Pap Smear

Introduction
Cancer of the cervix affects more than 10,000 women in the United States every year. Thanks to a procedure called a Pap smear test, many early stages of cervical cancer can be detected and treated. Your doctor has recommended that you have a Pap smear.

This reference summary will help you better understand what a Pap smear is and why it is beneficial.

Anatomy
The female reproductive organs include:
- The vagina
- The uterus
- The Fallopian tubes
- The ovaries

These organs are located in the pelvis, between the urinary bladder and the rectum.

The ovaries have 2 main functions:
1. The production of specialized hormones, such as estrogen and progesterone
2. Ovulation, which is the release of eggs needed for reproduction.

Estrogen and progesterone prepare the inner lining of the uterus in case a pregnancy takes place. These hormones also regulate when the eggs get released.
When an egg is released, it goes down the Fallopian tube, where it may or may not get fertilized by a sperm. If it is not fertilized, the egg and the inner lining of the uterus are discharged to the outside of the body during the menstrual period.

The uterus is pear shaped and measures approximately 3 inches in length. The lowest part of the uterus is called the cervix. It opens into the vagina. The vagina opens to the outside of the body between the urethra, which is the urinary bladder opening, and the rectum.

Diseases of the Cervix

Some sexually transmitted diseases are associated with the development of cancer of the cervix, also called cervical cancer. Since the cervix comes in contact with semen during unprotected heterosexual sex, it could get infected with sexually transmitted diseases.

Cervical cancer usually develops gradually. At first, the cells that line the cervix become slightly abnormal. This is known as “atypia.” After a while, atypia could turn into cancer.

In the early stages of cervical cancer, the cancer is limited to just the surface area of the cervix. This is called “carcinoma in situ.”

If left untreated, the cancer will move deeper into the cervix. From there, it could move to other organs. Treating atypia and carcinoma in situ is very successful in curing cervical cancer.

The Pap smear test is essential in detecting atypia early. It is named after the doctor who made it popular, Dr. Papanicolaou. The aim of a Pap smear test is to obtain a specimen from the cervix using a swab, or smear. The specimen is sent to a lab to be analyzed.

During a Pap Smear

First you will be asked to undress, at least from the waist down. You will be given either a gown or a sheet to drape over your lap. You will then be asked to lie on an examination table and put your feet in the stirrups.
The doctor or nurse will then gently open your vagina and insert a speculum. A speculum is a specialized instrument that keeps the vagina open so that a health care provider can see and reach inside the vagina more easily.

Next, a small spatula is inserted into the vagina and used to swab the cervix. This may cause some discomfort followed by minor cramping for a few hours, but the Pap smear test should not be painful.

The sample, which contains cells and mucus, is then smeared onto a glass slide and sent to a lab for a pathologist to look at. After the test is finished, the speculum is taken out and you will be able to put your clothes back on.

Results
In the lab, a specialized doctor known as a pathologist looks at the Pap smear slides under a microscope. By doing this, he or she is able to find out if there is infection, atypia or cancer in the specimen. Next, the test results are sent to your doctor. He or she will discuss the results with you.

It is very important to make a follow-up appointment if your test results are abnormal. Abnormal test results are known as positive Pap smear tests.

Results are considered abnormal if any of the following were noticed on the slide:
- Atypia
- Early cancer
- Advanced cancer
- Infections

A Pap smear test should be done regularly. In cases where abnormalities are found, the test might need to be repeated every few months.
Prevention

A Pap smear test is one of the best ways to detect cervical cancer in its early stages. The chances of successfully treating cervical cancer are higher if it is found early.

There are several different recommendations for screening. The following are some of the recommendations. Talk to your healthcare provider about what is best for you.

- Women ages 21 to 29 should be screened every two or three years using either the standard Pap or liquid-based cytology. Your doctor may have recommended screenings more or less often. Talk to your healthcare provider about what is best for you.

- Women age 30 and older who have had three consecutive negative cervical cytology test results may be screened once every three years with either the Pap or liquid-based cytology.

- Women with certain risk factors may need more frequent screening, including those who have HIV, are immunosuppressed, were exposed to diethylstilbestrol (DES) in utero (which means while they were in the mother’s womb), and have been treated for cervical intraepithelial neoplasia (CIN) 2, CIN 3, or cervical cancer.

Since cervical cancer is very strongly associated with sexually transmitted diseases, practicing safe sex is very important. When used properly, condoms are extremely helpful in preventing sexually transmitted diseases.

A vaccine against some types of the human papilloma viruses is now available. These viruses have been linked to the development of cervical cancer. Taking the vaccine helps prevent cervical cancer. If you have not taken the vaccine yet, make sure to ask your doctor about it.

Smoking has also been linked to cervical cancer. This is an excellent reason to refrain from or stop smoking!
When found early, most cases of cervical atypia or cancer can be cured. You owe it to yourself to have Pap smears on a regular basis!

Summary
A Pap smear is extremely important in detecting cervical cancer in its early stages. Pap smears are safe, painless, and very reliable.

Getting regular Pap smears could save your life! Don’t forget to schedule your Pap smear. It is a small price to pay for your health.