Cancer Association of South Africa (CANSA)

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.

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.


Background: Some countries have implemented stand-alone human papillomavirus (HPV) testing while others consider cotesting for cervical cancer screening. We compared both strategies within a population-based study.

Methods: The MARZY cohort study was conducted in Germany. Randomly selected women from population registries aged ≥30 years (n = 5,275) were invited to screening with Pap smear, liquid-based cytology (LBC, ThinPrep), and HPV testing (Hybrid Capture2, HC2). Screen-positive participants [ASC-US+ or high-risk HC2 (hrHC2)] and a random 5% sample of screen-negatives were referred to colposcopy. Post hoc HPV genotyping was conducted by GP5+/6+ PCR-EIA with reverse line blotting. Sensitivity, specificity (adjusted for verification bias), and potential harms, including number of colposcopies needed to detect 1 precancerous lesion (NNC), were calculated.
Results: In 2,627 screened women, cytological sensitivities (Pap, LBC: 47%) were lower than HC2 (95%) and PCR (79%) for CIN2+. Cotesting demonstrated higher sensitivities (HC2 cotesting: 99%; PCR cotesting: 84%), but at the cost of lower specificities (92%-95%) compared with HPV stand-alone (HC2: 95%; PCR: 94%) and cytology (97% or 99%). Cotesting versus HPV stand-alone showed equivalent relative sensitivity [HC2: 1.06, 95% confidence interval (CI), 1.00-1.21; PCR: 1.07, 95% CI, 1.00-1.27]. Relative specificity of Pap cotesting with either HPV test was inferior to stand-alone HPV. LBC cotesting demonstrated equivalent specificity (both tests: 0.99, 95% CI, 0.99-1.00). NNC was highest for Pap cotesting.

Conclusions: Cotesting offers no benefit in detection over stand-alone HPV testing, resulting in more false positive results and colposcopy referrals.

Impact: HPV stand-alone screening offers a better balance of benefits and harms than cotesting.

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.

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.

**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 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.”
CANSAs 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
http://americanpregnancy.org/womens-health/Papanicolaou-smear/
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http://www.cdc.gov/hpv/


National Cervical Screening Program

Papanicolaou Smear

Pregnancy
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