

## UTERINE SARCOMA

### EXAMPLE OF A UTERINE SARCOMA USING PROPOSED TEMPLATE

- Case: Adenosarcoma with heterologous elements and stromal overgrowth
  - TAH, BSO, omentectomy, staging biopsies of cul-de-sac, bladder peritoneum, left diaphragmatic peritoneum
  - Primary in the endometrium, tumor invades full thickness of myometrium to involve the posterior uterine serosa (3.0 cm into a 3.0 cm-thick myometrium)
  - Cervical margin negative
  - Heterologous elements and stromal overgrowth (rhabdomyosarcoma and chondrosarcoma) present
  - 6.0 x 3.2 x 3.0 cm
  - Lymph node sampling not performed
  - ALI +
  - Other organs involved: metastasis to omentum and cul-de-sac
  - Cytology: rare atypical cells

### UTERINE SARCOMA

1. **Specimens:** Uterus, cervix, bilateral fallopian tubes and ovaries, omentum, cul-de-sac, bladder peritoneum, left diaphragmatic peritoneum
2. **Procedures:** Total abdominal hysterectomy, bilateral salpingo-oophorectomy, omentectomy, staging biopsies
3. **Regional Lymph Node Sampling:** Not performed
4. **Specimen Integrity:** Intact
5. **Primary Tumor Site:** Uterus; endometrium
6. **Tumor Size:**
  - a. Greatest dimension: 6.0 cm
  - b. Total dimensions: 6.0 x 3.2 x 3.0 cm
7. **Histologic Type:** Adenosarcoma with sarcomatous overgrowth and heterologous elements (rhabdomyosarcoma and chondrosarcoma)
8. **Histologic Grade:** High-grade
9. **Myometrial Invasion:** Present; 3.0 cm depth / 3.0 cm-thick myometrium; > 50% myoinvasion
10. **Lymph-Vascular Space Invasion:** Present
11. **Other Sites/Organs Involved:** Omentum, cul-de-sac
12. **Regional Lymph Nodes:** Not performed
13. **Cytology:** Atypical, CNXX-XXXX
14. **Surgical Margins:** Negative
15. **Pathologic Staging:** AJCC [pT3a]; FIGO [IIIA]

**UTERINE CORPUS AND CERVIX SARCOMA (specific details to be added into SOFT)**

1. **Specimen(s):** *list all specimens removed during case*
2. **Procedure(s):** *select all that apply*
  - a. [Total abdominal hysterectomy]
  - b. [Radical hysterectomy]
  - c. [Supracervical hysterectomy]
  - d. [Bilateral salpingo-oophorectomy]
  - e. [Bilateral oophorectomy]
  - f. [Bilateral salpingectomy]
  - g. [Right salpingo-oophorectomy]
  - h. [Right oophorectomy]
  - i. [Right salpingectomy]
  - j. [Left salpingo-oophorectomy]
  - k. [Left oophorectomy]
  - l. [Left salpingectomy]
  - m. [Omentectomy]
  - n. [Peritoneal biopsies]
  - o. [Peritoneal washings]
  - p. [Other, <SPECIFY>]
3. **Regional Lymph Node Sampling:** *select whether or not regional lymph nodes were removed*
  - a. [Performed]
  - b. [Not performed]
  - c. [Not applicable]
  - d. [Cannot be determined]
4. **Specimen Integrity:** *document whether intact or received fragmented. This absolutely requires correlating with the operative report*
5. **Primary Tumor Site:** *select all that apply*
  - a. [Uterus, <CAN FURTHER SPECIFY>]
  - b. [Cervix, <CAN FURTHER SPECIFY>]
  - c. [Cannot be determined]
6. **Tumor Size:** *provide greatest dimension and total dimensions, if both ovaries equally involved, list separately*
  - a. [Greatest dimension: <SPECIFY>]
  - b. [Total dimensions: <SPECIFY>]
  - c. [Cannot be determined]
7. **Histologic Type:** *select appropriate tumor type*
  - a. [Leiomyosarcoma]
  - b. [Myxoid leiomyosarcoma]

