

## **Ovarian Cancer - Diagnosis [1]**

**This section has been reviewed and approved by the [Cancer.Net Editorial Board](#) [2], 04/2015**

**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, which is 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 spread to another part of the body, called metastasis. 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. There are no effective screening methods before cancer is suspected. 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.** Usually, the first exam is the abdominal pelvic examination. The doctor feels the uterus, vagina, ovaries, 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 cervical 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. Woman 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 women who have had menopause. Other tumor marker tests are available, such as HE4 and OVA-1, 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. Sometimes, a special dye called a contrast medium is given before the scan to provide better detail on the image. This dye can be injected into a patient's vein or given as a pill to swallow. 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 five millimeters (1/5th of an inch) are difficult to see.
- **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 sugar substance is injected into the patient's body. This sugar substance is taken up by cells 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, which is 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 particularly if there is concern for a blockage in the large

intestine by cancer.

- **Biopsy** [9]. A biopsy is the removal of a small amount of tissue for examination under a microscope. If the doctor suspects ovarian cancer, surgery is usually recommended to remove as much of the tumor as possible (see [Treatment Options](#) [10]), and a tumor sample will be analyzed afterwards. A biopsy is sometimes used if the diagnosis is uncertain or if there is too much tumor to remove initially with surgery. This is usually done when chemotherapy is planned as the first treatment, with possible surgery afterwards.
- **Magnetic resonance imaging (MRI)** [11]. An MRI uses magnetic fields, not x-rays, to produce detailed images of the body. MRI can also be used to measure the tumor's size. A special dye called a contrast medium is given before the scan to create a clearer picture. This dye can be injected into a patient's vein or given as a pill to swallow.

After 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 ovarian cancer, these results also help the doctor describe the cancer; this is called staging.

*The [next section in this guide is Stages and Grades](#) [12], and it explains the system doctors use to describe the extent of the disease. Or, use the menu on the side of your screen to choose 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>

[11] <http://www.cancer.net/node/24578>

[12] <http://www.cancer.net/node/19487>