LUNG EOD CASE

Social History

30 y/o White male, single, born in California. Insurance: Private insurance, managed care.

Physical Exam

06/02/2018 - HPI: Pt w/ recurring pneumonias in LLL, on recent exam found obstructing apparently inflammatory mass occluding LLL segmental airways. PTA bxs taken w/ NE malig, being reviewed here. PE: Mild nontender Lt mid anterior cervical chain LN. No addl cervical or SCV LAD. IMP: Suspicious LLL endobronchial mass (2 cm), likely causing recurrent pneumonias. Plan: PET/CT w/ likely need for tumor removal.

07/06/2018 - Discharge Summary: Pt s/p lobectomy for carcinoma.

Scans

04/24/2018 - PTA CT Chest: Occlusion of truncus basalis of LLL w/ associated post-obstructive process. 2 cm mass-like area in this region w/ calcification. Minimal prominent LNs in mediastinum up to 8 mm.

06/26/2018 - PET CT (Mid body): Hypermetabolic focus in Lt hilar region, associated w/ soft tissue lesion, could represent low grade bronchial tumor. LLL consolidation improved since 04/24/2018. No other suspicious hypermetabolic foci.

Operative Reports

07/01/2018 - Bronchoscopy w/ bx and Lt lower lobectomy through thoracoscopy converted to muscle-sparing thoracotomy: Extensive tumor obstruction involving all his basilar segments at end of lobar bronchus. Bx's w/ low grade epithelial neoplasm, so proceeded w/ lobectomy. Id'd mass like lesion in fissural aspect LLL. Open inspection of bronchus demonstrated tumor was a few mm from resection line.

Treatment Plan

08/13/2018 - Mucoepidermoid ca of lung, very rare type of tumor. Given low risk features of his tumor, further treatment likely unnecessary. Recommend CT scan every 6 months.

05/14/2018 - Path Report #1

FINAL DIAGNOSIS
Review of slides (05/14/2018). Received 05/28/2018.
Left lower lobe of lung, endobronchial biopsy: Minute fragment of benign-appearing squamous epithelium in a background of blood and fibrin, non-diagnostic of neoplasm.

07/01/2018 - Path Report #2

FINAL DIAGNOSIS
A) Lung, left lower lobe endobronchial tumor, excision: Mucoepidermoid carcinoma. See Summary Cancer Data.

B) Station 7 lymph node, excision: 1 lymph node negative for carcinoma.

C) Lung, left lower lobe, lobectomy: Mucoepidermoid carcinoma. See Summary Cancer Data.

SUMMARY CANCER DATA
Specimen and Tumor Location
Tumor laterality: Left.
Tumor site: Lower lobe.
Tumor location in lung: Airway associated.
Specimen integrity: Intact.
Characteristics and Extent of Tumor:
Histologic type: Mucoepidermoid carcinoma (84303).
- Comment about histologic type: Positive mucin and PAS-diastase stains confirm the diagnosis.
Histologic grade: G2: Moderately differentiated.
Tumor diameters: Greatest diameter: 4.9 cm.
Tumor extent: Superficial spreading endobronchial tumor with invasive component limited to bronchial wall (T1a).
Lymphatic (small vessel) invasion: Absent.
Previous treatment: No.
Pleural invasion: Absent.
Final Surgical Resection Margins: All margins or staple lines free of carcinoma by at least 0.5 cm.
Lymph Node Status:
- N1 nodes: Nodes with carcinoma: 2 / Total nodes examined: 8.
- N2 nodes: Nodes with carcinoma: 0 / Total nodes examined: 1.
- N3 nodes: Nodes with carcinoma: 0 / Total nodes examined: 0.
- Extranodal extension: Not identified.
- Comment about lymph nodes: The two positive N1 nodes are involved by direct extension of the tumor.
Minimum Pathologic Stage (AJCC, 8th ed.): pT1a pN1.
Additional pathologic findings: Associated organizing pneumonia

IMMUNOHISTOCHEMISTRY STUDIES
Block (Original Label): C17

Population: Tumor cells

Block	Label	Marker For	Results	Special Pattern or Comments
C17	CK 5	Cytokeratin 5 (EP1601Y)	Negative	

C17 TTF-1 Thyroid Transcription Factor 1 [8G7G3/1], TTF Negative

CLINICAL DATA
Left endobronchial mass.

