SCREENING, INVESTIGATION AND STAGING

OF CA CERVIX

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107

INDICATIONS OF SCREENING

01 Routine cervical cancer screening

02 Abnormal bleeding / suspicious cervical lesion

03 Post treatment surveillance of CIN

04 Before Inserting IUD

05 Followup on women with HPV positivity

SCREENING

1. Cervical Cytology
2. HPV DNA testing

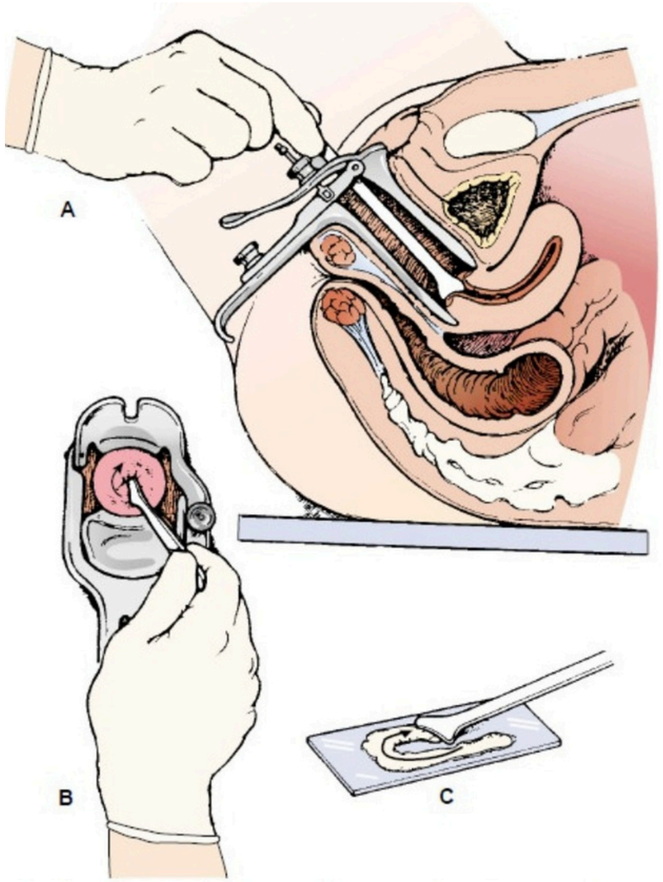
Co - testing

3. VILI

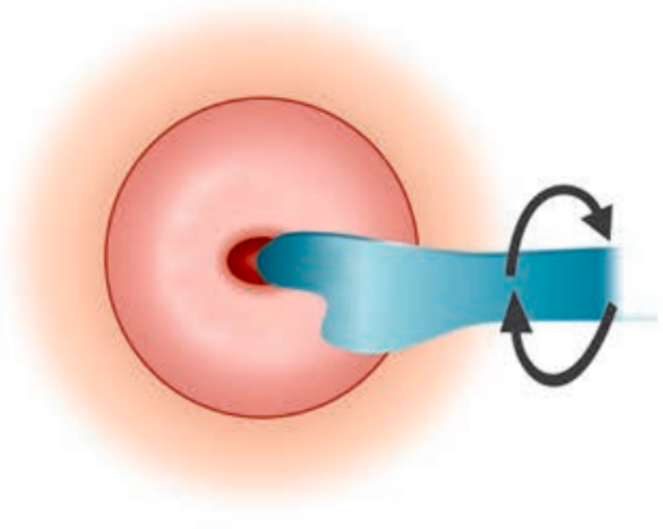
4.VIA

1. Cervical Cytology

PAP Test



- Dorsal position
- Cusco's speculum
- Ayre's spatula
- Rotate360°
- Smear
- 1:1 solution of
  95% ethyl alcohol & Ether
- Papanicolau stain



Liquid based cytology

- Placed in a liquid fixative **(buffered methanol solution)**
- Removes blood, mucus,inflammatory cells
- Also test HPV infection
- More sensitivity and specificity

Bethesda System

- **NILM :** Negative for intraepithelial Lesion or Malignancy
- **ASC - US :** Atypical squamous cells of undetermined significance
- **LSIL :** Low grade Squamous Intraepithelial Lesion
- **ASC - H :** Atypical squamous cells cannot exclude HSIL
- **HSIL :** High grade Squamous Intraepithelial Lesion
- **AGC :** Atypical glandular cells

