

Introduction to Colposcope



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Total	165 (2.75 hours)

Section 1 – Introduction to Colposcopy

Learning Objectives

1. Understand Colposcopy
2. Identify cases for colposcopy
3. Identify parts of colposcope and their functions
4. Identifying requirements for colposcopy at health facility

What is Colposcopy?

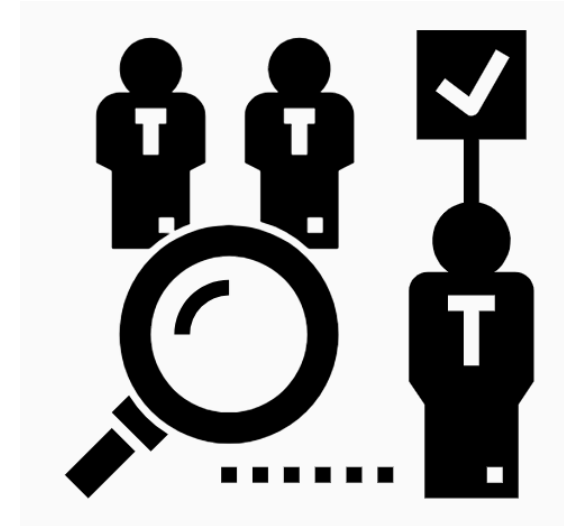
- Diagnostic test to detect pathologies of the cervix, vagina, and vulva with help of an equipment called '**Colposcope**'
- Colposcope has a powerful light source, can provide variable magnification ranging from **4x to 30x**
- Primarily to **identify premalignant and malignant lesions**
- **Outpatient procedure**, no anesthesia or hospitalization required



Point to Note : Colposcopy is not a screening test. It is a diagnostic tool to evaluate women with positive screening tests for cervical cancer

Indications for Colposcopy

- Women positive on any screening test for cervical cancer (VIA, VIAM, VILI, Cytology (Pap Smear, HPV Testing))
- Suspicious cervix on visual examination
- Assessment of lesions prior to treatment
- Persistently unsatisfactory quality on cytology Infection with oncogenic human papillomaviruses (HPV)
- Persisting (for more than 12-18 months) low-grade (CIN 1) abnormalities on cytology
- Women with symptoms suggestive of invasive cancer (post-coital bleeding, intermenstrual bleeding, post-menopausal bleeding, etc)
- Post-treatment follow-up



Know your Colposcope

- **A video colposcope** is a variant of the colposcope that does not have a binocular lens system
- Video colposcopes have a –
 - **Video camera** with LED lamps mounted on a height-adjustable stand
 - **Control panel** at the back of the head is for
 - Changing the magnification
 - Turning the green filter on and off and
 - Capturing the image
 - Good-quality monitor (or LED television screen) -to see and interpret the two-dimensional images



Video colposcopes have the advantage of recording and storing the still or video images for future reference

Colposcopy Requirements- Equipment and Consumables

Equipment	Consumables
<ul style="list-style-type: none">• Examination table• Screen to ensure privacy• Focusing light• Colposcope• Colposcopy instrument tray containing:<ul style="list-style-type: none">○ Kidney tray○ Gallipot○ Self-retaining vaginal specula○ Cusco's speculum○ Sponge-holding forceps○ Endocervical speculum○ Endocervical curette○ Teischler's punch biopsy forceps	<ul style="list-style-type: none">• Gloves (sterile/gloves after high-level disinfection/disposable)• Sterile cotton swabs, cotton swab sticks• Normal saline• Dilute acetic acid (5%) solution (freshly prepared)• Lugol's iodine• Monsel's solution/paste• 10% formaldehyde• Lubricant jelly• Waste disposal bag• Case record forms• 0.5% chlorine solution



Colposcopy Instrument Tray

Section 1- Introduction to Colposcopy

Learning Outcomes

1. Colposcopy is **not a screening test**. It is a **diagnostic tool** to evaluate women with positive screening tests for cervical cancer
2. Indications of colposcopy include **positive screening test** for cervical cancer, **suspicious cervix** on visual examination, assessment of lesions **prior to treatment**, **post-treatment follow-up** and **persistently unsatisfactory cytology**
3. Preparation of colposcopic tray

Section 2- SOP for Colposcopy

Learning Objectives

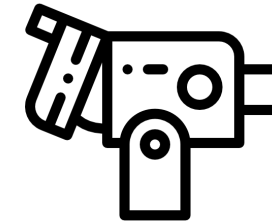
1. Perform colposcopy competently
2. Interpret colposcopic findings and make provisional diagnosis
3. Identify cases for appropriate management
4. Counsel women before and after colposcopy

Performing Colposcopy (1/5)

1

Visualization of Cervix after application of –

- Normal Saline
- 5% Acetic Acid
- Lugol's Iodine



2

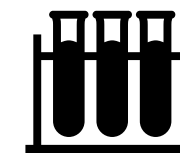
Assessment of –

- Squamous epithelium
- Columnar epithelium
- SCJ
- Transformation zone
- Vasculature



3

Directing **biopsies** from suspicious areas (if necessary)



Steps for Performing Colposcopy (2/5)

1. *Preparation for Colposcopy*

- Instruments are functioning & ready to use
- Colposcopy tray ready

2. *History taking, counselling and consent*

- Personal information, obstetric history, symptoms and illness
- Counsel the women and obtain written consent

3. *Step-wise Colposcopy Procedure*

- Check that the woman has emptied her bladder
- Help her onto the examining table, help her to undress and drape her
- Wash hands and put on new pair of examination gloves
- Inspect external genitalia and check urethral opening for discharge
- Select speculum of appropriate size and lubricate it with jelly/normal saline
- Insert speculum and adjust it so that the entire cervix can be seen
- Adjust the colposcope to bring the cervix into sharp focus using appropriate magnification (usually 6x or 8x)

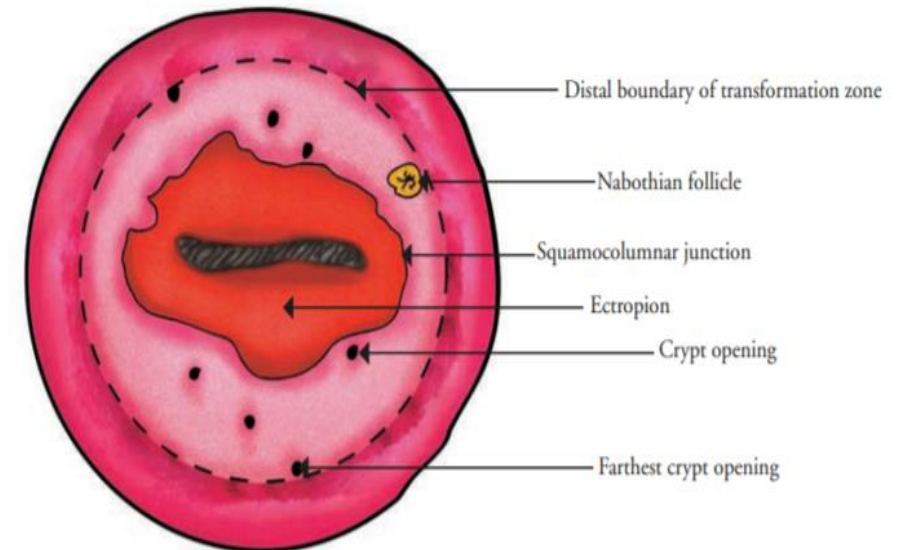
Steps for Performing Colposcopy (3/5)

