Results



SURGICAL PATHOLOGY

### **ADDENDUM**

Addendum Comment

Section, designated B4, of the left obturator lymph node shows a nodular architecture with several follicles some of which have small germinal centers. Occasional follicles composed predominantly or entirely of small lymphocytes some of which have a monocytoid appearance. Scattered, rare plasma cells are noted. Areas of fatty infiltration are also identified. Increased numbers of histiocytes are seen in the dilated sinuses. An immunohistochemical panel was performed to further characterize the lymphocytes with respect to architecture. B and T cells (CD20 and CD3 positive, respectively) show appropriate zonation. The T cells are also positive for CD5 and CD43. No co-expression of CD20 and CD43 or CD5 is appreciated. The small germinal centers are positive for CD20, CD10 and bcl-6, but negative for bcl-2. Some of the small follicles are positive for CD20 and bcl-2, but negative for CD10 and bcl-6, these follicles most likely represent either mantle/marginal zone hyperplasia or primary follicles. CD21 and CD23 stains highlight the follicular dendritic meshwork in the follicles. Cyclin D1 is positive in the endothelial cells, but negative in the lymphocytes.

The combined morphologic and immunophenotypic features in this lymph node are most consistent with a reactive process. Clinical correlation and follow-up is recommended.

Intradepartmental consultation:

Hematopathology, have been consulted on this case and concur with the findings and interpretation.

Addendum Diagnosis
LYMPH NODE, LEFT OBTURATOR, EXCISION (
- REACTIVE LYMPH NODE WITH SINUS HISTIOCYTOSIS

Site: Isthmus Uteri, lower uterine segment (54.)

path Endometrium (54.)

Staff Pathologist

### PATHOLOGIC DIAGNOSIS

A. UTERUS, CERVIX, BILATERAL TUBES AND OVARIES, HYSTERECTOMY WITH BILATERAL

### SALPINGO-OOPHORECTOMY:

- HIGH GRADE ENDOMETRIAL CARCINOMA, COMPOSED OF ENDOMETRIOID ADENOCARCINOMA, FIGO GRADE 2 AND SEROUS CARCINOMA (SEE COMMENT)
- TUMOR SIZE: 2.1 x 1.1 x 0.6 CM
- TUMOR INVADES 2.2 MM / 10 MM THICK MYOMETRIUM
- NO LYMPHOVASCULAR SPACE INVASION PRESENT
- TUMOR INVADES INTO UPPER ENDOCERVICAL STROMA
- BILATERAL FALLOPIAN TUBES, NO TUMOR PRESENT
- BILATERAL OVARIES, NO TUMOR PRESENT

## Pathologic staging (TNM):

pT2 [II]: Tumor invades stromal connective tissue of the cervix, but does not extend beyond uterus pN0: No regional lymph node metastasis

Number of Lymph Nodes Examined: 29 Number of Lymph Nodes Involved: 0 pMx: Not applicable

# B. LYMPH NODES, LEFT OBTURATOR, EXCISION:

- THIRTEEN LYMPH NODES, NO CARCINOMA IDENTIFIED (0/13)
- C. LYMPH NODE, LEFT PELVIC, EXCISION:
- TWO LYMPH NODES, NO CARCINOMA IDENTIFIED (0/2)
- D. LYMPH NODES, LEFT, COMMON ILIAC, EXCISION:
- ONE LYMPH NODE, NO CARCINOMA IDENTIFIED (0/1)
- E. LYMPH NODE, RIGHT EXTERNAL ILIAC, EXCISION:
- FIBROADIPOSE TISSUE, NO LYMPH NODES OR TUMOR PRESENT
- F. LYMPH NODE, RIGHT OBTURATOR, EXCISION:
- SIX LYMPH NODES, NO CARCINOMA IDENTIFIED (0/6)
- G. LYMPH NODE, RIGHT PERIAORTIC, EXCISION:
- ONE LYMPH NODES, NO CARCINOMA IDENTIFIED (0/1)

# H. LYMPH NODES, RIGHT COMMON ILIAC, EXCISION:

- TWO LYMPH NODES, NO CARCINOMA IDENTIFIED (0/2)
- I. LYMPH NODES, LEFT PERIAORTIC, EXCISION:
- FOUR LYMPH NODES, NO CARCINOMA IDENTIFIED (0/4)
- J. OMENTUM, EXCISION:
- ADIPOSE TISSUE, NO TUMOR PRESENT

Staff Pathologist

### Comment

The tumor is predominantly composed of endometrioid adenocarcinoma with foci of serous carcinoma. These foci are present at the lower uterine segment/ upper endocervical canal junction, and consititute the area of deepest invasion. ER immunostain is strongly positive in the endometrioid areas, while there is patchy staining in areas of serous carcinoma. P53 shows strong and diffuse staining in endometrioid areas while it is negative in areas of serous carcinoma.

