ACOG
The American College of Obstetricians and Gynecologists

FAQs

Cervical Cancer

Overview

What is cervical cancer?

The cervix is covered by a thin layer of tissue made up of cells. Healthy cells grow, divide, and are replaced as needed. Cervical cancer (cancer of the cervix) occurs when cells become abnormal. Cancer cells divide more rapidly. They may grow into deeper cell layers or spread to other organs. The cancer cells eventually form a mass of tissue called a tumor.

How common is cervical cancer?

An estimated 12,000 new cases of cervical cancer occur each year in the United States, and each year about 4,000 U.S. women will die from this disease.

How long does it take for cervical cancer to develop?

It takes several years for cervical cancer to develop. During this time, the cells on or around the cervix become abnormal. The early cell changes that occur before cancer is present are called dysplasia or cervical intraepithelial neoplasia (CIN).

HPV and Cervical Cancer

What is the main cause of cervical cancer?

The main cause of cervical cancer is human papillomavirus (HPV) infection. There are many types of HPV. Some types of HPV, called "high-risk types," can cause cancer of the anus, cervix, vulva, vagina, and penis. They can also cause cancer of the head and neck. Other HPV types have been linked to genital warts.

HPV infection is very common. It is passed from person to person through sexual contact. Some research suggests that at least 3 in 4 people who have sex will get a genital HPV infection at some time during their lives. However, being infected with HPV does not necessarily mean that a person will get genital warts or develop cancer.

Does HPV always lead to cervical cancer?

HPV enters cells and causes them to change and grow abnormally. Usually, your immune system gets rid of the virus quickly, and the infection goes away by itself. But in a small number of cases, HPV does not go away. The longer HPV is present and the older you are, the greater the risk that the virus will damage cervical cells.

How can I prevent HPV infection?

One way to protect against HPV infection is by getting the HPV vaccine. The vaccine is safe and effective and protects against the HPV types that are the most common cause of genital warts and cancer. Millions of people around the world have gotten the HPV vaccine without serious side effects. The vaccine does not contain live viruses, so it cannot cause an HPV infection.

When should people get the HPV vaccine?

Vaccination works best when it is done before a person is sexually active and exposed to HPV. But vaccination can still reduce the risk of getting HPV for people who have already been sexually active.

The ideal age for HPV vaccination of girls and boys is 11 or 12. But anyone can get the vaccine starting at age 9 and through age 26.

If you are older than 26, have not been vaccinated, and are at risk of a new HPV infection, you and your health care professional can talk about whether you need the HPV vaccine. The vaccine is approved for people through age 45.

Risk Factors and Screening Tests

Who is at risk of cervical cancer?

Cervical cancer can occur at any age. It occurs most often after age 40, but it can occur at younger ages too. However, it rarely occurs before age 21.

Your risk of cervical cancer depends on your sexual history, your immune system, your health, and your lifestyle. The most important risk factor for cervical cancer is infection with the types of HPV linked to cancer. The following factors increase your risk of becoming infected with HPV:

- Multiple sexual partners
- Having a male sexual partner who has had multiple sexual partners
- Early age at which you first had sex (younger than 18)

Other risk factors include the following:

- A personal history of dysplasia of the cervix, vagina, or vulva
- A family history of cervical cancer
- Smoking
- Certain sexually transmitted infections (STIs), such as chlamydia
- Problems with the immune system
- Having a mother who took a drug called diethylstilbestrol (DES) during pregnancy

Is there a screening test for cervical cancer?

Yes. Cervical cancer is largely preventable by having regular cervical cancer screening. About one half of cervical cancer cases occur in women who have never had screening.

Cervical cancer screening includes the Pap test , an HPV test, or both. The Pap test checks for abnormal cell changes of the cervix. The HPV test can detect many high-risk types of HPV even before there are visible changes to cervical cells. Read Cervical Cancer Screening for more information.

Symptoms and Diagnosis

What are some of the symptoms of cervical cancer?

Cervical dysplasia and cancer of the cervix often have no symptoms. By the time symptoms appear, the cancer cells may have already spread.

When symptoms do occur, the first signs may be abnormal bleeding, spotting, or watery discharge from the vagina. Menstrual bleeding may be heavier than usual, and bleeding may occur after sex. Most of the time, these signs are caused by other health problems besides cancer. However, if you have any of these symptoms, you should see your health care professional.

Signs of advanced cancer can include pelvic pain, problems urinating, and swollen legs. If the cancer has spread to nearby organs or the lymph nodes, the tumors can affect how those organs work. For example, a tumor might press on your bladder or block blood flow in a vein. These symptoms do not always mean cancer. If you have any of these symptoms, see your health care professional right away.

How is cervical cancer diagnosed?

If your health care professional suspects that you have cervical cancer, a biopsy may be done. Cancer can be detected with a Pap test, but a biopsy is needed to be sure.

If cervical cancer is diagnosed, your health care professional will assess the size of the cancer and the extent (if any) to which the disease has spread. This process may include the following tests:

- A pelvic exam (which may include a rectal exam)—An exam of the uterus, ovaries, and other organs near the cervix
- Cystoscopy—A test in which the inside of the urethra and bladder are studied with a lighted device
- Colonoscopy—A test in which the entire colon is examined with a lighted device

Because cervical cancer can spread to other areas of the body, you may need other tests to check these areas.

What are the stages of cervical cancer?

"Staging" is the process of finding out how much the cancer has spread. Most types of cancer have stages from I to IV. The lower the number, the less the cancer has spread.

