

For many years, the Pap smear has been the most effective way to tell if a woman is at risk of developing cervical cancer.

The Pap smear may also identify a common viral infection called Human Papillomavirus (HPV). This brochure gives you some important facts about HPV and about current testing procedures.

What is HPV and why is it so important?

Human Papillomavirus (HPV) is quite a common viral infection that can cause skin warts and can also affect the genital tract in both men and women. There are many types of HPV and only some of these types affect the female genital tract causing lesions on the vulva, vagina and/or cervix.

HPV has been identified as the primary cause of some of the atypical changes in the cells of the cervix found in Pap tests, including changes that can lead to cervical precancer and cancer. Most women with HPV never get significant abnormality, precancer or cancer. However a few do and this is why HPV is so important.

The HPV types can be divided into two groups:

- *low risk types, which may cause genital warts and minor changes in the cervix;*
- *high risk types, which, in addition to minor changes, sometimes cause precancerous changes, and cervical cancer.*

Identifying the presence of the high risk HPV types in women helps identify the relatively few women who are at greater risk of developing precancerous changes and cancer.

How is HPV acquired?

Having HPV is not uncommon. It is an infection that can affect anyone who has ever been sexually active. In the vast majority of cases HPV infection is transient, causes no problems, and is harmless. However, in some women persistent infection with the high risk HPV types is linked to the risk of developing precancerous changes and cancer of the cervix.

How do I know if I have HPV?

Unlike other viral or bacterial infections, HPV does not cause you to feel unwell, and does not cause irritation, discharge or bleeding. HPV may be present for years before it causes the characteristic changes in the cells of the cervix which are recognised in the routine Pap test.

The presence of HPV in the genital tract is most often detected in a routine Pap test. This is more common than discovering genital warts. Most women with HPV changes in the Pap test don't ever develop warts, and most do not realise they have the infection. The Pap test, however, cannot detect HPV directly.

HPV can also now be detected through a simple test that uses advanced technology to detect the genetic code (DNA) of HPV. This test can identify the presence of the HPV types that have been linked with cervical precancer and cancer. The great majority of women with these types do not ever actually develop cancer, but a few do.

How can having the HPV test help me?

The HPV test may be useful when the Pap test has shown some abnormal cells, or has been difficult to evaluate. In some women with atypical and inconclusive Pap tests the additional use of the HPV test can be helpful in working out what further tests and treatments may be necessary. If the high risk HPV types are not detected, ie. a negative result, further investigations may be avoided.

In addition, the HPV test can be used to test for the continued presence of high risk HPV in patients who have been treated for a high grade intraepithelial lesion (either CIN II or CIN III).

Negative results in both the Pap and the HPV tests mean a significant or high grade lesion is unlikely. This can be reassuring, especially if you have previously had a number of abnormal, inconclusive or unsatisfactory smears.

Collecting the sample for HPV testing.

The process of collecting cells for the HPV test is simple and can be performed either at the same time as your Pap test or on a separate visit. Cells are scraped or brushed gently from the cervix in a similar way to a Pap test. If you have had a ThinPrep test with your Pap smear, this specimen can also be used for the HPV test if it is necessary.

The test will be conducted and results analysed by our expert laboratory staff, including scientists and pathologists who will notify your doctor of the results.

What happens next?

The information about your HPV result, combined with the Pap test result, enables your doctor to assess whether you need any further investigation at present, or simply ongoing Pap test follow-up.

If changes are present in your Pap test and you do have high risk HPV types, then your doctor may suggest you have a colposcopy. This is a procedure usually undertaken by a gynaecologist using a specialised microscope to closely examine the cervix under magnification.

This procedure may also be necessary in women with marked Pap test changes, even if high risk HPV types are not detected.

The main advantages of the HPV test.

The HPV test may reduce the uncertainty and anxiety caused by abnormal or inconclusive Pap test results. It is a very useful way to discover if you may be at increased risk of developing cervical precancer or rarely, cancer, enabling your doctor to monitor you more closely.

The HPV test may prevent delays in receiving further appropriate investigation and management if your Pap test is mildly abnormal.

The HPV test may save unnecessary extra examinations if you do not have high risk HPV types. However you will still need regular Pap tests.

The HPV test can be used after treatment of high grade squamous intraepithelial lesions to establish whether high risk HPV is still present.

How is HPV infection treated?

If you have only minor changes in your Pap test and high risk HPV types are not evident, then you are at low risk of progressing to severe precancerous change and cancer. In this instance, your doctor may recommend a Pap test follow-up protocol, rather than further treatment.

Cervical lesions, if detected early, can almost always be treated simply. Your doctor will be able to discuss the effective treatment options with you. The lesions are generally quite small and may be removed either with surgical, diathermy or laser treatment.

Remember that cervical cancer is a rare condition. Cytology has led to the prevention of very many cases and new testing procedures such as the HPV test may also have a role in reducing the incidence of cervical cancer.

Is the test covered by Medicare?

Currently, Medicare and the private health funds only provide a rebate for the HPV test for the following up of high grade squamous intraepithelial lesions. Testing in any other circumstance will attract a fee. (For details of the exact cost, see our Billing Guide for Out Patients, **My Pathology Test - What will it cost?**)

If you have any more questions about HPV, Pap smear results or have any other concerns about the testing procedure, feel free to contact your doctor or call Western Diagnostic Pathology, Tel 08 9317 0999

understanding human papillomavirus



MANARK_9.2008