If cervix is not properly visualized- Due to lack of exposure, excessive inflammation, bleeding or scar, the colposcopy is to be considered **inadequate**

If cervix is properly visualized- Examine the cervix for cervicitis, growth, ulcers or contact bleeding

- **Apply normal saline to gently remove the mucus and discharge**

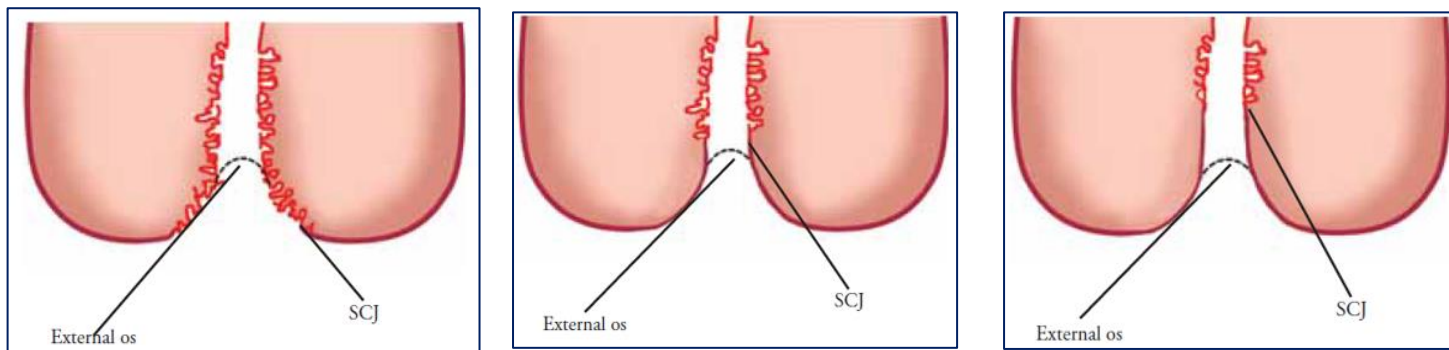
- Identify the following parts of cervix-
 - external os
 - new SCJ
 - Original SCJ
 - the transformation zone (TZ)



- Examine blood vessels with green (or blue) filter. Increase magnification if required

Steps for Performing Colposcopy (4/5)

- **Apply 5% acetic acid , wait for 1 minute**
 - Locate SCJ and determine **type of TZ**



- Look for acetowhite areas. If acetowhite area appears, look for the following features-
 - **Density**
 - **Margin characteristics**
 - **Location in relation to SCJ or external os**
 - **Number of quadrants involved**
- Use endocervical speculum to visualize the endocervix if necessary
- After examination is complete, remove remaining acetic acid from cervix and vagina with clean cotton swab

Steps for Performing Colposcopy (5/5)

- Apply Lugol's iodine and inspect for colour change
- Use **Swede score** for interpretation of colposcopy findings
- Perform cervical biopsies (or proceed for treatment) depending on Swede score
- Obtain punch biopsy(s) from the worst identified lesion(s) close to SCJ
- Apply Monsel's solution (paste) to biopsy site to control bleeding
- Gently remove the speculum
- Help woman to get up from the examination table and sit comfortably and tell her that you will explain the test findings soon

Post- Colposcopy Task

- Dispose-off the swabs in appropriate disposal bags
- Immerse the speculum in 0.5% chlorine solution
- Immerse both gloved hands in 0.5% chlorine solution
- Remove gloves by turning them inside out
- Wash hands thoroughly with soap and water and dry with clean, dry cloth or air dry

Record the colposcopy findings in the woman's case record form-

Normal colposcopy

- Counsel the woman

Invasive cancer is suspected

- Counsel the women and refer to TCC

Abnormal colposcopy

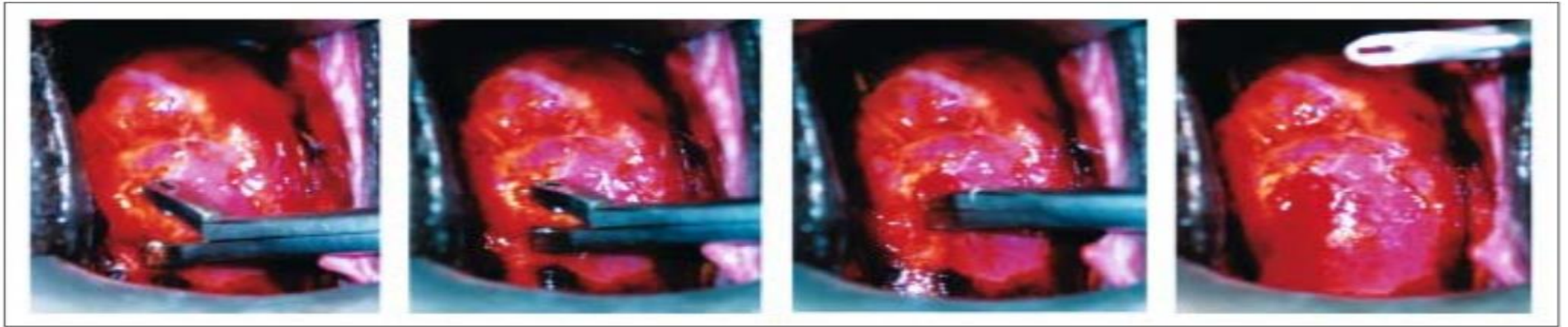
- If **Punch biopsy taken**
 - Label the specimen, fill lab requisition
 - Give post-biopsy instructions
- If **Immediate TA/Cryo/LEEP** is planned
 - Counsel women, written consent

Performing Cervical Biopsy (if necessary) (1/3)

Steps of a Colposcopy Directed Biopsy

- Use low power magnification to obtain a panoramic view of the cervix
- Select the biopsy site from the area with maximum disease severity
- Obtain multiple biopsies if the lesion is in multiple quadrants
- Sample the posterior cervical lip first to prevent obscuring due to bleeding

Performing Cervical Biopsy (if necessary) (2/3)



- Position the biopsy forceps directly over the lesion to be biopsied
- Orient the opened biopsy forceps is such a way that the fixed jaw end of the forceps is placed close to or within the external os
- Hold the biopsy instrument handles upside down while taking a biopsy from the posterior lip

To prevent slipping of the forceps from the biopsy site push the cervix backwards with the open biopsy forceps as much as possible

Quickly squeeze the forceps handles together while asking the patient to cough

Lock the jaws of the forceps and pass it to the assistant

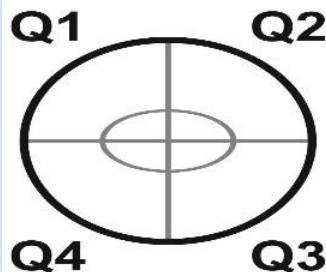
Performing Cervical Biopsy (if necessary) (3/3)

- Confirm colposcopically that the intended area has been adequately sampled
- Secure haemostasis by applying Monsel's paste for 30–60 seconds
- After colposcopy directed biopsy, endocervical curettage is to be performed if:
 - SCJ is not completely visible
 - Lesion extends into the endocervical canal

Points to Note

- *The biopsy sample must be of adequate depth to include some stromal tissue along with the epithelium, otherwise the biopsy will be inadequate*
- *Use of blunt biopsy forceps will lead to inadequate and crushed tissue and will also cause pain to the woman*
- *Some colposcopists prefer to inject 1–2 mL of local anaesthetic at the biopsy site before the procedure*
- *Biopsy forceps should undergo regular sharpening and maintenance.*

Understanding the Documentation for Colposcopy (1/2)

