

EDUCATION



EARLY DETECTION



PREVENTION

MAINTAIN YOUR  
Gynecologic Health  
WITH Education &  
Early Detection



Gynecologic  
Cancer  
Foundation

**Each year**, approximately 77,000 women are diagnosed with one of the gynecologic cancers: ovarian, uterine, cervical, vulvar, vaginal or tubal. This brochure has been produced to help you understand how minimize your risk of serious health effects from reproductive cancers.

The Gynecologic Cancer Foundation (GCF) was founded by physicians who have chosen to specialize in treating women with reproductive cancers. It is our goal to provide you with the information you need to make the best choices to ensure your gynecologic health.

► *Take 15 minutes out of your day to determine your risk for developing gynecologic and breast cancer by logging on at the Women's Cancer Network (WCN) Web site, [www.wcn.org](http://www.wcn.org). This way, you can receive a free, personalized assessment of your risk for developing breast, ovarian, endometrial, cervical, vulvar and vaginal cancer. The WCN Web site also has in-depth information on female cancers, resources for women who have been diagnosed with cancer and information on gynecologic oncologists/experts who specialize in treating reproductive cancers.*

## SEPTEMBER IS GYNECOLOGIC CANCER AWARENESS MONTH

For more information on women's cancer, access the Women's Cancer Network at [www.wcn.org](http://www.wcn.org)



GCF is a 501 (c)(3) non-profit organization under the U.S. Internal Revenue Code.  
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[www.thegcf.org](http://www.thegcf.org)

**Cancer is a word** used to define a collection of diseases that share one unique characteristic — the uncontrolled growth of cells. Our bodies are made up of cells, with each one containing 23 pairs of chromosomes. Distributed amongst the 46 chromosomes are approximately 300,000–500,000 genes. The genes contribute to how we grow, what we look like and how we behave. In normal cells, the chromosomes reproduce every time the cell divides. Occasionally, something goes wrong and a number of genes are altered. When this happens, the cells escape from the normal growth control mechanisms, and they multiply until they form a mass of cells, usually referred to as a tumor.

Some tumors are benign and are composed of cells which resemble the normal cells of that organ. Although they may form a large mass, they do not spread. However, when cells undergo malignant change, they look “wild” under a microscope. These cells can invade nearby normal tissue and spread to other parts of the body: the condition is known as cancer. Metastasis is the word used to define the spreading of cancer from where it started to a new location.

Cancers that develop in the various organs manifest themselves in different ways, which is why each cancer has a unique way of being diagnosed. For example, breast cancer is detected by changes seen on mammograms, and cervical cancers usually produce abnormalities detected by Pap tests. Once a cancer is diagnosed, it is given a stage indicating how advanced the tumor is. How a cancer is treated depends on the type and stage of the cancer.

Gynecologic cancers grow from a woman's reproductive organ(s) including the cervix, uterus, ovaries, fallopian tubes, vagina and vulva. Each year approximately 77,000 women in the United States are diagnosed with cancers affecting the reproductive organs. Although they are often discussed as a group, gynecologic cancers have a spectrum of different causes, prevention and detection methods, treatment, and likelihoods of a cure which are described below.

### *Why do women get these cancers?*

Biomedical research has discovered that some genes, called oncogenes, promote the growth of cancer. You can acquire these genetic mutations during life (e.g. through smoking, aging or environmental influences) or you can inherit these mutations from your parents or grandparents. Many cancers of the cervix, vagina and vulva are caused by a virus — the Human Papillovirus or HPV — that blocks normal gene function. So far, only a few of the specific genes leading to reproductive cancers have been identified. Knowing your family history can increase your chance of early diagnosis and can help you take action toward prevention. The knowledge that some cancers are linked together and run in your family can help you know what other diseases you should be screened for, such as breast or colon cancers. Your physician can determine an appropriate screening and prevention program based on your family's history of cancer and other factors.

### *Who should take care of me?*

Detection and treatment of gynecologic cancers require physicians who are trained specifically in this area. Gynecologic oncologists have at least seven additional years of training beyond medical school to become expert in diagnosing, treating and the continuing care of women with reproductive cancers.

This training is available in a number of medical centers around the country. Physicians who complete this training are able to offer patients the therapy or combination of therapies most likely to be successful, without fragmenting care among many physicians. Gynecologic oncologists practice in a variety of settings including teaching hospitals, cancer centers, regional and local hospitals, and private offices.

