Cancer Association of South Africa (CANSA)



Fact Sheet And Position Statement on Papanicolaou Smear Tests During Pregnancy

Introduction

A Papanicolaou smear is a quick and simple test in which a number of cells are collected from the cervix and sent to a laboratory where it is tested for changes. No drugs or anaesthetics are required and a doctor or nurse can easily do a Papanicolaou smear test. It only takes a few minutes and is the best practice against cervical cancer.

[Picture Credit: Pregnancy]

All women who have ever had sex should start having Papanicolaou smear tests between the ages of 18 and 20 years, or two to three years after commencement of sexual activity sex - whichever is later.



Papanicolaou smear tests do not diagnose cancer, but it detects 95% of cervical cancers at a stage when it cannot be seen with the naked eye. Any abnormality detected can then be treated and are almost always cured. Though Papanicolaou smear tests do not specifically test for other gynaecological problems or sexually transmitted infections, Papanicolaou smear tests will indicate the presence of abnormal cells for which further testing or examination could be required.

Eun, T.J. & Perkins, R.B. 2020.

"The most effective strategy for cervical cancer prevention involves vaccination to prevent human papillomavirus (HPV) infections during adolescence followed by screening to detect HPV infections during adulthood. HPV vaccination before sexual debut can prevent HPV infections, precancers, and cancers. HPV vaccination of sexually active populations does not prevent cancer. Screening with HPV testing is the most effective method of detecting precancers and cancers between ages 25 and 65. Ensuring adequate screening around the age of menopause may be the key to preventing cervical cancer among elderly women. Most cervical cancers at all ages occur among unscreened or underscreened women."

Human Papilloma Virus Infection

Human Papillomavirus (HPV) is the most common sexually transmitted virus. Almost every sexually active person will acquire HPV at some point in their lives.

Several types of cancer are associated with HPV:

- Cervical cancer: the most common HPV-associated cancer. Almost all cervical cancer is caused by HPV
- Vulvar cancer: about 50% are linked to HPV
- Vaginal cancer: about 65% are linked to HPV
- Penile cancer: about 35% are linked to HPV
- Anal cancer: about 95% are linked to HPV
- Oropharyngeal cancers (cancers of the back of the throat, including the base of the tongue and tonsils): about 60% are linked to HPV - some of these cancers may also be related to tobacco and alcohol use

Most of the time, HPV goes away by itself within two years and does not cause health problems. It is thought that the immune system fights off HPV naturally. It is only when certain types of HPV do not go away over years that it can cause cancers. It is not known why HPV goes away in most, but not all cases. There is no way to know which persons will go on to develop cancer or other health problems.

There are HPV vaccines available to protect individuals against HPV infections. Even though a woman has had a HPV vaccine, regular Papanicolaou smear tests remain essential, as the vaccine does not protect against all cancer-causing types of HPV.

For additional information on HPV, refer to CANSA's Fact Sheet on Human Papilloma Virus Infection and Cancer.

Papanicolaou Smear Tests During Pregnancy

A Papanicolaou smear test should form a routine part of pre-natal care. It poses no risk to the foetus.

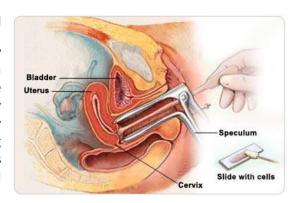
It is recommended that every woman presenting for antenatal care should be offered cervical screening by Papanicolaou smear if they have not had cervical screening within the past two years.

Papanicolaou smear tests can generally be undertaken during pregnancy, ideally before 24 weeks gestation. The woman may have some spotting and minor bleeding following the Papanicolaou smear. The doctor or professional nurse should be able to advise women what is normal following a Papanicolaou smear test and address any specific concerns they may have about having a Papanicolaou smear test during pregnancy.

If a woman has an abnormal Papanicolaou smear test result before, or during, pregnancy, the doctor will discuss treatment options which can be done safely during pregnancy, or depending on the diagnosis, delay treatment until after the birth of the baby. If the doctor suggests a colposcopy or cervical biopsy, there can be slight bleeding from the external part of the cervix, but this should not be a serious complication.

[Picture Credit: Papanicolaou Smear]

If the doctor is considering doing an internal biopsy into the endocervical canal, there may be a risk of a pregnancy complication. But the doctor will have the patient and foetus' best interest in mind and will only do what is medically necessary. The doctor may perform additional Papanicolaou smear tests during the course of the pregnancy if necessary. Many times the birth of the baby will wash away any abnormal cervical cells.