Parameters		Observations
General Assessment		<ul style="list-style-type: none"> • Cervix Visualization - Adequate/inadequate (reason): (ex- cervix obscured by bleeding, inflammation, scare, etc.) • SCJ visibility: Completely visible/partially visible/not visible • Transformation zone type: 1 / 2 / 3
Normal Colposcopic Findings		<ul style="list-style-type: none"> • Original squamous epithelium: <ul style="list-style-type: none"> ○ Mature ○ Atrophic • Columnar epithelium: <ul style="list-style-type: none"> ○ Ectopy • Metaplastic squamous epithelium: <ul style="list-style-type: none"> ○ Nabothian cyst ○ Crypt opening
Abnormal colposcopic Findings	General Principles	<ul style="list-style-type: none"> • Location of the lesion: Inside TZ / outside TZ / both inside and outside TZ: <ul style="list-style-type: none"> ○ Clock position (Please mark below) ○ Number of quadrants involved: 1/ 2/ 3/ 4 ○ Size of lesion: <25% / 25–50% / 50–75% / >75% 

Understanding the Documentation for Colposcopy (2/2)

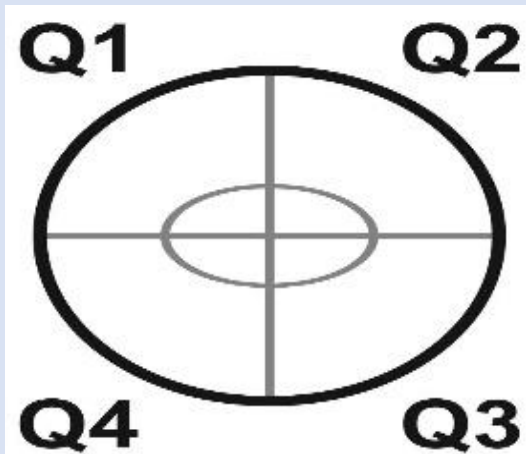
Parameters		Observations	
Abnormal Findings	Grade 1 (minor)	<ul style="list-style-type: none"> Thin AW epithelium Irregular, geographic border 	<ul style="list-style-type: none"> Fine mosaic Fine punctation
	Grade 2 (major)	<ul style="list-style-type: none"> Dense AW epithelium Rapid appearance of acetowhitening Cuffed crypt openings 	<ul style="list-style-type: none"> Coarse mosaic Coarse punctation Sharp border Inner border sign Ridge sign
	Nonspecific	<ul style="list-style-type: none"> Leukoplakia Erosion Lugol's staining (Schiller's test): stained/non-stained 	
Suspicious for Invasive Cancer		<ul style="list-style-type: none"> Atypical vessels/fragile vessels/irregular surface/exophytic lesion, necrosis/ulceration (necrotic)/tumour/gross neoplasm 	
Miscellaneous Finding		<ul style="list-style-type: none"> CTZ Condyloma Polyp Inflammation 	<ul style="list-style-type: none"> Stenosis Congenital anomaly Post-treatment

Documentation for Colposcopy – As per Gol Format (1/2)

1. Screening No		2. Name	
3. Age		4. Facility Name	
5. Date of Visit (dd/mm/yyyy)			
6. Indications for Colposcopy (xx that applies)	a) VIA +ve	b HPV +ve	c) Cytology +ve
	d) Follow-up after treatment	e) others	
7. Cervix Visualization	a) Adequate		b) Inadequate
If inadequate, specify the reason:	a) Obscured by inflammation	b) Bleeding	c) Scars
	d)others		
8. Visibility of Squamo-Columnar Junction (SCJ)	a) Completely visible	b) Partially visible	c)Not visible
9. Transformation zone type	a) Type 1	b) Type 2	c)Type 3

10. Colposcopic findings within the TZ
(Draw SCJ, acetowhite, punctuation, mosaic, atypical vessel and other lesions)

- I. Grade 1 (minor) findings:**
- a) Thin acetowhite epithelium
- b) Irregular, Geographic border
- c) Fine mosaic
- d) Fine punctuation
- II. Grade 2 (major) findings:**
- Dense acetowhite epithelium
- Rapid appearance of aceto-whitening
- Cuffed crypt (gland opening)
- Coarse mosaic
- Coarse punctuation
- Sharp borders
- Inner border sign
- Ridge sign



Documentation for Colposcopy – As per GoI Format (2/2)

III. Non-Specific Findings:	
a) Leukoplakia	
b) Erosion	
c) Lugol's staining: Stained/non-stained	
IV. Suspicious for Invasion	
• Atypical vessel	
• Fragile vessel	
• Irregular Surface	
• Exophytic lesion	
• Necrosis	
• Ulceration(necrotic)	
• Tumour/gross neoplasm	
V. Miscellaneous findings	
12. Number of quadrants involved: a) 1 b) 2 c) 3 d) 4	
13. Size of lesion: a) <25% b) 25-50% c) 50-75% d) >75%	
14. Swede score (if applicable)	
15. Colposcopic diagnosis	
a) Inadequate, specify-	c) Leukoplakia
b) Normal colposcopic findings	d) Condyloma
e) Low-grade CIN	f) High-grade CIN
g) Invasive cancer	h) Others, specify-
16. Biopsy taken a) Yes b) No c) refused	
17. Patient referred to higher center No Yes If yes, place of referral	
18. Colposcopist Name and Signature	

Interpretation of Colposcopic Findings

S. No	Parameter	Feature	Check the observed feature(Yes/No)	Score	Score Alloted basis Observation
1	Aceto-White Uptake	Zero or transparent		0	
		Thin, Milky		1	
		Distinct		2	
2	Margin and Surface	Zero or diffuse		0	
		Sharp but irregular, jagged, geographical, satellites		1	
		Sharp and even, difference in surface levels including cuffing		2	
3	Vessels	Fine, regular		0	
		Absent		1	
		Coarse or atypical vessels		2	
4	Lesion Size	<5 mm		0	
		5–15 mm or two quadrants		1	
		>15 mm or three to four quadrants or endocervically undefined		2	
5	Iodine Staining	Brown		0	
		Fainty or patchy yellow		1	
		Distinct yellow		2	
				Total	

✓ Check only one most prominent observed feature against all 5 parameters

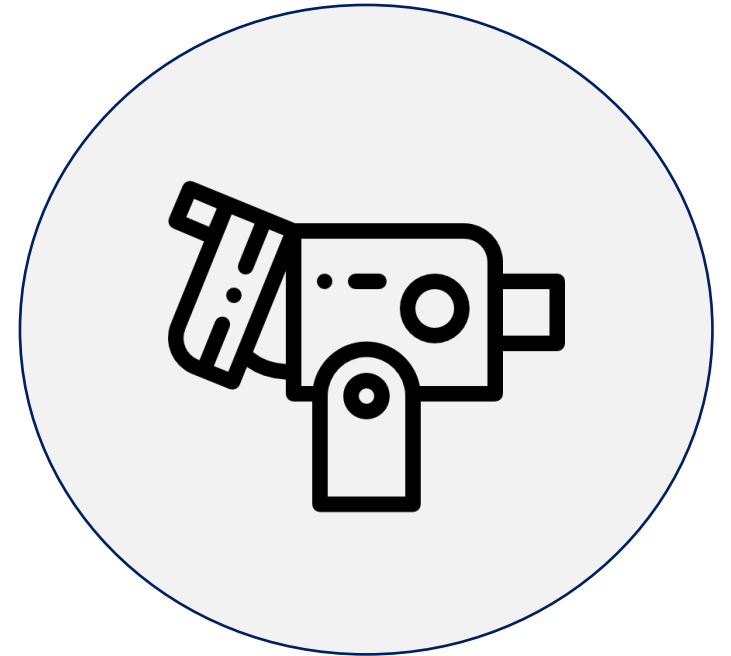
A total score of:

