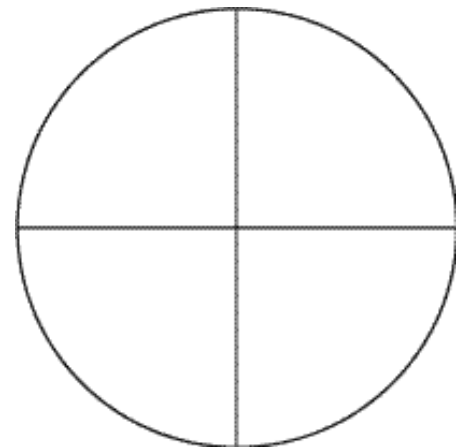


# Appendix 1

## Colposcopy record

EXAMPLE

1. Medical Record Number: \_\_\_\_\_
  2. Patient's Name: \_\_\_\_\_
  3. Age: \_\_\_\_\_
  4. Date of visit: \_\_\_\_ / \_\_\_\_ / \_\_\_\_ (Day/Month/Year)
  5. Colposcopist performing exam: \_\_\_\_\_
  6. Did you see the entire squamocolumnar junction (SCJ)?  Yes  No  
(If 'No', consider endocervical curettage)
  7. Unsatisfactory colposcopy:  Entire SCJ not visualised  Entire lesion not visualised
  8. Colposcopic findings within the transformation zone (use ✓ to indicate result):  
(Draw SCJ, acetowhite, punctation, mosaics, atypical vessels, and other lesions)
    - Flat acetowhite epithelium
    - Micropapillary or microconvoluted acetowhite epithelium
    - Leukoplakia
    - Punctation
    - Mosaic
    - Atypical vessels
    - Iodine- negative epithelium
    - Other, specify: \_\_\_\_\_
  9. Findings outside the transformation zone: \_\_\_\_\_
- 
10. Colposcopically suspect invasive carcinoma: Yes No
  11. Miscellaneous findings: \_\_\_\_\_
- 
12. Colposcopic diagnosis (use ✓ to indicate result):
    - Unsatisfactory, specify: \_\_\_\_\_
    - Normal colposcopic findings
    - Inflammation/infection, specify: \_\_\_\_\_



- Leukoplakia
- Condyloma
- Low-grade CIN
- High-grade CIN
- Invasive cancer, specify location of referral: \_\_\_\_\_
- Other, specify: \_\_\_\_\_
- Number of biopsies taken \_\_\_\_\_ (mark site(s) with an 'X' on colposcopy drawing)
- Endocervical curettage (ECC) taken

## 13. Other findings (use ✓ to indicate all that apply):

- Lesion extended into endocervix
- Mucosal bleeding easily induced
- Purulent cervicitis
- Opaque discharge
- Yellow discharge
- Other, specify: \_\_\_\_\_

## 14. Colposcopist's signature: \_\_\_\_\_

## 15. If test performed at colposcopy exam, note results below:

Cytology result:	ECC result:	Biopsy result:
<input type="checkbox"/> Negative	<input type="checkbox"/> Negative	<input type="checkbox"/> Negative
<input type="checkbox"/> Atypia/CIN 1	<input type="checkbox"/> CIN 1	<input type="checkbox"/> CIN 1
<input type="checkbox"/> CIN 2	<input type="checkbox"/> CIN 2	<input type="checkbox"/> CIN 2
<input type="checkbox"/> CIN 3	<input type="checkbox"/> CIN 3	<input type="checkbox"/> CIN 3
<input type="checkbox"/> Invasive cancer	<input type="checkbox"/> Microinvasive squamous cancer	<input type="checkbox"/> Microinvasive squamous cancer
	<input type="checkbox"/> Invasive squamous cancer	<input type="checkbox"/> Invasive squamous cancer
	<input type="checkbox"/> Adenocarcinoma	<input type="checkbox"/> Adenocarcinoma in-situ
	<input type="checkbox"/> Glandular dysplasia	<input type="checkbox"/> Adenocarcinoma
	<input type="checkbox"/> ECC not done	

# Appendix 2

## Consent form

Patient's Name..... Health Center .....

EXAMPLE

## Consent for Colposcopy, Biopsy, and Possible Treatment

Cervical cancer is a problem for women in our region, but much of it could be prevented by simple tests. The clinicians here are using a test that can find problems early. If these problems are found early, they can be treated easily and cancer can be avoided.

