SURGICAL PATHOLOGY

Case Number:

100-0-3 Adeno carcinoma, serous, NOS 8441/3 Sita: Indometrium C54.1 3/1/11

Diagnosis:

A: Soft tissue mass, abdominal wall tumor, excision

- Metastatic serous adenocarcinoma of primary uterine origin.

B: Tube and ovary, left salpingo-oophorectomy

- Metastatic serous adenocarcinoma of primary uterine origin.

C: Uterus and cervix, hysterectomy:

Location of tumor: primary endometrial cancer (see comment)

Histologic type: serous adenocarcinoma

Histologic grade (FIGO): 3

Extent of invasion: see below

Myometrial invasion: transmural invasion

Serosal involvement: present

Lower uterine segment involvement: present

Cervical involvement: present, involving endocervical glands and posterior cervical soft tissue

Adnexal involvement (see below): present

Other sites: involvement of multiple other sites as indicated in other specimens

Cervical/vaginal margin and distance: Difficult to assess; tumor involves posterior soft tissue close to presumed area of margin.

Lymphovascular Space Invasion: present

Regional lymph nodes (see other specimens):

Total number involved: 7 Total number examined: 9



Criteria		1	1
Diagnosis Discrepand	,	Yes	No.
Primary Tumor Site D	screnancy		- A
HIPAA Discrepancy			X
Prior Malignancy Hist	nrv .		_L_X
Dual/S; pchronous Pri	nap Noted		$\perp 2$
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		-1,211	
			7

Other Pathologic findings: multiple leiomyomas with hyalinization and calcification

Tumor estrogen receptor and progesterone receptor immunohistochemistry results: The endometrial adenocarcinoma is negative for estrogen receptor (0%) and essentially negative for progesterone receptor (1+, <5%) by immunohistochemistry.

AJCC Pathologic stage: pT3a, pN1, pM1

FIGO (2008 classification) Stage grouping: IVB

These stages are based on information available at the time of this report, and are subject to change pending additional information and clinical review

Ovary, right, oophorectomy:

- Metastatic serous adenocarcinoma.

Fallopian tube, right, salpingectomy:

- Metastatic serous adenocarcinoma.
- D: Soft tissue mass, left sidewall, excision
- Metastatic serous adenocarcinoma.
- E: Omentum, omentectomy
- Metastatic serous adenocarcinoma.

F: Soft tissue mass, left posterior pelvis, excision

- Metastatic serous adenocarcinoma.

G: Soft tissue mass, left posterior cul-de-sac, excision

- Metastatic serous adenocarcinoma.

H: Soft tissue mass, anterior cul-de-sac, excision

- Metastatic serous adenocarcinoma.
- I: Soft tissue mass, right posterior pelvic, excision
- Metastatic serous adenocarcinoma.

J: Lymph nodes, right pelvic, excision

- Metastatic serous adenocarcinoma involving 5 of 7 lymph nodes (5/7), size of largest metastasis up to approximately 4 cm in greatest dimension, with extracapsular extension.

K: Lymph nodes, left pelvic, excision

- Metastatic serous adenocarcinoma involving 2 lymph nodes (2/2). Size of largest metastasis up to 2.5 cm, with extracapsular extension.

Comment:

Histologic sections of the above specimens show extensive involvement by serous adenocarcinoma of primary uterine corpus origin. A uterine corpus primary is supported by involvement of the uterine corpus with transmural myometrial invasion to the serosa with extensive lymphovascular space invasion. The involvement of the ovaries is multinodular with preserved intervening areas of ovarian tissue, also supporting metastases to the ovaries. Additionally, representative sections from the endometrial tumor and the left ovarian tumor were evaluated by immunohistochemistry. The tumor at both sites is diffusely positive for P53 and negative for WT-1, results that support serous adenocarcinoma of primary uterine rather than ovarian origin.

Intraoperative Consult Diagnosis:
Frozen section consultation was requested by Dr

FSA1: Abdominal wall tumor, biopsy

- High grade papillary serous carcinoma invading peritoneum

B1: No frozen, permanent only

FSC1: Uterus, hysterectomy

- Adenocarcinoma with papillary serous features

Frozen Section Pathologist:

Clinical History:

with a 13 cm complex adnexal mass.