If a reproductive cancer is suspected or diagnosed, a woman should seek care from a gynecologic oncologist.

### *What are the warning signs?*

Gynecologic oncologists advise women to seek medical attention if these symptoms persist for 2 weeks:

- ❖ A change in bowel or bladder habits
- ❖ A genital sore that does not heal
- ❖ Unusual vaginal discharge
- ❖ A thickening or lump that either causes pain or can be seen or felt
- ❖ Persistent indigestion
- ❖ Pain in the pelvic area
- ❖ Persistent or progressive fullness, bloating or pressure in the abdomen or pelvis

In addition, women should seek medical attention immediately if they have vaginal bleeding after menopause. Even light brown vaginal spotting after menopause is abnormal and should prompt a woman to seek evaluation. In the premenopausal age group, woman should be checked if they develop new heavy menstrual periods or bleeding between periods.

## OVARIAN CANCER

### *What is ovarian cancer?*

Ovarian cancers, usually arise on the surface of the ovary. When this happens, the ovaries frequently become enlarged. The cancer cells often fall off the ovary's surface and implant throughout the abdominal cavity. Each one of these seedlings can then grow into a separate ovarian cancer tumor nodule.

### *Screening for Ovarian Cancer*

There are no established tests to screen for ovarian cancer for average-risk women, and this highlights the importance of recognizing the symptoms of this disease which are described below. Studies are underway to evaluate blood tests and ultrasound, but so far neither have proven that a screening method can save lives. Women should be screened for their risk for ovarian cancer based on their family history. For the highest risk women, genetic testing may be recommended, and an ultrasound and a CA 125 test every 6–12 months are often advised. Preventative removal of the tubes and ovaries may be recommended for these women once child-bearing is complete.

### *What are the common symptoms?*

Conclusive research has demonstrated that the following symptoms are much more likely to occur in women with ovarian cancer than women in the general population. These symptoms include bloating, pelvic or abdominal pain, difficulty eating or feeling full quickly, and/or urinary symptoms (urgency or frequency).

Women who have these symptoms almost daily for more than a few weeks should see their doctor, preferably a gynecologist.

## *How is it treated?*

The cornerstone of therapy is surgery. Therefore, it is vitally important that a patient be operated on by the right doctor. A gynecologic oncologist has special surgical training which enables him/her to perform the appropriate and optimal surgical procedure. Furthermore, he/she understands the biology of ovarian cancer and can appropriately address each of the metastatic sites and remove all of the visible tumor whenever possible. For women who don't have access to these specialists, it is important to determine that their surgeon understands that the key to success is removal of as much tumor as possible. After surgery, most patients receive chemotherapy for approximately six months.

## *What are the risk factors?*

The risk of ovarian cancer increases with age, especially around the time of menopause. There are cases of ovarian cancer in women as young as teens, but it is most often a disease of women older than 50. A family history of ovarian cancer is one of the most important risk factors. It is important for women to find out if members of their family have been affected by cancers of the ovaries, uterus, colon or breast because there may be a hereditary tendency linking these cancers.

The genes for ovarian cancer are not "sex linked," which means that familial cancer risk can be transmitted by either the mother or the father. For example, if your father's sister had ovarian cancer, you are at a higher risk. Still, it is important to remember that most women with ovarian cancer do not have a family history of this disease. Infertility and not bearing children are additional risk factors, whereas pregnancy can decrease the risk of developing ovarian cancer. Birth control pills provide an incremental reduction in risk each year they are taken. Tubal ligation has also been found to significantly reduce the ovarian cancer risk.

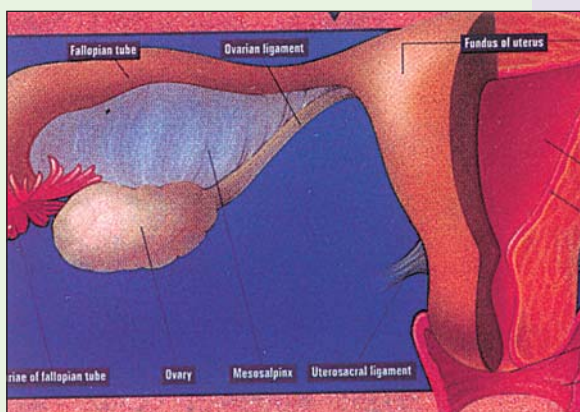
## UTERINE CANCER

### *What is uterine cancer?*

Most uterine cancers begin in the lining of the uterus (endometrium). The endometrium is the tissue shed each month with the menstrual cycle. After menopause, the endometrium flattens out. With uterine cancer, it is typically the cells in the lining that grow out of control and invade the muscle of the uterus (the myometrium). From there, the cancer can spread to lymph nodes or surrounding organs. Another type of uterine cancer is uterine sarcoma. These tumors develop in the wall of the uterus and are less common than endometrial cancers.

