ICD-O-3
Adenocarcinoma, endometrioid NOS
8380/3
Site: Endometrium
C54.1
OD 2/18/13

[redacted]

[redacted] A

Surg Path

UUID:2B1515A6-001A-46AF-952C-D393944DE57F
TCGA-B5-A5OC-01A-PR
Redacted

CLINICAL HISTORY:

Malignant neoplasm of the corpus uteri

GROSS EXAMINATION:

A. "Uterus, cervix, bilateral tubes and ovaries (AF1-2)", received fresh for frozen section and placed in formalin on [redacted] and consists of a 270 gm, 12.2 x 6.8 x 5.4 cm uterus with attached cervix and bilateral adnexal structures. Uterine serosa is tan to red-brown and mildly hyperemic. The cervix measures 4.2 cm in diameter with a 1.2 cm cervical os. The ectocervix is tan to red-brown and appears granular. On sectioning, there is a 5 x 3 x 3 cm, red-brown, exophytic mass involving the endocervical canal and lower uterine segment. Sectioning through the mass reveals tumor extension into the deep cervical stroma to abut the paracervical soft tissue margin. The mass extends and involves the external cervical os. The endometrial cavity measures 6.4 cm in length x 3 cm cornu-to-cornu and displays a pale tan bosselated appearance with no overt exophytic tumor growth. However, on serial sectioning, the tumor extends deep into the myometrial wall. Also noted is a 2.4 x 1.4 x 0.3 cm endometrial polyp located at the fundal region. Multiple cross sections through the endomyometrium display multiple intramural myomatous nodules measuring up to 0.6 x 0.6 x 0.5 cm with some being focally calcified. The right and left ovary appear similar in shape and size and measure up to 2.4 x 1.6 x 0.6 cm each. The external ovarian surface is yellow-tan and convoluted. Multiple cross sections through the left ovary reveal normal ovarian structures. The left ovary reveals a diffusely calcified area measuring 0.7 x 0.6 x 0.5 cm. The right and left fallopian tubes also appear similar in shape and size measuring up to 4.3 cm in length and 0.6 cm in diameter, with a grossly unremarkable lumen. Representative sections are submitted as follows:

A1-A6	anterior cervix (entirely submitted)
A7-A14	posterior cervix with two bisected sections in blocks A10 and A11, A12 and A13 with ink indicating area of sectioning (entirely submitted)
A15-	anterior lower uterine segment
A16-	posterior lower uterine segment
A17-A20	anterior endomyometrium with endometrial polyp in A17, bisected sections of full-thickness endomyometrium in blocks 19 and 20 (red indicating area of sectioning)
A21-A24	posterior endomyometrium with full-thickness endomyometrial sections in 23 and 24 bisected with red ink indicating area of sectioning
A25-A6	right and left ovary and fallopian tube respectively
A27-	AF1 remnant
A28-	AF2 remnant

B. "Posterior vagina", received fresh and placed in formalin on [redacted] at and consists of a 2.4 x 2 x 0.6 cm aggregate of tan-pink, firm tissue fragments entirely submitted in block B1.

C. "Posterior left vagina", received fresh and placed in formalin on [redacted] and consists of a 4.2 x 2.7 x 1.1 cm irregularly-shaped tan-pink portion of apparent vaginal tissue. The vaginal mucosa is tan-pink and displays a 1.4 x 0.8 x 0.7 cm red-brown lesion which abuts the nearest resection margin. The resection margin is inked in blue, the specimen is serially sectioned and entirely submitted in blocks C1-C7 with block C1 submitted en face.

D. "Posterior vagina margin", received fresh and placed in formalin on [redacted] and consists is a 3.2 x 1.1 x 0.4 cm tan-pink irregularly-shaped unoriented portion of vaginal tissue. The resection margin is inked in blue, the specimen is serially sectioned and entirely submitted in blocks D1 and D2.

E. "Left pelvic lymph node", received fresh and placed in formalin on and consists of a 10.4 x 7 x 1.6 cm aggregate of yellow-pink adipose tissue. One examination reveals multiple lymph nodes measuring up to 4.4 x 1.6 x 0.8 cm in greatest dimension. All lymph nodes are entirely submitted as follows:

E1- multiple lymph nodes
E2- two bisected lymph nodes with one lymph node inked in blue
E3-E7 one bisected lymph node in each block
E8-E9 one trisected lymph node
E10-E11 one bisected lymph node
E12-E14 one serially sectioned lymph node

F. "Left para-aortic node", received fresh and placed in formalin on at 7:45 am and consists of a 2.3 x 0.8 x 0.4 cm yellow to red-brown lymph node with attached adipose tissue. The specimen is bisected and entirely submitted in block F1.