GROSS DESCRIPTION
A) Received fresh for intraoperative consultation in a container labeled "Left lower lobe endobronchial tumor" are two tan-pink fragments of soft tissue measuring 1 x 0.9 x 0.8 cm and 0.7 x 0.7 x 0.5 cm. The fragments are bisected and one half of each is submitted for frozen. The frozen section residue is submitted in cassette AFS1. The remaining tissue is submitted in cassette A2.

B) Received in formalin labeled "Station 7 lymph node" is a 1.0 x 0.6 x 0.5 cm black, anthracotically-stained lymph node; bisected and entirely submitted in cassette B1.

C) Received fresh in a container labeled "C. Left lower lobe" is a 191 g, 12 x 8 x 4.5 cm left lower lobe of lung. The pleura is tan-pink, smooth and glistening, with a moderate amount of anthracotic pigment within the lymphatic channels. No external masses or lesions are appreciated grossly. The bronchial margin of resection is unremarkable and grossly there is a palpable mass which comes within 0.9 cm of the bronchial margin at its closest point. The palpable mass is inked blue. 2.5 cm from the bronchial margin of resection is a 5.5 cm length of resected surface which is inked orange. The lobe is inflated with formalin and fixed overnight. The bronchi are opened longitudinally to a depth of approximately 3 cm and the lumina contain a scant amount of mucoid material. Approximately 0.9 cm from the bronchial margin of resection, there is a friable, dark red irregular lesion protruding in the airway. The lesion appears to be confined to the bronchus and does not appear to extend out into lung parenchyma. Upon dissection of the airways, two black, somewhat firm lymph node candidates are identified measuring 0.5 x 0.4 x 0.3 cm and 0.2 x 0.2 x 0.2 cm. The lung is serially sectioned perpendicularly to the palpable mass and cut surfaces reveal a large area of tan-brown consolidation measuring 5.5 x 4.5 cm in greatest dimension. The lung is sectioned in approximately 0.5 cm intervals and no additional masses or lesions are appreciated grossly. The palpable mass measures 2 x 2.2 x 1.2 cm. Grossly, the closest the described lesion comes to the orange marked resection margin is 1 cm grossly. Representative sections are submitted as follows:
C1 - bronchial margin shave, frozen section residue
C2 - two individual lymph node candidates
The entire area of tumor is blocked in cassettes C3-C20
C3-C5 - one composite section
C6-C7 - one composite section
C8-C9 - one composite section
C10-C14 - one composite section (C10 demonstrates relationship to orange ink, C14 demonstrates relationship to pleura)
C15-C17 - one composite section
C18-C19 - one composite section
C20 - representative sections of uninvolved normal appearing lung and area of described consolidation

EOD Primary Tumor	
EOD Regional Nodes	
EOD Mets	
Summary Stage 2018	

BREAST EOD CASE

Social History

Widowed, Romanian, female. Born in Romania. Insurance: Medicare and Blue Cross.

Physical Exam

05/21/2018 - cc: Rt breast lobular ca. HPI: Pt noticed Rt breast more firm. Had bilat mammo and U/S PTA on 04/08/2018. Mammo showed Rt breast w/ increased density spanning 4 - 5 cm w/ some nipple retraction and skin thickening. U/S w/ skin thickening and hypoechoic subareolar mass, 35 x 10 x 36 mm, contiguous w/ retracted nipple. Two nodes in axilla w/ cortex thicker than expected. PTA 04/22/2018 Rt breast bx id'd invasive lobular ca and FNA of Rt axillary LN negative. PTA mastectomy performed 05/07/2018. IMP: Multifocal pT3 N1mi M0 invasive lobular ca. Plan: In light of her advanced age and comorbidities, I would not recommend chemotherapy. Because of hx of osteoporosis would not recommend aromatase inhibitor, but should consider Tamoxifen. Will refer to Rad Onc.

Scans

06/05/2018 - PET: No evidence of metastasis.

Operative Reports

05/07/2018 - PTA Right total mastectomy with right axillary sentinel lymph node biopsy (procedure only).

Radiation Text

07/07/2018 - Rt chest wall and axilla treated w/ 3D conformal rads to a total of 5040 cGy using 6 MV photons over 28 fractions. Rt chest wall received a total boost of 1000 cGy using 6 MeV electrons over 5 fractions. Dates given: 07/07/2018 to 08/20/2018.

Hormonal Text

09/16/2018 - Prescription given for Tamoxifen.