2. HPV DNA Testing

- Higher Sensitivity and specificity
- Important component of ASC - US cytology
- PAP test + HPV DNA testing : **Co - testing**

3. VIA

- Visual Inspection with Acetic Acid

4. VILI

- Visual Inspection with Lugol's Iodine

SCREENING RECOMMENDATIONS

- **Started** 3 years after first sexual intercourse
  - **-PAP Smear alone: Every 3 years**
  - **- Co testing with HPV DNA : Every 5 years**
  - **-Stopped at 65 years of age,** provided
    - 3 consecutive negative cytological reports. (OR)
    - 2 consecutive negative co test reports

in the prior 10 years, with the most result occuring within **5 yrs**

- **High risk women :** continued for **20 more years**

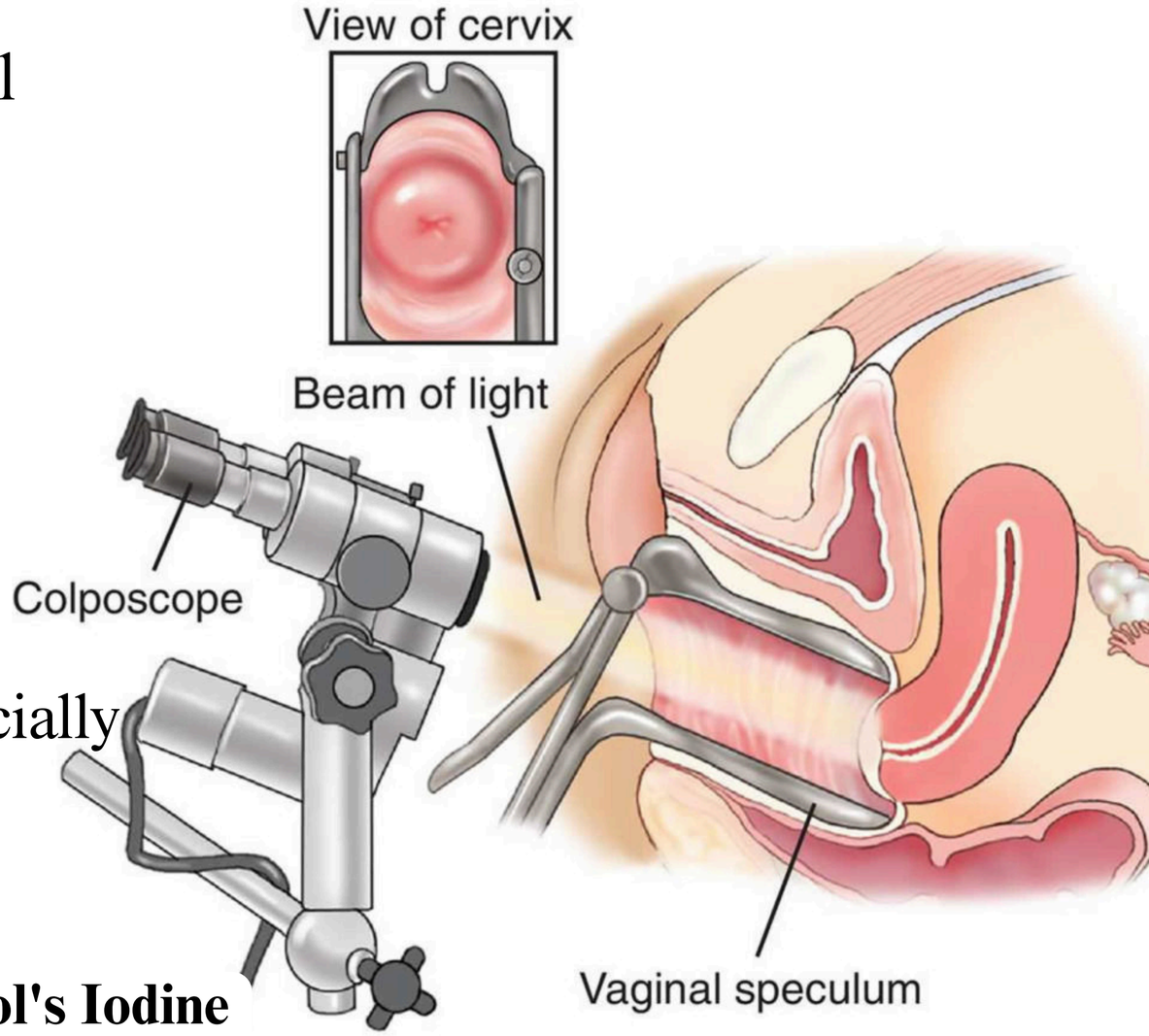
INVESTIGATIONS

1. Pap Smear
2. Colposcopy
3. Punch Biopsy
4. Cone Biopsy

2. Colposcopy

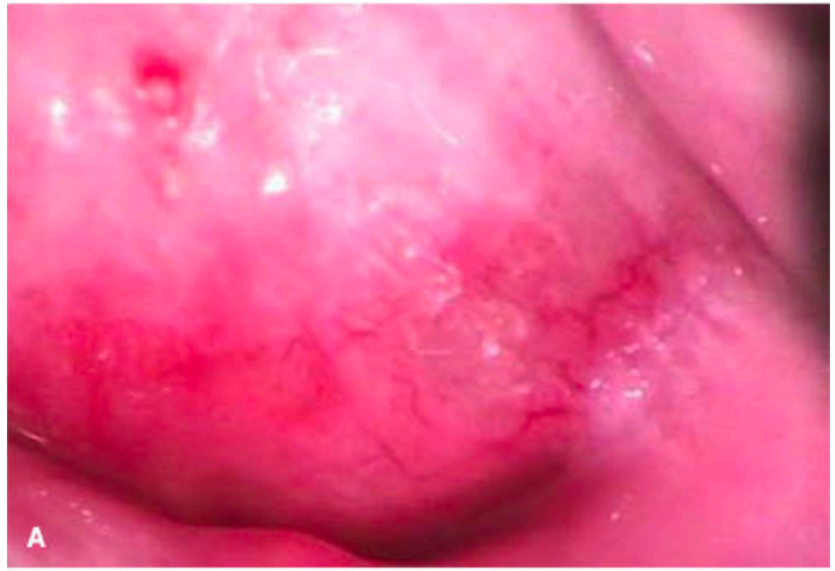
Indications

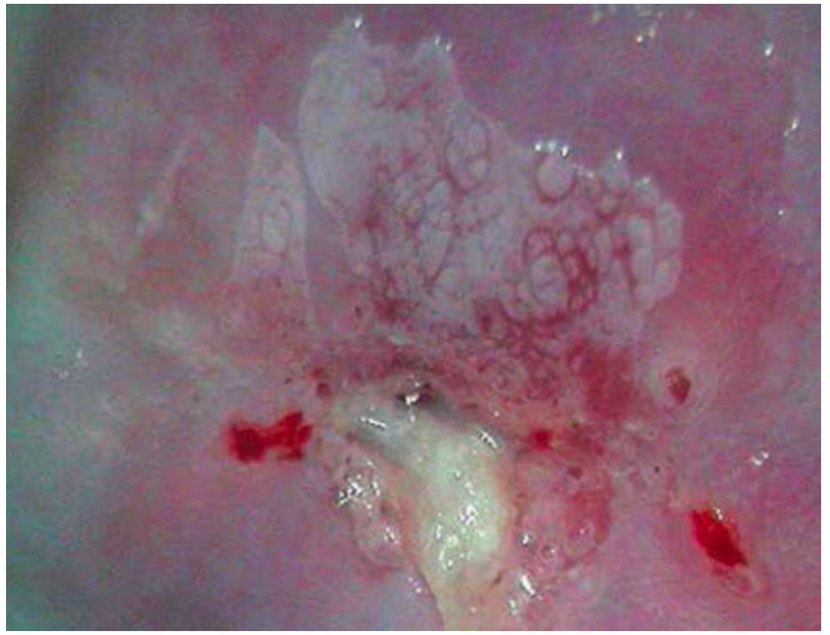
- Abnormal or recurrent inadequate cervical cancer screening result
- Unexplained lower genital tract bleeding
- Unexplained vaginal discharge