G. "Left common node", received fresh and placed in formalin on at and consists of a 2.6 x 1.4 x 1 cm portion of adipose tissue. On examination two palpable lymph nodes are grossly identified measuring up to 1 x 0.7 x 0.4 cm. The specimen is entirely submitted in blocks G1 and G2 with G1 two whole lymph nodes, G2 additional adipose tissue.

H. "Infundibular pelvic node", received fresh and placed in formalin on and consists of a 2.4 x 2.1 x 1.2 cm yellow-pink portion of adipose tissue. On examination no distinct palpable lymph nodes are grossly identified. The specimen is entirely submitted in blocks H1-H3.

I. "Right para-aortic node", received fresh and placed in formalin on and consists of a 5 x 3.4 x 1.1 cm yellow-tan portion of adipose tissue. On examination multiple lymph nodes are grossly identified measuring up to 4 x 2 x 0.8 cm. All lymph nodes are entirely submitted as follows:

I1- whole lymph nodes
I2-I4 one bisected lymph node in each block
I5-I6 one serially sectioned lymph node

J. "Right pelvic lymph node", received fresh placed in formalin on and consists of a 6 x 3.4 x 1.4 cm aggregate of yellow-pink adipose tissue. On examination multiple lymph nodes are grossly identified measuring up to 3 x 2.6 x 0.8 cm in greatest dimension. All lymph nodes are entirely submitted as follows:

J1- multiple lymph nodes
J2-J4 one bisected lymph node in each block
J5-J6 one bisected lymph node

[redacted]

INTRA OPERATIVE CONSULTATION:
A. "Uterus, cervix, BTO": AF1 (endocervical)-adenocarcinoma favor endocervical primary, endometrioid type, FIGO II.

AF2 endomyometrium no tumor in representative section.

MICROSCOPIC EXAMINATION:
Microscopic examination is performed.

IMMUNOHISTOCHEMICAL FINDINGS:

[redacted]

The immunoperoxidase tests reported herein were developed and their performance characteristics were determined by the Immunopathology Laboratory, Some of them may not be cleared or approved by the U.S. Food and Drug Administration. The FDA has determined that such clearance or approval is not necessary. These tests are used for clinical purposes. They should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical testing.

PATHOLOGIC STAGE:

PROCEDURE: Exploratory laparotomy, total abdominal hysterectomy, bilateral salpingo-oophorectomy, bilateral pelvic and periaortic lymph node sampling, partial vaginectomy, proctoscopy, and washings.

PATHOLOGIC STAGE (AJCC 7th Edition): pT3b pN0 pMX

NOTE: Information on pathology stage and the operative procedure is transmitted to this Institution's Cancer Registry as required for accreditation by the Commission on Cancer. Pathology stage is based solely upon the current tissue specimen being evaluated, and does not incorporate information on any specimens submitted separately to our Cytology section, past pathology information, imaging studies, or clinical or operative findings. Pathology stage is only a component to be considered in determining the clinical stage, and should not be confused with nor substituted for it. The exact operative procedure is available in the surgeon's operative report.

DIAGNOSIS:

A. UTERUS, CERVIX, BILATERAL FALLOPIAN TUBES AND OVARIES (TOTAL ABDOMINAL HYSTERECTOMY AND BILATERAL SALPINGO-OOPHORECTOMY):

CARCINOMA OF THE ENDOMETRIUM:

TUMOR SITE: PREDOMINANTLY BASED IN THE LOWER UTERINE SEGMENT AND ENDOCERVICAL CANAL, BUT ALSO EXTENSIVELY INVOLVING THE UTERINE CORPUS AND ENDOMETRIAL POLYP.

HISTOLOGIC TYPE: ENDOMETRIOID ADENOCARCINOMA WITH SQUAMOUS DIFFERENTIATION. per TSS, squamous differentiation is <1%.

FIGO GRADE: 2.

TUMOR SIZE: AT LEAST 5 X 3 X 3 CM.

TUMOR EXTENSIVELY INVADES THE FULL THICKNESS MYOMETRIAL WALL OF THE LOWER UTERINE SEGMENT AND ENDOCERVICAL CANAL WALL (1.6 CM IN A 1.7 CM THICK WALL).

LYMPHATIC/VASCULAR INVASION: IDENTIFIED.

ADJACENT ENDOMETRIUM: COMPLEX ATYPICAL HYPERPLASIA (ENDOMETRIAL INTRAEPITHELIAL NEOPLASIA) AND ENDOMETRIOID ADENOCARCINOMA ARISING IN ENDOMETRIAL POLYP.

REMAINING MYOMETRIUM: MICROSCOPIC, SUBMUCOSAL AND INTRAMURAL LEIOMYOMAS (0.6 CM IN GREATEST DIMENSION EACH).

CERVIX: INVOLVED WITH EXTENSIVE STROMAL INVASION.

SEROSA: NEGATIVE FOR MALIGNANCY.

