Cervical Cancer Screening in Pregnancy

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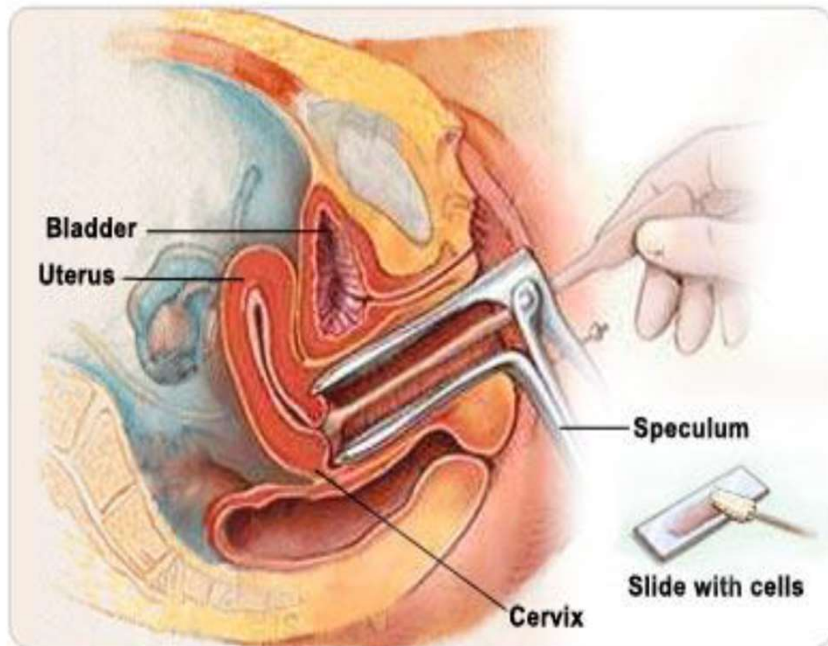


Is there a role for Pap Smear in Pregnancy?

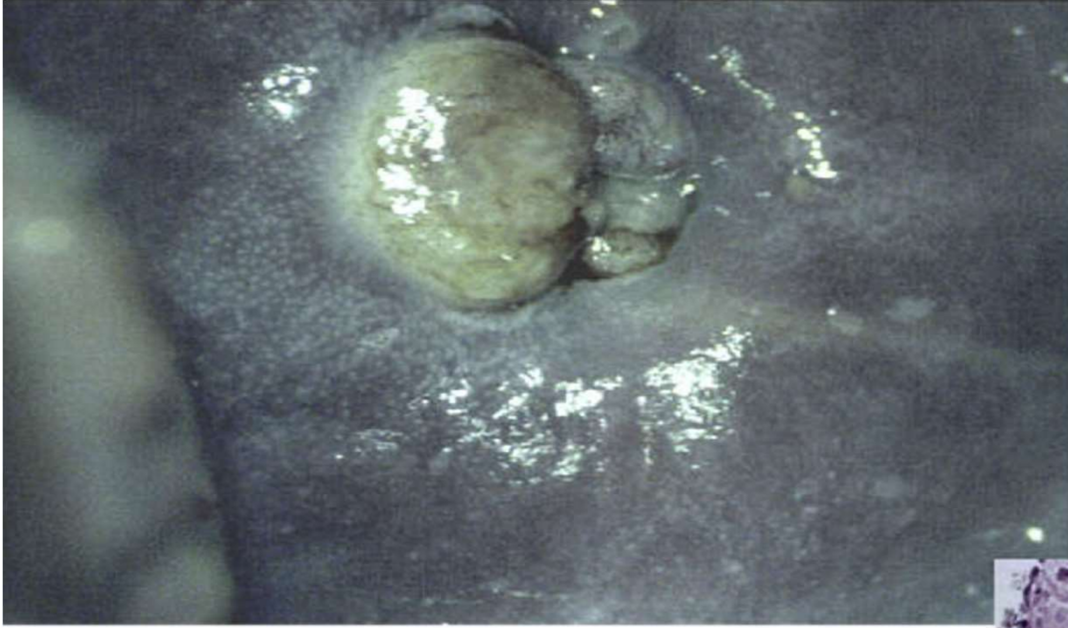
- The Answer is definitely a YES!!!!