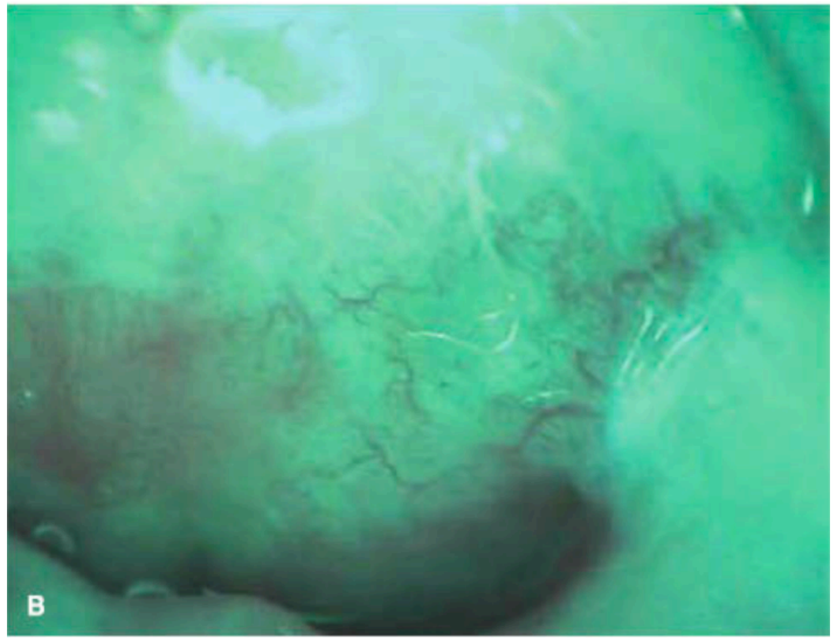
- **Endocervical curettage** can also be done with colposcopy to evaluate an abnormal smear, especially in glandular lesions

- **Normal Saline → Green filter → 5 % Acetic acid. → Lugol's Iodine**

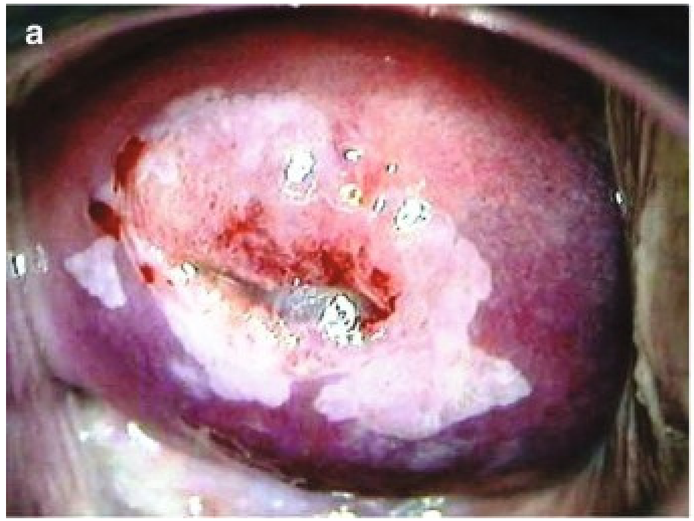


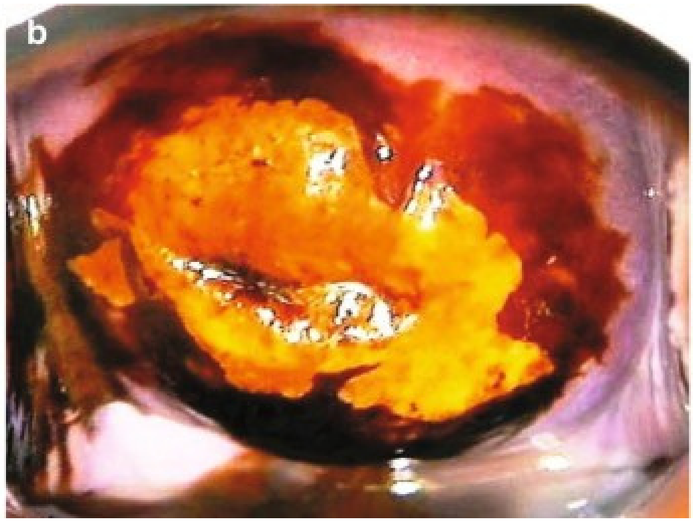


5% acetic acid ---> **Acetowhite lesions**



Green filter





Lugol's Iodine ---> Precancerous: **Mustard yellow**, Normal cells: **Mahogany brown**

