NCSP Guidelines for managing women with abnormal cervical cytology

Margaret Sage
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NCSP Guidelines

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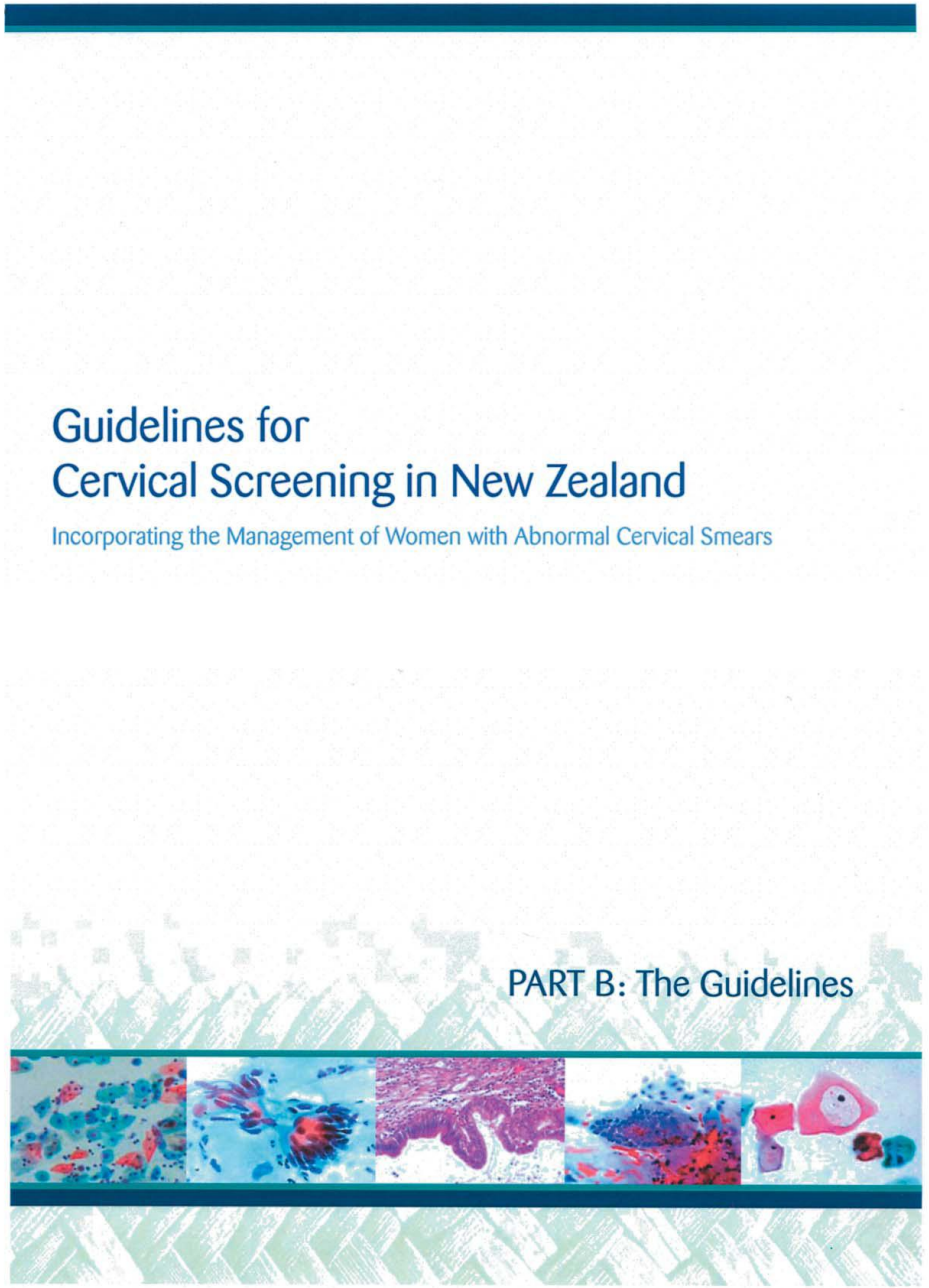
HPV Testing was introduced on 1 October 2009 for women in selected clinical groups



HrHPV Testing in New Zealand

1. Triage of Women 30 years and over with ASC-US or LSIL (who have not had an abnormal smear within the last 5 years)

2. Follow-up of women treated for high-grade squamous lesions (Test of cure)

3. Post-colposcopy management of women with discordant results: e.g. high-grade cytology and negative satisfactory colposcopy (specialist testing)

Women with normal or no previous cervical smears

Report: Negative for squamous or glandular epithelial lesion or malignancy

Rec: Recall in three years unless in either category below

Report: Negative for squamous or glandular epithelial lesion or malignancy but this is the first smear, or more than 5 years has elapsed since the previous smear