SPECIMEN MARGINS: THE TUMOR IS WITHIN 1 MM OF THE PARACERVICAL SOFT TISSUE MARGIN.

OVARIES, RIGHT AND LEFT: NEGATIVE FOR MALIGNANCY.

FALLOPIAN TUBE, RIGHT AND LEFT: NEGATIVE FOR MALIGNANCY.

NOTE: Immunohistochemical stains were performed and demonstrate positive immunolabeling of tumor cells for ER and PR, while only patchy positive immunoreaction for p16. HPV in situ is negative. Despite its predominantly lower uterine segment / endocervical canal location, the finding of complex atypical hyperplasia in the adjacent endometrium and endometrial polyp, along with the above mentioned immunohistochemical profile, highly favors an endometrial origin for this tumor. Of note, endocervical adenocarcinoma in situ (AIS) is not seen in this material.

B. POSTERIOR VAGINA (BIOPSY):

ENDOMETRIOID ADENOCARCINOMA IS IDENTIFIED.

C. POSTERIOR, LEFT VAGINA (RESECTION):

ENDOMETRIOID ADENOCARCINOMA IS IDENTIFIED AND EXTENDS TO THE CAUTERIZED MARGIN.

D. POSTERIOR VAGINA MARGIN (RESECTION):

ENDOMETRIOID ADENOCARCINOMA IS IDENTIFIED AND EXTENDS TO THE INKED RESECTION MARGIN.

E. LYMPH NODE, LEFT, PELVIC (DISSECTION):

ELEVEN LYMPH NODES ARE IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/11).

F. LYMPH NODE, LEFT, PARA-AORTIC (DISSECTION):

ONE LYMPH NODE IS IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/1).

G. LYMPH NODE, LEFT, COMMON (DISSECTION):

TWO LYMPH NODES ARE IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/2).

H. LYMPH NODE, INFUNDIBULAR, PELVIC (DISSECTION):

ONE LYMPH NODE IS IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/1).

I. LYMPH NODE, RIGHT, PARA-AORTIC (DISSECTION):

SIX LYMPH NODES ARE IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/6).

J. LYMPH NODE, RIGHT, PELVIC (DISSECTION):

NINE LYMPH NODES ARE IDENTIFIED, NEGATIVE FOR MALIGNANCY (0/9).

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

[redacted]

CI ADDENDUM 1:
SPECIMEN: " ANTERIOR CERVIX" FOR HUMAN PAPILLOMAVIRUS 16 AND 18 (HPV 16/18) DETECTION BY CHROMOGENIC IN SITU HYBRIDIZATION [redacted].

OBJECTIVE FINDINGS:
(1) Tumor cells are negative for HPV 16/18 DNA.
(2) Tumor cells stain focally for p16 antigen by immunoperoxidase stain.

[redacted]

CONTROLS: DNA positive control and negative control slides stain appropriately. An external HPV positive control slide stains appropriately. Immunoperoxidase controls stain appropriately.

METHODOLOGY: The HPV 16/18 probe is an oligonucleotide probe and is used in the detection of HPV DNA in formalin-fixed, paraffin-embedded tissue via chromogenic in situ hybridization (CISH). The GenPoint Tyramide Signal Amplification Kit is used in conjunction with the oligonucleotide probe.

Indirect immunoperoxidase for p16 antigen is performed using the standard technique with DAB chromogen.

This test is intended to be used as an adjunct to existing clinical and pathologic information. This test was developed and its performance characteristics determined by the It has not been cleared or approved by the FDA. The FDA has determined that such clearance or approval is not necessary. This test is used for clinical purposes. It should not be regarded as investigational or for research. This laboratory is certified under the Clinical Laboratory Improvements Amendments of 1988 (CLIA) as qualified to perform high complexity clinical testing.

INTERPRETATION: NEGATIVE FOR HUMAN PAPILLOMAVIRUS DNA SUBTYPES 16/18.
FOCALLY POSITIVE FOR p16 PROTEIN EXPRESSION. SEE COMMENT.

COMMENT: Variable staining of tumor cells for p16 protein is present, but many areas are devoid of staining. There is considerable background staining in the chromogenic in situ hybridization, but no convincing nuclear staining above background levels is identified.

I certify that I personally conducted the diagnostic evaluation of the above specimen(s) and have rendered the above diagnosis(es).

Performed by: [redacted]

Ordering MD: [redacted]

Consulting MDs: [redacted]

Criteria	Yes	No
Diagnosis Discrepancy		✓
Primary Tumor Site Discrepancy		✓
HIPAA Discrepancy		✓
Prior Malignancy History		✓
Dual/Synchronous Primary Noted		✓
Case is (circle):	QUALIFIED	DISQUALIFIED
Reviewed Initials:	Date Reviewed:	

lw 2/17/13

11/28/13

[redacted]