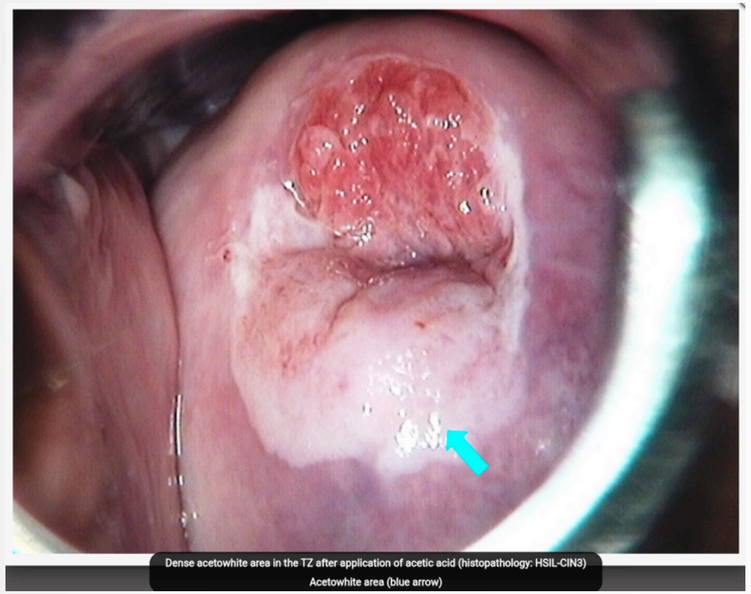
Reid's Index

Colposcopic sign	0 points	1 point	2 points
Margin	Flocculated or feathered edges, indistinct margins	Smooth, straight lines, sharp peripheral margins	Rolling, peeling edges, internal border between lesions of different grade
Color	Shiny or snow-white, transparent, indistinct acetowhite epithelium	Shiny, gray–white	Dull white, oyster-gray
Vessels	Uniform, fine caliber; fine mosaic or punctations	Absence of blood vessels after acetic acid	Coarse punctation and mosaicism, large intercapillary distance, dilated individual vessels
Iodine staining	Positive iodine uptake producing brown color, low grade by other criteria (<2/6)	Partial variegated iodine uptake, tortoiseshell color	Mustard-yellow color in uptake, high grade by other criteria (>3/6)
Colposcopic score	0–2, human papillomavirus or CIN 1	3–4, CIN 1 or CIN 2	5–8, CIN 2 or CIN 3

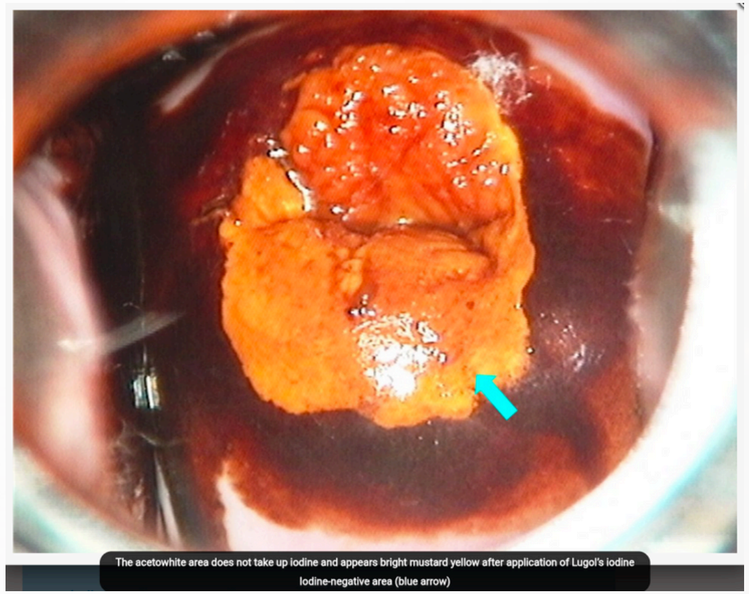
Swede Score

Low resource setting

VIA & VILI

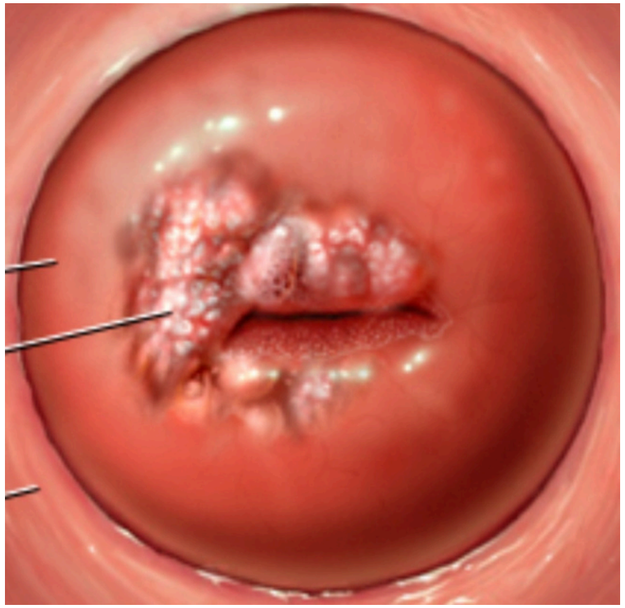


Dense acetowhite area in the TZ after application of acetic acid (histopathology: HSIL-CIN3)
Acetowhite area (blue arrow)