Rec: Recall in 12 months for cervical smear

Women with unsatisfactory cervical smears

Report: Unsatisfactory

Rec: Repeat cervical smear within 3 months

Referral for colposcopy after three consecutive unsatisfactory smear reports

Women with low-grade squamous abnormalities

Report: Atypical squamous cells of undetermined significance (ASC-US)
or Low grade squamous intraepithelial lesions (LSIL – CIN1)

Rec: Women 20-29 yrs with no previous abnormal in last 5 years
Repeat cervical cytology in 12 months

Women 20-29 yrs with a previous abnormal in last 5 years
Referral for colposcopy

Women 30+ yrs with no previous abnormal in the last 5 years
Reflex HrHPV testing performed on the sample

Women 30+ yrs with a previous abnormal in 5 last years
Referral for colposcopy

Women with low-grade squamous abnormalities (cont.)

Women 20-29 years

with 12 month repeat smear after first ASC-US/LSIL

Report: negative → further repeat sample in 12 months

Report: any abnormality → referral to colposcopy

Women 30+ years

HrHPV Test: negative → repeat cytology in 12 months

HrHPV Test: positive → referral to colposcopy

Colposcopic assessment of women with ASC-US/LSIL

Colposcopy satisfactory and normal

Refer to smear-taker for 2 annual smears

If either is abnormal then repeat colposcopy

If both normal then resume normal screening

Colposcopy satisfactory and abnormal take Target biopsy

Colposcopy unsatisfactory:

1. Cytology review particularly looking for missed high-grade cells
2. If low-grade confirmed, repeat colposcopy and cytology in 12 months
3. Management may be individualised (age, clinical risk)

Treatment not usually indicated

Women with histologically confirmed LSIL

- Treatment not recommended as such lesions are considered to be an expression of a productive HPV infection

- Refer back to smear-taker for repeat cytology at 12 and 24 months.

  If both repeat samples negative return to routine screening

  If either repeat sample shows any abnormality then refer back to colposcopy

Women with high-grade squamous abnormalities

Report: Atypical squamous cells, possible high-grade (ASC-H)

Rec: Refer to colposcopy

Report: HSIL

Rec: Refer for colposcopy

Report: SCC or HSIL with features suspicious of invasion

Rec: Urgent referral to experienced colposcopist or gynaecologic oncologist

Colposcopic assessment of women with ASC-H/HSIL

Colposcopy satisfactory and abnormal

Rec: Targeted biopsy for histological diagnosis

Colposcopy satisfactory and normal or biopsy is negative

Rec: Cytology review

if confirms ASC-H or HSIL, repeat colposcopy and cytology at 3 months

If colposcopy and cytology normal at 3 months, repeat cytology in 12 months

If colposcopy or cytology are LSIL, individualise management based on multidisciplinary team review

If colposcopy or cytology is HSIL, treatment indicated

Colposcopy unsatisfactory

Rec: Cytology review

If confirms ASC-H/HSIL then cone biopsy

If normal or ASC-US/LSIL refer to appropriate pathway for management

Colposcopy
Women with histologically confirmed CIN 2 or 3

Women with histologically confirmed CIN 2 or 3 should be treated (exception: HSIL in pregnancy)

Treatment: Excisional or locally ablative to remove or destroy abnormal tissue to depth = at least 7mm.

LEEP, LLETZ: excisional treatment. Most lesions are treated this way

Ablative therapy: Colposcopy must be satisfactory, the target biopsy has confirmed the diagnosis, there is no invasive disease on cyto/colp/histo and the entire lesion is visualized.

Cone Biopsy: used if there is

1. Failure to visualize upper limit of transformation zone with high-grade cytology
2. Suspicion of early invasive cancer on cyto/colp/histo
3. Suspected presence of a glandular lesion on cyto/histo

Hysterectomy: not generally indicated for CIN 2 or 3 alone. If performed the following must apply:

1. Colposcopy is satisfactory and the entire lesion is visualised
2. Targeted biopsy has confirmed the diagnosis
3. No evidence of invasion or a glandular lesion on cyto/colp/histo

Follow-up after treatment
Women treated for CIN 2 or 3

- colposcopy and smear in 6-12 months
- cytology and HPV Test 12 months after treatment (Test of Cure)
  - If both negative, repeat cyto and HPV Test@ 12 months. If both negative again, return to 3 yearly screening
  - If either/both are positive, return to colposcopy
- any abnormal smear within 5 years after treatment referred to colposcopy
- after 70 yrs women will not receive communication from the NCSP but follow-up may be individualized
- symptoms should be managed appropriately

Women with glandular abnormalities

Report: Atypical glandular cells (AGC) or endocervical adenocarcinoma in situ (AIS)

