Review of the Guidelines for Cervical Screening in New Zealand

Presentation for smear-takers

September 2008
Presentation overview

• The review process
• Guidelines overview and key changes
• Age range and interval for screening
• HPV testing
• Further information
The new guidelines

- Title: “Guidelines for Cervical Screening in New Zealand”
- Update 1999 guidelines
- Provide recommendations on management of women participating in cervical screening
  - assessment, treatment and follow-up
  - are guidelines ie, they do not override clinical decisions, particularly if women have clinical symptoms
The review process

• Two multidisciplinary expert working groups
• Extensive review of literature and guidelines of other countries
• NSU commissioned cost-effectiveness evaluation:
  – Guidelines (without HPV testing) – cost-effective but neutral in cancer impact
  – HPV testing triage for women over 30 yrs – would reduce cervical cancer cases
  – 100% LBC plus HPV triage – cost-effective
  – HPV testing post-treatment – found to be cost-effective and lead to long term savings
The 5 main sections

- Management of women with normal cervical smears
- Management of women with unsatisfactory cervical smears
- Management of women with abnormal cervical smears
- Management of women in special clinical circumstances
- HPV testing guidance
Guidelines overview and key changes
The most significant changes

- Changes to follow-up time for women with low grade smear abnormalities

- Additional information on various clinical circumstances

- The introduction of HPV testing (from 1 July 2009)
• All women aged 20 years who have ever been sexually active should be invited to have a smear.

• Women 20-69 years should be offered a smear test every 3 years.

• Women under 20 years **must not** be routinely screened
  - the risk of cervical cancer is extremely low in this age group
  - can cause more harm than benefit
• WHO (2006) recommendation for new programmes:
  – no screening women <25 yrs
  – 3 year interval for women 25-49 yrs
  – 5 year interval for women >50 yrs.

• Age range and screening interval for review by NSU within 3-5 years.
Management of women with normal cervical smears

• Recall in 3 years – not before
  - consider reminder notes before due date ie, 2-4 weeks

SHORT INTERVAL RE-SCREENING
  - Represents unnecessary use of NCSP resources
  - Impacts on laboratory turn around times
  - Can lead to inappropriate treatment
Management of women with unsatisfactory smears

- Repeat the smear within 3 months

- There may be situations where LBC offers some advantage over conventional smears, such as women with:
  - excessive cervical mucus, discharge or blood
  - recurrent inflammatory smears
  - recurrent unsatisfactory smears

*Liquid Based Cytology Policy (2006)*
Management of women with abnormal cervical smears
### Low Grade: ASC-US or LSIL smear report

#### CERVICAL SMEAR REPORT

<table>
<thead>
<tr>
<th>ASC-US or LSIL</th>
<th>GUIDELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women aged 20 - 29 years with no abnormal smear reports within the last 5 years</td>
<td>Repeat cervical smear in 12 months</td>
</tr>
<tr>
<td>Women aged 30 years and over with one (or more) normal smear reports in the last 5 years</td>
<td>Repeat cervical smear in 12 months</td>
</tr>
<tr>
<td>Women aged 30 years and over who haven't had a smear in the last 5 years should be offered either a repeat smear within 6 months or a referral to colposcopy.</td>
<td></td>
</tr>
</tbody>
</table>

_HrHPV testing as from 1 July 2009_

*ie: - extends time for repeat smear from 6 to 12 months
- HrHPV testing from 1 July 2009*
### Low Grade: histology confirmed LSIL (CIN1)

**HISTOLOGY REPORT**

Histologically confirmed low grade squamous abnormalities

**GUIDELINE**

*Treatment is 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 smears are negative, it is recommended that the woman return to routine screening.

If either repeat smear shows ASC-US / LSIL or higher ie: HSIL / ASC-H / AGC / AIS then the woman should be referred back to colposcopy.

*Note: recall at 12 months rather than 6 months*
Low Grade: colposcopy assessment
## High Grade: ASC-H/HSIL

<table>
<thead>
<tr>
<th>CERVICAL SMEAR REPORT</th>
<th>GUIDELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASC-H</td>
<td>Refer for colposcopy</td>
</tr>
<tr>
<td>HSIL</td>
<td>Refer for colposcopy and targeted biopsy where indicated.</td>
</tr>
<tr>
<td>HSIL with suspected invasion</td>
<td>Urgent referral to a colposcopist or oncologist</td>
</tr>
</tbody>
</table>

More information on colposcopic assessment of ASC-H/HSIL and on various treatment methods.
High Grade: ASC-H /HSIL colposcopy
Proportionally, cervical adenocarcinomas are increasing.

Glandular lesions carry a significant risk of cancer.

