Abnormal PAP Test Results

Current guidelines recommend cervical cancer screening by Papanicolaou (Pap) test beginning at age 21, regardless of sexual history. Approximately 5-10% of women who have a yearly Pap test will have an “abnormal” Pap result. The following information will answer some of your questions about abnormal Pap tests. The results of my last Pap test are abnormal. I’m worried!

What does this mean?
Abnormal results on a Pap test mean that there are changes in the cells of the cervix—the opening of the uterus (womb). Cervical cell changes are most often caused by inflammation. Inflammation may be the result of infections (bacterial, viral, or fungal) or related to hormonal changes. Occasionally, changes in cervical cells can signal precancerous or cancerous conditions that need to be examined further by a physician.

Is the Pap test always accurate?
Although the Pap test is very effective in detecting changes in the cervix, like any test, it is not always 100% accurate. There may be too few or too many cells in the sample to allow an accurate reading, or an infection may be obscuring abnormal cells. Although no test is perfect, because the Pap test can find cell changes at an early stage when treatment is more successful, it helps prevent cancer of the cervix. Since the Pap test was introduced 50 years ago, the number of deaths from cervical cancer has decreased by 70%.

Does an abnormal Pap test mean that I have cancer?
No. For the vast majority of women, an abnormal Pap test result does not lead ultimately to a diagnosis of cancer. Early treatment of precancerous conditions can prevent cancer from ever occurring. Yearly Pap tests and complete follow-up care ensure that even if cervical cancer is present, it will be detected early enough for successful treatment. That is why it is so important to return to your doctor for follow-up care.

What do the abnormal results mean, specifically, and what should I do?
Consult your physician to help clarify the test results and discuss any questions or concerns. The following information explains some common abnormal results and recommendations.

- **ASCUS:** Atypical Squamous Cells of Unknown Significance. This term is used when the cervical cells look borderline between normal and abnormal. Inflammatory cells are seen, usually suggesting an infection or disturbance on the surface of the cervix. To determine if the cause of an ASCUS Pap result is HPV (Human Papilloma Virus), many labs will test the cervical cells for the presence of “high-risk” types of HPV.
- **ASCUS/High-risk HPV-Negative:** This means the type of HPV associated with progressing abnormalities of the cervix (high-risk HPV) is NOT detected. Usually the cells return to normal without treatment. It is important to have another Pap test in 12 months.
- **ASCUS/High-risk HPV-Positive:** This means the type of HPV associated with progressing abnormalities of the cervix has been detected. It is important to be evaluated within the next 6 months by a gynecologist off-campus for colposcopy (an examination of the cervix with a special microscope) or other recommendations.
- **LGSIL or LSIL:** Low-grade Squamous Intra-epithelial Lesion, sometimes called mild dysplasia. Dysplasia is a change in the size, shape, or organization of cells. Abnormal cells have replaced normal ones and could develop into cancer cells over a period of years. “Low-grade” indicates the changes have started to occur recently. Since HPV is the most likely cause for dysplasia, HPV testing is not done routinely by the lab for an LGSIL result. It is important to be evaluated within the next 3 months by a gynecologist off-campus for colposcopy and biopsy (examination of the cervix with a microscope to obtain samples of abnormal cells).
- **HGSIL or HSIL:** High-grade Squamous Intra-epithelial Lesion, sometimes called moderate or severe dysplasia. This term is used when cervical cells are significantly different from normal cells. These cells are usually precancerous and more likely to progress to cervical cancer without treatment. It is very important to be evaluated within the next month by a gynecologist off-campus for colposcopy and biopsy (examination of the cervix with a microscope to obtain samples of abnormal cells).

What is the treatment for dysplasia?
Colposcopy may be performed to allow direct viewing of the cervix through a special magnifying microscope (colposcope). A biopsy is done on abnormal cells seen by colposcopy to accurately diagnose the problem. Often all the inflamed tissue is removed with the biopsy and no other treatment is needed.

Sometimes minor surgery may be needed to treat the cervix. The affected tissue is removed and new tissue gradually grows to heal the cervix. There are several surgical methods: cryosurgery, which freezes the affected tissue; electro surgery, which destroys affected tissue with heat; electrosurgical excision which removes tissue using a thin loop carrying electrical energy; laser treatment, which removes abnormal tissue with high intensity light; or conization, a surgical biopsy that takes larger samples.

