

# Ovarian Cancer

## Serous Carcinoma

### Definitions

**Serous:** Relating to serum, the clear liquid part of the blood.

**Carcinoma:** A type of cancerous, or malignant, tumor originating in the internal lining or surface of an organ, such as the ovary.

**Epithelial:** Relating to the epithelium, the tissue that lines the internal surfaces of body cavities or external surface of some organs, such as the ovary.

**Malignant:** Cancerous and capable of spreading.

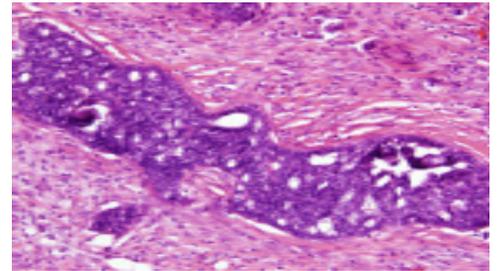
**Pathologist:** A physician who examines tissues and fluids to diagnose disease in order to provide essential information for patient prognosis and assist in making treatment decisions.

### What is ovarian serous carcinoma?

Serous carcinoma is a type of epithelial ovarian cancer, which is the most common kind of ovarian cancer. According to the American Cancer Society, ovarian cancer accounts for 3 percent of all cancers among women. The overall five-year survival rate for women with endometrioid carcinoma is 83 percent. If the disease is found at an early stage (with no spread outside the ovary), the survival rate is about 95 percent.

### Who is most likely to have ovarian serous carcinoma?

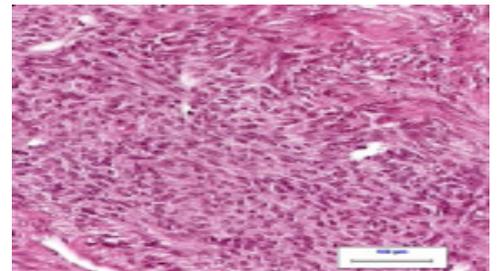
Women with a personal or family history of breast, ovarian, endometrial, prostate, or colon cancer have the highest risk of having ovarian serous carcinoma, especially if their mother or sister had ovarian cancer. Other risk factors include age; use of high-dose estrogen for long periods without progesterone; or uninterrupted ovulation due to infertility, no pregnancies, or no use of birth control. Jewish women and women inheriting a defect in the BRCA1 or BRCA2 gene also have an increased risk.



Ovarian serous carcinoma often does not present clear physical symptoms.

### What characterizes ovarian serous carcinoma?

Unfortunately, because ovarian cancer does not present clear physical symptoms, most women with ovarian serous carcinoma are not diagnosed until the disease is advanced and has spread into the abdomen or beyond. Some signs of ovarian cancer include persistent (more than two weeks) symptoms such as pelvic or abdominal pain or discomfort; bloatedness, gas, nausea, and indigestion; vaginal bleeding; frequent or urgent urination with no infection; unexplained weight gain or loss; fatigue; and changes in bowel habits.



Normal ovarian cells.

### How does a pathologist diagnose ovarian serous carcinoma?

In addition to having regular rectal and vaginal pelvic exams, women should have a comprehensive family medical history taken by a physician knowledgeable about the risks of ovarian cancer. In addition, a **rectovaginal examination** conducted by your primary care physician may detect abnormalities. If any irregularities are found, your primary care physician may prescribe a **transvaginal ultrasound** or a tumor marker blood test called the **CA-125**. High levels of CA-125 can point to ovarian cancer.

If you have a family history of ovarian cancer, you may have a higher genetic risk. Your primary care physician or specialist may recommend that you take advantage of other new blood marker tests in the developmental stages.

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## What kinds of questions should I ask my doctors?

Ask any question you want. There are no questions you should be reluctant to ask. Here are a few to consider:

- Please describe the type of cancer I have and what treatment options are available.
- What stage is the cancer in?
- What are the chances for complete remission and cure?
- What treatment options do you recommend? Why do you believe these are the best treatments?
- What are the pros and cons of these treatment options?
- What are the side effects?
- Should I seek a second opinion?
- Is your medical team experienced in treating the type of cancer I have?

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## What does the pathologist look for?

The pathologist studies under a microscope the **biopsy specimens** removed during an initial diagnostic surgical procedure. These specimens typically include ovary samples and tissue from other parts of the abdomen. By examining these samples, the pathologist can confirm whether or not the tumor is cancerous and, if so, what kind of cancer it is and whether or not it has spread.

After reviewing the results of all your tests and procedures, your pathologist assigns a pathologic **stage** to your ovarian cancer. Stage 1 ovarian serous carcinomas are confined to one or both ovaries, and stage 4 tumors have spread far away from the ovary. Stages between 2 and 3 describe conditions in between these two extremes.

## How do doctors determine what surgery or treatment will be necessary?

Once ovarian cancer is suspected or confirmed, your primary care physician or specialist will refer you to a surgeon. The initial **surgery** will remove as much of the suspicious mass as possible. In clearing cancerous tissue from the abdominal cavity, the surgeon may remove the uterus, ovaries, fallopian tubes, omentum, lymph nodes, and other tissues. Following the surgery, your primary care physician or specialist will most likely recommend **intrapertoneal (IP) chemotherapy** directed into the abdomen.

According to a study published by the New England Journal of Medicine, IP chemotherapy resulted in patients having a median survival time 16 months longer, especially when administered certain chemotherapy drugs such as cisplatin and paclitaxel, than women who received intravenous (IV) chemotherapy. Studies show that cisplatin and paclitaxel concentrate and remain active longer in the abdominal cavity than other chemotherapeutic agents.

**Radiation therapy**, using pinpointed high-energy beams, is sometimes used with chemotherapy to treat ovarian cancer. Radiation therapy can be used to shrink tumors before surgery or to destroy cancer cells that remain after surgery. This treatment is also used to relieve the symptoms of advanced cancer.

Patients who experience relapse or who have carcinomas that are resistant to treatment may benefit from additional surgical procedures and tests, secondary chemotherapy agents, biological therapies, or other treatments.

**Clinical trials** of new treatments may be found at [www.cancer.gov/clinicaltrials](http://www.cancer.gov/clinicaltrials). These treatments are highly experimental in nature but may be a potential option for advanced cancers.

**For more information**, go to [www.cancer.gov](http://www.cancer.gov) (National Cancer Institute) or <http://ovariancancer.jhmi.edu> (Johns Hopkins). Type the keywords **ovarian serous carcinoma** or **ovarian cancer** into the search box.

Healing begins with the pathologist's diagnosis. More than 70% of all decisions about your diagnosis, treatment, hospital admission, and discharge rest on the pathology report.