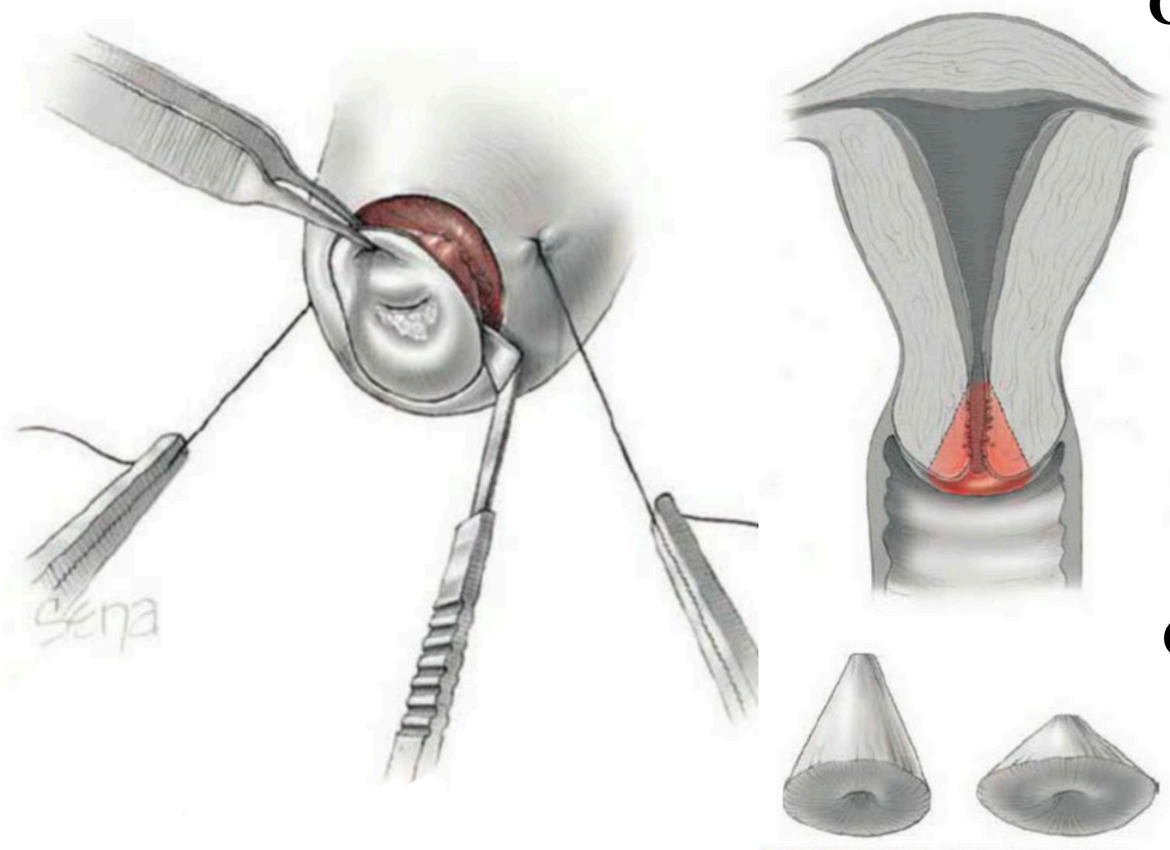


The acetowhite area does not take up iodine and appears bright mustard yellow after application of Lugol's iodine
Iodine-negative area (blue arrow)

3. Punch Biopsy



4. Cone Biopsy



Colposcopy available

- Entire limits of the lesion not seen
- Transformation zone not seen
- Evidences of microinvasion on biopsy, colposcopy or CIN on endocervical curettage
- Normal colposcopic findings with abnormal cytology/biopsy

Colposcopy not available

- Abnormal smear with healthy cervix
- Biopsy report is inconsistent with cytologic findings

