

What Every Woman Should Know About Gynecologic Cancer

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What is gynecologic cancer?

Cancer is a disease where cells grow and spread without control. Gynecologic cancers begin in the female reproductive organs. The most common gynecologic cancers are endometrial cancer, ovarian cancer and cervical cancer. Less common gynecologic cancers involve vulva, Fallopian tube, uterine wall (sarcoma), vagina, and placenta (pregnancy tissue: molar pregnancy).



What causes endometrial cancer?

Endometrial cancer is the most common gynecologic cancer: one out of every 40 women will develop endometrial cancer. It is caused by too much estrogen, a hormone normally present in women. The most common cause of the excess estrogen is being overweight: fat cells actually produce estrogen. Another cause of excess estrogen is medication such as tamoxifen (often prescribed for breast cancer treatment) or some forms of prescribed estrogen hormone therapy (unopposed estrogen).

How is endometrial cancer detected?

Almost all endometrial cancer is detected when a woman notices vaginal bleeding after her menopause or irregular bleeding before her menopause. If bleeding occurs, a woman should contact her doctor so that appropriate testing can be performed. This usually includes an endometrial biopsy, a brief, slightly crampy test, performed in the office. Fortunately, most endometrial cancers are detected before spread to other parts of the body occurs

Is endometrial cancer treatable?

Yes! Most women with endometrial cancer will undergo surgery including hysterectomy (removal of the uterus) in addition to removal of ovaries and lymph nodes. In most cases, if biopsies taken at the time of surgery show that the cancer has not spread, no other treatment is needed. If cancer has spread to other areas, then additional treatment with radiation is usually needed. Most women with endometrial cancer will be cured if they receive appropriate treatment.

How is ovarian cancer different from endometrial cancer?

Ovarian cancer is less common than endometrial cancer, but it is a more deadly type of cancer. More women die from ovarian cancer than all other forms of gynecologic cancer combined. Unlike endometrial cancer, ovarian cancer is often not detected until it has already spread to other parts of the body.

Who gets ovarian cancer?

One out of every 60 women will develop ovarian cancer in her lifetime. There are 2 different groups of women who may be at risk for ovarian cancer. The majority of ovarian cancers develop in women who have many ovulations (egg release from the ovary) during their lifetime. Bearing children and use of birth control pills both reduce the likelihood of ovarian cancer because they reduce the number of lifetime ovulations. About 10% of women who develop ovarian cancer have inherited a gene from either parent that increases the risk. There are at least 6 genes that can cause inherited ovarian cancer, including BRCA-1, BRCA-2, MSH, MLH, PMS-1, and PMS-2. Warning signs that a gene abnormality may be present in a woman's family include:

- ✤ Multiple family members with breast cancer, ovarian cancer or colon cancer
- ✤ Early age of cancer in affected relatives.

A woman should inform her doctor if she is aware of a family history of cancer, Tests are available that can detect abnormal genes and if they are detected, prophylactic removal of the ovaries may greatly reduce the risk of ovarian cancer.

How is ovarian cancer detected?

Warning signs of ovarian cancer include abdominal discomfort, loss of appetite, nausea, bloating, gas, constipation, and frequent urination, among others. These signs usually do not occur until the ovarian cancer has already spread. Early ovarian cancer usually does not cause any symptoms, which is why this is often referred to as a "silent disease". There are no *reliable* tests yet available to detect early ovarian cancer.

Tests that may be very useful in some, but not all, situations include ultrasound (sound waves that provide a visual image of the ovary) and tumor marker blood tests (CA-125, CA 19-9, CEA, AFP, and others). None of these tests are perfect, and inappropriate use of them can actually cause more harm than good. There are a number of new tests in development including a proteomics test (Ovacheck) and new markers (LPA). It is too soon to know whether these tests will improve our ability to detect early ovarian cancer.

How is ovarian cancer treated?

Surgery is almost always the first step for treatment. For most women, this will include a hysterectomy with removal of ovaries, lymph nodes and the omentum (a pad for other organs in the abdomen). In young women, some types of ovarian cancer can be treated with less aggressive surgery to preserve fertility.

Following surgery, the exact type of ovarian cancer and the extent of spread (stage), if any, are determined. Some early ovarian cancers require only surgery for treatment. The majority of women with ovarian cancer will need chemotherapy, which is medication designed to kill cancer cells in order to reduce the risk of the cancer recurring.

Is ovarian cancer curable?

With modern surgical techniques and chemotherapy, ovarian cancer without spread at the time of diagnosis can be "cured" in up to 95% of women. Unfortunately, at least 70% of ovarian cancers are detected after spread has occurred. For these women, treatment has an 80% chance of "remission", meaning disappearance or shrinkage of disease. Disease of this advanced extent has a high likelihood of relapse, anywhere from months to years after treatment. We can often successfully treat relapses and attain another remission, but we are not able to permanently "cure" ovarian cancer that has relapsed.

What is being done to improve ovarian cancer treatment?

Clinical trials allow experimental treatments to be attempted in controlled settings to protect the safety of patients. Research centers nationwide are developing new treatments including:

- Immunotherapy (Ovarex, vaccines)
- ✤ Gene therapy
- ✤ Biological therapy
- ✤ New chemotherapy treatment

It takes a great deal of time to improve treatment of ovarian cancer, but progress is being made.

Quality of life for women with ovarian cancer is improving. Chemotherapy no longer causes severe nausea, vomiting or exhaustion.

What is cervical cancer?

Cervical cancer involves the lowermost portion of the uterus where it enters the vagina. Cervical cancer was once the most common gynecologic cancer in the world. Use of the Pap test has greatly reduced cervical cancer by allowing detection of abnormalities that can be treated before the cancer develops.

How often should Pap tests be done?

Pap tests should begin within 3 years of the time that a woman becomes sexually active or by 21 at the latest. The test should be done every year (conventional method) or two rears (liquid method: ThinPrep) until age 30. If all tests are normal by age 30, Pap tests can be every 2-3 years depending on which method your doctor uses.

What if a Pap test is abnormal?

If an abnormal Pap test occurs, additional testing with colposcopy (a microscope to view the cervix) is performed in the office. Pre-cancer conditions can usually be treated by removing the portion of diseased skin on the cervix.

Most cervical cancers are detected early as long as a woman has Pap tests regularly. Early cervical cancer is very treatable and the cure rate is high. New surgical techniques allow early cervical cancer to be treated with preservation of fertility. More advanced cases require radical surgery or radiation therapy.

What causes cervical cancer?

Cervical cancer is caused by the human papilloma virus (HPV) which is a sexually transmitted disease that also causes genital warts. Smoking is strongly associated with cervical cancer.

How can HPV infection be prevented?

HPV is a sexually transmitted disease. Safe sex practices including monogamous relationships, fewer sexual partners and use of condoms help to reduce risk. A vaccine to prevent transmission of the virus is available for females from age 9-26

If a woman has a gynecologic cancer, what should she do and where should she go?

Medical studies have shown that the quality of care and chances of survival are best when a cancer specialist provides care. Specialists in gynecologic cancer are **GYNECOLOGIC ONCOLOGISTS**. It is best to ask for referral to a gynecologic oncologist if cancer is diagnosed or suspected.

Resources

University of Michigan	
Department of ObGyn	www.med.umich.edu/obgyn/gynonc/more.htm
Appointments	734-647-8906
American Cancer Society	www.cancer.org
Women's Cancer Network	www.wcn.org (locate a gyn oncologist)
National Institutes of Health	www.nci.nih.gov (listing of clinical trials)
Society of Gynecologic Oncologists	www.sgo.org