- **0-4: Normal/CIN 1**
- **5-7: CIN2/CIN3, biopsy for diagnosis**
- **>7: CIN 3 /Cancer**

Maintenance of Colposcope

Colposcope requires meticulous care and maintenance

1. **Cover the colposcope** at the end of day to prevent dust accumulation
2. Lens should be **cleaned only with soft and clean tissue paper**, if at all necessary
3. Protect fibreoptic light cables from trauma, twisting or bending to avoid breaking the encased glass strands
4. Replace light bulbs and fuse as necessary. Always keep spares handy
5. **Decontaminate the colposcope at least once a day** after the clinic is over. Remove potentially infected secretions and blood with a safe disinfectant to wipe portions of the colposcope that come in regular contact with clinicians. No disinfectant liquid should get into the optics
6. Ensure the machine is serviced by a trained technician at least once a year



Section 2- SOP for Colposcopy

Learning Outcomes

1. The key ingredients of colposcopic practice are the examination of the features of the cervical epithelium after successive application of normal saline, 3-5% dilute acetic acid and Lugol's iodine solution
2. Colposcopic findings should be documented as per the IFCPC 2011 classification
3. Swede score is used to assist in colposcopy diagnosis and decide on management

Section 3- Interpretation of Colposcopic Findings

Learning Objectives

1. Interpret colposcopy findings
2. Identify normal colposcopic features
3. Identify abnormal colposcopic features and categorize them according to the IFCPC 2011 classification
4. Recognize colposcopic features of early invasive and invasive cervical cancer
5. Identify other miscellaneous findings on colposcopy
6. Manage women with abnormal colposcopic findings

Normal Colposcopic Findings (1/3)

1. After Normal Saline



Multiple nabothian cysts and a mucus polyp are visible

2. With Green Filter



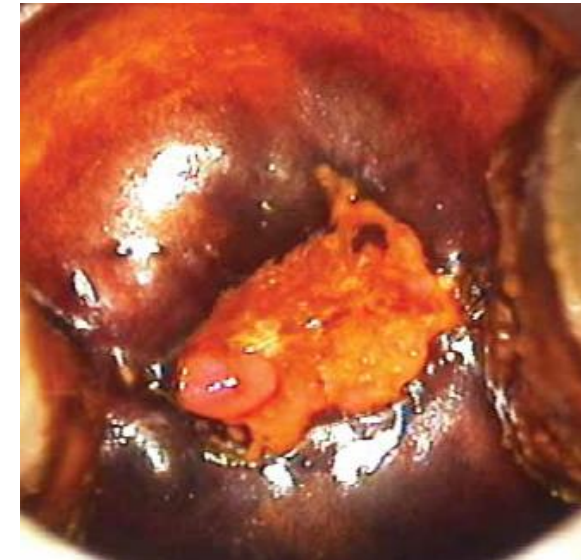
No abnormal vessels seen

3. After 5% Acetic Acid



Squamocolumnar junction is visible. Thin AW areas on the anterior and posterior lips with irregular margins occupying < 25% of the ectocervix

4. After Lugol's Iodine



Patchy yellow areas seen on the anterior and posterior lips of the cervix

Swede score: 1+1+1+0+1=4

Provisional diagnosis: **transformation zone 1; squamous metaplasia**

Management: VIA after 5 years

Normal Colposcopic Findings (2/3)

1. After Normal Saline



SCJ is fully visible on the ectocervix

2. With Green Filter



No abnormal vessels seen

3. After 5% Acetic Acid



SCJ distinctly seen as a thin white line. No acetowhite area. Columnar epithelium bleeds to touch

4. After Lugol's Iodine



Columnar epithelium is not stained by Lugol's iodine

Swede score: 0+0+0+0+0=0

Provisional diagnosis: **Type 1 transformation zone; ectropion**

Management: VIA after 5 years

Normal Colposcopic Findings (3/3)

1. After Normal Saline



SCJ is fully visible on the ectocervix

2. With Green Filter



No abnormal vessels seen

3. After 5% Acetic Acid



Transparent acetowhite area at 12 o'clock position with indistinct margins occupying <25% of the ectocervix

4. After Lugol's Iodine



Faint yellow area over the anterior lip at 12 o'clock position

Swede score: 0+0+1+0+1=2

Provisional diagnosis: **Type 1 transformation zone; ectropion with metaplastic changes**

Management: VIA after 5 years

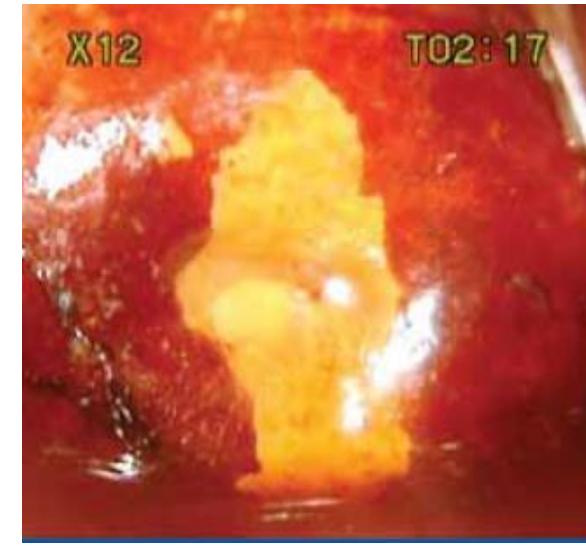
Abnormal Colposcopic Findings- Grade 1 (Minor) (1/2)

1. After Normal Saline

2. With Green Filter

3. After 5% Acetic Acid

4. After Lugol's Iodine



SCJ not visible

No abnormal vessels seen

Thin AW areas noted at 12 o'clock and 6 o'clock positions with sharp margins. Lesions occupying two quadrants (25-50%) of the cervix

Distinct yellow areas on the anterior and posterior lips of the cervix

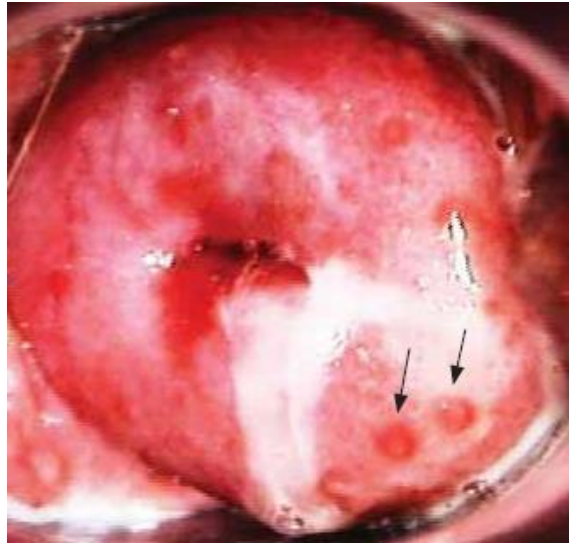
Swede score: 1+1+1+1+2=6

Provisional diagnosis: **Type 3 transformation zone; low grade squamous intraepithelial lesion**

Management: Treatment with LEEP

Abnormal Colposcopic Findings- Grade 1 (Minor) (2/2)

1. After Normal Saline



Cervix covered with mucus. Strawberry-like appearance noted. SCJ partially visible