04/22/2018 - Path Report #1

FINAL DX
A. RIGHT BREAST, 5:30 3 CM FROM NIPPLE, ULTRASOUND-GUIDED CORE BIOPSY: INVASIVE LOBULAR CARCINOMA WITH THE FOLLOWING FEATURES:
1. HISTOLOGIC GRADE: Nottingham grade 1 of 3 (tubule formation score 3, nuclear pleomorphism score 1, mitotic rate score 1, total score 5).
2. HISTOLOGIC TYPE OF INVASIVE CARCINOMA: Invasive lobular carcinoma.

3. LYMPH-VASCULAR INVASION: Not identified.
4. DUCTAL CARCINOMA IN SITU: Not identified.
5. ANCILLARY STUDIES: Breast panel of hormone receptor immunohistochemistry studies pending; these results will be issued as an addendum.

B. RIGHT AXILLARY LYMPH NODE, ULTRASOUND-GUIDED FINE NEEDLE ASPIRATE: NEGATIVE FOR METASTATIC CARCINOMA.

SPECIMEN(S)
A. Ultrasound right breast 5:30 3 cm from nipple core biopsy.
B. Ultrasound right axilla lymph node FNA.

CLINICAL INFO
A. BI-RADS5, ? ILC cancer vs. fibrocystic change.

GROSS
A. SPECIMEN: Received in formalin, labeled with the patient's name, and "ultrasound biopsy right breast 5:30 3 cm from nipple." NUMBER OF CORES: Six. SIZE: Ranging from 0.4 to 1.2 cm in length x 0.1 cm in average diameter. INK: Orange. RADIOGRAPH: Absent. SUMMARY OF SECTIONS: A1: Breast cores, submitted entirely and wrapped.

B. Received labeled with the patient's name and "ultrasound right axilla lymph node FNA" is 35 mL of clear fluid with CytoLyt fixative added from which one monolayer preparation slide and one cell block are made.

MICROSCOPIC
A. HE stained sections of the core biopsy material show an infiltrative epithelial neoplasm consistent with invasive lobular carcinoma; this interpretation is supported by immunohistochemical evaluation performed on block A1, which demonstrates that these singly distributed cells are uniformly OSCAR positive.

B. One Pap stained monolayer cytology slide and one HE stained cell block section are reviewed. The slides show scattered lymphoid cells consistent with lymph node. Metastatic carcinoma is not identified.

ADDENDUM
IMMUNOCYTOCHEMICAL CANCER MARKER STUDIES
Specimens: A: BREAST BIOPSY

MATERIALS
BLOCK: A1
SPECIMEN TYPE: Breast
TUMOR TYPE: Invasive
FIXATIVE: Formalin (10% neutral buffered)
DURATION OF FIXATION (>6 AND <72 HOURS): Yes
COLD ISCHEMIA TIME (<1 HOUR): Yes

ANALYSIS SUMMARY
ESTROGEN RECEPTOR: POSITIVE FOR ER PROTEIN EXPRESSION
Percentage of tumor cells exhibiting nuclear staining: 98
Staining Intensity: Strong
Internal Controls: Not Present
External Controls: Positive
PROGESTERONE RECEPTOR: POSITIVE FOR PR PROTEIN EXPRESSION
Percentage of tumor cells exhibiting nuclear staining: 95
Staining Intensity: Strong
Internal Controls: Not Present
External Controls: Positive
CERBB2 (HER-2 NEU) ONCOGENE:
NEGATIVE FOR HER2 PROTEIN OVEREXPRESSION (SCORE 0)
Percentage of tumor cells exhibiting complete membrane staining: 0
Internal Controls: Not Present
KI-67 ANTIGEN: LOW (<10%)
Percentage of positive cells: 7

05/07/2018 - Path Report #2

FINAL DX
A. RIGHT BREAST, SIMPLE MASTECTOMY: INVASIVE LOBULAR CARCINOMA, SEE SUMMARY BELOW.

B. RIGHT SENTINEL LYMPH NODE #1, BIOPSY: ISOLATED TUMOR CELLS IDENTIFIED IN ONE OF ONE LYMPH NODES.

C. RIGHT SENTINEL LYMPH NODE #2, BIOPSY: MICROMETASTATIC CARCINOMA (1.3 MM) IDENTIFIED IN ONE OF ONE LYMPH NODES. NO EXTRANODAL EXTENSION IDENTIFIED.

D. SKIN, INFERIOR MEDIAL MARGIN, BIOPSY: INVASIVE LOBULAR CARCINOMA EXTENDING TO THE DEEP AND PERIPHERAL RESECTION MARGINS.