### Procedures

You were referred for colposcopy because there is a possible problem with your cervix. If you decide to participate in this examination, the clinician will provide counselling and education about cervical cancer, ask you some questions about your reproductive history and risk of being pregnant, and examine your cervix today. S/he will use a speculum to hold the vagina open. Then, s/he will gently wipe your cervix with vinegar. You may feel a slight stinging from the vinegar. The clinician will look at your cervix with a colposcope, which magnifies and illuminates the cervix to help the clinician see your cervix more clearly. The colposcope will not touch your body. The examination will take about 5 to 7 minutes.

If the examination with the colposcope shows that your cervix is healthy, you will be finished with your examination. If the examination with the colposcope shows that your cervix is not healthy, the clinician will take a small sample of tissue from your cervix (this is called a biopsy) in order to check the diagnosis.

The biopsy may cause some pain that lasts a few seconds and varies from mild pinching to some cramping sensations. After the biopsy, you will be treated with cryotherapy to remove the area that is a problem on your cervix. You will probably feel some cramping during and after the procedure; the cramping usually stops shortly after the procedure. You also will probably experience spotting or light bleeding from your cervix for 1 to 2 weeks and a watery vaginal discharge that lasts 2 to 4 weeks. You will be asked to not have sexual intercourse for 3 to 4 weeks to allow your cervix to heal properly. You also will be asked to return to the clinic 9-12 months after the procedure for a follow-up visit. The clinician will look at your cervix again with a colposcope in order to make sure that the treatment was successful. If, however, the colposcopic examination shows that the treatment was not successful, you will be advised on further steps to take.

### Risks

You may be embarrassed by the vaginal examination. The colposcopy examination may cause vaginal irritation and burning for several minutes. You may experience slight vaginal bleeding for one or two days if a biopsy is taken from your cervix. You may experience a watery vaginal discharge for up to four weeks if you undergo treatment by cryotherapy. Although it is unlikely, you also may experience heavy vaginal bleeding. There is a 10% risk that cryotherapy, if used correctly, will not be effective, but this outcome will be detected at the follow-up examination after 9-12 months.

### Eligibility

Before being examined, you will be asked a series of questions to determine if there is a chance of your being pregnant. If so, you will be tested with a standard urine pregnancy test. You will be examined using colposcopy

regardless of your pregnancy status. If you require treatment and the pregnancy test is positive, your treatment will be postponed until six weeks after delivery.

### Confidentiality

All of your personal information will be kept confidential and used only for your medical care. Any other use will require your written consent. If you refuse any part of this examination, it will not affect care that we give you in the future.

### Questions

Please direct any questions you have about the examination or your rights as a patient to district hospital staff.

## Patient Statement (Provider's copy)

The information above on colposcopy, biopsy, and possible treatment has been explained to me and I have been given the opportunity to ask questions. I agree to participate in this examination.

\_\_\_\_\_

Signature of patient OR thumbprint of patient ,

Date \_\_\_\_\_



\_\_\_\_\_

Signature of witness  
Date \_\_\_\_\_

-----  
*(tear off at dotted line and give to patient)*

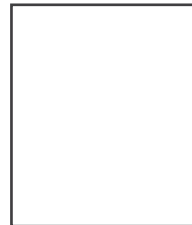
## Patient Statement (Patient's copy)

The information above on colposcopy, biopsy, and possible treatment has been explained to me and I have been given the opportunity to ask questions. I agree to participate in this examination.

\_\_\_\_\_

Signature of patient OR thumbprint of patient ,

Date \_\_\_\_\_



\_\_\_\_\_

Signature of witness  
Date \_\_\_\_\_

# Appendix 3

## Preparation of 5% acetic acid, Lugol's iodine solution, and Monsel's paste

### 5% dilute acetic acid

Ingredients	Quantity
1. Glacial acetic acid	5 ml
2. Distilled water	95 ml

#### Preparation

Carefully add 5 ml of glacial acetic acid into 95 ml of distilled water and mix thoroughly.

#### Storage:

Unused acetic acid should be discarded at the end of the day.

#### Label:

5% dilute acetic acid

Note: It is important to remember to dilute the glacial acetic acid, since the undiluted strength causes a severe chemical burn if applied to the epithelium.

### Lugol's iodine solution

Ingredients	Quantity
1. Potassium iodide	10 g
2. Distilled water	100 ml
3. Iodine crystals	5 g

#### Preparation

- Dissolve 10 g potassium iodide in 100 ml of distilled water.
- Slowly add 5 g iodine crystals, while shaking.
- Filter and store in a tightly stoppered brown bottle.