Rec: Refer to an experienced colposcopist or gynaecological oncologist

Report: Adenocarcinoma

Rec: Urgent referral to gynaecological colposcopist or a gynaecologic oncologist

Colposcopy
Women with glandular abnormalities

Colposcopy satisfactory and normal: review cytology

if confirmed: cone biopsy and D&C

if not confirmed: multidisciplinary decision

Colposcopy satis and abnormal and suspicious: cone, D&C

Colposcopy satis and abnormal and Ca: biopsy and refer

Colposcopy unsatis: Review cytology

if suspicious: cone biopsy and D&C

if not confirmed: multidisciplinary decision

Colposcopy
Women with AIS (Adenocarcinoma in situ)

Cytology Report: AIS

Rec: if invasive Ca not seen at colposcopy, take a cone biopsy

Cold knife cone is the "gold standard"

Histology Report: AIS on cone biopsy

Rec: management depends on age, fertility expectations, excision margins. Hysterectomy may be recommended (difficulties with follow-up/ high recurrence/ multifocal)

Adenocarcinoma on cone or punch, refer to gynaecological oncologist

Follow-up after treatment
AIS (Adenocarcinoma in situ)

1. Follow-up colposcopy and cytology 6 months after treatment
2. Repeat cytology at 12 months then annually
3. Early follow-up of symptoms
4. If cone has positive margins consider further treatment

No role for HPV testing as 10% of high-grade glandular lesions are negative

- Some clinicians use HPV testing to assist with detection of recurrence if known to be HPV +ve prior to treatment and HPV –ve after treatment

Women in special clinical circumstances
Pregnancy

Cervical cytology taken as per NCSP guidelines

Low-grade cytology: as per guidelines

High-grade smears: refer for colposcopy

Colposcopy: aim is to exclude invasive cancer

- biopsy if invasion suspected otherwise treatment may deferred until after delivery
- May need further colposcopies during pregnancy
- Treatment of a high-grade lesion may be deferred until after delivery if invasion can be excluded

Women in special clinical circumstances
Immunosuppressed women

Refer all abnormalities for colposcopy

Assessment and treatment should be by an experienced colposcopist

The whole of the lower genital tract needs evaluating

Treatment should be by excisional methods

Follow-up after treatment should include colposcopy as well as cytology

Follow-up should be annual and indefinite

Women in special clinical circumstances
HSIL in women under 20 years

Strongly recommended that women under 20 years are not screened

Management should be individualised and include multidisciplinary case review

Careful specialist observation of histologically confirmed CIN 2 may be appropriate (high rate of resolution of CIN 2)

Multidisciplinary review of CIN 2 and CIN 3 cases is recommended

Women in special clinical circumstances
Post-menopausal women and women over 40 years with normal endometrial cells

Normal endometrial cells

Normal endometrial cells in pre-menopausal women are rarely associated with endometrial pathology such as endometrial carcinoma and if asymptomatic, no further investigation is recommended.

Normal endometrial cells in post-menopausal women is more oftem associated with significant endometrial pathology and further investigation is recommended.

Management is clinically driven by the smeartaker/clinican who should consider clinical symptoms, hormone replacement therapy, use of contraceptive devices and other relevant clinical factors

Women with symptoms of uterine pathology require investigation regardless of cervical smear results

Atypical endometrial cells Urgent referral to an experienced colposcopist

Women in special clinical circumstances
Women exposed to Diethylstilboestrol (DES)

DES exposed women should be offered annual cytological screening and colposcopy of the cervix and vagina

Screening should begin at any time at the woman's request and continue indefinitely

DES exposed women who have a screen detected abnormality should be managed in a specialist centre by a gynaecological colposcopist

Women in special clinical circumstances
Women who have had a hysterectomy

Subtotal hysterectomy: routine screening

Total hysterectomy for benign reasons:

if benign and normal smears in previous 5 years, no further smears

if smear history is unknown then baseline vault smear

if normal, no further smears

if CIN 1 on histology at any time in past then

3 yearly vault smears until 70 years

Total hysterectomy for CIN 2 or 3:

if HSIL on histology at any time then annual vault smears until 70 yrs HPV testing for test of cure can occur at 12 months after treatment

Total hysterectomy for genital malignancy:

on-going surveillance from a gynaecological oncologist

Case 1

- 35 years of age
- normal NCSP history, regular three yearly samples
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Detected (ASC-US Triage)
- Recommendation: ??

Case 1

- 35 years of age
- normal NCSP history, regular three yearly samples
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Detected (ASC-US Triage)
- Recommendation: Refer for colposcopy

Case 1

- 35 years of age
- normal NCSP history, regular three yearly samples
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Detected (ASC-US triage)
- Recommendation: Refer for colposcopy

- Colposcopic findings: Low-grade changes observed
- Punch biopsy taken: CIN1 confirmed
- Referred to sample-taker for 2 annual follow-up cytology samples
- Both negative so returned to three yearly screening.