- c. [Epithelioid leiomyosarcoma]
  - d. [Low-grade endometrial stromal sarcoma]
  - e. [High-grade endometrial stromal sarcoma]
  - f. [Undifferentiated uterine sarcoma]
  - g. [Adenosarcoma without sarcomatous overgrowth or heterologous elements]
  - h. [Adenosarcoma with sarcomatous overgrowth and heterologous elements]
  - i. [Adenosarcoma with sarcomatous overgrowth only]
  - j. [Adenosarcoma with heterologous elements only]
  - k. [Rhabdomyosarcoma]
  - l. [Perivascular epithelioid cell tumor (PEComa)]
  - m. [Other, <SPECIFY>]
8. **Histologic Grade:** *select appropriate tumor grade*
- a. [Low-grade] (for low-grade endometrial stromal sarcoma, some adenosarcomas, and some PEComas)
  - b. [High-grade] (for high-grade endometrial stromal sarcoma, all leiomyosarcomas that fulfill Stanford criteria, rhabdomyosarcoma, some adenosarcomas, and some PEComas)
  - c. Cannot be assessed
9. **Myometrial Invasion:** *select if myometrial invasion is absent, present, or cannot be determined*
- a. [Absent]
  - b. [Present: <PROVIDE DEPTH OF INVASION> / <PROVIDE TOTAL MYOMETRIAL THICKNESS>]
    - i. [ $\geq 50\%$  myoinvasion]
    - ii. [ $< 50\%$  myoinvasion]
    - iii. *(give depth of invasion and myometrial thickness (if a specific measurement cannot be determined, provide the approximate percentage of myometrial involvement))*
  - c. [Cannot be determined]
10. **Lymph-Vascular Space Invasion:** *state whether LVI is present*
- a. [Absent]
  - b. [Present]
  - c. [Suspicious]
  - d. [Cannot be determined]
11. **Other Sites/Organs Involved:** *state whether there is disease outside the uterus*
- a. [Negative]
  - b. [Positive: <LIST OTHER ORGANS INVOLVED> ; <PROVIDE SIZE OF LARGEST METASTATIC FOCUS>]
12. **Regional Lymph Nodes:** *provide lymph node status*

- a. [Not performed]
  - b. [Negative: 0 / <PROVIDE TOTAL LYMPH NODES>]
  - a. [Positive: <PROVIDE TOTAL NUMBER OF POSITIVE LYMPH NODES> / <PROVIDE TOTAL LYMPH NODES> ; <LIST SIZE OF LARGEST LYMPH NODE METASTASIS AND IF THERE IS EXTRANODAL EXTENSION>]
13. **Cytology:** *state whether or not cytology was performed and results, include accession number*
- a. [Not performed]
  - b. [Performed]:
    - i. [Positive, <PROVIDE ACCESSION NUMBER IF AVAILABLE>]
    - ii. [Negative, <PROVIDE ACCESSION NUMBER IF AVAILABLE>]
14. **Surgical Margins:** *provide margin status*
- a. [Negative] (can specify if close)
  - b. [Positive] (specify)
15. **Pathologic Staging:** *may use AJCC and/or FIGO; refer to staging manuals*

\* Specimen integrity is particularly important in the staging of uterine sarcomas and every attempt should be made to comment on this.

\* Grading of uterine leiomyosarcomas is controversial. Some institutions do not endorse grading as some studies have found grading to be moot. In other words, once a smooth muscle tumor makes it to leiomyosarcoma, they all have the capacity for aggressive behavior regardless of how poorly differentiated it looks. Other institutions do grade uterine leiomyosarcomas, and our own institution does take grade into account in terms of adjuvant therapy. This is a pending issue for the GYN working group.

\* Endometrial stromal sarcomas should always be graded as either low or high-grade as both kinds of tumors exist.

\* Undifferentiated uterine/endometrial sarcomas do not resemble endometrial stroma and essentially are high-grade sarcomas of the uterus, not-otherwise-specified. At this point in time, differentiating an undifferentiated uterine/endometrial sarcoma from a high-grade endometrial stromal sarcoma is of no clinical significance.

\* Prognostic pathological features of adenosarcomas include depth or extent of myometrial invasion, extra-uterine spread at presentation, tumor cell necrosis, and sarcomatous overgrowth. Sarcomatous overgrowth is defined as a sarcomatous component that occupies  $\geq 25\%$  of the tumor cell volume. Heterologous elements are

often seen when there is sarcomatous overgrowth, but presence of heterologous elements in-of-itself is not prognostic. Adenosarcomas without sarcomatous overgrowth or tumor cell necrosis are considered low-grade.