Gross Description:

Received are 11 appropriately labeled containers.

Specimen A is additionally labeled "abdominal wall tumor" and consists of 3 x 2 x 2 cm tan cystic/solid tissue fragments (2 fragments). Representative section submitted as FSA1. Remaining fragment submitted in blocks A1-A3,

Specimen B is additionally labeled "left tube ovary" and is received in formalin. The specimen is a salpingo-ophorectomy ruptured.

Tumor site: Left adnexa

Surface involvement: Positive

Ovary/tumor size: Ovary weighs 107.4 grams and measures 8.5 x 6.5 x 4.0 cm.

Description of tumor: Entire ovary is replaced by a lobulated, variably hemorrhagic and white/tan mass that does have papillary excrescences along the surface. Due to the ruptured nature of the ovary, surface an be difficult to ascertain in some areas. Intact areas are inked blue. The fallopian tube is identified and detached, and measures 4.5 x 0.7 cm. It is otherwise grossly unremarkable. The tumor is a lobulated white/tan solid and cystic mass with multiple areas of hemorrhage and necrosis noted throughout. Residual ovary is not grossly identified. Cystic portions are filled with a yellow serous fluid. Papillary excrescences are noted along the surface.

Digital picture: No

Tissue submitted for special investigation: No

Block Summary:

B1 - fallopian tube

B2-B6 - representative sections of solid tumor

B7 - additional sections of tumor with surface involvement

Specimen C is received is one appropriately labeled container, additionally labeled "cervix, uterus, RSO".

Adnexa: Only right side present

Weight: 750 grams

Shape: Complex distorted mass

Dimensions: height: 13.5 cm

anterior to posterior width: 9.0 cm

breadth at fundus: 14.0 cm

Serosa: Pink/tan and smooth with numerous subserosal nodules and foci of hemorrhage present throughout.

Cervix:

length of endocervical canal: 3.5 cm

ectocervix: Pink/tan and smooth with focal hyperemia

endocervix: Tan and trabeculated

Endomyometrium:

length of endometrial cavity: 6.5 cm

width of endometrial cavity at fundus: Appears to be 4.5 cm tumor findings:

dimensions: 6.0 x 3.5 x 4.0 cm (circumferential)

appearance: Lobulated exophytic, white/tan vaguely papillary mass with a necrotic core.

location and extent: Lower uterine segment, surrounds the lower uterine segment circumferentially and does appear to

rise up into the fundus of the uterus. myometrial invasion: Inner one-half

thickness of myometrial wall at deepest gross invasion: 2.5 cm

other findings or comments: Multiple soft and calcified white/tan, firm whorled nodules are present both submucosally, intramuscularly and subserosally. These nodules are generally homogenous in appearance with no areas of necrosis identified. No myxoid change, or hemorrhage noted. These nodules range in size from 0.5 up to 5 cm in greatest

dimension.

Adnexa:

Right ovary:

Specimen Fixation: Formalin

Specimen Type: Hysterectomy salpingo-oophorectomy

Tumor Site: Right, surface involvement is positive

Ovary/Tumor Size: $7.5 \times 6.0 \times 3.5$ cm. No residual ovary is present grossly. Fallopian tube is identified, grossly enlarged and measures approximately 7.5×1.2 cm

Tumor Description: Lobulated, solid, white/tan, soft mass that occupies the majority of the ovary. Necrosis and hemorrhage are both identified. Very focal areas of surface involvement can be identified.

Digital Photos/Scans Taken: No

Tissue submitted for special investigation: No

Lymph nodes: Assessed separately.

