

## Ovarian Cancer - Diagnosis [1]

This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 05/2013

**ON THIS PAGE:** You will find a list of the common tests, procedures, and scans that doctors can use to find out what's wrong and identify the cause of the problem. To see other pages, use the menu on the side of your screen.

If your doctor suspects that you might have ovarian cancer, you should see a gynecologic oncologist (a doctor who specializes in treating cancer of the female reproductive system). Doctors use many tests to diagnose cancer and find out if it has metastasized (spread). Some tests may also determine which treatments may be the most effective. For most types of cancer, a biopsy is the only way to make a definitive diagnosis of cancer. This is often done as part of surgery for ovarian cancer. The doctor may suggest other tests that will help make a diagnosis. Imaging tests may be used to find out whether the cancer has spread.

This list describes options for diagnosing this type of cancer, and not all tests listed will be used for every person. Your doctor may consider these factors when choosing a diagnostic test:

- Age and medical condition
- Type of cancer suspected
- Signs and symptoms
- Previous test results

As with all cancers, early detection and treatment is important. However, early detection of ovarian cancer is difficult. Often, women don't have any symptoms until the tumor is large or in later stages of the disease. In fact, 70% of epithelial ovarian cancers are not found until the disease is in an advanced stage and has spread to other parts of the body, most commonly the abdomen.

In addition to a physical exam, the following tests may be used to diagnose ovarian cancer:

**Pelvic examination.** The doctor feels the uterus, vagina, ovaries, fallopian tubes, bladder, and rectum to check for any unusual changes. A [Pap test](#) [3], usually done with a pelvic examination,

is not likely to find or diagnose ovarian cancer using traditional methods (as is used for detection of cervix precancer and cancer). However, advances in DNA testing has provided new evidence that one day cells trapped in the cervix could be studied for changes that reflect ovarian or

uterine cancers. Currently, these findings are considered experimental but are promising as a new way to find these types of cancers earlier.

**Transvaginal ultrasound [4].** An ultrasound wand is inserted in the vagina and aimed at the ovaries. An ultrasound uses sound waves to create a picture of the ovaries, including healthy tissues, cysts, and tumors. Researchers are currently studying whether this test can help with early detection of ovarian cancer.

**Blood tests/CA-125 assay.** There is a blood test that measures a substance called CA-125, a tumor marker [5], which is found in higher levels in women with ovarian cancer. Women younger than 50 with conditions such as endometriosis, pelvic inflammatory disease, and uterine fibroids may also have an increased CA-125 level. This test is more accurate in postmenopausal women. Other tumor marker tests are available such as HE4 and OVA-1, as well, and may help evaluate women with ovarian cysts who may have ovarian cancer.

**X-ray.** An x-ray is a way to create a picture of the structures inside of the body using a small amount of radiation.

**Computed tomography (CT or CAT) scan [6].** A CT scan creates a three-dimensional picture of the inside of the body with an x-ray machine. A computer then combines these images into a detailed, cross-sectional view that shows any abnormalities or tumors. A CT scan can also be used to measure the tumor's size. While the technology of CT scanning has continued to evolve, tumors or abnormalities under about 5 mm (1/5th an inch) are difficult to see. To help, a contrast medium (a special dye) is injected into a patient's vein or given orally (by mouth) or rectally to provide better detail.

**Positron emission tomography (PET) scan [7].** A PET scan is a way to create pictures of organs and tissues inside the body. A small amount of a radioactive substance is injected into a patient's body. This substance is absorbed mainly by organs and tissues that use the most energy. Because cancer tends to use energy actively, it absorbs more of the radioactive substance. A scanner then detects this substance to produce images of the inside of the body.

**Lower gastrointestinal (GI) series [8].** This is a series of x-rays of the colon and rectum taken after the patient has a barium enema (a procedure that delivers a special dye into the rectum and colon through the anus). The barium highlights the colon and rectum on the x-ray, making it easier to identify a tumor or abnormal area in those organs. This test is used occasionally for ovarian cancer.

**Biopsy [9].** For many types of cancer, a biopsy is the removal of a small amount of tissue for examination under a microscope. A biopsy for ovarian cancer is rarely done as a separate procedure. If the doctor suspects ovarian cancer, surgery is usually recommended to remove as much of the tumor as possible (see Treatment [10]), and a tumor sample will be analyzed afterwards. Other tests can suggest that cancer is present, but only an analysis of the tumor can make a definite diagnosis. The sample removed during surgery or biopsy is analyzed by a pathologist (a doctor who specializes in interpreting laboratory tests and evaluating cells, tissues, and organs to diagnose disease). If the test results indicate cancer, the doctor may recommend additional tests (above) to see if the cancer has spread beyond the ovaries.

After the diagnostic tests are done, your doctor will review all of the results with you. As noted above, surgery and an examination of the lymph nodes may be needed before results are complete. If the diagnosis is cancer, these results also help the doctor describe the cancer; this is called staging.

*The next section helps explain the different stages for this type of cancer. Use the menu on the side of your screen to select Stages, or you can select another section, to continue reading this guide.*

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**Links:**

- [1] <http://www.cancer.net/cancer-types/ovarian-cancer/diagnosis>
- [2] <http://www.cancer.net/about-us>
- [3] <http://www.cancer.net/node/24638>
- [4] <http://www.cancer.net/node/24714>
- [5] <http://www.cancer.net/node/24730>
- [6] <http://www.cancer.net/node/24486>
- [7] <http://www.cancer.net/node/24648>
- [8] <http://www.cancer.net/node/24402>
- [9] <http://www.cancer.net/node/24406>
- [10] <http://www.cancer.net/node/19488>