### *What are common symptoms?*

Bleeding after menopause and irregular, or excessive vaginal bleeding before menopause, may be a warning sign of uterine cancer. Uterine cancer is frequently diagnosed at an early stage because the bleeding is a trigger that prompts women to see a physician. Enlarging fibroids after menopause may be a warning sign for uterine sarcoma.

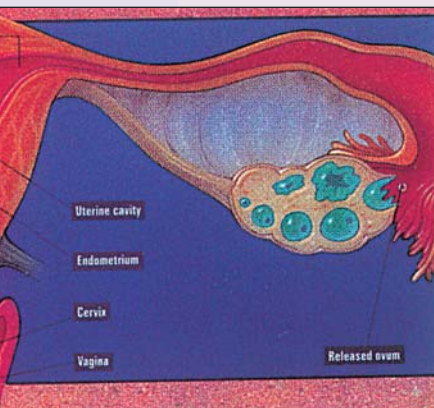


### *How is it treated?*

A diagnosis of uterine cancer is typically made by an endometrial biopsy, and is frequently treated by hysterectomy and surgical staging. This involves removing selected lymph nodes and performing biopsies to find the extent of the cancer. Involvement of a gynecologic oncologist at the time of the hysterectomy is important in order to ensure that the appropriate lymph node assessment and staging biopsies are performed. Many patients are cured by surgery alone. For some uterine cancers, including sarcomas, radiation treatments or chemotherapy may be needed after surgery.

### *What are the risk factors?*

For endometrial cancers, the risk factors include obesity, hypertension, diabetes, tamoxifen use and late menopause. Women who have not been pregnant have a slightly higher risk. Use of estrogen medications without the balancing effect of the other female hormone progesterone causes increased risk. Pelvic radiation and tamoxifen use are associated with increased risk for uterine sarcomas.



## CERVICAL CANCER

### *What is cervical cancer?*

Cervical cancer is the most preventable of the gynecologic cancers. The Pap test has significantly reduced the incidence and death rates of cervical cancer for women who get regular tests. The Pap test can detect abnormal cells or precancerous changes in the cervix that precede the development of cancer, thereby allowing a healthcare provider to intervene. When cervical cancer arises, the tumor can replace the normal cervix and can spread to the lymph nodes, bladder, rectum or other distant sites.

Since 2002, women age 30 and older have had an additional option for screening for cervical cancer. The test checks directly for Human Papillomavirus (or HPV), the virus that causes cervical cancer. The main advantage of combining the HPV test with a Pap test is that women with both a negative HPV test and a normal Pap test are at very low risk for cervical cancer and can be screened less often (no more than every 2-3 years).

A vaccine to prevent cervical cancer became available in the United States in 2006. The vaccine is most effective when given before a woman starts to have sex. The vaccine is not a substitute for cervical cancer screening, which should still be scheduled according to standard guidelines.

### *What are the common symptoms?*

Cervical cancer typically has no symptoms in the early stages. That is why Pap tests are important. Bleeding after intercourse, excessive discharge and abnormal bleeding between periods are the most frequent symptoms, but by having those symptoms it does not mean you have cervical cancer; see your healthcare provider if this is abnormal for you. Cervical cancer is easily diagnosed by a magnified

view of the cervix called colposcopy and cervical biopsies that are done in the doctor's office. Sometimes a minor surgical procedure called a LEEP or cone biopsy makes the diagnosis.

### *How is it treated?*

Most cervical cancers are diagnosed when they are still within the cervix. Most tumors within the cervix can be successfully treated with a 'radical' hysterectomy or radiation therapy with a little chemotherapy. Both forms of treatment have similar cure rates but different side effects. In a radical hysterectomy, the cervix, uterus, and surrounding tissues and lymph nodes are removed, but not necessarily the ovaries. This is important for young women since the loss of fertility does not have to be compounded by early menopause. Some patients may undergo radiation therapy and avoid surgery, but they may have later side effects such as bowel and bladder problems, and vaginal dryness. When cervical cancer has spread outside the cervix, radiation therapy is most effective. Some of the earliest tumors may be treated with a cone biopsy or a radical trachelectomy (the removal of the cervix without removal of the uterus). These surgeries have the advantage of preserving fertility, but are only offered to women with certain cervical cancers depending on a lot of factors. You should discuss what option is right for you with a Gynecologic Oncologist.