2. With Green Filter



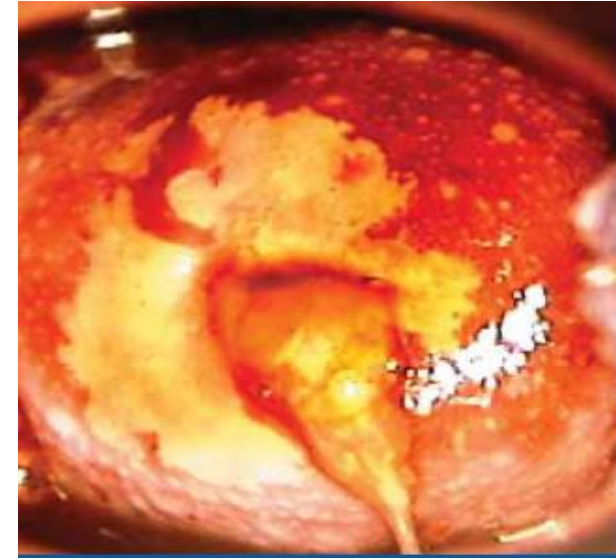
No abnormal vessels seen

3. After 5% Acetic Acid



SCJ fully visible at the external os. Thin acetowhite area with irregular margins noted in three quadrants. Fine mosaics seen

4. After Lugol's Iodine



Faint yellow areas seen. Leopard-skin appearance noted

Swede score: 1+1+0+2+1=5

Provisional diagnosis: **Type 1 transformation zone; low grade squamous intraepithelial lesion; trichomoniasis**

Management: Cervical punch biopsy for diagnosis

Abnormal Colposcopic Findings- Grade 2 (Major) (1/3)

1. After Normal Saline



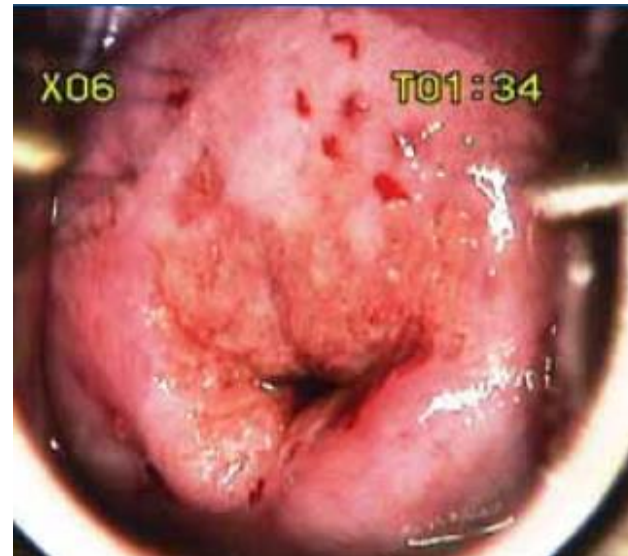
SCJ partly visible

2. With Green Filter



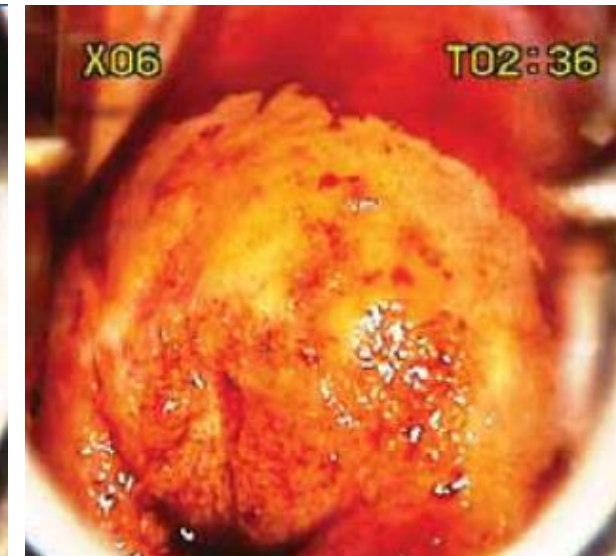
No abnormal vessels seen

3. After 5% Acetic Acid



Type 2 TZ: Dense acetowhite area with sharp margins seen on the anterior lip occupying >2 quadrants of cervix

4. After Lugol's Iodine



Distinct yellow area after Lugol's iodine application

Swede score: 2+2+1+2+2=9

Provisional diagnosis: **Type 2 transformation zone; high grade squamous intraepithelial lesion**

Management: LEEP

Histopathology: **CIN 3**

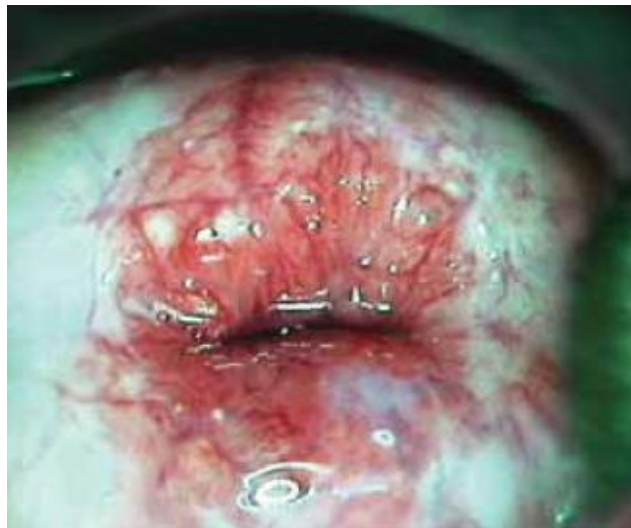
Abnormal Colposcopic Findings- Grade 2 (Major) (2/3)

1. After Normal Saline



SCJ completely visible

2. With Green Filter



No atypical vessels seen

3. After 5% Acetic Acid



Type 1 TZ; dense acetowhite lesion at 4–7 o'clock with sharp margins occupying two quadrants

4. After Lugol's Iodine



Distinct yellow area with Lugol's iodine

Swede score: 2+2+1+1+2=8

Provisional diagnosis: **Type 1 transformation zone; high grade squamous intraepithelial lesion**

Management: LEEP

Histopathology: **CIN 3**

Abnormal Colposcopic Findings- Grade 2 (Major) (3/3)

1. After Normal Saline



SCJ not completely visible,
minimal mucoid discharge

2. With Green Filter



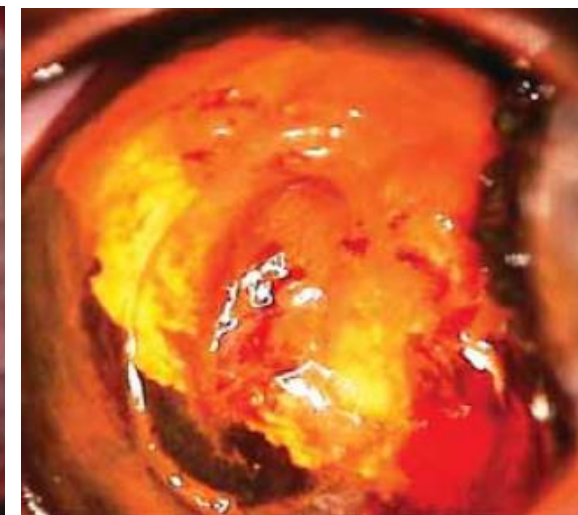
No abnormal vessels noted

3. After 5% Acetic Acid



Type 3 TZ; dense acetowhite area
with sharp margins seen
in all four quadrants of the cervix

4. After Lugol's Iodine



Distinct yellow area
occupying all quadrants
of the cervix

Swede score: $2+2+1+2+2=9$

Provisional diagnosis: **Type 3 transformation zone; high grade squamous intraepithelial lesion**

