

Q: Do HE4, Ovarian Cancer Monitoring work with CA125?

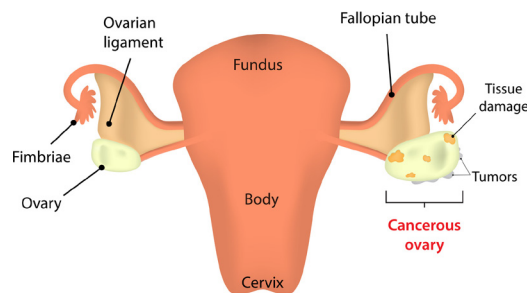
A: HE4, ovarian cancer Monitoring is a tool that physicians may use alone or with the Cancer Antigen 125 (CA125) blood test. An increased CA125 test might mean that the cancer has come back, but more testing would be needed to be sure, because CA 125 levels can also be increased by non-cancerous conditions, such as ovarian cysts. On the other hand, some women have a recurrence even though their CA125 level is normal. A combined test is more specific and sensitive.

Q: How to distinguish ovarian cancer?

A: Ovarian cancer is distinguished based on the type of cells in which it occurs. The three main types are listed as follows:

- Epithelial cell cancer—epithelial cells cover the surface of the ovary. Eighty-five to ninety percent of ovarian cancer cases are this type.
- Germ cell cancer—Germ cells are the cells in the ovary that develop into eggs. This type of cancer is more common in younger women and usually has a high cure rate.
- Stromal cell cancer—Stromal cell cancer occurs in the connective tissue, which provides the internal structure of the ovary. It also has a high cure rate.

Ovarian Cancer

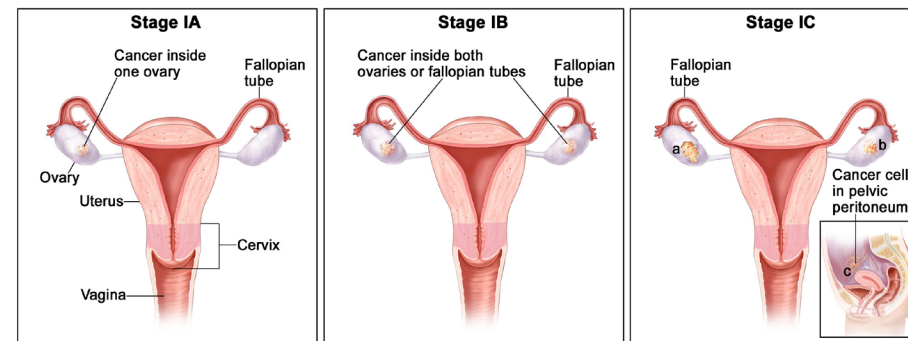


Q: How is ovarian cancer treated?

A: Treatment is based on the stage of the cancer and how much the cancer has spread outside the ovary. Epithelial ovarian cancer has four

stages. Stage I is the least advanced stage. Stage IV is the most advanced stage. Cancer grade also is important in ovarian cancer treatment. Ovarian tumors are graded as low-grade or high-grade.

If a woman is thought to have ovarian cancer, surgery and other tests are needed to find out the stage and grade of the cancer. Usually, surgery to remove the uterus (**hysterectomy**) and the ovaries and **fallopian tubes** (salpingo-oophorectomy) is performed. Lymph nodes and tissue from the abdomen may be removed. Surgery may be followed by chemotherapy. Chemotherapy is the use of drugs that kill cancer cells.



Stages of Ovarian cancer

Q: What tests are used to find out if the cancer has spread?

A: To find out whether the cancer has spread, imaging tests such as a **colonoscopy, computed tomography scan, magnetic resonance imaging,** and chest X-ray may be done. If possible, it is best that a doctor specially trained or experienced in cancer, such as a gynecologic oncologist, performs the surgery and evaluates test results.

Q: What type of follow-up is needed after treatment?

A: Women treated for cancer of the ovary need to have regular checkups, including exams and blood tests to check CA 125 levels. Other tests, including ultrasound, chest X-ray, magnetic resonance imaging or computed tomography also may be done.