OTHER INVESTIGATIONS

Laboratory :CBC | Urinanalysis | LFT | Creatinine /BUN

Radiological

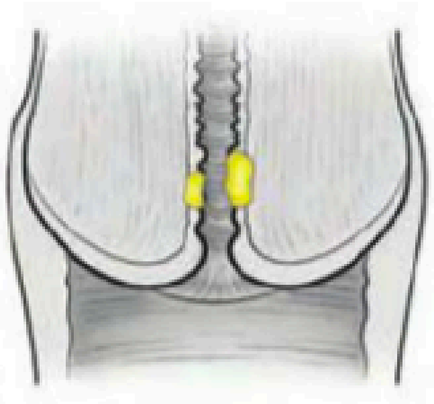
- Chest radiograph: Lung metastasis
- IVP : Hydronephrosis
- CT scan (abdominopelvic) : Nodal or distant organ metastasis
  Hydronephrosis
- MR imaging: Local parametrial invasion; nodal metastasis; tumor size
- PET scan: Nodal or distant organ metastsasis

STAGING

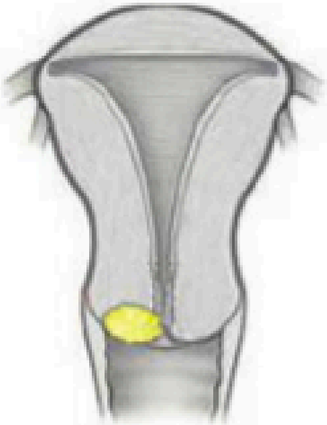
STAGE I

Carcinoma strictly confined to cervix

IA1
D <3 mm



IA2
D ≥3 – <5 mm

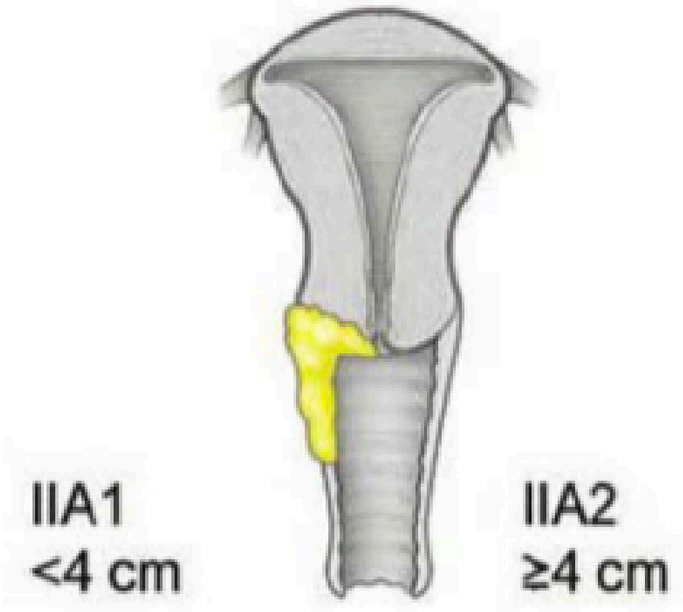


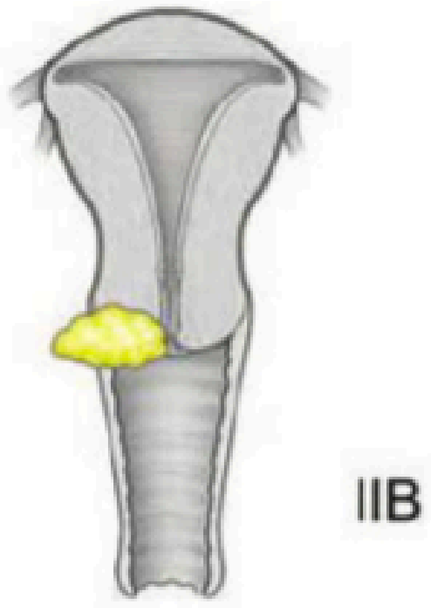
Depth ≥5 mm
IB1: <2 cm
IB2: ≥2 – <4 cm
IB3: ≥4 cm