#### Storage:

1 month

#### Label:

Lugol's iodine solution  
Use by (date)

## Monsel's paste

### Ingredients

1. Ferric sulfate base	15 g
2. Ferrous sulfate powder	a few grains
3. Sterile water for mixing	10 ml
4. Glycerol starch (see preparation on next page)	12 g

### Quantity

### Preparation

**Take care: The reaction is exothermic (emits heat).**

- Add a few grains of ferrous sulfate powder to 10 ml of sterile water in a glass beaker. Shake.
- Dissolve the ferric sulfate base in the solution by stirring with a glass stick. The solution should become crystal clear.
- Weigh the glycerol starch in a glass mortar. Mix well.
- Slowly add ferric sulfate solution to glycerol starch, constantly mixing to get a homogeneous mixture.
- Place in a 25 ml brown glass bottle.
- For clinical use, most clinics prefer to allow enough evaporation to give the solution a sticky pastelike consistency that looks like mustard. This may take 2 to 3 weeks, depending on the environment. The top of the container can then be secured for storage. If necessary, sterile water can be added to the paste to thin it.

*Note: This preparation contains 15% elementary iron.*

### Storage:

6 months

### Label:

Monsel's solution  
Shake well  
External use only  
Use by (date)

## Glycerol starch

(an ingredient in Monsel's paste)

### Ingredients

1. Starch	30 g
2. Sterile water for mixing	30 ml
3. Glycerine	390 g

### Quantity

### Preparation

- In a china crucible, dissolve the starch in the sterile water.
- Add the glycerine. Shake well.
- Heat the crucible and its contents over a bunsen burner. Mix constantly with a spatula until the mass takes on a thick, swelling consistency. Take care not to overheat so as not to let it turn yellow.

### Storage:

1 year

### Label:

Glycerol starch  
Store in a cool place  
For external use only  
Use by (date)

*Note: Do not overheat, otherwise the mixture will turn yellow.*

# Appendix 4

## Colposcopic terminology

### Normal colposcopic findings

Original squamous epithelium  
Columnar epithelium  
Normal transformation zone

### Abnormal colposcopic findings

Within the transformation zone

Acetowhite epithelium  
    Flat  
    Micropapillary or microconvoluted  
Punctation\*  
Mosaic\*  
Leukoplakia\*  
Iodine-negative epithelium  
Atypical vessels

Outside the transformation zone, e.g., ectocervix, vagina

Acetowhite epithelium\*  
    Flat  
    Micropapillary or microconvoluted  
Punctation\*  
Mosaic\*  
Leukoplakia\*

Iodine-negative epithelium

Atypical vessels

Colposcopically suspect invasive carcinoma

Unsatisfactory colposcopy

    Squamocolumnar junction not visible

    Severe inflammation or severe atrophy

    Cervix not visible

Miscellaneous findings

    Nonacetowhite micropapillary surface

    Exophytic condyloma

    Inflammation

    Atrophy

    Ulcer

    Other

\* Indicates minor or major change. Minor changes are acetowhite epithelium, fine mosaic, fine punctation, and thin leukoplakia. Major changes are dense acetowhite epithelium, coarse mosaic, coarse punctation, thick leukoplakia, atypical vessels, and erosion.

Ref: StafI and Wilbanks (1991)

# Appendix 5

## The modified Reid colposcopic index (RCI)\*

The modified Reid colposcopic index (RCI)*			
Colposcopic signs	Zero point	One point	Two points
Colour	<p>Low-intensity acetowhitening (not completely opaque); indistinct acetowhitening; transparent or translucent acetowhitening</p> <p>Acetowhitening beyond the margin of the transformation zone</p> <p>Pure snow-white colour with intense surface shine (rare)</p>	<p>Intermediate shade - grey/white colour and shiny surface (most lesions should be scored in this category)</p>	<p>Dull, opaque, oyster white; grey</p>
Lesion margin and surface configuration	<p>Microcondylomatous or micropapillary contour<sup>1</sup></p> <p>Flat lesions with indistinct margins</p> <p>Feathered or finely scalloped margins</p> <p>Angular, jagged lesions<sup>3</sup></p> <p>Satellite lesions beyond the margin of the transformation zone</p>	<p>Regular-shaped, symmetrical lesions with smooth, straight outlines</p>	<p>Rolled, peeling edges<sup>2</sup></p> <p>Internal demarcations between areas of differing colposcopic appearance—a central area of high-grade change and peripheral area of low-grade change</p>
Vessels	<p>Fine/uniform-calibre vessels<sup>4</sup>- closely and uniformly placed</p> <p>Poorly formed patterns of fine punctation and/or mosaic</p> <p>Vessels beyond the margin of the transformation zone</p> <p>Fine vessels within microcondylomatous or micropapillary lesions<sup>6</sup></p>	<p>Absent vessels</p>	<p>Well defined coarse punctation or mosaic, sharply demarcated<sup>5</sup> - and randomly and widely placed</p>



