

SURGICAL PATHOLOGY

Case Number:

1CD-6-3
ADS

Adenocaremoira, endametrus
8380/3

Site Endometrus
C54.1

908/11/13

Diagnosis:

A: Uterus, bilateral ovaries and fallopian tubes, hysterectomy and bilateral salpingo-oophorectomy

Histologic type: Endometrioid adenocarcinoma of the endometrium AND Cervical adenoid basal carcinoma (see Light Microscopy)

Histologic grade: FIGO grade 3 (architecture grade 2, nuclear grade 3) endometrioid adenocarcinoma

Tumor site:

Endometrium: Anterior and posterior uterus, involving both anterior and posterior lower uterine segments and with stromal invasion in the cervix.

Cervix: The adenoid basal carcinoma is confined to the cervix.

Myometrial invasion: Inner half

Depth: 4.5 mm Wall thickness: 2.0 cm

Percent: 22.5% (A5)

Serosal involvement: not identified

Lower uterine segment involvement: present involving both anterior and posterior endometrium

Cervical involvement:

- Invasive endometrioid adenocarcinoma present, with stromal invasion of 0.9 mm in wall thickness of 1.5 cm (6%) (A19, A20) - Cervical adenoid basal carcinoma also identified, involving seven sections of cervix, size 1.4 cm in greatest horizontal dimension on a single slide, and depth of invasion 1.1 cm in wall thickness of 1.5 cm (73%) (A28) (see comment)

Adnexal involvement: not identified

Other involved sites: not applicable

Cervical margin and distance: Widely negative from endometrioid carcinoma (> 1 cm). Adenoid basal carcinoma of the cervix is 4 mm from the deep cervical margin and 8 mm from the closest peripheral margin. The peripheral margin is also negative for in situ carcinoma.

Lymphovascular space invasion: not identified

Regional lymph nodes (see other specimens): none submitted

Additional pathologic findings:

Cervix: High grade squamous intraepithelial lesion (HSIL/CIN 3)

also present

Ovary A: atrophic with endosalpingiosis Ovary B: atrophic with endosalpingiosis

Fallopian tube A: serosal adhesions Fallopian tube B: serosal adhesions

AJCC Pathologic Stage: pT2 pNx pMx (Endometrioid carcinoma); pT1b1 pNx (cervical adenoid basal carcinoma) FIGO (2009 classification) Stage Grouping: II (Endometrioid carcinoma); Ib (cervical adenoid basal carcinoma) Note: This pathologic stage assessment is based on information available at the time of this report, and is subject to change pending clinical review and additional information.

Other findings:

- Endometrial polyp
- Adenomyosis
- Small intramural leiomyomata
- Uterine serosal adhesions

Comment:

Two invasive carcinomas are identified. The endometrial adenocarcinoma is endometrioid type, FIGO grade 3, and invades cervical stroma. In addition, representative sections of cervix show an adenoid basal carcinoma which is deeply invasive into the cervix. The adenoid basal carcinoma involves seven slides and measures 1.4 cm in greatest horizontal length on a single slide. The exact horizontal dimension is difficult to measure because the cervix is not submitted as to clock face; however, the findings suggest the size is < 4 cm which is staged as pTlb.

Clinical History:

-year-old female with a clinical diagnosis of endometrial cancer.

Gross Description:

Received is one appropriately labeled container, additionally labeled "uterus, cervix, bilateral tubes and ovaries". The specimen was received previously opened in the OR.

Adnexa: Present, not attached

Weight: 135 grams Shape: Pear shaped

Dimensions: height: 8.5 cm

anterior to posterior width: 5 cm

breadth at fundus: 4.5 cm

Serosa: The serosal surface is tan/pink, smooth and glistening with diffusely scattered areas of red/tan, gray plaque up to 0.4 cm in greatest dimension.

Cervix:

ectocervix: The cervix is 3.5 cm in diameter with a 1 cm slit-like cervical os. The ectocervical mucosa is \tan/gray , smooth and glistening with focal areas of erythema. endocervix: The endocervical mucosa is \tan/pink , smooth and glistening. Upon sectioning, there is a single 0.5 x 0.5 x 0.5 cm thin walled cyst containing gray gelatinous material. length of endocervical canal: 2 cm

Endomyometrium:

length of endometrial cavity: 5.5 cm

width of endometrial cavity at fundus: 4.5 cm

tumor findings:

dimensions: $4.5 \times 4 \times 0.8 \text{ cm}$

appearance: Tan/brown, friable and exophytic.

location and extent: The tumor is primarily in the anterior lower and mid corpus and extends down into the lower uterine segment.

myometrial invasion: At deepest invasion, the tumor extends to the outer half of the myometrium.

thickness of myometrial wall at deepest gross invasion: 2.5 cm thick

other findings or comments: The uninvolved endometrial mucosa is tan/pink, smooth and glistening and mildly trabeculated. The uninvolved myometrium is tan/pink, firm and mildly trabeculated. There is a 0.8 x 0.6 x 0.6 cm tan/firm, well-circumscribed whorled nodule within the myometrium.