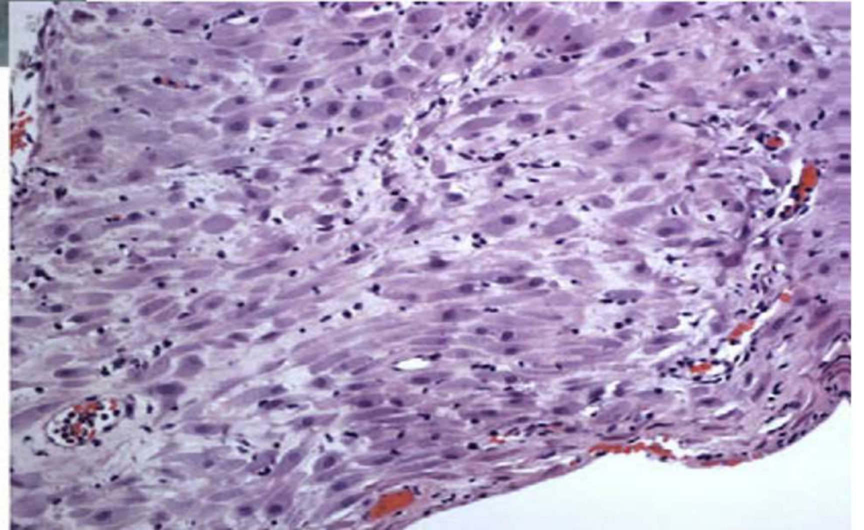
- When?

✓ Just only before 24 weeks?
✓ When there is a suspicion such as PV bleeding in pregnancy?
✓ When a woman has been following up at Colposcopy?
✓ How about HIV positive women?
✓ How about women who have never Screened for Cervical Cancer?

Introduction

- A Pap 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.
- Cervical cancer is the most common malignancy diagnosed during pregnancy, with an incidence of 0.45 to 1 per 1000 live births.
- In countries where screening is done routinely in pregnancy, nearly 3% of cases of newly diagnosed cervical cancer occur in pregnant women.





Points to Note

- Pap smear tests do not diagnose cancer, but it detects 95% of cervical cancers not seen with the naked eye.
- Any abnormality detected can then be treated/ almost always cured.
- Pregnant women are an opportunistic group.
- 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 live.

Physiologic Changes of the Pregnant Cervix

- Any clinician who cares for pregnant women should be aware of the dramatic changes.
- The cervix undergoes hypertrophy and hyperplasia.
- There is eversion of endocervical epithelium.
- Increased blood flow leads to the familiar cyanotic hue of the cervix and vaginal walls.
- There is increased edema and fibromuscular relaxation of the cervix, vagina and copious thick mucus production.
- Decidualization of the stroma often causes friability, polyps, and plaque-like changes seen grossly and colposcopically.

Challenges of Pap Smear in Pregnancy

- Cytotrophoblasts and syncytiotrophoblasts may be seen in cytologic specimen.
- Immature metaplastic cells are often seen in larger numbers.
- There are more inflammatory cells than in non-pregnant state.
- Immature metaplastic cells appear similar to High Grade Intraepithelial Lesions: Challenges of interpretation

(The need for adequate filling of form and history for cytologist).