BREAST CANCER STAGING SUMMARY
1. PROCEDURE: Simple mastectomy.
2. LYMPH NODE SAMPLING: Sentinel lymph nodes #1 and #2.
3. SPECIMEN LATERALITY: Right.
4. TUMOR SITE: Predominantly subareolar extending into all four quadrants.
5. HISTOLOGIC TYPE OF INVASIVE CARCINOMA: Invasive lobular carcinoma.
6. TUMOR SIZE: 70 mm (largest tumor mass); additional satellite tumors range from 0.4 mm to 4 mm.
7. HISTOLOGIC GRADE: Grade II of III.
   a. Nottingham histologic score: Tubular differentiation score 3, nuclear pleomorphism score 2, mitotic rate score 1, total score 6 of 9.
8. TUMOR FOCALITY: Multiple foci (at least 10) throughout entire breast.

9. DUCTAL CARCINOMA IN SITU (DCIS): Present.
a. ARCHITECTURAL PATTERN: Solid.
b. NUCLEAR GRADE: Intermediate (grade 2).
c. NECROSIS: Not present.
d. ASSOCIATED MICROCALCIFICATIONS: Not identified.
e. EXTENSIVE INTRADUCTAL COMPONENT: Negative.
10. MARGINS:
a. INVASIVE CARCINOMA:
i. POSTERIOR MARGIN: Focally involved by invasive carcinoma.
ii. ANTERIOR-INFERIOR MARGIN: Involved by invasive carcinoma at medial dermal/subcutaneous margins; separately submitted additional inferior medial skin margin (specimen D) involved by invasive carcinoma which extends to the peripheral and deep resection margins.
iii. ANTERIOR-SUPERIOR MARGIN: 4 mm from invasive carcinoma.
b. DUCTAL CARCINOMA IN SITU:
i. ANTERIOR-SUPERIOR MARGIN: 10 mm from DCIS.
ii. ANTERIOR-INFERIOR MARGIN: >10 mm from DCIS.
iii. POSTERIOR MARGIN: >10 mm from DCIS.
11. MACROSCOPIC AND MICROSCOPIC EXTENT OF TUMOR:
a. SKIN: Invasive carcinoma directly invades into the dermis without skin ulceration.
b. NIPPLE: Invasive carcinoma invades into the dermis of nipple, no DCIS of the nipple epidermis is identified.
c. SKELETAL MUSCLE: Not present.
12. LYMPH-VASCULAR INVASION: Present.
13. LYMPH NODES:
a. NUMBER OF SENTINEL LYMPH NODES EXAMINED: 2.
b. TOTAL NUMBER OF LYMPH NODES EXAMINED (SENTINEL AND NONSENTINEL): 2.
c. NUMBER OF LYMPH NODES WITH MACROMETASTASES: 0.
d. NUMBER OF LYMPH NODES WITH MICROMETASTASES: 1.
e. NUMBER OF LYMPH NODES WITH ISOLATED TUMOR CELLS: 1.
f. TOTAL NUMBER OF POSITIVE LYMPH NODES (MACRO- AND MICROMETASTASES): 1.
g. NUMBER OF LYMPH NODES WITHOUT TUMOR CELLS IDENTIFIED: 0.
h. SIZE OF LARGEST METASTATIC DEPOSIT: 1.3 mm.
i. EXTRANODAL EXTENSION: Not present.
j. METHOD OF EVALUATION OF SENTINEL LYMPH NODES: 3 HE-stained levels and pancytokeratin immunohistochemical stains.
14. TREATMENT EFFECT: No known presurgical therapy.
15. ADDITIONAL PATHOLOGIC FINDINGS: Seborrheic keratosis.
16. ANCILLARY STUDIES: See Breast Biomarker summary below.
17. PATHOLOGIC STAGING (AJCC 8TH ED.): pT3(m), pN1mi(sn).

BREAST BIOMARKER SUMMARY
RESULTS: Performed on prior biopsy:
1. ESTROGEN RECEPTOR (ER): Strong positive, 98%.

2. PROGESTERONE RECEPTOR (PgR): Strong positive, 95%.
3. HER2 (by immunohistochemistry): Negative.
4. HER2 (by in situ hybridization): Not performed.
5. Ki-67: Low, 7%.

METHODS:
1. FIXATIVE: Formalin.
2. ESTROGEN RECEPTOR: SP1.
3. PROGESTERONE RECEPTOR (PgR): SP2.
4. HER2 (by immunohistochemistry): SP3.
5. HER2 (by in situ hybridization): Dako HER2 FISH pharmDX.
6. Ki-67: MIB1.