Adnexa:

Received freely floating is a $2 \times 1.4 \times 1$ cm tan, white, cerebriform ovary.

Upon sectioning, the cut surface is tan/white, heterogeneous with a 1 x 0.4 x 0.8 cm tan/yellow nodule consistent with corpus luteum. Attached to the ovary is a 4 cm long x 0.5 cm in diameter fimbriated fallopian tube and are designated ovary A and fallopian tube A.. The serosal surface is tan/pink,

smooth and glistening. Upon sectioning, the lumen is pinpoint, patent, and grossly unremarkable.

Also received freely floating is a 2 gram, 1.8 x 1.5 x 0.6 cm ovary. The external surface is tan/white, cerebriform. Upon sectioning, the cut surface is tan/gray, heterogeneous with multiple tan/yellow well circumscribed nodules consistent with corpus luteum. This ovary is designated ovary B.

Also received freely floating is a 3.8 cm long x 0.8 cm in diameter fimbriated fallopian tube. The serosal surface is tan/pink, smooth and glistening. Upon sectioning the lumen is pinpoint, patent, grossly unremarkable. This fallopian tube is designated as fallopian tube B.

Lymph nodes: No lymph nodes grossly seen

Other comments: None

Digital photograph taken: None

Tissue submitted for special investigations: A portion of tumor was submitted for tissue procurement.

Block Summary:

A1 - Anterior cervix

A2 - Posterior cervix

A3 - Anterior lower uterine segment

A4 - Posterior lower uterine segment

A5 - Anterior mid corpus

A6 - Posterior mid corpus

A7 - Anterior fundus

A8 - Posterior fundus

A9 - Representative section of serosal plaque

AlO - Representative section of intramural nodule

All - Ovary A

A12 - Fallopian tube fimbria A

A13 - Representative cross sections of fallopian tube A

A14 - Ovary B

A15 - Fallopian tube B, fimbria

A16 - Representative cross sections of fallopian tube B

A17 - Representative section of tumor

A18-A28 - Remainder of ectocervix

Light Microscopy: Light microscopic examination performed by Dr.

Sections of the endometrial tumor show an endometrioid adenocarcinoma with solid areas and high grade (grade 3) nuclei. A representative section of the cervix shows a basaloid neoplasm with focal gland formation and luminal eosinophilic material. The basaloid neoplasm in the cervix forms small nests and tubules, and is deeply invasive into the cervical wall. The peripheral cells are basaloid and palisading, and there are scattered larger luminal cells. There is no stromal response to the basaloid carcinoma. The morphology of the two tumors is different. Immunostains are performed on both tumors and the rest of the cervix is submitted.

The tumor in the cervix (A1) is strongly and diffusely positive for P16, P63 and CAM 5.2. Vimentin is subset positive. S-100, CEA, CD56, ER and PR are negative. Synaptophysin and chromogranin are non-contributory as the tissue washed off the slide. The endometrial carcinoma (A17) is P16 positive, vimentin positive, CEA negative, P63 subset positive and shows weak positivity for ER (1+, 40%) and positive for PR (2+, 40%) in a subset. The morphology and immunostaining is different between the two tumors and the morphology of the basaloid tumor in the cervix is most consistent with adenoid basal carcinoma (a second primary carcinoma in the cervix).

The additional sections of cervix show additional sections of the adenoid basal carcinoma, which is deeply invasive into the cervix. Also, two sections show involvement by endometrioid adenocarcinoma with stromal invasion (A19, A20).

Given the differences in morphology and immunostaining, the patient has two carcinomas, one is endometrial (endometrioid FIGO Grade 3) with superficial invasion of the cervical stroma. The second tumor is of primary cervical origin and confined to the cervix (adenoid basal carcinoma). Note, Dr. has also reviewed these two tumors and agrees with the diagnosis.

At the surface of the basaloid carcinoma, there are scattered foci suspicious for an in situ component (high grade squamous intraepithelial lesion). P16 and Ki-67 are performed on a representative section (A28). A P16 strongly stains the carcinoma and stains a subset of the in situ atypical epithelium. Ki-67 stains scattered cells. The findings are consistent with an in situ component in the cervix (HSIL/CIN 3).