Colposcopic assessment is mandatory for cytology suggesting glandular abnormalities.

<table>
<thead>
<tr>
<th>CERVICAL SMEAR REPORT</th>
<th>GUIDELINE</th>
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</thead>
<tbody>
<tr>
<td>AGC or AIS or adenocarcinoma</td>
<td>Refer to a colposcopist or to an oncologist.</td>
</tr>
</tbody>
</table>
High Grade: glandular abnormalities - colposcopy

Atypical glandular cells (AGC) (AG1-5)
Adenocarcinoma in situ (AIS)
Adenocarcinoma (AC 1-4)

Colposcopy

- Satisfactory & normal
  - Cytology review
    - Cytology confirmed: Cone biopsy and D&C
    - Not confirmed: Multi-disciplinary team review

- Satisfactory & abnormal
  - Consistent with cancer
    - Punch biopsy and refer to gynaecological oncologist
  - Favours a neoplastic process (AIS)
    - Cone biopsy and D&C

- Unsatisfactory
  - Cytology review
    - Confirmed favouring a neoplastic process
      - Cone biopsy and D&C
      - Multi-disciplinary team review
    - Not confirmed
      - Multi-disciplinary team review
For example:

<table>
<thead>
<tr>
<th>SPECIAL CIRCUMSTANCE</th>
<th>GUIDELINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pregnancy</td>
<td>Cervical smears and colposcopy are not contraindicated, however, it is not necessary to do routine cervical smears.</td>
</tr>
<tr>
<td></td>
<td>Low-grade cytology lesions - a repeat smear after 12 months.</td>
</tr>
<tr>
<td></td>
<td>High-grade lesions should be referred for colposcopic evaluation.</td>
</tr>
<tr>
<td>Immunosuppressed women</td>
<td>Refer abnormal smear results for colposcopy, even for a low-grade lesion</td>
</tr>
</tbody>
</table>
High risk HPV (HrHPV) testing
Human Papillomavirus

- About 15-20 HrHPV types are associated with cervical cancer.
- **Persistent** infection with one or more of these types is the primary cause of cancer.
- Most HPV infections are short-lived, few persist, fewer progress to cervical pre-cancer.
- There is no reliable treatment to clear the virus.
HPV Infection

Exposure

HPV → Normal cervix

Transient infection

Productive infection → Regression

Persistent infection

Precursor lesion → Invasive lesion

Progression

Normal CIN 1 CIN 2 CIN 3 Cancer
HrHPV Testing

• Tests for 13 high risk HPV genotypes
• Very high negative predictive value (approx 99%)
• A positive HPV test indicates increased risk of developing a high grade lesion but does not indicate the presence of abnormal cell changes.
• HPV testing is a useful adjunct to management.
• Can be requested with LBC or as a separate swab.
• Operational from 1 July 2009.

• “NCSP Best Practice Guidance on HPV Testing” is available at www.nsu.govt.nz

• Of benefit in 3 main areas of management.
1. HPV testing for triage of low grade smears
Triage with HPV testing

- For:
  - Women 30 years and over
  - No abnormal smear reports in the last 5 years
  - Low-grade smear result (ASCUS/LSIL)

- Use of ‘reflex testing’ – LBC or co-collection

- Women who test positive for HPV will be referred to colposcopy. Women who are HPV negative return to 3 yearly recall (following another negative smear).
HPV triage ASC-US/LSIL
2. HPV testing post treatment
HPV testing: post treatment

- Following treatment for pre-cancerous lesions
- Substitutes for annual smears for life
- 2 negative HPV and smear tests - return to normal screening
- Will require close monitoring of long term safety
HPV testing: post-treatment

Colposcopy follow-up with cytology at 6-12 months

Cytology and HrHPV test 12 months post-treatment and again at 24 months post-treatment

HrHPV negative cytology negative on both testing occasions

Return to 3-yearly screening

HrHPV positive or cytology ASC-H at either event

Refer to colposcopy

HrHPV negative cytology ASC-US / LSIL

Repeat cytology and HrHPV testing 24 months post treatment

- HrHPV negative, cytology negative, repeat cytology in 12 months
- HrHPV negative, cytology ASC-US/LSIL, consider referral to colposcopy or continue annual screening
- HrHPV negative, cytology ≥ ASC-H, refer to colposcopy
- HrHPV positive, refer to colposcopy irrespective of cytology result
• ‘Discordant’ results eg, a high-grade smear result but colposcopy appears normal

• HPV testing assists in management

• Similar to ‘post-treatment’ flowchart
Information & Training

- Women
- Smear takers
- Laboratory staff
- Other health professionals
Further information

• www.nsu.govt.nz
• Screening Matters
Thank you.