SPECIMEN(S)
A. Right breast.
B. Right sentinel node #1.
C. Right sentinel node #2.
D. Inferior medial skin margin.

GROSS
A. Received in formalin, labeled with the patient's name and designated "right breast," is 411 g, unoriented simple right mastectomy measuring 19.0 cm from superior to inferior, 4.8 cm from anterior to posterior, and 14.5 cm from medial to lateral. The skin ellipse on the anterior surface measures 14.0 x 7.3 cm. The tan-pink everted nipple measures 1.4 cm in diameter x 0.5 cm in length, and is surrounded by a faintly pigmented areola measuring 2.5 cm in diameter. A 2.0 cm area of yellow-gray papillary lesion is present on the skin surface at the 5:00 N+3 position, as well as a 1.0 cm papillary yellow-tan area on the skin surface at the 8:00 N+6 position. No skeletal muscle is present on the posterior surface of the breast. The specimen is differentially inked to allow for microscopic evaluation of surgical resection margins as follows:

Anterior-superior Blue
Anterior-inferior Green
Posterior Black

Sectioning reveals an ill-defined, extensively indurated area present in all four quadrants of the breast, measuring 7.0 cm from the medial to lateral, 7.0 cm from superior to inferior, and 4.0 cm from anterior to posterior. A biopsy site with associated gritty white biopsy material is present at the 5:00 N+3 position, measuring 1.0 cm in greatest dimension and located 0.2 cm from the anterior-inferior resection margin, 1.2 cm deep to the skin, 1.0 cm from the posterior resection margin, and 4.0 cm from the anterior-superior resection margin. This previous biopsy site is located at the medial edge of the previously mentioned suspicious area. The suspicious area located in all four quadrants is located within 0.5 cm of the posterior resection margin, 1.0 cm of the anterior-inferior resection margin, and 1.2 cm of the anterior-superior resection margin. The previous biopsy site is located deep to the previously mentioned 5:00 papillary skin lesion. No other discrete lesions or masses are identified. The remaining uninvolved breast tissue consists of 20% tan-white fibrous tissue admixed with 80% tan-yellow glistening and lobulated adipose tissue. Representative sections are submitted as follows:

A1 Perpendicular section through nipple
A2 5:00 previous biopsy site to skin
A3 5:00 previous biopsy site to skin and anterior-inferior resection margin
A4 Suspicious area to posterior resection margin
A5 Suspicious area to anterior-superior resection margin
A6 Suspicious area to posterior resection margin
A7 Lateral most edge of suspicious area at the 9:00 N+6 position
A8 Uninvolved upper-outer quadrant
A9 Lower-outer quadrant
A10 Upper-inner quadrant
A11 Lower-inner quadrant

B. Received in formalin, labeled with the patient's name and designated "right sentinel node #1," is a 1.2 cm lymph node candidate, which is bisected to reveal tan-pink to tan-white firm homogeneous cut surface. The bisected lymph node candidate is submitted entirely in cassette B1.

C. Received in formalin, labeled with the patient's name and designated "right sentinel node #2," is a 1.5 cm single lymph node candidate, which is bisected to reveal a tan-pink to tan-yellow firm homogeneous cut surface. The bisected lymph node candidae is submitted entirely in cassette C1.

D. Received in formalin, labeled with the patient's name and designated "inferior medial skin margin," is an unoriented tan-pink wrinkled skin ellipse with underlying tan-yellow lobulated subcutaneous tissue. The skin ellipse measures 5.8 x 1.0 cm, and the subcutaneous tissue is resected up to a depth of 1.0 cm. The resection margin is marked with blue ink and the skin ellipse is serially sectioned to reveal tan-yellow lobulated subcutaneous tissue deep to the skin, with no discrete lesions or masses identified. Representative sections are submitted in D1 and D2.

MICROSCOPIC
A-D. Sections are examined. Pan-cytokeratin immunohistochemical stains are performed on the sentinel lymph node biopsies (blocks B1 and C1). The stains highlight the isolated tumor cells as well as the small focus of micrometastasis.

EOD Primary Tumor	
EOD Regional Nodes	
EOD Mets	
Summary Stage 2018	

MELANOMA EOD CASE

Social History

35 year old Lebanese female, married, born in Lebanon. Insurance: Private insurance.

Physical Exam

10/07/2018 - cc: Melanoma midline upper back. HPI: Over last few months, pt noticed a lesion that developed on her midline upper back. PTA shave bx revealed melanoma. Pt referred here for further tx. PE: Back lesion at T4 healing, this is approx 1 cm to the Rt of the spine. No axillary or clavicular LAD noted. IMP: T4aN0M0, stage 2B melanoma upper back. Plan: WLE and sentinel LN bx.

