Cervical cancer control in developing countries

Dr. Y. Vuhahula
Tanzania

WHO/GFMER/IAMANEH
Postgraduate Training Course in Reproductive Health
Geneva 2004

Magnitude of the problem

- Cervical cancer is the third most common cancer worldwide
- About 500 000 new cases identified each year
- 80% of the new cases occur in developing countries
- Almost 200 000 women die due to cervical cancer annually

Aetiology of cervical cancer

HPV infection is found to be associated with cervical cancer and is sexually transmitted

- Women are generally infected with HPV in their teens, 20s, and 30s.
- After HPV infection, cervical cancer takes up to 20 years to develop.
- About 10% of women affected with HPV develops cancer.

Cervical cancer prevention

Three lines of prevention:

- Primary prevention
- Secondary prevention
- Tertiary prevention

Cervical cancer prevention in developing countries

Primary prevention:

- Education to reduce high risk sexual behaviour
- Measures to avoid exposure to HPV and other STIs

Secondary prevention

- Early detection and treatment of precancerous lesions before they progress to cervical cancer (Screening tests)

Qualities of a good screening test

- Effective (sensitive)
- Safe
- Acceptable
- Affordable
- Available

Screening

Key point is to detect precancerous lesions.

How? By screening all sexually active women

- Pap smear test is considered to be the gold standard, unfortunately it has limitations

Alternative methods to Pap Smear

- Visual inspection with acetic acid (VIA/VIAM)
- Visual inspection with lugol`s iodine (VILI)

Sensitivity and Specificity of VIA /Pap smear in detection of HSIL

- Reports from different studies
  - Zimbabwe:
    - VIA - sensitivity 77% & specificity 64%
    - Pap smear - 43% sensitivity & specificity 91%
  - India:
    - VIA - sensitivity 81.6% & specificity 94.3%
    - Pap smear - sensitivity 78% & specificity 99%

Equipments required for visual inspection (VIA, VIAM, VILI)

- Gynaecological bed
- Sterile speculum, preferably Cusco`s
- Sterile gloves
- Source of light (a lamp or a torch)
- Cotton swabs, Forceps
- Syringe for acetic acid lavage
- Acetic acid 3-6% ; Lugol`s iodine
- Aviscope or colposcope
- Stationary- to record examination findings.

Objectives of Visual Inspection

- Locate the squamocolumnar junction
- Identify any lesion and its limits
- Examine whether is a CIN lesion
- Determine whether invasion is possible
- Select a site / sites for biopsy to confirm the diagnosis histologically

Findings before application of acetic acid

1. Normal
2. Abnormal
   - Infection
   - Ectropion
   - Benign tumour
   - Suspicious of malignancy

     -erosion that bleeds on touch or friable

     -growth with irregular surface or friable

Findings after application of acetic acid

1. Normal
2. Abnormal
   - White gland openings
   - Acetowhite lesion
   - Mosaics & punctations
   - Abnormal vessels
   - Malignancy

Action plan

VIA NEGATIVE

- Advise the lady to come back after 2-5 years depending on the policy

VIA POSITIVE

- Refer to an appropriate center for treatment

OR

- Treat after taking a biopsy
- If it is a malignant tumour refer to cancer centre for treatment (tertiary prevention)

Things to remember

- Do not perform examination if the woman is pregnant, on her menstrual period or is using intravaginal medications. Advise her to come back
  - -3 months after delivery
  - -10 days after her menses
  - -after finishing her treatment

Things to remember

- Do not apply acetic acid if there is a gross lesion suspicious of malignancy, refer the patient to a cancer center for treatment.

CONCLUSION

- VIA is a promising new approach for cervical cancer screening in developing countries.
- The sensitivity of VIA is as that of Pap Smear however the specificity of VIA is less than that of Pap Smear.
- The specificity of VIAM is almost equal to that of Pap Smear.

CONCLUSION

- Cervical cancer is a preventable disease. People should be educated on the risk of sexual behaviour to reduce exposure to HPV and other STIs.
- The Governments of the developing countries should implement massive screening programs with affordable methods such as VI for early detection of cervical precursors and treating them before development of cervical cancer.

THANK YOU