## The modified Reid colposcopic index (RCI)\*(Cont.)

Colposcopic signs	Zero point	One point	Two points
Iodine staining	<p>Positive iodine uptake giving mahogany-brown color</p> <p>Negative uptake of insignificant lesion, i.e., yellow staining by a lesion scoring three points or less on the first three criteria</p> <p>Areas beyond the margin of the transformation zone, conspicuous on colposcopy, evident as iodine-negative areas (such areas are frequently due to parakeratosis)<sup>7</sup></p>	Partial iodine uptake - variegated, speckled appearance	Negative iodine uptake of significant lesion, i.e., yellow staining by a lesion already scoring four points or more on the first three criteria

- \* Colposcopic grading performed with 5% aqueous acetic acid and Lugol's iodine solution. (See Appendix 3 for recipes for 5% acetic acid and for Lugol's iodine solution).
- 1 Microexophytic surface contour indicative of colposcopically overt cancer is not included in this scheme.
  - 2 Epithelial edges tend to detach from underlying stroma and curl back on themselves. Note: Prominent low-grade lesions often are overinterpreted, while subtle avascular patches of HSIL can easily be overlooked.
  - 3 Score zero even if part of the peripheral margin does have a straight course.
  - 4 At times, mosaic patterns containing central vessels are characteristic of low-grade histological abnormalities. These low-grade-lesion capillary patterns can be quite pronounced. Until the physician can differentiate fine vascular patterns from coarse, overdiagnosis is the rule.
  - 5 Branching atypical vessels indicative of colposcopically overt cancer are not included in this scheme.
  - 6 Generally, the more microcondylomatous the lesion, the lower the score. However, cancer also can present as a condyloma, although this is a rare occurrence.
  - 7 Parakeratosis: a superficial zone of cornified cells with retained nuclei.

## Colposcopic prediction of histologic diagnosis using the Reid Colposcopic Index (RCI)

RCI (overall score)	Histology
0 - 2	Likely to be CIN 1
3 - 4	Overlapping lesion: likely to be CIN 1 or CIN 2
5 - 8	Likely to be CIN 2-3

# Index

Acetowhitening	.35, 59-65, 70, 81, 87, 128
Adenocarcinoma	.19, 23, 72
Adenocarcinoma <i>in situ</i>	.13, 19, 72
Adenosquamous carcinoma	.24
Anal intraepithelial neoplasia (AIN)	.36
Atypical squamous cells of undetermined significance (ASCUS)	.14-15
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Atypical transformation zone (ATZ)	.11-12, 41
Bethesda system	.14-15
Blended cutting waveform	.104
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Cervical intraepithelial neoplasia (CIN)	.13-19, 55-68, 95-111
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Coarse mosaic	.57-58, 67, 87, 128
Coarse punctation	.58, 63, 87, 128
Cold-knife conization	.43, 92, 93, 110
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Colposcopic terminology	.127
Colposcopy record	.29, 36, 121
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Ectopy	.7, 8
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High-level disinfection	.113-116
Histopathology	.16, 24
Hyperkeratosis	.30, 58, 92
Hyperplasia	.8
Immature metaplasia	.9-10, 50-54
International Federation of Gynaecology and Obstetrics (FIGO) staging system	.24-25
Inflammatory lesions	.64, 79-83
Keratinizing squamous cell carcinoma	.23-24
Leopard skin appearance	.82
Leukoplakia	.30, 58, 86, 92
Loop electrosurgical excision procedure (LEEP)	.103-111
Low-grade squamous intraepithelial lesion (LSIL)	.14-15
Lugol's iodine solution	.36, 41, 51, 65, 81, 125
Mature squamous metaplasia	.9-12, 36, 51, 87
Microinvasive carcinoma	.21-27
Monsel's paste	.42, 126
Nabothian cyst/follicle	.10
New squamocolumnar junction	.5-8
Non-keratinizing squamous cell carcinoma	.24
Pregnancy	.43-44, 93-94
Reid Colposcopic Index	.128
Reproductive tract infection	.91-92
Schiller's test ( <i>see also</i> Lugol's iodine solution)	.36
Squamocolumnar junction (SCJ)	.5-8, 87
Squamous metaplasia	.8-11, 50-51
Sterilization	.113-116
Stratified non-keratinizing squamous epithelium	.3-4
Transformation zone (TZ)	.11-12, 53-54, 67, 87
Umbilication	.58
Vaginal intraepithelial neoplasia (VAIN)	.36
Visual inspection with acetic acid (VIA)	.29-36, 41, 49, 59-65, 81, 87, 125
Visual inspection with acetic acid using magnification (VIAM)	.29-36
Vulvar intraepithelial neoplasia (VIN)	.36