Suzuki, K., Furuhashi, M., Kwamura, T., Kubo, M., Osato, K. & Yamawaki, T. 2017.

AIM: Cervical cancer onset initially occurs during youth. Papanicolaou tests performed in early pregnancy can detect cervical cancer; however, Papanicolao tests during pregnancy have been noted to be inaccurate, reflecting changes associated with pregnancy. Therefore, we assessed the effect of pregnancy on Papanicolaou test results.

METHODS: Of 1351 pregnant women who delivered at Ise Red Cross Hospital between January 2010 and December 2014, 1213 underwent Papanicolaou tests at early pregnancy and post-partum. We compared the Papanicolaou test results.

RESULTS: The results of the Papanicolaou test were different in 32 patients. Of the 1191 patients negative for intraepithelial lesions or malignancy in early pregnancy, 16 had other cytological abnormalities post-partum. We performed therapeutic conization post-partum in four patients. The Papanicolaou test results in early pregnancy of the four patients were negative for intraepithelial lesions or malignancy in one patient, atypical squamous cells of undetermined significance in one and high-grade squamous intraepithelial lesion in two.

CONCLUSION: The results of the Papanicolaou test during pregnancy may not be accurate because of the influence of hormones associated with pregnancy. Taking advantage of the one-month post-partum screening visit can lead to early detection and treatment of cervical cancer in young people.

American Pregnancy Association

According to the American Pregnancy Association: "A Pap Smear, usually done during your first prenatal visit is a test used to look for changes in the cells of the cervix which indicate cervical cancer or conditions that may develop into cancer.

"Pap smears do not diagnose cancer, but they detect 95% of cervical cancers at a stage when they cannot be seen with the naked eye. They can then be treated and are almost always cured. Though Pap smears do not specifically test for other gynecological problems or sexually transmitted diseases, Pap smears will indicate the presence of abnormal cells for which further testing or examination would be required.

"A Pap smear is a routine part of your prenatal care and poses no risk to the fetus. If you have an abnormal Pap during pregnancy your physician will discuss treatments which can be done safely during pregnancy, or depending on diagnosis, delay treatment until after your baby is born. If your physician suggests a colposcopy or cervical biopsy, there can be slight bleeding from the external part of the cervix, but this is not a serious complication. If your physician is considering doing an internal biopsy into the endocervical canal, there may be a slight risk of a pregnancy complication. But your health care provider has your best interest in mind and will only do what is medically necessary. Your

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doctor may perform additional Pap smears during your pregnancy if necessary. Many times the birth of your baby will wash away any abnormal cervical cells."

CANSA's Position on Papanicolaou Smear Tests During Pregnancy

Because cervical cancer is a major health risk among South African women, and Papanicolaou smear tests have not been associated with increased rates of miscarriage, CANSA believes that:

- Papanicolaou smear tests can be safely performed during pregnancy up to not more than 24 weeks gestation
- During the early stages of pregnancy, ideally before 24 weeks gestation, can be a good time to have a Papanicolaou smear test, during an examination by a doctor or midwife for matters relating to the pregnancy
- Any pregnant woman who is due for a Papanicolaou smear test should talk to her doctor or midwife about whether she should have a Papanicolaou smear test while pregnant or wait until after the baby is born
- If the woman chooses to have the Papanicolaou smear test after the birth of her baby, it is
 best to wait for at least 12 weeks following delivery as there is an increased rate of
 unsatisfactory results due to insufficient or inflammatory cells collected on a Papanicolaou
 smear test that is taken soon after delivery

The Position of the Cancer Association of South Africa (CANSA)

Even though the international research literature indicates that performing a Papanicolaou smear during pregnancy is safe, CANSA has resolved not to offer the procedure to any pregnant person.

Medical Disclaimer

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Sources and References Consulted or Utilised

American Pregnancy Association

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Eun, T.J. & Perkins, R.B. 2020. Screening for Cervical Cancer. Med Clin North Am. 2020 Nov;104(6):1063-1078.

Centers for Disease Control and Prevention

http://www.cdc.gov/hpv/

National Cervical Screening Program

http://www.cancerscreening.gov.au/internet/screening/publishing.nsf/Content/cervical-faqs#4

Papanicolaou Smear

http://www.medindia.net/health-screening-test/Papanicolaou-smear-and-cervical-cancer-screening.htm

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