Other comments: No

Digital photograph taken: No

Tissue submitted for special investigations:

Block Summary:

FSC1 - representative section of endometrium

C1 - anterior cervix

C2 - anterior lower uterine segment

C3 - anterior corpus

C4 - anterior fundus

C5 - posterior cervix

C6 - posterior lower uterine segment

C7 - posterior corpus

C8 - posterior fundus

C9 - additional lower uterine segment tumor and leiomyoma

C10-C11- additional leiomyoma

C12 - right fallopian tube and representative residual ovary

C13-C16- Representative sections of right ovary

Specimen D is additionally labeled "left side wall" and is received in formalin. The specimen consists of a single brown/tan soft tissue nodule that measures 2.5 x 2.0 x 1.2 cm. Sectioning reveals a white/tan, vaguely lobular/papillary architecture with significant hemorrhage. The specimen is submitted in blocks D1 and D2, I

Specimen E is additionally labeled "omentum" and is received in formalin. The specimen consists of a 33 x 7 x 0.8 cm fragment of yellow/tan fibroadipose tissue. Multiple white/tan, firm, lobulated nodules are noted within the omentum and range in size from 1 cm up to 4.5 cm in greatest dimension. Sectioning of these nodules reveals a yellow/white, soft surface without hemorrhage or calcification.

Block Summary:

- E1 representative section of largest nodule and omentum
- E2 mid sized nodule to omentum
- E3-E4 additional representative sections of omentum

Specimen F is additionally labeled "left posterior pelvis" and is received in formalin. The specimen consists of a 6 x 4 x 3.5 cm fragment of pink/tan soft tissue. The tissue appears to be fibroadipose tissue with multiple yellow/tan, lobulated nodules extending from its surface. Focal areas of hemorrhage are noted. Representative sections are submitted in blocks F1-F3.

Specimen G is additionally labeled "left posterior cul-de-sac" and is received in formalin. The specimen consists of a single yellow/white soft tissue nodule that measures 2.1 x 2.0 x 1.2 cm. Overall architecture is lobular and cut surface reveals a solid white/tan mass with focal areas of hemorrhage. Representative sections are submitted in blocks G1 and G2, I

Specimen H is additionally labeled "anterior cul-de-sac" and is received in formalin. The specimen consists of a single pink/tan soft tissue nodule that measures $2.0 \times 1.3 \times 1.1$ cm. The nodule consists of solid pink/tan tissue with numerous foci of hemorrhage. The specimen is entirely submitted in blocks H1 and H2

Specimen I is additionally labeled "right posterior pelvic" and is received in formalin. The specimen consists of multiple soft tissue fragments that measure $5.5 \times 3.2 \times 1.0$ cm in aggregate. Nodules are consistent with pink/tan soft tissue that appear to be infiltrated by a solid white/tan mass. Foci of hemorrhage are also noted. Representative sections are submitted in blocks I1-I3.

Specimen J is additionally labeled "right pelvic lymph nodes" and is received in formalin. The specimen consists of multiple soft tissue fragments that measure $6.0 \times 5.5 \times 1.5$ cm in aggregate. The specimen appears consistent with fibroadipose tissue. Five lymph node candidates are identified within fibroadipose tissue. These range in size from 1.5 up to 4 cm in greatest dimension.

Block Summary:

- J1 one lymph node candidate, bisected
- J2 one lymph node candidate, bisected
- J3 one lymph node candidate, sectioned
- J4-J7 one lymph node candidate, sectioned
- J8-J14 largest lymph node candidate,

Specimen K is additionally labeled "left pelvic lymph node" and is received in formalin. The specimen consists of a single fragment of yellow/tan fibroadipose tissue that measures 5.3 x 2.5 x 1.2 cm in aggregate. Within fibroadipose tissue, two lymph node candidates are identified. These measure approximately 2.5 cm in greatest dimension.

Block Summary:

K1-K2 - one lymph node candidate

K3-K5 - second lymph node candidate,

Grossing Pathologist:

Light Microscopy:

Light microscopic examination is performed by Dr.

For cases in which immunostains are performed, the following applies: Appropriate internal and/or external positive and negative controls have been evaluated. Some of the immunohistochemical reagents used in this case may be classified as analyte specific reagents (ASR). These were developed and have performance characteristics determined by the

These reagents have not been cleared or

approved by the US Food and Drug Administration (FDA). 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-88) as qualified to perform high complexity clinical laboratory testing.

Signature

Resident Physician:

Attending Pathologist: I have personally conducted the evaluation of the above specimens and have rendered the above diagnosis(es).