Management: LEEP

Histopathology: **CIN 3**

Abnormal Colposcopic Findings- Non-Specific

1. Leukoplakia



- White patch visible on the cervical epithelium even before application of acetic acid
- Typically, look like white plaques on the cervix with shiny surface and are due to deposition of keratin in the epithelial cells
- All leukoplakic patches on the TZ of the cervix should be biopsied as they can also hide a high-grade lesion or cancer underneath

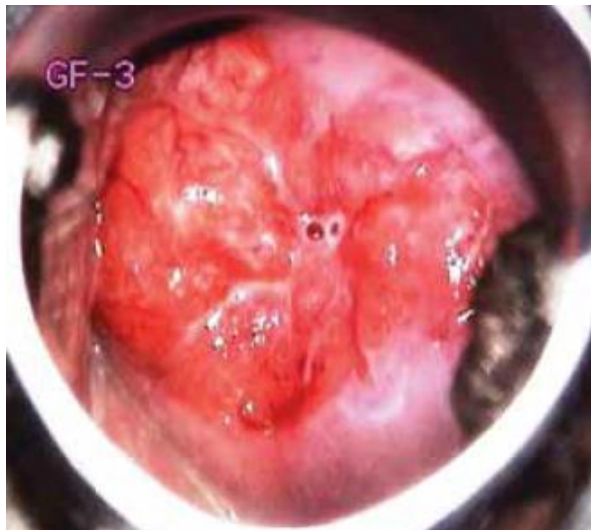
2. Erosion



- Condition where there is peeling-off of the cervical epithelium, often confused with ectropion because both conditions appear as red patched on cervix
- Underlying stroma is exposed and 'spider-like' blood vessels are often visible
- Commonly seen in inflammations and infections of cervix, and in post-menopausal cervix
- Erosion may also present in high grade lesions or invasive cancers, therefore all erosions within the TZ needs to be thoroughly assessed and biopsied

Abnormal Colposcopic Findings- Suspicious for Invasion

1. After Normal Saline



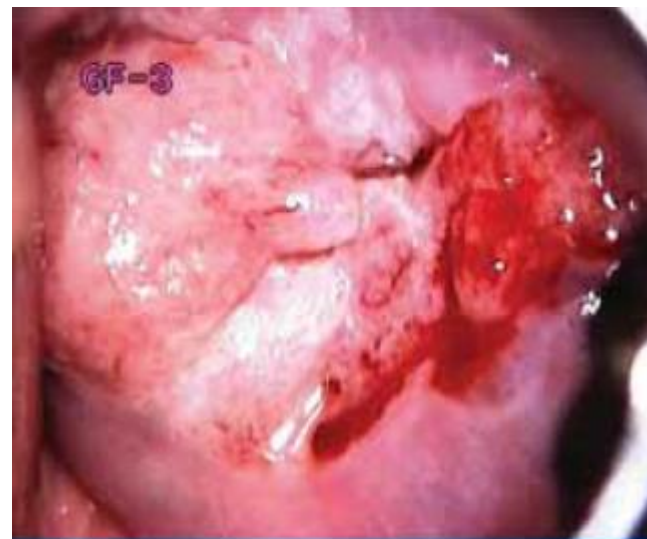
SCJ apparently visible

2. With Green Filter



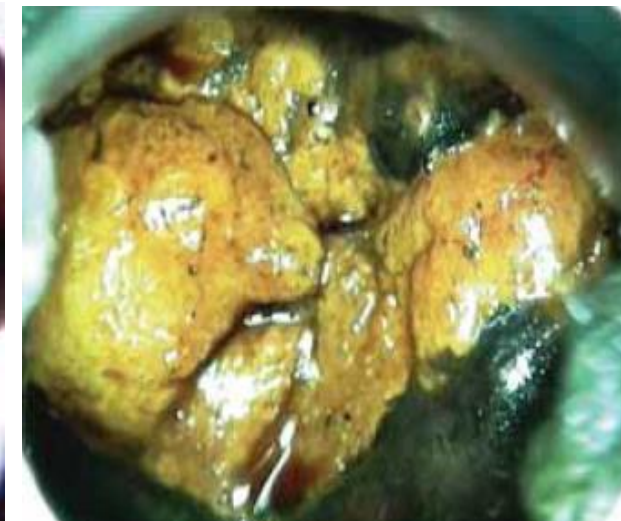
Atypical vessels seen

3. After 5% Acetic Acid



Columnar epithelium has become densely AW with irregular surface

4. After Lugol's Iodine



Distinct yellow areas

Swede's score: $2+2+2+2+2=10$

Provisional diagnosis: **Suspicion of invasive cancer, probably adenocarcinoma**

Management: Multiple punch biopsies

Histopathology: **Adenocarcinoma**

Abnormal Colposcopic Findings- Suspicious for Invasion

1. After Normal Saline



2. With Green Filter



3. After 5% Acetic Acid



4. After Lugol's Iodine



Erosion seen on the cervix

Vessels have branching pattern

Type 1 TZ with dense acetowhite area all around the cervix; cuffed crypt openings also noted

Distinct yellow areas

Swede score : 2+2+2+2+2=10

Provisional diagnosis: **Type 3 transformation zone; suspicious of early invasive cancer**

Management: Multiple punch biopsies from anterior and posterior lips of cervix

Histopathology: **Squamous cell carcinoma**

Miscellaneous Findings

1. Congenital Transformation Zone



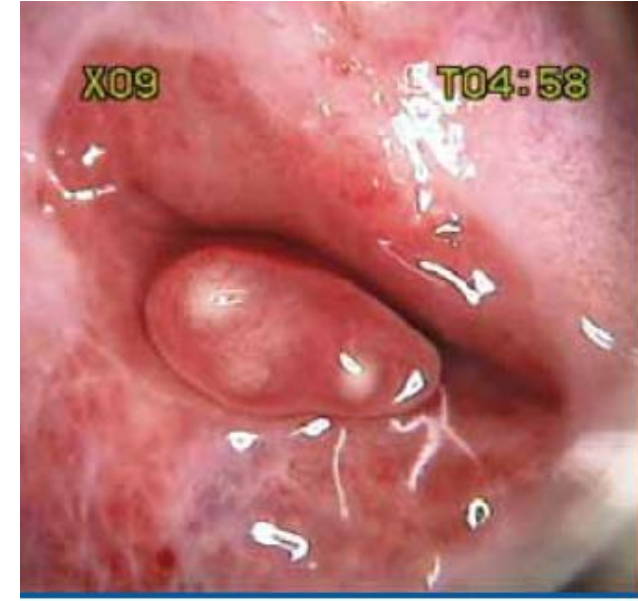
Large thin acetowhite area extending to the fornices with fine mosaics on the surface