Some types of cancer, including cervical cancer, have a Stage 0. Stage 0 is also called noninvasive cervical cancer or carcinoma in situ (CIS). In Stage 0, cancer cells are present on the top layer of the cervix only. They have not gone into deeper layers of the cervical tissue or other organs.

The remaining stages are called invasive cancer. In these stages, the cancer has invaded into deeper layers of the cervix.

- Stage I—The cancer is only on the cervix. Stage I has several substages. Stage IA is very early cancer. The cancer cells have gone only a few millimeters into the deeper layers of the cervix. Stage IB is also early cancer, but the cells have gone a little further into the cervix.
- Stages II to III—More advanced stages in which the cancer has spread to the vagina and pelvis.
- Stage IV—The cancer has spread to the bladder or rectum or to other organs.

Stages II to IV also have substages.

Treatment

How is invasive cervical cancer treated?

Invasive cancer of the cervix is treated with surgery, radiation therapy , and chemotherapy (the use of cancer-killing drugs). The type of treatment chosen depends on the cancer stage. You may receive more than one type of treatment.

Treatment works best at early stages of cancer. The 5-year survival rate for stage I cancer is 91 percent. The 5-year survival rate for stage IV cancer is 17 percent.

What is involved in surgical treatment for cervical cancer?

If surgery is recommended, the goal is to remove the tumor and any tissues where it may spread. In a simple hysterectomy , the cervix and uterus are removed. The ovaries

may not be removed if they appear normal. In a radical hysterectomy, the structures that support the uterus and a small part of the upper vagina are also removed. The ovaries, fallopian tubes , and nearby lymph nodes may be removed too.

What is involved in radiation therapy for cervical cancer?

Radiation therapy stops cancer cells from growing by exposing them to special radiation. Two methods can be used:

- In one method, radiation from outside of the body is directed at the tumor through the skin. This treatment can require daily visits to a clinic for several weeks.
- In the second method, a device that directs radiation at the tumor from inside the body is placed in the cervix. This treatment may be done as an outpatient procedure, or it may require a stay in the hospital.

Complications of radiation therapy include vaginal dryness, narrowing of the vagina, and damage to the ovaries, bladder, or bowel.

What is involved in chemotherapy for cervical cancer?

Chemotherapy is the use of cancer-killing drugs. Chemotherapy drugs travel through the blood and destroy different types of cells, including cancer cells. The treatments may be given in cycles either in a doctor's office or clinic, or it may require a hospital stay. It can be given alone or with radiation to make the radiation therapy more successful.

Is special follow-up required after treatment?

Depending on the stage of cancer and the type of treatment, cervical cancer usually does not return. But close follow-up is needed. Routine checkups and cervical cancer screening tests are important, even after treatment ends.

Your health care professional may suggest more frequent cervical cancer screening tests for the first few years after treatment to make sure that all the cancer cells were removed. Even if your cervix has been removed to treat your cancer, you still need cervical cancer screening. Cells are taken from the upper vagina instead of the cervix.

You may also need other tests and procedures. You and your health care professional should work together to plan your follow-up care.

Glossary

Anus: The opening of the digestive tract through which bowel movements leave the body.

Biopsy: A minor surgical procedure to remove a small piece of tissue. This tissue is examined under a microscope in a laboratory.

Bladder: A hollow, muscular organ in which urine is stored.

Cells: The smallest units of a structure in the body. Cells are the building blocks for all parts of the body.

Cervical Intraepithelial Neoplasia (CIN): Abnormal changes in the cells of the cervix that are caused by infection with human papillomavirus (HPV).

Cervix: The lower, narrow end of the uterus at the top of the vagina.

Chemotherapy: Treatment of cancer with drugs.

Co-testing: Use of both the Pap test and human papillomavirus (HPV) test to screen for cervical cancer.

Dysplasia: A noncancerous condition that happens when normal cells are replaced by a layer of abnormal cells.

Fallopian Tubes: Tubes through which an egg travels from the ovary to the uterus.

Human Papillomavirus (HPV): The name for a group of related viruses, some of which cause genital warts and some of which are linked to cancer of the cervix, vulva, vagina, penis, anus, mouth, and throat.

Hysterectomy: Surgery to remove the uterus.

Immune System: The body's natural defense system against viruses and bacteria that cause disease.

Lymph Nodes: Small groups of special tissue that carry lymph, a liquid that bathes body cells. Lymph nodes are connected to each other by lymph vessels. Together, these make up the lymphatic system.

Ovaries: Organs in women that contain the eggs necessary to get pregnant and make important hormones, such as estrogen, progesterone, and testosterone.

Pap Test: A test in which cells are taken from the cervix (or vagina) to look for signs of cancer.

Radiation Therapy: Treatment with radiation.

Sexually Transmitted Infections (STIs): Infections that are spread by sexual contact. Infections include chlamydia, gonorrhea, human papillomavirus (HPV), herpes, syphilis, and human immunodeficiency virus (HIV, the cause of acquired immunodeficiency syndrome [AIDS]).

Urethra: A tube-like structure. Urine flows through this tube when it leaves the body.

Uterus: A muscular organ in the female pelvis. During pregnancy, this organ holds and nourishes the fetus. Also called the womb.

Vagina: A tube-like structure surrounded by muscles. The vagina leads from the uterus to the outside of the body.

Vulva: The external female genital area.

If you have further questions, contact your ob-gyn.

Don't have an ob-gyn? Learn how to find a doctor near you.

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