Scans

11/07/2018 - CT Chest/Abd/Pelvis: S/p Rt axillary nodal dissection w/ post surgical changes. Non-enlarged small Rt axillary LNs. NE mets in chest, abd or pelvis.

Operative Reports

10/31/2018 - Lymphatic mapping, Rt axillary sentinel LN dissection, WLE Rt back skin lesion (outpatient procedure only).

12/08/2018 - Rt complete axillary LN dissection (procedure only).

Treatment Plan

11/12/2018 - Standard tx is completion lymphadenectomy.

01/12/2019 - Pt agreeable with surveillance as adjuvant Interferon has low benefit rate.

09/22/2018 - Path Report #1

FINAL DIAGNOSIS:
Review of slides (09/22/2018) Received: 10/02/2018
Skin, midline upper back, shave biopsy: Malignant melanoma, with the following prognostic parameters:

1. Approximate Breslow thickness: 7.5 mm
2. Clark's level: IV.
3. Ulceration: Not identified.
4. Mitotic rate: >11/mm2.
5. Lymphocapillary invasion: Present.
6. Satellitosis: Not identified.
7. Perineural invasion: Not identified.

8. Lymphocytic infiltrate: Present, non-brisk.
9. Regression: Focal.
10. Margins: Present at inked peripheral margins, free of the inked deep margin.
11. Melanoma in situ: Present.
12. Additional findings: Associated intradermal melanocytic nevus.

COMMENT:
Provided immunostains strongly and diffusely label the population with Melan-A and HMB45, with estimated regional Ki-67 proliferation index at 20-30%.

GROSS DESCRIPTION:
Received are three glass slides labeled with the patient's name and accession number. Included is a single H&E-stained slide and 2 IHC/controls (HMB45, Melan-A/Ki-67).

10/31/2018 - Path Report #2

FINAL DIAGNOSIS:
A) Lymph node, right axillary sentinel, excision:
One lymph node positive for metastatic melanoma; focus of melanoma measures at least 0.5 cm with no extracapsular extension.

B) Skin and subcutaneous tissue, right upper back, excision:
No residual malignant melanoma identified.
Changes consistent with previous biopsy site.

CLINICAL DATA:
Wide local excision right upper back lesion.

GROSS DESCRIPTION:
A) Received in a container of formalin labeled "right axillary sentinel lymph node" is a 1.5 x 0.6 x 0.6 cm congested, rubbery portion of tissue. The specimen is bisected and there is a subcapsular 0.5 cm black nodule. The specimen is entirely submitted in cassette A1.

B) Received in a container of formalin labeled "right back skin lesion" is a 7.5 x 3.0 x 0.9 cm tan skin ellipse. There is a central 0.5 x 0.5 cm previous biopsy site. The epidermis around the biopsy site has been injected with blue dye. There is a long suture attached to the lateral side of the specimen and a short suture attached to the superior tip of the ellipse. The margins of resection are inked as follows: superior lateral - blue, inferior - orange, and the entire medial side of the margin is marked with black ink. The specimen is sectioned and there are tan, rubbery cut surfaces, and no gross residual tumor is appreciated. Representative sections are submitted labeled:
B1 - superior inferior tips
B2-B6 - entire skin biopsy site and surrounding normal appearing skin

12/08/2018 - Path Report #3

FINAL DIAGNOSIS:
A) Lymph nodes, right levels I, II, III, axillary, excision:
1. 13 lymph nodes negative for metastatic melanoma.
2. Skin and subcutis with previous surgical site changes.

CLINICAL DATA:
Melanoma, excision.

GROSS DESCRIPTION:
A) Received in formalin labeled "right levels I, II, III, axillary nodes, suture apex level III" is a 10.5 x 5.5 x 3.0 cm portion of axillary fatty tissue weighing 60 g. There is an attached ellipse of tan-white skin, 4.5 x 0.5 cm. On sectioning, there are 13 possible lymph node candidates, including a previous surgery site in the subcutis. The lymph node candidates range from 0.3 to 1.5 cm in greatest dimension. The lymph node candidates and additional tissue are submitted as follows:
A1 - random skin
A2-A3 - sections of surgical site with possible lymph node tissue below the skin surface
A4 - one possible lymph node candidate from level I
A5 - four separate possible lymph node candidates from level II
A6 - five separate lymph nodes from level III
A7 - two separate lymph nodes from level III

EOD Primary Tumor	
EOD Regional Nodes	
EOD Mets	
Summary Stage 2018	

KIDNEY EOD CASE

Social History

66 yr old Native American male. BP: OR. Insurance: Indian Health Service.