DISCOVER
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DEFEND



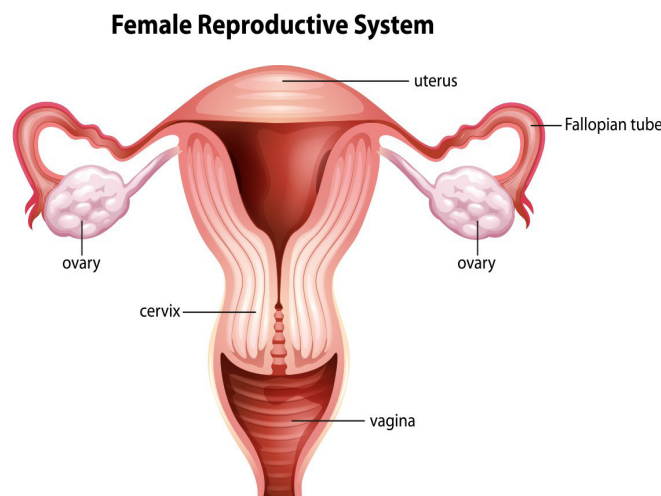
Ovarian cancer

Frequently Asked Questions



Q: What Is Ovarian Cancer?

A: Ovarian cancer is a disease that occurs when abnormal cells in the ovaries (the female reproductive organs) grow at an uncontrollable rate and form a mass of tissue known as tumor. Many types of tumors can start in one or both ovaries or in the tubes associated with them. Tumors found in the ovaries may be noncancerous tissue growths (cysts) or cancerous growths that may spread to other parts of the body.



Q: How common is ovarian cancer?

A: Ovarian cancer is the fifth most common cancer in women. It causes more deaths than any other cancer of the female reproductive system. Most cases occur in older women and above half the cases are in women older than 63 years of age. However it can occur in a younger age group.

Q: Who is at risk for ovarian cancer?

- A:
- Middle aged or older
 - Close family member (mother, sister, aunt or grandmother) on either mother's or father's side who has had ovarian cancer.
 - Family history of breast cancer, ovarian cancer, colon cancer, or endometrial cancer (cancer of the lining of the uterus).
 - Known genetic mutations (changes) in BRCA 1 or BRCA 2 genes and

or Lynch Syndrome (inherited condition that gives a person higher risk of cancer of digestive tract, gynecological tract and other organs).

- Have personally had breast cancer, colorectal cancer, cervical cancer or melanoma.
- Ashkenazi Jewish descent.
- Have never given birth or have had trouble getting pregnant.
- Have endometriosis.

Q: Does being at risk mean that ovarian cancer will occur?

A: Having one or more of the risk factors does not mean that ovarian cancer will develop. Most important thing is to watch for symptoms and report to the doctor for tests to look for ovarian cancer.

Q: Is Ovarian Cancer hereditary?

A: 10 percent of ovarian cancers result from inherited mutations (changes) in BRCA 1 and BRCA2 genes that are passed on in families.

Q: If a family member has ovarian cancer, can genetic screening determine if other family members will get the disease?

A: Women who inherit a mutation in BRCA 1 and or BRCA 2 genes are at greater risk of developing ovarian cancers.

Genetic testing can determine if these mutations exist. Although having these mutations increases the risk it does not mean a woman will definitely get the disease. Genetic counseling can help women determine whether they should be tested for genetic mutations linked with ovarian cancer.

Q: Is screening recommended for women who have a high risk of epithelial ovarian cancer?

A: For women at high risk of epithelial ovarian cancer, such as women with BRCA1 or BRCA2 mutations, periodic tests to check for ovarian cancer may be recommended. These tests include transvaginal ultrasound to look for changes in the ovaries and measurement of CA 125 levels. CA 125 is a

substance made by tumor cells. It is sometimes increased in women with ovarian cancer.

Q: What are the symptoms of epithelial ovarian cancer?

A: The signs of ovarian cancer are subtle and may mimic other diseases. Many times women with ovarian cancer have no symptoms or mild symptoms until disease is in the advanced stage. Symptoms can include back pain, irregular periods or abnormal bleeding, stomach discomfort or bloating, pelvic pain, loss of appetite, indigestion, nausea, eating smaller quantities, diarrhea, constipation, frequency of urination, unusual fatigue or shortness of breath and unexplained weight loss or gain.

Q: How is ovarian cancer diagnosed?

A: If there are frequent or persistent symptoms of ovarian cancer, usually a physical exam is done, including a pelvic exam. An imaging test of the ovaries, such as a transvaginal ultrasound exam, may be done.

The level of CA 125 in the blood may be measured. CA 125 and He4 combined testing with ROMA gives a better risk assessment.

The only way to tell for certain that a woman has ovarian cancer is with a biopsy. In a biopsy, tissue is removed during surgery and is tested for cancer.

Q: Is CA 125 always increased in ovarian cancer?

A: No, not all ovarian cancers are associated with increased level of CA 125. Elevated levels have been found in about 80% of women with ovarian cancer.

Q: What is He4 test?

A: He4 test is a laboratory blood test that is useful in early cancer detection and is also useful in monitoring after surgery to detect if the cancer has recurred.