**DESCRIPTION OF THE TUMOR/CANCER TYPE**

Uterine serous carcinoma is an uncommon, but aggressive subtype of endometrial cancer. About 10% of all endometrial cancers are serous carcinoma. Women are diagnosed at an average age of 63. This tumor behaves differently from the more common endometrioid cancer. These tumors do not arise because of overexposure to estrogen and are not associated with obesity. Serous carcinomas tend to act more like ovarian cancers, often having spread to surfaces in the abdomen and the omentum. Also, spread to lymph nodes is common in 35 to 50% of patients. About 60 to 70% of patients with uterine serous carcinoma already have spread outside of the uterus at the time of diagnosis. Some studies have suggested that women with mutations in the BRCA1 gene may be at increased risk for uterine serous carcinoma.

**SIGNS & SYMPTOMS**

Women with uterine serous cancer have similar symptoms to those with other endometrial cancers. Most women have abnormal bleeding: irregular vaginal bleeding, bleeding between periods, or bleeding after menopause. Some women may have symptoms of abnormal vaginal discharge. Occasionally women may have endometrial cells show up on a Pap test. Other signs may include pelvic pain, weight loss, bloating, and feeling pressure or a lump in the pelvis. These symptoms may be more common in later stages of the cancer.

**SCREENING**

There is no effective screening for uterine serous carcinoma at this time.

**TREATMENT & FOLLOW-UP**

To help understand basics and how this may be different for these rare types.

**Role of Surgery:** As with the more common in endometrioid carcinoma, surgery to remove the uterus, cervix, tubes, and ovaries is usually the first step in treatment. This may be done through an abdominal incision, or by a minimally invasive technique like laparoscopy or robotic surgery. For patients who do not have obvious spread of tumor outside of the uterus, lymph node biopsies (lymph node sampling or sentinel lymph node biopsy) are an important part of assessment. In particular, patients who have serous carcinoma may also have an omental biopsy and washings performed at the time of surgery.

**Role of Chemotherapy and Radiation:** Treatment after surgery depends on the stage of the cancer. For patients who have cancer that is limited to the endometrium without invasion into the wall of the uterus, and also have negative washings, vaginal radiation is preferred (brachytherapy). Patients who have positive washings should receive chemotherapy as well as vaginal radiation. Carboplatin and paclitaxel is the preferred initial treatment regimen in most circumstances. Patients who have serous carcinoma that has invaded into the wall of the uterus or the cervix should undergo chemotherapy and radiation (external or vaginal radiation, or both), or may be treated with radiation alone (external radiation with consideration for vaginal radiation as well). Patients with more advanced disease should undergo chemotherapy with consideration for radiation depending on the circumstances.

**Targeted Therapy options:** Patients who have recurrent disease, or disease that has spread outside of the uterus, may be eligible for targeted therapies. Some serous cancers overexpress a protein called Her2. Patients whose tumors have Her2 overexpression may have chemotherapy in combination with a drug that is targeted against Her2, called trastuzumab. Other women may have chemotherapy in combination with a drug called bevacizumab, which helps prevent new blood vessel formation that supports tumor growth.

**Immunotherapy options:** Some patients who have recurrent disease, or disease that had spread outside of the uterus may also be eligible for immunotherapy. Currently available immunotherapies target a receptor on white blood cells called PDL-1. Blocking this receptor helps to stimulate white blood cells to fight the cancer. Examples of this class of drug include pembrolizumab, nivolumab, dostarlimab, and avelumab. Some women may also be eligible for treatment with lenvatinib in combination with pembrolizumab. Lenvatinib is a drug which blocks signals to certain proteins on cancer cells which cause them to grow and multiply. Lenvatinib also helps prevent new blood vessel formation that supports tumor growth.
ABOUT YOUR TREATMENT PLAN and FOLLOWUP CARE

Are there clinical trials available to treat my cancer?
What is the goal of my treatment?
What side effects should I prepare for?
How will this affect my sex life?
What are the chances my cancer will come back?
How will you know if my treatment is working?
What symptoms should I tell you about right away?
Are there limitations on my activities or work during treatment?
How will I be followed after I complete my treatment?
What symptoms should I watch out for?
When can I go back to my usual activities at work and around the house?
How will I know if my cancer comes back?
What will my options be if the cancer comes back?