CANSA's Position in advocacy for Pregnant women

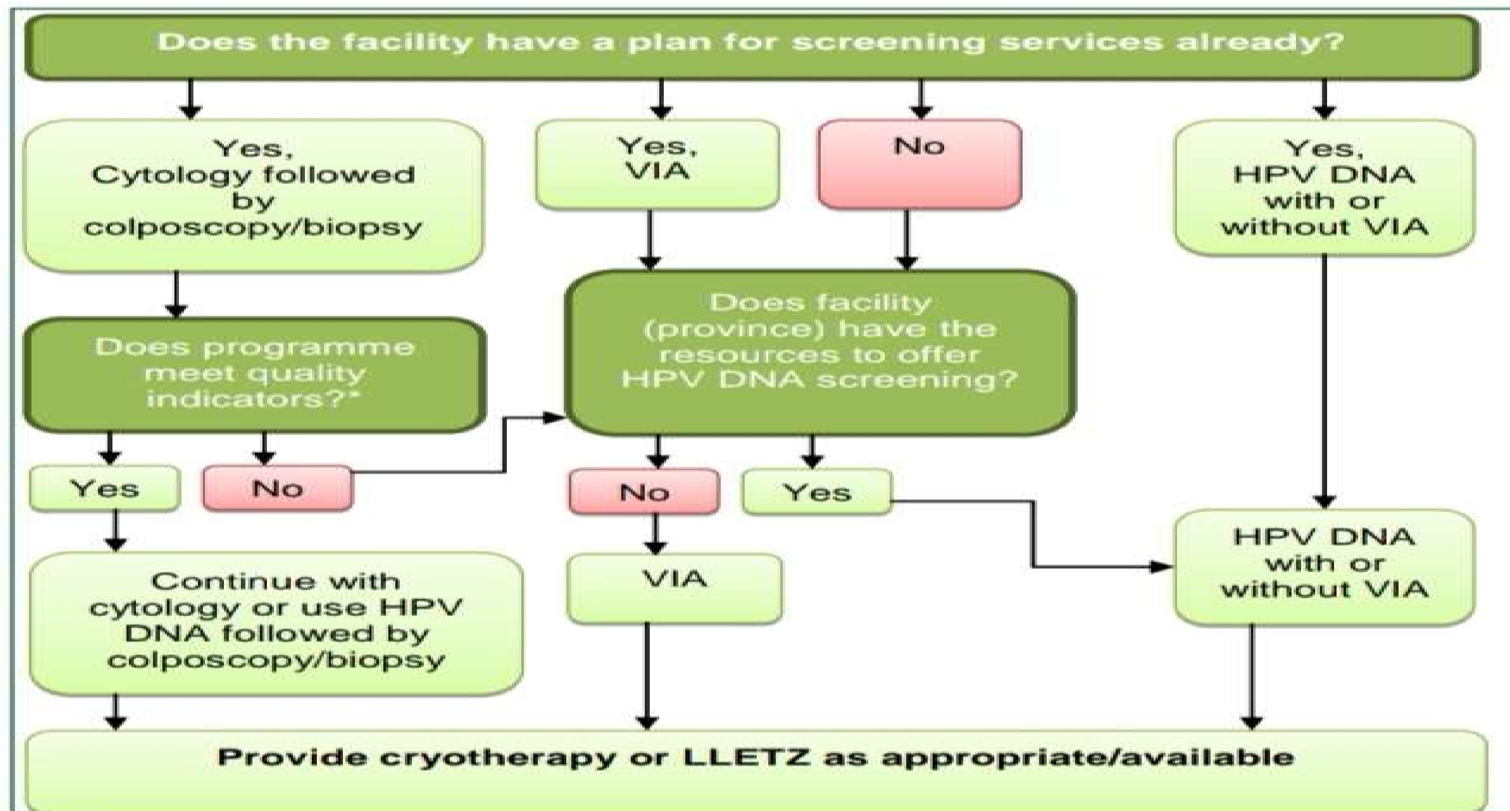
"Because cervical cancer is a major health risk among South African women, and Pap smear tests have not been associated with increased rates of miscarriage, CANSA believes that: Pap smear tests can be safely performed during pregnancy up to not more than 24 weeks gestation."

"If the woman chooses to have the Pap 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 Pap smear test that is taken soon after delivery."