Case 2

- 31 years of age
- cytology 3 years previously was normal, but one sample 7 years previously showed ASC-US
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Not Detected (ASC-US triage)
- Recommendation: ??

Case 2

- 31 years of age
- cytology 3 years previously was normal, but one sample 7 years previously showed ASC-US
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Not Detected (ASC-US triage)
- Recommendation: Repeat cytology in 12 months

Case 2

- 31 years of age
- cytology 3 years previously was normal, but one sample 7 years previously showed ASC-US
- asymptomatic, normal clinical examination

- Cytology: ASC-US
- High-risk HPV test: Not Detected (ASC-US triage)
- Recommendation: Repeat cytology in 12 months

- Repeat cytology: LSIL
- Refer to colposcopy

Case 3

- 42 years of age
- CIN 3 treated 21 years previously. Normal annual samples since.
- Asymptomatic, cervix appears normal

- Cytology: ASC-US
- hrHPV test: Not Detected (Test of cure ordered by sample-taker)
- Recommendation: ??

Case 3

- 42 years of age
- CIN 3 treated 21 years previously. Normal annual samples since.
- Asymptomatic, cervix appears normal

- Cytology: ASC-US
- hrHPV test: Not Detected (Test of cure ordered by sample-taker)
- Recommendation: Repeat cytology and hrHPV Test in 12 months

Case 3

- 42 years of age
- CIN 3 treated 21 years previously. Normal annual samples since.
- Asymptomatic, cervix appears normal

- Cytology: ASC-US
- hrHPV test: Not Detected (Test of cure ordered by sample-taker)
- Recommendation: Repeat cytology and hrHPV Test in 12 months

- Repeat cytology: Normal Repeat hrHPV test: Not Detected
- Further repeat cytology and hrHPV test in 12 months. If both negative again, then can return to 3-yearly screening.

Case 4

- 37 years of age
- CIN 2 treated 10 years previously. Normal annual cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Recommendation: ??

Case 4

- 37 years of age
- CIN 2 treated 10 years previously. Normal annual cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Recommendation: Elects to repeat tests in 12 months

Case 4

- 37 years of age
- CIN 2 treated 10 years previously. Normal annual cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Recommendation: Elects to repeat tests in 12 months

- Repeat Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Elects referral for colposcopy

Case 5

- 29 years of age
- CIN 3 treated 2 years previously. Two normal follow-up cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Recommendation: ??

Case 5

- 29 years of age
- CIN 3 treated 2 years previously. Two normal follow-up cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV Test: Detected (Test of Cure)
- Recommendation: Referral to colposcopy

Case 5

- 29 years of age
- CIN 3 treated 2 years previously. Two normal follow-up cytology samples since.
- Asymptomatic, cervix appears normal

- Cytology: Normal
- hrHPV test: Detected (Test of Cure)
- Recommendation: Referral to colposcopy

- Colposcopy: nil to see but SCJ not fully visualised
- LLETZ: CIN 3 in endocervical canal

Case 6

- 23 years of age
- First cytology sample
- Asymptomatic, cervix appears normal

- Cytology: Atypical Squamous Cells, possible high-grade (ASC-H)
- Recommendation: ??

Case 6

- 23 years of age
- First cytology sample
- Asymptomatic, cervix appears normal

- Cytology: Atypical Squamous Cells, possible high-grade (ASC-H)
- Recommendation: Referral to colposcopy

Case 6

- 23 years of age
- First cytology sample
- Asymptomatic, cervix appears normal

- Cytology: Atypical Squamous Cells, possible high-grade (ASC-H)
- Recommendation: Referral to colposcopy

- Colposcopy satisfactory (SCJ fully visualised)
- Minor changes: Cervical biopsy inflammation only
- hrHPV test: Detected (Specialist ordered)
- LLETZ: HSIL

Clinical Practice Guidelines for Cervical Screening in New Zealand: what's new??

1. Recommendations incorporating HPV primary screening with partial genotyping and cytology triage
2. Recommendations given for managing discordance between the LBC report, colposcopy impression and histopath results
3. Colposcopy 6-9 months after treatment of HSIL is no longer recommended. Use test of cure for follow-up
4. After hysterectomy,
   - women with previous HSIL can stop screening after successfully completing a test of cure
   - if hysterectomy was for benign reasons and and screening history is unknown, can cease screening after two Not Detected hrHPV tests.
5. Screening defined for women who experienced early sexual activity
6. "Immunosuppressed" women now called "immune deficient"
7. Section on investigation of abnormal bleeding
8. Section on transition arrangements once HPV primary screening is introduced