Appendix 1

Colposcopy record

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:

<table>
<thead>
<tr>
<th>Cytology result:</th>
<th>ECC result:</th>
<th>Biopsy result:</th>
</tr>
</thead>
<tbody>
<tr>
<td>✗ Negative</td>
<td>✗ Negative</td>
<td>✗ Negative</td>
</tr>
<tr>
<td>✗ Atypia/CIN 1</td>
<td>✗ CIN 1</td>
<td>✗ CIN 1</td>
</tr>
<tr>
<td>✗ CIN 2</td>
<td>✗ CIN 2</td>
<td>✗ CIN 2</td>
</tr>
<tr>
<td>✗ CIN 3</td>
<td>✗ CIN 3</td>
<td>✗ CIN 3</td>
</tr>
<tr>
<td>✗ Invasive cancer</td>
<td>✗ Microinvasive squamous cancer</td>
<td>✗ Microinvasive squamous cancer</td>
</tr>
<tr>
<td></td>
<td>✗ Invasive squamous cancer</td>
<td>✗ Invasive squamous cancer</td>
</tr>
<tr>
<td></td>
<td>✗ Adenocarcinoma</td>
<td>✗ Adenocarcinoma in-situ</td>
</tr>
<tr>
<td></td>
<td>✗ Glandular dysplasia</td>
<td>✗ Adenocarcinoma</td>
</tr>
<tr>
<td></td>
<td>✗ ECC not done</td>
<td>✗ Adenocarcinoma</td>
</tr>
</tbody>
</table>
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  

(ear 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  

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Appendix 3

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

5% dilute acetic acid

**Ingredients**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Glacial acetic acid</td>
<td>5 ml</td>
</tr>
<tr>
<td>2. Distilled water</td>
<td>95 ml</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Potassium iodide</td>
<td>10 g</td>
</tr>
<tr>
<td>2. Distilled water</td>
<td>100 ml</td>
</tr>
<tr>
<td>3. Iodine crystals</td>
<td>5 g</td>
</tr>
</tbody>
</table>

**Preparation**

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

**Storage:**

1 month

**Label:**

Lugol’s iodine solution
Use by (date)
**Monsel’s paste**

**Ingredients**

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ferric sulfate base</td>
<td>15 g</td>
<td></td>
</tr>
<tr>
<td>2. Ferrous sulfate powder</td>
<td>a few grains</td>
<td></td>
</tr>
<tr>
<td>3. Sterile water for mixing</td>
<td>10 ml</td>
<td></td>
</tr>
<tr>
<td>4. Glycerol starch (see preparation on next page)</td>
<td>12 g</td>
<td></td>
</tr>
</tbody>
</table>

**Preparation**

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

A. Add a few grains of ferrous sulfate powder to 10 ml of sterile water in a glass beaker. Shake.
B. Dissolve the ferric sulfate base in the solution by stirring with a glass stick. The solution should become crystal clear.
C. Weigh the glycerol starch in a glass mortar. Mix well.
D. Slowly add ferric sulfate solution to glycerol starch, constantly mixing to get a homogeneous mixture.
E. Place in a 25 ml brown glass bottle.
F. 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**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Starch</td>
<td>30 g</td>
</tr>
<tr>
<td>2. Sterile water for mixing</td>
<td>30 ml</td>
</tr>
<tr>
<td>3. Glycerine</td>
<td>390 g</td>
</tr>
</tbody>
</table>

**Preparation**

A. In a china crucible, dissolve the starch in the sterile water.
B. Add the glycerine. Shake well.
C. 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
- Mosaic*
- Leukoplakia*
- Iodine-negative epithelium
- Atypical vessels
Outside the transformation zone, e.g., ectocervix, vagina
- Acetowhite epithelium*
  - Flat
  - Micropapillary or microconvoluted
- Punctuation*
- 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 punctuation, and thin leukoplakia. Major changes are dense acetowhite epithelium, coarse mosaic, coarse punctuation, thick leukoplakia, atypical vessels, and erosion.

Ref: Stafl and Wilbanks (1991)
### Appendix 5

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

<table>
<thead>
<tr>
<th>Colposcopic signs</th>
<th>Zero point</th>
<th>One point</th>
<th>Two points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Colour</strong></td>
<td>Low-intensity acetowhitening (not completely opaque); indistinct acetowhitening; transparent or translucent acetowhitening Acetowhitening beyond the margin of the transformation zone Pure snow-white colour with intense surface shine (rare)</td>
<td>Intermediate shade - grey/white colour and shiny surface (most lesions should be scored in this category)</td>
<td>Dull, opaque, oyster white; grey</td>
</tr>
<tr>
<td><strong>Lesion margin and surface configuration</strong></td>
<td>Microcondylomatous or micropapillary contour¹ Flat lesions with indistinct margins Feathered or finely scalloped margins Angular, jagged lesions³ Satellite lesions beyond the margin of the transformation zone</td>
<td>Regular-shaped, symmetrical lesions with smooth, straight outlines</td>
<td>Rolled, peeling edges² Internal demarcations between areas of differing colposcopic appearance—a central area of high-grade change and peripheral area of low-grade change</td>
</tr>
<tr>
<td><strong>Vessels</strong></td>
<td>Fine/uniform-calibre vessels⁴- closely and uniformly placed Poorly formed patterns of fine punctation and/or mosaic Vessels beyond the margin of the transformation zone Fine vessels within microcondylomatous or micropapillary lesions⁶</td>
<td>Absent vessels</td>
<td>Well defined coarse punctuation or mosaic, sharply demarcated⁵ - and randomly and widely placed</td>
</tr>
</tbody>
</table>
### Colposcopic prediction of histologic diagnosis using the Reid Colposcopic Index (RCI)

<table>
<thead>
<tr>
<th>RCI (overall score)</th>
<th>Histology</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 - 2</td>
<td>Likely to be CIN 1</td>
</tr>
<tr>
<td>3 - 4</td>
<td>Overlapping lesion: likely to be CIN 1 or CIN 2</td>
</tr>
<tr>
<td>5 - 8</td>
<td>Likely to be CIN 2-3</td>
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<td>29-36, 41, 49, 59-65, 81, 87, 125</td>
</tr>
<tr>
<td>Visual inspection with acetic acid using magnification (VIAM)</td>
<td>29-36</td>
</tr>
<tr>
<td>Vulvar intraepithelial neoplasia (VIN)</td>
<td>36</td>
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</tbody>
</table>