Due to abnormal morphology of the lymph nodes, additional immunohistochemical stains and hematopathology consult is pending, and the results will be reported in an addendum.

Pertinent Clinical Information

ear-old female with endometrial carcinoma.

Procedure: Total abdominal hysterectomy; bilateral salpingo-oophorectomy.

### Gross Description

Specimen Material: A- Uterus, cervix, bilateral tubes and ovaries; B- Left obturator lymph node, C- Left pelvic lymph node; D- Left common iliac lymph node; E- Right external iliac lymph node; F- Right obturator lymph node; G- Right periaortic lymph node; H- Right common iliac lymph node; I- Left periaortic lymph node; J- Omentum.

The case is received in ten parts, each labeled with the patient's name, medical record number and given accession number

, and it is accompanied by a requisition form labeled with the same name and accession number.

Part A: Received in formalin and labeled "UTERUS, CERVIX, BILATERAL TUBES AND OVARIES" is a 60 gram (5.5 x 4.7 x 2.5 cm) unopened uterus with attached right fallopian tube (6 x 0.3 cm), right ovary (2.3 x 2 x 1.4 cm), left

fallopian tube (6.9 x 0.4 cm), and left ovary (2.6 x 1.5 x 1.2 cm).

The exocervix (3 x 2.5 cm) is covered by a tan-white, rubbery, and smooth mucosal surface, and has a  $0.5 \times 0.5$  cm circular os. The uterine serosa is tan-pink, smooth and glistening. A. The specimen is bivalved to reveal a  $2.3 \times 1.2$  cm endometrial cavity. The anterior endometrium features a  $2.1 \times 1.1 \times 0.6$  cm red, friable, exophytic mass extending upward from the endometrium. The uninvolved endometrium measures 0.2 cm in thickness on average. The myometrium averages 1.2 cm in thickness. The tumor mass appears superficial, and grossly does not invade the myometrium.

The right fallopian tube has a pinpoint lumen on cut surface. The right ovary is tan-white, lobulated, and firm, and is serially sectioned to reveal unremarkable tan-white parenchyma, with multiple corpora albicantia. The left fallopian tube ia sectioned to reveal a stellate lumen, and the left ovary is is tan-white, lobulated, and firm, and is serially sectioned to reveal unremarkable tan-white parenchyma with multiple corpora albicantia.

### INK CODE:

Anterior uterus: blue Posterior uterus: black

## **SECTION CODE:**

1: anterior cervix and lower uterine segment, full thickness

2: anterior lower uterine segment, full thickness

3: anterior endomyometrium with tumor, full thickness

4-6: additional sections of tumor from anterior endomyometrium

7: posterior cervix

8: posterior endomyometrium, full thickness

9: right fallopian tube

10-12: right ovary in its entirety

13: left fallopian tube

14-15: left ovary in its entirety

Part B: Received in formalin and labeled "LEFT OBTURATOR LYMPH NODE" are five pieces of tan to golden-yellow, lobulated pieces of tissue ranging in size from  $1.5 \times 0.8 \times 0.5$  to  $3 \times 2.2 \times 1.1$  cm. The adipose tissue is dissected away to reveal eleven possible whole lymph nodes, ranging in size from  $0.2 \times 0.2 \times 0.2$  cm to  $2.2 \times 1.2 \times 0.5$  cm. The lymph nodes are submitted in their entirety as follows:

B1: four possible whole lymph nodes

B2: three possible whole lymph nodes

B3: one possible whole lymph node, bisected

B4: one possible whole lymph node, bisected

B5: one possible whole lymph node, bisected

B6: one possible whole lymph node, bisected

Part C: Received in formalin and labeled "PELVIC LYMPH NODE" are two pieces of tan-brown to golden-yellow, lobulated pieces of soft tissue measuring 3.5 x  $2.8 \times 0.9$  cm in aggregate. The adipose tissue is dissected away to reveal two possible whole lymph nodes ranging in size from  $2 \times 1.3 \times 0.4$  cm to  $3.5 \times 0.9 \times 0.7$  cm. Two possible whole lymph nodes are submitted in their entirety as follows:

