/XX

Discharge Date: 3/19/XX

Hospital Course: On the day of admission the patient underwent a bilateral pelvic lymphadenectomy with radical retropubic prostatectomy. He did well postoperatively. He did have a slight temperature of 38.4. Hemoglobin was 13.5. On the first postoperative day his urine was relatively clear. His JP output was small and it was removed. He followed the care map well. His pathology report showed Gleason score 9 adenocarcinoma of the prostate with seminal vesicle involvement, margin positive and positive left pelvic lymph nodes. This was discussed with him. His urine is clear.

He will be discharged home to follow-up with me next week with a cystogram. We will have to discuss further adjuvant treatment.

Diagnosis: Adenocarcinoma of prostate.

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Pathology Report (Case 5: Prostate)

Date: 3/15/XX

Specimens

- 1. Pelvis-right pelvic obturator node
- 2. Pelvis-left pelvic obturator node
- 3. Prostate

Post-Operative Diagnosis: Adenocarcinoma of prostate, erectile dysfunction.

Diagnostic Opinion

- 1. Adenocarcinoma, Gleason score 9, with tumor extension to periprostatic tissue, margin involvement, and tumor invasion to seminal vesicle, prostate.
- 2. No evidence of metastatic carcinoma, right pelvic obturator lymph node.
- 3. Metastatic adenocarcinoma, left obturator lymph node; see description.

Clinical History: None listed.

Gross Description

Specimen #1 labeled "right pelvic obturator lymph nodes" consists of two portions of adipose tissue measuring $2.5 \times 1 \times 0.8 \text{ cm}$ and $2.5 \times 1 \times 0.5 \text{ cm}$. There are two lymph nodes measuring $1 \times 0.7 \text{ cm}$ and $0.5 \times 0.5 \text{ cm}$. The entire specimen is cut into several portions and totally embedded.

Specimen #3 labeled "prostate" consists of a prostate. It measures 5 x 4.5 x 4 cm. The external surface shows very small portion of seminal vesicles attached in both sides with tumor induration. External surface also shows tumor induration especially in right side. External surface is stained with green ink. The cut surface shows diffuse tumor induration especially in right side. The tumor appears to extend to excision margin. Multiple representative sections are made.

Microscopic Description

Section #1 reveals lymph node. There is no evidence of metastatic carcinoma.

Section #2 reveals lymph node with tumor metastasis in section of large lymph node as well as section of small lymph node.

Section #3 reveals adenocarcinoma of prostate. Gleason's score 9 (5+4). The tumor shows extension to periprostatic tissue as well as margin involvement. Seminal vesicle attached to prostate tissue shows tumor invasion. Dr. X reviewed the above case. His opinion agrees with the above diagnosis.

Summary

- A. Adenocarcinoma of prostate, Gleason's score 9, with both lobe involvement and seminal vesicle involvement (T3b).
- B. There is lymph node metastasis (N1).
- C. Distant metastasis cannot be assessed (MX).
- D. Excision margin is positive and there is tumor extension to periprostatic tissue.

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Imaging Report (Case 5: Prostate)

Date: 3/1/XX

Whole Body Radionuclide Bone Scan

Indication: Prostate Cancer.

Technique: 3.5 hours following the intravenous administration of 26.5 mCi of Technetium 99m MDP, the skeleton was imaged in the anterior and posterior projections.

Findings: There is a focus of abnormal increased tracer activity overlying the right parietal region of the skull. The uptake in the remainder of the skeleton is within normal limits. The kidneys image normally. There is increased activity in the urinary bladder suggesting possible urinary retention.

Conclusion

- Focus of abnormal increased tracer activity overlying the right parietal region of the skull. CT scanning of magnetic resonance imaging of the skull and brain could be done for further assessment if it is clinically indicated.
- 2. There is probably some degree of urinary retention.

Case 5 Prostate	Answer	Rationale
Date of Dx	03/01	Bone scan, indication states prostate cancer, exact date unknown but 3/1 is earliest date from available documentation; <i>FORDS</i> , p. 89
Primary Site	C61.9	H & P; FORDS, p. 91
Histology	8140/33	Prostatectomy path; Gleason's conversion table; FORDS, p. 14; SEER Program Coding and Staging Manual (PCSM) 2004, p. 96 & FORDS, p. 14
CS Extension	23	H & P, involves left and right lobes, clinically apparent – found on rectal exam; <i>Collaborative Staging (CS) Manual</i> , p. 518
CS Lymph Nodes	10	Lymphadenectomy path, involved obturator LNs; CS Manual, p. 520
CS Mets at Dx	00	PE, parietal bone lesion negative per biopsy; <i>CS Manual</i> , p. 521
SSF 3	045	Prostatectomy path; seminal vesicle involvement; CS Manual, p. 523
Surg Primary Site	50	Radical prostatectomy per DS & path; FORDS, p. 277
Scope Reg LN Surg	5	Bilateral pelvic lymphadenectomy, 4 obturator nodes excised; <i>FORDS</i> , p. 139
Surg Proc/Other Site	0	FORDS, p. 142
Rad Reg Treatment Mod	00	FORDS, p. 155
Chemotherapy	00	FORDS, p. 171
Hormone Therapy	00	FORDS, p. 175
Immunotherapy	00	FORDS, p. 179
Hem Tsplt & End Proc	00	FORDS, p. 183
Other Treatment	0	FORDS, p. 186