What should I know about HPV?
HPV, human papillomavirus, is the virus that causes warts. It is an infection that is transmitted by direct skin-to-skin contact. When genital skin is involved, the infection is generally considered “sexually-transmitted”.

HPV infection is very common, with an estimated 80% of sexually active people becoming infected at some point in their lives. However, most people do not have symptoms and the infection resolves on its own. It is important to be tested for HPV if you are at risk of contracting the virus.
people contracting it at some point in their lives. There are over 100 different types of HPV. Most HPV infections do not cause any health effects at all because they are eliminated by the infected person’s immune system before any damage occurs. At times, certain types of HPV (‘low risk’) can cause minor cell changes. Usually those types do not cause long term problems. Other types (‘high risk’) can cause infected cells to lose control of their own growth; if early changes are not detected and treated, these changes can turn into cancer years later.

There is an HPV vaccine shown to be effective at preventing 4 types of HPV (2 low-risk and 2 high-risk types). The vaccine may not fully protect everyone, and does not prevent all types of cervical cancer, so it’s important to continue routine cervical cancer screenings. The vaccine will not protect against diseases caused by other HPV types or against diseases not caused by HPV. The vaccine is not contraindicated for patients who test positive for HPV.

How would I know if I had HPV?
Often infected women and men do not know that they have an HPV infection. Some individuals develop genital warts (‘condylomata acuminata’)—raised, rough-surfaced, flesh-colored or gray bumps. They usually don’t hurt, but may itch slightly or feel irritated.

Other individuals develop HPV infections on the cervix. These infections do not produce visible symptoms. HPV infection of the cervix is found by having a Pap test or cervical HPV test performed during a pelvic exam. In most cases, a Pap test showing intra-epithelial lesions or dysplasia or cervical cancer is a result of HPV infection.

If HPV is the cause of my abnormal Pap test, how did I get it?
HPV is usually acquired by direct skin-to-skin contact during intimate sexual contact with someone who is infected. Most men and women are not aware that they have the virus. Condoms do not offer complete protection from HPV. Increasing numbers of partners increases the risk of getting HPV, but the virus is so common that having only a single lifetime partner does not assure protection. It is usually impossible to determine when and from whom HPV was contracted. HPV may be detected fairly soon after exposure, or may not be found until many years later. For all these reasons, it is not helpful or fair to blame your partner.

If I tested positive for HPV, what does this mean for me?
Most HPV infections go away without treatment because the immune system finds the virus and either gets rid of it or suppresses it to the point that it never returns to cause problems. Cell changes that may eventually lead to cervical cancer only occur when this does not happen and HPV stays for many years. Even though HPV is found in cervical cancer, most people testing positive for HPV are not at risk for getting cervical cancer because they have the virus for only a short time (months rather than many years).

What does my positive HPV test mean for my partner?
Most sexually active couples share the HPV until the immune response eliminates the infection. Partners who are sexually intimate only with each other do not pass the same virus back and forth. In other words, when the virus is shared, being exposed to more of the same virus by one’s partner does not make it more difficult to eliminate the infection. When HPV infection goes away the immune system will remember that specific HPV type and keep a new infection of the same HPV type from ever occurring again. However, because there are many different types of HPV, becoming immune to one HPV type may not protect you from getting HPV again if exposed to another HPV type.

If I have HPV or a cell abnormality, is there anything I can do?
• Closely follow the doctor’s recommendations for treatment and repeat Pap tests.
• Don’t smoke. Smoking has been shown to increase the chance that cell abnormalities might progress to more severe changes.

Key Points to Remember:
• Cervical cancer is preventable. Regular screening and early detection of abnormal cell changes is crucial.
• Almost all women have HPV at some point, but very few will develop cervical cancer. The immune system of most women will usually suppress or eliminate HPV. Only HPV infection that does not go away over many years may lead to cervical cancer.
• It can be helpful to know your HPV status. This can help determine how often your doctor will recommend that you be tested.
• Don’t blame. Your HPV status is not a reliable indicator of your sexual behavior or of your partner’s behavior.

For more information:
American Social Health Association:
www.ashastd.org
Genital HPV Infection CDC Fact Sheet:
www.cdc.gov/STD/HPV/STDFact-HPV.htm

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