Physical Exam

01/27/2018 - HPI: Pt w/ end-stage renal disease secondary to polycystic kidney disease and hypertension. Pt has been on hemodialysis since 2003 and was recently selected by committee for a kidney transplant. Because of the size of the native kidneys, he needs to have one of the kidneys removed. Pt is otherwise completely asymptomatic. Plan: Open Rt native nephrectomy.

02/10/2018 - Discharge Summary: ESRD secondary to polycystic kidney disease. Pt s/p Rt native nephrectomy required for transplant. Plan: Kidney transplant once a donor is available.

Operative Reports

01/31/2018 - Rt total nephrectomy, native kidney, incidental appendectomy (procedure only).

01/31/2018 - Path Report #1

FINAL DIAGNOSIS
A) Right kidney (2925g), nephrectomy:
1. Renal parenchyma with focus of low grade renal cell neoplasm. (See comment)
2. Numerous simple epithelium-lined cysts with variable papillary excrescences, consistent with the patient's history of polycystic kidney disease.
3. Foci of renal parenchymal hemorrhage and fibrinous debris with surrounding fibrosis, hemosiderin-laden macrophages, and foamy macrophages.
4. Margins of resection free of tumor.

B) Appendix, appendectomy: Appendix with fibrous obliteration of the tip and no evidence of inflammation or carcinoma.

COMMENT
In the background of multiple cysts, mostly lined by simple cuboidal epithelium and with varying degrees of complexity, there are multiple foci of solid areas composed of cells with clear and foamy cytoplasm. There is one focus that measures 1.1 x 0.5 cm in the largest cross sectional dimension. The immunohistochemical stain CAIX for this focus demonstrates variable positivity, while a CK7 stain shows diffuse positivity. Histologic and immunophenotypic findings are consistent with a low grade renal cell carcinoma, papillary type.

CLINICAL DATA
Patient with renal polycystic disease.

GROSS DESCRIPTION
A) Received fresh labeled "Right kidney" is a 2925 g, 28 x 18 x 15 cm polycystic kidney with moderate amount of perinephric fat attached. The ureter cannot be identified. The renal pelvis is bisected, revealing numerous cysts ranging in size from 0.2 cm to 5.0 cm. The cysts are filled by a combination of straw-colored fluid, mucous, and blood. A tan-brown mass measuring 1 x 0.8 cm is identified in the mid portion of the mass. A similar mass measuring 2 x 1.2 cm is identified in the mid upper portion. Representative sections are submitted as follows:
A1 - vascular and presumed ureter margin
A2-A4 - cyst
A5 - pelvic fat
A6 - one mass
A7-A9 - second mass

B) Received in formalin labeled "Appendix" is an appendix measuring 5 x 0.5 cm with 8 x 2.5 cm of attached periappendiceal fat. The serosal surface is tan-pink. The appendix is serially sectioned to reveal an unremarkable cut surface. No mass lesions are identified. Representative sections are submitted as follows:
A1 - tip, body, surgical margin (inked blue)

IMMUNOHISTOCHEMISTRY STUDIES
Block (Original Label): A4
Population: Neoplastic cells

Label	Marker For	Results	Special Pattern or Comments
CAIX	Carbonic Anhydrase IX	Positive, variably	
RCC	Renal cell carcinoma, Clone 66.4	Positive, variably	
CK7	Cytokeratin 7 [OV-TL 12/30]	Positive, uniformly	

EOD Primary Tumor	
EOD Regional Nodes	
EOD Mets	
Summary Stage 2018	

PROSTATE EOD CASE

Social History

71 yr old Black male, married. Born in Aruba. Insurance: Medicare.

Physical Exam

08/20/2018 - cc: Newly dx'd T1c, Gleason 6 prostate adenoca. HPI: PSA has been slowly rising for a few years. PTA PSAs were elevated. PTA TRUS- guided prostate bx on 08/04/2018 revealed Gleason 6 prostate adenoca, w/ dominant lesion being 1.0 cm in Rt transition zone. No complaints of mets disease. DRE: Prostate smooth w/o nodules or induration. IMP: T1c prostate adenoca. Discussed active surveillance vs. treatment. Pt not comfortable w/ active surveillance. Plan: Pt leaning towards surgery.

11/07/2018 - Discharge Summary: Pt w/ prostate ca, s/p radical prostatectomy.