C1: one possible whole lymph node, bisected C2: one possible whole lymph node, bisected

Part D: Received in formalin and labeled "LEFT COMMON ILIAC LYMPH NODE" is a  $3.1 \times 0.9 \times 0.8$  cm aggregate of tan-brown to golden-yellow and lobulated soft tissue. The adipose tissue is dissected away to reveal a  $1.5 \times 0.7 \times 0.5$  cm possible whole lymph node, which is dissected and submitted in its entirety in cassette D.

Part E: Received in formalin and labeled "RIGHT EXTERNAL ILIAC LYMPH NODE" is a 2.8 x 1.5 x 0.5 cm aggregate of tan-brown to golden-yellow, lobulated tissue. No possible lymph nodes are appreciated on palpation or sectioning. The specimen is submitted in its entirety in cassette E.

Part F: Received in formalin and labeled "RIGHT OBTURATOR LYMPH NODE" is a 4.5 x 2.1 x 1 cm aggregate of red-brown to golden-yellow, lobulated tissue. The adipose tissue is dissected away from the specimen to reveal six possible whole lymph nodes, ranging in size from 0.2 x 0.2 x 0.1 cm to 2.7 x 1.2 x 0.4 cm. The possible lymph nodes are submitted in their entirety as follows: F1: two possible whole lymph nodes

E2: one possible whole lymph node bisected

F2: one possible whole lymph node, bisected F3: one possible whole lymph node, bisected

F4: one possible whole lymph node, bisected

F5: one possible whole lymph node, bisected

Part G: Received in formalin and labeled "RIGHT PERIAORTIC LYMPH NODE", is a 2.1 x 1.4 x 0.4 cm aggregate of tan-brown, golden-yellow, lobulated tissue. The adipose tissue is dissected away to reveal a 1.2 x 0.5 x 0.5 cm possible whole lymph node, which is bisected and submitted in its entirety in cassette G.

Part H: Received in formalin and labeled "RIGHT COMMON ILIAC LYMPH NODE", is a 2.1 x 1.4 x 0.4 cm aggregate of tan-brown, golden-yellow, lobulated tissue. The adipose tissue is dissected away to reveal two possible whole lymph nodes, ranging in size from 0.5 x 0.3 x 0.3 cm to 1.2 x 1 x 0.2 cm, which are submitted in their entirety in cassette H.

Part I: Received in formalin and labeled "LEFT PERIAORTIC LYMPH NODE", is a 1.8 x 1 x 0.4 cm aggregate of tan-brown to golden yellow, lobulated tissue.

The adipose tissue is dissected away to reveal three possible whole lymph nodes, ranging in size fro  $0.3 \times 0.2 \times 0.2$  cm to  $0.4 \times 0.3 \times 0.2$  cm. The possible whole lymph nodes are submitted in their entirety in cassette I.

Part J: Received in formalin and labeled "OMENTUM" is a 9.2 x 7.3 x 2.4 cm aggregate of golden-yellow, lobulated tissue. The specimen is serially sectioned, revealing unremarkable, golden-yellow and lobulated adipose tissue with no gross lesions appreciated. Representative sections are submitted in cassette J1-J4.

Pathology Resident Microscopic Description Performed.

This immunohistochemistry test(s) was developed and its performance characteristics determined by the Immunohistochemistry Laboratory and/or affiliated institution. It has not been cleared or approved by the U.S. Food and Drug Administration. 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 Improvement Amendments of 1988 (CLIA) as qualified to perform high complexity clinical laboratory testing.

The staff pathologist listed below has reviewed this case.

\*\*Electronically Signed Out\*\*

Staff Pathologist

Criteria W 2/18/13 Yes	No /
Diagnosis Discrepancy Primary Tumor Site Discrepancy HIPAA Discrepancy	7
Prior Malignancy History  Dual/Synchronous Primary, Noted  Case is (circle): QUALIERD / DISQUALIFIED  Date Reviewed: 2, 16	
Reviewer Initials	T