STAGING

STAGE II

Upper 2/3 rd of vagina / parameterial involvement

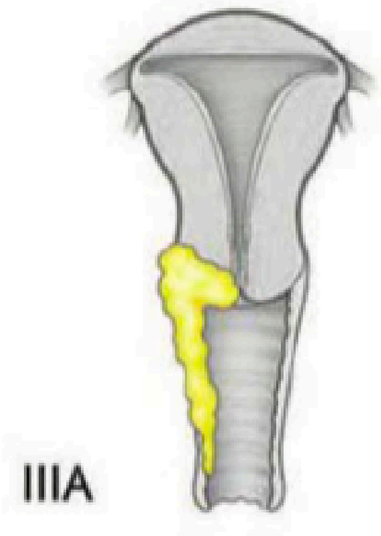


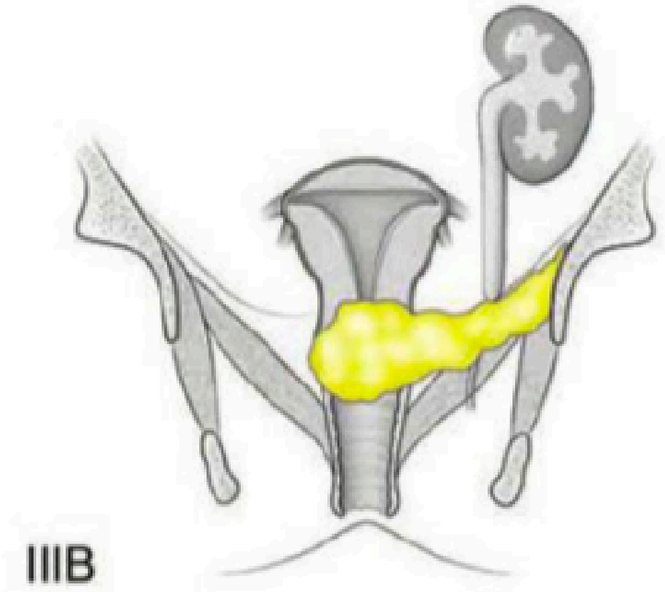


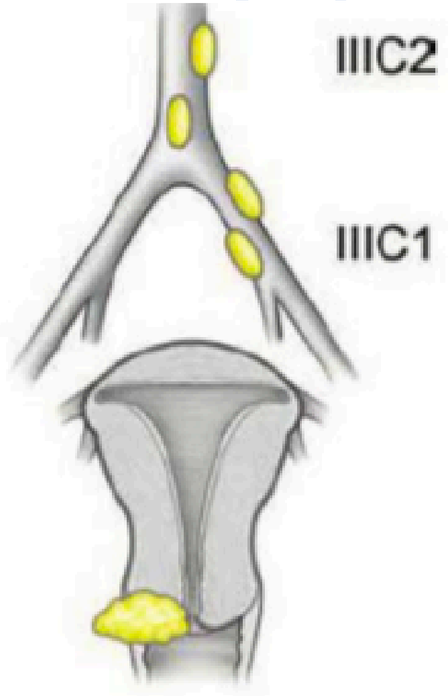
STAGING

STAGE III

Lower 2/3rd of vagina / pelvic wall / hydronephrosis/ lymph nodes



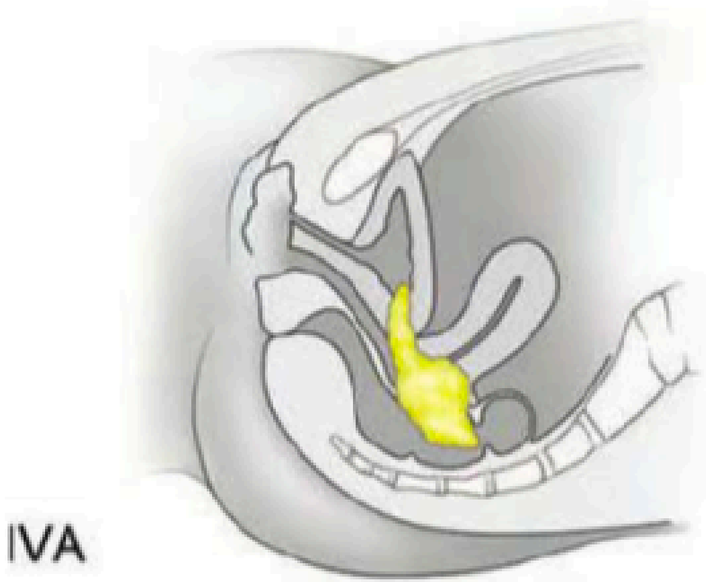




STAGING

STAGE IV

Adjacent/distant organs



IVA

IVB

THANK YOU!

References | Sheila Balakrishnan Textbook of gynaeology | Shaw's textbook of gynaecology | William's Textbook of gynaecology