

Schiffert Health Center www.healthcenter.vt.edu

Patient Information:

Pap Tests and Results Questions and Answers

What is a Pap test?

The Pap test is a sampling of cells from the surface and canal of the cervix. It was developed by George Papanicolaou in 1924 as a method for detecting cervical cancer and has evolved into a very effective screening test for precancerous cell changes on the cervix. The incidence of invasive cervical cancer has decreased by 80% since Pap tests became a part of routine women's health care. Changes caused by the Human Papilloma virus are common in women aged 16-20 but the immune system generally clears these changes within 1-2 years without producing cancerous changes.

How often should I have a Pap test?

Guidelines for pap testing changed in 2012. Paps should start at age 21. Women age 21-29 should have pap testing every 3 years unless they have had an abnormal pap. Women age 30-65 may be screened every 3 years or if they would like to lengthen the screening interval they may have high risk HPV-DNA testing with the pap. If both test results are negative and they have no high risk factors, they may have the Pap test every 5 years.

Does the Pap test detect sexually transmitted diseases?

The Pap test is primarily a test for precancerous changes of the cervix. Improvements in Pap technology allow testing for the presence of Human Papilloma virus (HPV) as an aid in evaluating abnormal Pap test results. There is a consensus among experts that almost all precancerous changes of the cervix as well as cervical cancer are triggered by infection with HPV.

What do my Pap test results mean?

Pap results are initially classified as "negative" or "abnormal." If the Pap test is negative, it should be repeated according to the guidelines. Since the Pap test is a "screening" test rather than a "diagnostic" test, an abnormal result does not prove the presence of an abnormality. Instead it indicates that further testing may be necessary to make a diagnosis.

Is the pelvic exam the same as the Pap test?

No, please do not confuse the Pap test with the pelvic exam. A pelvic exam should be done yearly on women of all ages to check the vagina, uterus, ovaries, fallopian tubes, urinary bladder and rectal area for any abnormality in their shape and size.

What is a colposcopy?

Colposcopy is a diagnostic test used to evaluate abnormal Pap test results. It is available at most gynecology offices. The colposcope is a magnifying scope which allows the examiner to see the abnormal cells the Pap test indicates are present. A small amount of acetic acid is applied to the cervix because it highlights the abnormal cells making them easily identifiable with the colposcope. If any cells are highlighted by the acetic acid, a tiny pinch of tissue (biopsy) is taken from those cells. One or more biopsies may be taken depending upon the number of areas found during the colposcopy. These biopsies are sent to a pathologist who can examine them further to obtain a definitive result. If precancerous cells are found by the pathologist they may be treated to prevent them from progressing to cervical cancer. At times, there may be no cells highlighted during the exam so that no biopsies are taken. At other times, the biopsy may take all the abnormal cells off the cervix thus no treatment is needed.

Will the colposcopy be painful?

Because the cervix does not contain many nerve endings the colposcopy with biopsy is usually an easy procedure to undergo. It can, however cause cramping like menstrual cramps similar to what the Pap test can cause for some women. An analgesic such as Ibuprofen may help manage the cramping. When you make your appointment ask the gynecology office if it is OK to take Ibuprofen before the exam.

The most common descriptors of abnormal Pap Tests are:

Atypical Squamous Cells of Undetermined Significance (ASC-US):

This is the most frequent abnormality reported on Pap Tests. Squamous cells are the normal cells covering the surface of the cervix, and they have a characteristic appearance under the microscope. Atypical squamous cells lack this normal appearance. The presence of atypical cells always requires further evaluation. Up to one woman in every six with atypical squamous cells may have underlying precancerous changes.

Low Grade Squamous Intraepithelial Lesion (LSIL, Mild Dysplasia, CIN I, HPV): Dysplasia means abnormal tissue growth. Cells in the cervix normally stop growing before they reach the surface where they can be collected with a Pap Test. With LSIL some actively growing cells are seen on the Pap test indicating more rapid cell growth. The presence of LSIL always requires further evaluation.

High Grade Squamous Intraepithelial Lesion (HSIL, Moderate or Severe Dysplasia, CIN II or CIN III/Carcinoma in Situ): Abnormal appearing, actively growing cells are seen on the Pap tests of women with high grade lesions. In some cases the appearance is indistinguishable from superficial localized cancer of the cervix. The presence of HSIL always requires further evaluation.

Atypical Glandular Cells (AGC): Atypical glandular cells on Pap tests are an unusual but important cytologic diagnosis. Atypical glandular cells of undetermined significance means the glandular cells demonstrate nuclear atypia that exceeds reactive or reparative changes. AGC occurs in < 1 % of all cervical tests. A significant percentage of women with AGC will have a more serious lesion. Colposcopic examination is recommended for all women with a diagnosis of AGC. Cells from the opening of the cervix or from the nearby lining of the uterus may be sampled also.

What do I do if my Pap test is abnormal?

Your medical practitioner will discuss the significance of your Pap result and make recommendations for further evaluation. The type of evaluation is based on the result of your Pap test, your age and HPV DNA test result if available.

Atypical Squamous Cells: This may be reported as ASC-US (atypical squamous cells of undetermined significance) or ASC-H (atypical squamous cells – cannot exclude a high grade lesion). Further evaluation depends on which of the two is reported.

ASC-US: Far more common. Since precancerous changes are triggered by HPV infection, the next step is testing of the original Pap test sample for the presence of high risk types of HPV.

- Women ages 21-24 who test positive for high risk HPV DNA should repeat the pap in a year.
- Women age 25 + who test positive for high risk HPV DNA should be referred for colposcopy.
- Women who test negative for high risk HPV should have their next Pap test according to routine screening or every three years.

ASC-H: Over 24% of women with this level of atypia have precancerous changes. Colposcopy is recommended regardless of age or HPV result.

LSIL: Between 15% and 30% of women with LSIL on their Pap test have underlying precancerous changes.

- Women ages 21-24 should repeat the pap in a year.
- Women age 25 + should be referred for colposcopy.
- Women who test negative for high risk HPV DNA may repeat the pap in a year.

HSIL: Approximately 75% of women with HSIL on their Pap test have underlying precancerous changes and 1 - 2% may have cancer of the cervix. All women with this degree of abnormality should be referred for colposcopy regardless of age or HPV test result.

AGC: Colposcopy is recommended regardless of age or HPV test result.