### *What are the risk factors?*

Not seeing a healthcare provider and not getting regular Pap tests are the biggest risk factors. Having persistent abnormal cells at the cervix from HPV infection increases a woman's risk for getting cervical cancer. HPV infection is common in all sexually active women, but causes cancer only in a few. Smoking, a high number of sexual partners and early age of first intercourse are other risk factors. Having an HIV infection is also associated with a higher risk of cervical cancer.

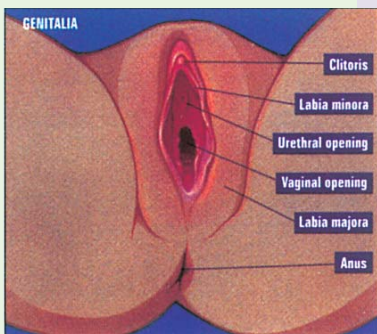
## VULVAR CANCER

Vulvar cancer is typically a disease of older women and is often heralded by itching in the vulvar area. Women in their 70's, 80's and 90's should not attribute perineal itching only to yeast and other infections and should have a physician examine them if these symptoms persist. Most vulvar lesions in older women should be biopsied. It is encouraging to note that this is usually a very curable type of cancer, typically with surgical removal of the vulvar lesions and the groin lymph nodes. Risk factors include diabetes, advanced age and chronic vulvar irritation.

## VAGINAL CANCER

Vaginal cancers are very rare. They are usually diagnosed in elderly women and treated with radiation. One exception

occurs in women who were exposed to a drug called DES. DES is a hormone medication that was used years ago to try to prevent miscarriage. Decades later scientists realized that daughters born of mothers who took DES have an increased risk of developing a rare form of vaginal cancer called clear cell cancer. DES has not been used in pregnancy since the 1960's. Discharge or bleeding are symptoms of vaginal cancer



## CANCER OF THE FALLOPIAN TUBES AND PERITONEUM

The fallopian tubes rarely develop cancer. Symptoms, treatments and risk factors for fallopian tube cancer are similar to ovarian cancer. Similarly, primary peritoneal cancer is uncommon and shares the same symptoms, treatments and risk factors as ovarian cancer. The peritoneum is the internal lining of the abdomen and pelvis. When cancer cells develop in this lining, the cells can circulate and grow throughout the abdominal cavity, similar to ovarian cancer. It is possible to have primary peritoneal cancer even though a woman's ovaries have been removed.

## TYPICAL QUESTIONS TO ASK YOUR DOCTOR

You will probably have many questions for your doctor if you have been diagnosed with a gynecologic cancer. The following are typical questions you'll want answered:

- ❖ Has the cancer spread? What does that mean?
- ❖ What happens in surgery?
- ❖ What happens with chemotherapy? How is it given and how often?
- ❖ Will I lose my hair?
- ❖ What happens with radiation therapy?
- ❖ Can I still work?
- ❖ How will this affect my family?
- ❖ Is it hereditary? Should I see a genetic specialist?
- ❖ Will I be infertile?
- ❖ How will this affect my sex life?
- ❖ What alternative treatments should I consider?
- ❖ How important is nutrition?
- ❖ Are you the appropriate doctor to be taking care of me?
- ❖ Have you had special training in the management of gynecologic cancers?
- ❖ Where should I go for additional information?

## WHAT NOW?

You have just received a great deal of information, much of it sounding scary. Relax — the good news is the more you know the better you'll be at protecting yourself. We recommend that you log onto the Women's Cancer Network at [www.wcn.org](http://www.wcn.org) to learn more. Try taking the personal cancer risk assessment to learn if you are high risk for any gynecologic cancer. Keep asking questions and keep learning. It is for your health!

## ABOUT GCF

The Gynecologic Cancer Foundation (GCF) was established by SGO in 1991 to develop educational programs for women, and create awareness about the prevention, early detection and treatment of gynecologic cancers. The Foundation also supports research and training related to gynecologic cancers.

As a 501(c)(3) not-for-profit charitable organization, GCF raises fund to support these programs from both public and private sources.

**To receive more information about our services or to contribute, please contact us.**

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