2. Condyloma



Raised white shiny lesions on posterior lip of cervix, away from the SCJ

3. Cervical Polyp



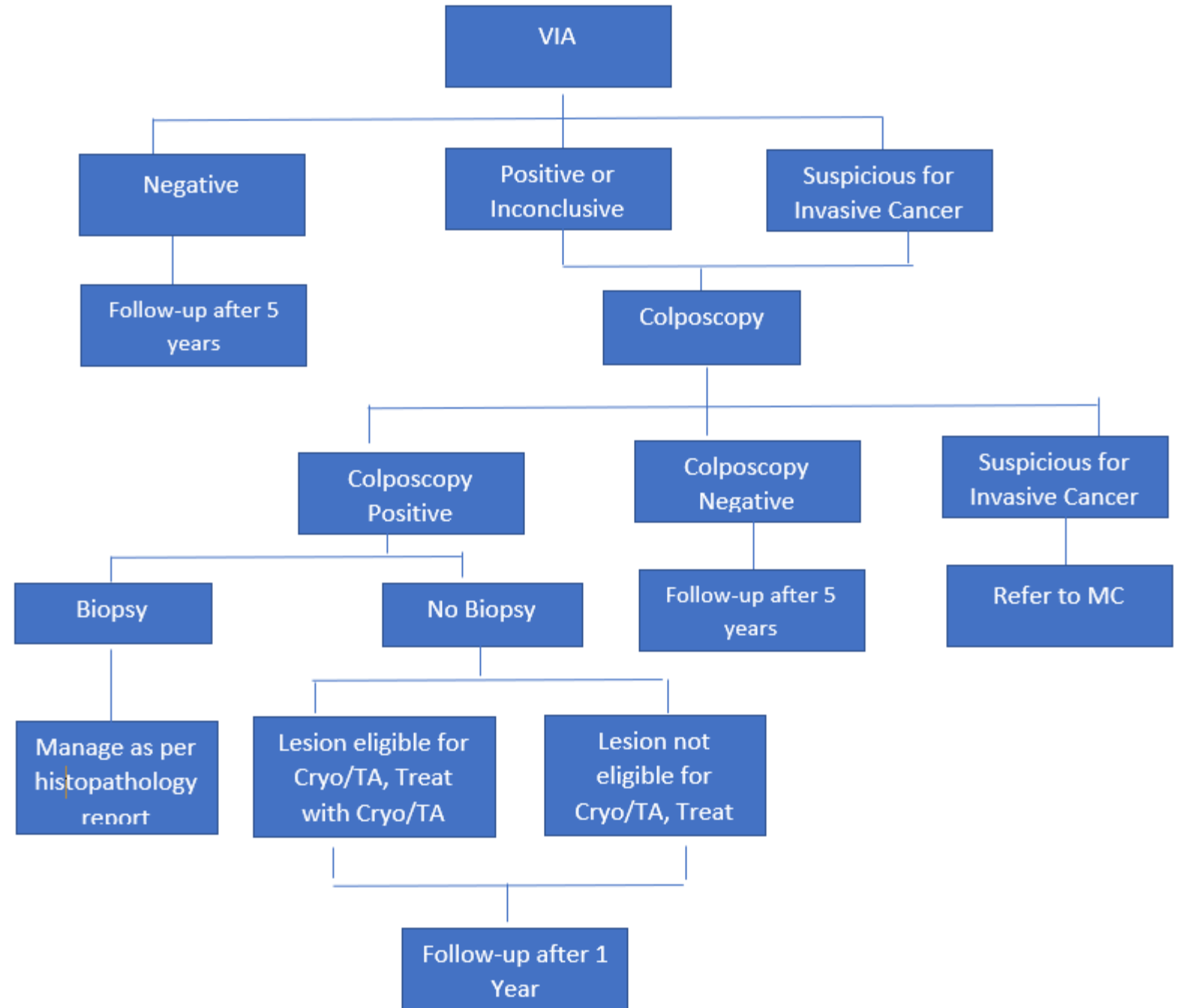
Miscellaneous Findings: Inflammation

- During colposcopic examination, the character of the discharge seen in the vagina and that covering the cervix should be noted to detect the type of infection
- An inflamed cervix (also called cervicitis) appears red and swollen with pus coming out from the external os, commonly seen in chlamydia or gonococcal infections. Inflamed areas may bleed on contact
- Application of Lugol's iodine produces the typical leopard skin appearance due to multiple iodine negative patches



Figure: (a) Curdy white thick discharge of candidiasis (left), (b) Thin, frothy discharge of trichomoniasis (centre), (c) Strawberry appearance of cervix in trichomoniasis (right)

Management Post-Colposcopy



Case Studies

Case Study 1

Case history: 45-year-old multiparous woman was positive on VIA. She was referred for colposcopy

1. After 5% acetic acid



2. After Lugol's Iodine



Q1: Describe the findings-
5% acetic acid –
Lugol's Iodine-

Q2: What is the final colposcopic diagnosis?

Q3: What is the Swede score?

Q4: Is she eligible for cryotherapy/TA?

Q5: What will be the post treatment advice?

Case Study 1 - Discussion

Case history: 45-year-old multiparous woman was positive on VIA. She was referred for colposcopy

1. After application of 5% acetic acid



2. After application of Lugol's Iodine



Q1: Describe the findings-

Ans: 5% acetic acid – The SCJ is entirely visible and the TZ is Type 1. Thin acetowhite area with indistinct and irregular margin is seen at 11 o'clock position. The lesion is on the TZ and covers one quadrant of the cervix

Lugol's Iodine-Partial iodine uptake is seen at 11 o'clock position

Q2: What is the final colposcopic diagnosis?

Ans: Grade 1 (minor) abnormalities involving one quadrant, likely to be a low-grade lesion

Q3:What is the Swede score?

Ans: The Swede score is **4**

- Thin milky – 1
- Irregular margins -1
- Absent vessels – 1
- 1 quadrant involvement – 0
- Partial iodine staining – 1

Case Study 1 - Discussion

Case history: 45-year-old multiparous woman was positive on VIA. She was referred for colposcopy

1. After application of 5% acetic acid



2. After application of Lugol's Iodine



Q4: Is she eligible for cryotherapy/TA?

Ans: Yes – TZ Type 1, lesion purely ectocervical, limited to one quadrant and can be covered fully by cryotherapy probe and treated by TA

Q5: What will be the post treatment advice?

- The woman should be told to avoid sexual intercourse for 4 weeks
- She should avoid vaginal douches or use of tampons for 4 weeks
- She should use sanitary napkins to avoid staining of clothes as watery discharge or spotting can occur for 2–3 weeks
- She should attend a health facility or consult a doctor if she has profuse and foul-smelling vaginal discharge with or without fever and lower abdominal pain. She should also seek advice if there is vaginal bleeding more than normal menstrual bleeding
- The woman should have a follow-up visit at 1 year

Case Study 2

Case history: 45-year-old multiparous woman was positive on VIA. She was referred for colposcopy

1. After Normal Saline



2. With Green Filter



3. After 5% Acetic Acid



4. After Lugol's Iodine



Q1: Describe the findings- Normal saline, green filter, 5% acetic acid , Lugol's Iodine

Q2: What is the Swede score?

Q3: What is the management strategy for the case?

Case Study 2- Discussion

Case history: A 47-year-old woman (parity 3) was positive on VIA. She was referred for colposcopy

1. After Normal Saline



Congested cervix with prominent vessels. The vessels have a branching pattern. SCJ cannot be seen

2. With Green Filter



The prominent vessels are better appreciated

3. After 5% Acetic Acid



Dense acetowhite area with sharp raised border is seen involving all the 4 quadrants. Coarse punctations are visible. Cuffed crypt openings are also present at 9 o'clock position. The dense white large lesions with surface irregularity and raised border are indicative of invasive cancer

TZ is of Type 3 as the SCJ is inside the canal and cannot be seen completely

4. After Lugol's Iodine



The acetowhite area is uniformly iodine negative

Case Study 2 - Discussion

Q2: What is the swede score?

Ans: The Swede score is 10

- Distinct stearin acetowhite – 2
- Sharp border and difference in surface levels – 2
- Atypical vessels – 2
- 3–4 quadrant involvement – 2
- Distinct yellow iodine non-stained area – 2

Q3: What is the management strategy for the case?