Labs

06/28/2018 - PTA PSA: 5.57 ng/mL (0 - 4 ng/mL normal).

Operative Reports

11/04/2018 - Robotic assisted laparoscopic radical prostatectomy: No obvious tumor extension to pelvic LNs. No obvious extraprostatic extension.

08/04/2018 - Path Report #1

FINAL DIAGNOSIS:
Review of slides (08/04/2018) Received: 08/20/2018
Prostate needle core biopsies as designated:
1) Left transition #1, left transition #2, left medial base, left medial mid, left medial apex, left lateral base, left lateral apex, right medial base (1L, 1L3,2L 2L3,3L 3L3,4L 4L3,5L 5L3,6L 6L3,8L 8L3,11L 11L3)
   Benign prostatic tissue
2) Left lateral mid (7L 7L3)
   Few atypical glands suspicious but not diagnostic for carcinoma
3) Right transition #1 (9L 9L3)
   Carcinoma Cancer length: 0.05cm Total core length: 1.5cm Pos cores: 1 of 1
4) Right transition #2 (10L 10L3)
   Carcinoma Cancer length: 0.7cm Total core length: 1.5cm Pos cores: 1 of 1
5) Right medial mid (12L 12L3)
   Few atypical glands strongly suspicious for carcinoma.
6) Right medial apex (13L 13L3)
   Fibromuscular tissue, no prostatic glands, no carcinoma identified.

7) Right lateral base (14L 14L3)
Fibromuscular tissue, no prostatic glands, no carcinoma identified.
8) Right lateral mid (15L 15L3)
Carcinoma Cancer length: 0.2cm Total core length: 1.9cm Pos cores: 1 of 1
9) Right lateral apex (16L 16 L3)
Carcinoma Cancer length: 0.1cm Total core length: 2cm Pos cores: 1 of 1

Summary Findings
Histologic type: Adenocarcinoma (conventional type) (81403)
Gleason grade: Primary: 3 Secondary: 3 Score: 6
Perineural invasion: Not identified.

11/04/2018 - Path Report #2

FINAL DIAGNOSIS:
A) Prostate, radical prostatectomy: Prostatic adenocarcinoma; please see Summary Cancer Data.

SUMMARY CANCER DATA:
Specimen and Tumor Location
Specimen type: Radical Prostatectomy
Specimen weight: 38g
Specimen weight includes: Prostate without seminal vesicles
Characteristics and Extent of Neoplasm
Histologic type: Adenocarcinoma, NOS (81403)
Histologic (Gleason) Grade: Primary: 3 + Secondary: 4 = Total: 7
Estimated volume (in cc): 0.9
Involved quadrants: Left posterior
Right anterior
Right posterior
Extraprostatic extension: Absent
Seminal vesicle invasion: Left S.V. present; negative for invasion
Right S.V. present; negative for invasion
Angiolymphatic invasion: Not identified
Extensive perineural invasion: Not identified
Therapy prior to surgery: No
Final Surgical Resection Margins
Prostatic apex: Carcinoma is absent (apical margin is negative)
Bladder neck: Carcinoma is absent (bladder neck margin is negative)
Circumferential margins: All circumferential margins are free of carcinoma
Minimum Pathologic Stage (AJCC 8th ed.)
Primary tumor (pT): pT2: Organ-confined
Regional lymph nodes (pN): pNX

CLINICAL DATA:
Prostate cancer.

GROSS DESCRIPTION:
A) Received fresh in a container labeled "prostate" is a 38 g prostate without its attached intact left and right seminal vesicles and vasa deferentia. After inking the right side black, right rectal surface green, left side blue, and left rectal surface orange, transverse sections are made revealing medium bilateral periurethral nodular hypertrophy, and no grossly apparent cancer. Approximately 5 g of tissue are removed for future investigative studies as RA, LA, RM, LM, RB, LB. The gland is fixed in formalin and embedded as follows:
A1 - apex
A2 - base
Serial sections from distal to proximal, as follows:
A3-A4 - most distal transverse section
A5-A6 - next transverse section
A7- A10 - next transverse section, and RA, LA
A11-A14 - next transverse section
A15-A18 - next transverse section, and RM, LM
A19-A22 - next transverse section
A23-A26 - next transverse section, and RB, LB
A27-A30 - next transverse section
A31-A32 - most proximal transverse section, which includes the seminal vesicles

EOD Primary Tumor	
Prostate Path Extension	
EOD Regional Nodes	
EOD Mets	
Summary Stage 2018	