SASOG General Guidelines for Screening

	LOW RESOURCE:	HIGH RESOURCE:
Initiate screen:	Age 25 At diagnosis of HIV positivity	Age 25 At diagnosis of HIV positivity
End screen:	Age 55 or hysterectomy Only after previous negative tests Never end if HIV positive	Age 65 or hysterectomy Only after previous negative tests Never end if HIV positive
Interval - HPV test	10 years if HIV neg or unknown 5 years if HIV pos	5 years if HIV neg or unknown 3 years if HIV pos
Interval - cytology	5 years if HIV neg or unknown 3 years if HIV pos	3 years if HIV neg or unknown Yearly if HIV pos
Timing:	Ten-yearly: At ages 25, 35, 45, 55 Five yearly: Also at ages 30, 40, 50. Three yearly: At ages 25, 28, 30, 33, 36, 40, 43, 46, etc.	Five yearly: Also at ages 30, 40, 50. Three yearly: At ages 25, 28, 30, 33, 36, 40, 43, 46, etc. Yearly: each year
Follow-up:	After single abnormal screening test or after treatment: • HIV negative and < 35 years: 5 yearly until normal. • HIV positive or > 35 years: yearly until normal. Back to SCREEN when normal Treat after second abnormal test	After single abnormal screening test or after treatment: • HIV negative and < 35 years: yearly until normal. • HIV positive or > 35 years: yearly until normal. Back to SCREEN when normal Treat after second abnormal test

SA NDoH General Guidelines for Screening



Pap Smear Tests during Pregnancy

- A Pap smear test should form a routine part of pre-natal care.
- It poses no risk to the foetus.
- It is recommended that every woman if they have not had cervical screening within the past two years.
- Pap smear tests can generally be undertaken ideally before 24 weeks gestation.
- There may be some spotting and minor bleeding after Pap smear.

Pap smear done: How About Colposcopy?

- Physiological oedema, cyanosis makes it difficult to grade lesion
- Cervix is friable and biopsy or LLETZ can present a challenge with haemostasis
- Decidualisation of stroma gives appearance of Dense Acetowhite area
- Spidey superficial vessels makes it difficult to interpret vessels assessment.
- Diagnosis of Intra-epithelial lesions can be a challenge with both Underdiagnosis and Overdiagnosis (REIDS and SWEDE Colposcopy Index Scores)

HGSIL Lesions Management

- With or without biopsy, may be followed with repeat Colposcopy in intervals not less than 12 weeks.
- Physicians discretion is needed
- There are no data in support of the value of repeat assessment
- American Society for Colposcopy Cervical Pathology advocates for deferring repeat colposcopy until after 6 weeks post-partum (no evidence in support of this).
- Conisation and LLETZ increase the risk. Only for cases where risk for invasive cancer is high.
- Comorbidities: Haemorrhage, Infection, Pregnancy loss

What does RCOG recommend

<table>
<tr><th>Situation</th><th>Action</th></tr>
<tr><td>Original treatment was for cGIN</td><td rowspan="2">Attend</td></tr>
<tr><td>Original treatment was for CIN 2 or CIN 3 but doctor not sure all abnormal areas were treated</td></tr>
<tr><td>Ist follow-up, original treatment was for CIN I</td><td rowspan="3">Wait until after your baby is born</td></tr>
<tr><td>Ist follow-up, original treatment was for CIN 2 or CIN 3 and doctor sure all abnormal areas were treated</td></tr>
<tr><td>2nd or later follow-up, you have not missed any appointments and smear tests are up to date and normal</td></tr>
<tr><td>Not sure</td><td>Contact clinic</td></tr>
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Conclusion

- Cervical Cytology should be part of Prenatal Screening Clinics
- Management of abnormal Pap Smear should be as per non pregnant patients
- LGSIL, ASCUS, HPV cytology findings can be deferred until after delivery
- Women over 20 years who infrequent screening should still be referred to colposcopy
- Atypical glandular cells findings should be referred to colposcopy
- Endocervical and Endometrial curetting is contraindicated
- Biopsy should be considered if HGSIL or worse is made.
- Note the thorough documentation of Pregnancy state on the form for ease of interpretation.