Ans: The lesion is suspicious of invasive cancer. Multiple punch biopsies should be obtained. The woman should be referred to a higher centre for staging and further management if the histology report shows invasive cancer

Colposcopy Procedure- Videos

<https://screening.iarc.fr/atlascolpodetail.php?Index=57&e=,0,1,2,3,8,10,15,19,30,31,43,46,47,60,61,68,73,83,88,89,93,96,102,105,111>

Section 3- Interpretation of Colposcopic Findings

Learning Outcomes

1. Mature squamous epithelium is pink in colour and may have fine capillaries or normal branching blood vessels
2. Ectropion is the presence of columnar epithelium on the ectocervix
3. Erosion is the denudation of cervical epithelium
4. A thin acetowhite area with irregular geographical margin and flat surface appearing on the TZ, fine mosaic or fine punctations indicate Grade 1 or minor abnormality
5. A dense acetowhite area on the TZ with well-defined flat or elevated regular margins, coarse mosaics, coarse punctations, cuffed crypt openings, inner border sign and ridge sign indicate Grade 2 abnormalities
6. A growth or ulcer with necrotic areas indicates invasive lesions

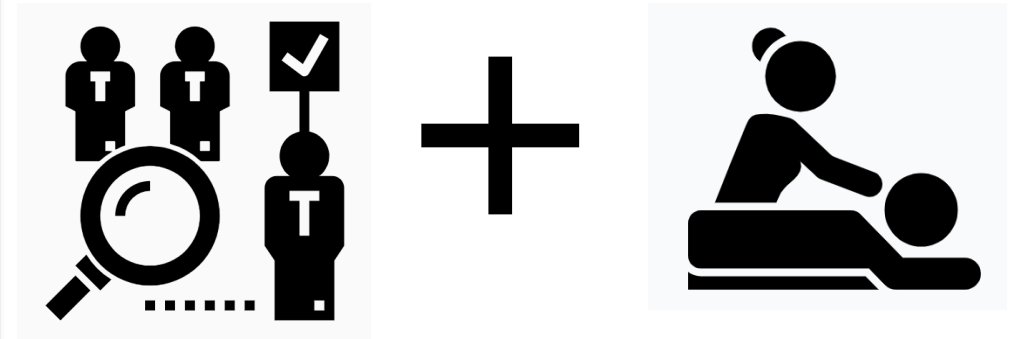
Section 4- Screen and Treat Approach

Learning Objectives

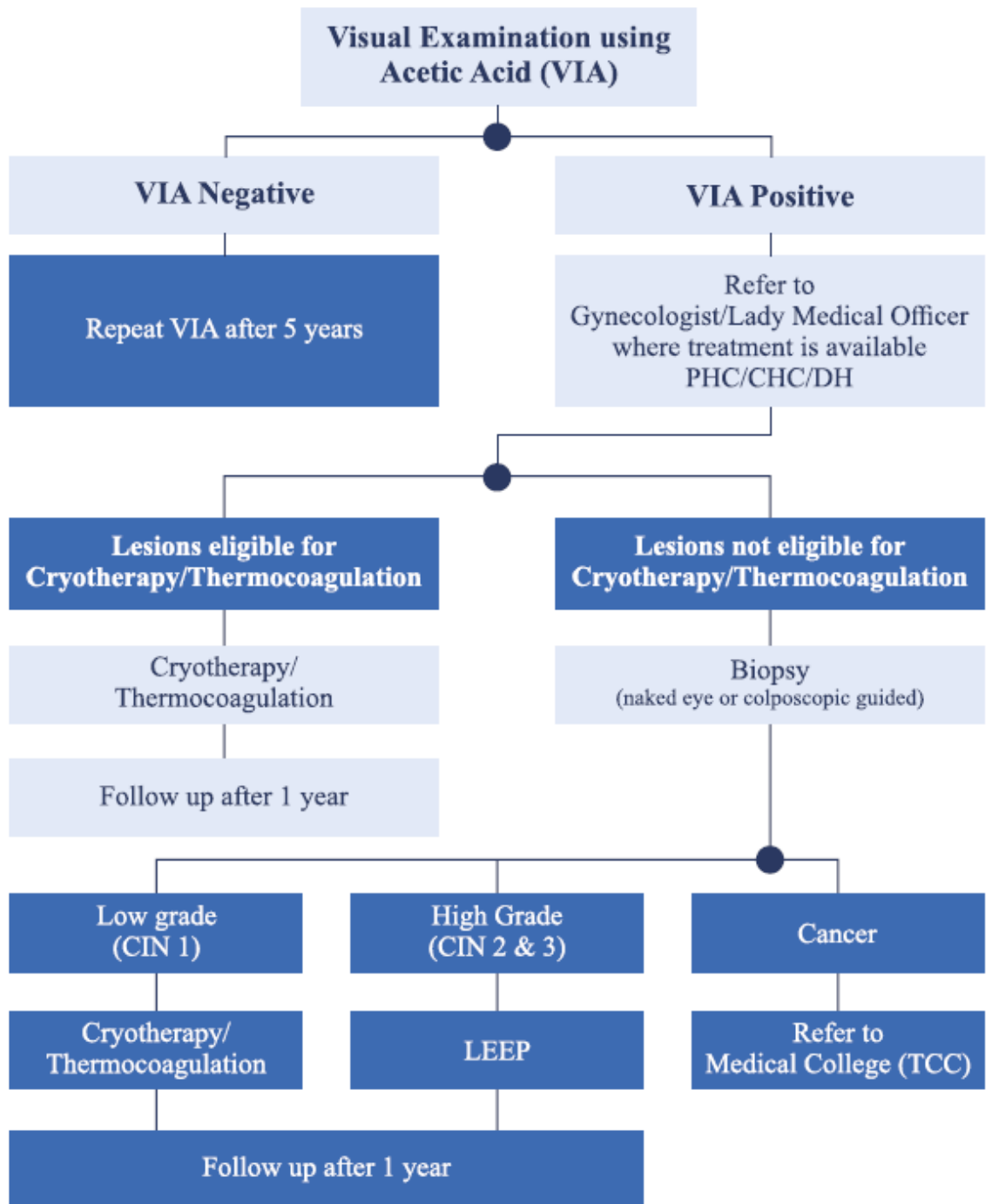
1. Understand **Screen and Treat** approach

Screen and Treat Approach

- VIA adopted as cervical cancer screening test in population based screening programs by GoI
- Availability of immediate results in VIA provides an opportunity for treating the lesions in the same sitting - '**Screen and Treat**' approach
- In screen and treat approach, treatment decision is based on a screening test, and not on a histologically confirmed diagnosis of CIN
- Treatment is provided soon or ideally immediately after a positive screening test
- Adding a diagnostic step between screening and treatment of pre-cancer may result in high loss to follow-up because of additional patient visits
- Concerns about over treatment must be weighed against overall benefit of ensuring higher rates of treatment



Screen and Treat Approach



Ref: Screening and Management of Cervical Cancer at Secondary level Health Care facilities, National Health Mission, Ministry of Health and Family Welfare, GoI

Section 4- Screen and Treat Approach

Learning Outcomes

1. **Screen and Treat** approach eliminate extra diagnostic visit by patient and hence reduce loss to follow-up
2. After VIA screening if lesion is found to be eligible for treatment with cryo/TA, treatment should be provided on the same visit
3. If treatment is not available at DH, patient should be referred to nearest medical college having treatment facilities
4. Every district to prepare a 10 min case study on colposcopy experience for TC to be conducted 2-3 weeks post training in 2 batches

Thank you!