CERVICAL DYSPLASIA IN PREGNANCY

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HUMAN PAPILLOMA VIRUS (HPV)

• Generally divided into oncogenic and non-oncogenic (in immuno-competent patients).

• Usually necessary, but not sufficient for development of cancer.
HUMAN PAPILLOMA VIRUS (HPV)

• Infections can be transient or persistent.
  – Small percentage are persistent.
  – Persistence of 1-2 years predicts risk of CIN 3 or cancer

• Cofactors which increase persistence:
  – Smoking, immunocompromise.

• HPV detection in age >30 more likely to represent persistence.
2012 Updated Consensus Guidelines for the Management of Abnormal Cervical Cancer Screening Tests and Cancer Precursors

L. Stewart Massad, MD, Mark H. Einstein, MD, Warner K. Huh, MD, Hormuzd A. Katki, PhD, Walter K. Kinney, MD, Mark Schiffman, MD, Diane Solomon, MD, Nicolas Wentzensen, MD, and Herschel W. Lawson, MD, for the 2012 ASCCP Consensus Guidelines Conference

A group of 47 experts representing 23 professional societies, national and international health organizations, and federal agencies met in Bethesda, MD, September 14-15, 2012, to revise the 2006 American Society for Colposcopy and Cervical Pathology Consensus Guidelines. The group’s goal was to provide revised evidence-based consensus guidelines for managing women with abnormal cervical cancer screening tests, cervical intraepithelial neoplasia (CIN) and adenocarcinoma in situ (AIS) following adoption of cervical cancer screening guidelines incorporating longer screening intervals and co-testing. In addition to literature review, data guidelines prescribed similar management for women with similar risks for CIN 3, AIS, and cancer. Most prior guidelines were reaffirmed. Examples of updates include: Human papillomavirus–negative atypical squamous cells of undetermined significance results are followed with co-testing at 3 years before return to routine screening and are not sufficient for exiting women from screening at age 65 years; women aged 21–24 years need less invasive management, especially for minor abnormalities; postcolposcopy management strategies incorporate co-testing; endocervical sampling reported as CIN 1 should be managed as CIN 1; unsatisfactory cytology should be repeated in most circum-
WHY DO WE SCREEN, WHY DO WE TREAT?

• 50% of women diagnosed with cervical cancer have never been screened.

• 10% of women diagnosed with cervical cancer have not been screened within 5 years.

• In a cohort of untreated patients with CIN 3, the cumulative incidence of invasive cancer over 30 years is 30.1%
HOW IS PREGNANCY DIFFERENT?

• It may be the first time (or the only time) a woman seeks care.

• The endocervix is particularly friable, limiting your evaluation to the ectocervix.
GUIDING PRINCIPLES FOR ALL PATIENTS

• Cervical cancer prevention results in benefits and harms.

• Attempts to achieve 0% cervical cancer may result in unbalanced harm.

• Prevention should focus HPV-related abnormalities likely to progress to invasive cancer.
HOW IS PREGNANCY DIFFERENT?

• The goal is to not miss invasive cancer

• Diagnostic excisional procedures carry a much greater risk of bleeding and can potentially result in pregnancy complications:
  – cervical insufficiency
  – PPROM
  – preterm labor
HOW TO APPROACH SCREENING, FOLLOW-UP, AND MANAGEMENT:

• Questions to ask:
  – What is their age group (21-24, 25-29, ≥ 30)?
  – Is this their first pap smear?
  – Is this routine screening or follow-up?
  – Have they had prior treatment(s)

• Determine whether the patient is at the beginning, middle, or end of an algorithm.
ASC-US OR LSIL: AGE 21-24

Management of Women Ages 21-24 years with either Atypical Squamous Cells of Undetermined Significance (ASC-US) or Low-grade Squamous Intraepithelial Lesion (LSIL)

- Repeat Cytology @ 12 months Preferred
  - Negative, ASC-US or LSIL
    - Repeat Cytology @ 12 months
      - Negative x 2
      - ≥ ASC
        - Colposcopy
  - ASC-H, AGC, HSIL
    - HPV Positive
      - Reflex HPV Testing Acceptable for ASC-US only
        - HPV Negative
          - Routine Screening

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ASC-US: AGE ≥ 25

Management of Women with Atypical Squamous Cells of Undetermined Significance (ASC-US) on Cytology*

- **Repeat Cytology**
  - @ 1 year
  - Acceptable
  - Negative
  - ≥ ASC
  - Routine Screening†

- **HPV Testing**
  - Preferred
  - HPV Positive (managed the same as women with LSIL)
  - HPV Negative
  - Repeat Cotesting @ 3 years

**Colposcopy**
Endocervical sampling preferred in women with no lesions, and those with inadequate colposcopy; it is acceptable for others

**Manage per ASCCP Guideline**

* Management options may vary if the woman is pregnant or ages 21-24
† Cytology at 3 year intervals

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LSIL: AGE ≥ 25

Management of Women with Low-grade Squamous Intraepithelial Lesions (LSIL)*†

- **LSIL with negative HPV test among women ≥ 30 with cotoesting**
  - Preferred → Repeat Cotoesting @ 1 year
  - Cytology Negative and HPV Negative → Repeat Cotoesting @ 3 years

- **LSIL with no HPV test**
  - Acceptable → ≥ ASC or HPV positive
  - Colposcopy → Non-pregnant and no lesion identified
  - Inadequate colposcopic examination
  - Adequate colposcopy and lesion identified

- **LSIL with positive HPV test**
  - Endocervical sampling “preferred”
  - Endocervical sampling “preferred”
  - Endocervical sampling “acceptable”

No CIN2,3 → Manage per ASCCP Guideline

CIN2,3 → Manage per ASCCP Guideline

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* Management options may vary if the woman is pregnant or ages 21-24 years
† Management women ages 25-29 as having LSIL with no HPV test
LSIL: PREGNANT WOMEN

Management of Pregnant Women with Low-grade Squamous Intraepithelial Lesion (LSIL)

- **Colposcopy Preferred**
  - No CIN2,3*
    - Postpartum Follow-up
  - CIN2,3
    - Manage per ASCCP Guideline

- **Defer Colposcopy**
  - (Until at least 6 weeks postpartum)
  - Acceptable

* In women with no cytological, histological, or colposcopically suspected CIN2,3 or cancer

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ASC-H: Age 21-24

Management of Women Ages 21-24 yrs with Atypical Squamous Cells, Cannot Rule Out High Grade SIL (ASC-H) and High-grade Squamous Intraepithelial Lesion (HSIL)

Colposcopy
Immediate loop electrosurgical excision is unacceptable

No CIN2,3

CIN2,3

Two Consecutive Cytology Negative Results and No High-grade Colposcopic Abnormality
Routine Screening

Observation with Colposcopy & Cytology*
@ 6 month intervals for up to 2 years

Other Results

High-grade colposcopic lesion or HSIL
Persists for 24 months with no CIN2,3 identified

Biopsy

Manage per ASCP Guideline for Young Women with CIN2,3

CIN2,3 (if no CIN2,3, continue observation)

Manage per ASCP Guideline

* If colposcopy is adequate and endocervical sampling is negative. Otherwise a diagnostic excisional procedure is indicated.
† Not if patient is pregnant

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ASC-H: AGE ≥ 25
HSIL: AGE ≥ 25

Management of Women with High-grade Squamous Intraepithelial Lesions (HSIL)*

- Immediate Loop Electrosurgical Excision†
- Or
- Colposcopy with endocervical assessment

- No CIN2,3
- CIN2,3

- Manage per ASCCP Guideline

* Management options may vary if the woman is pregnant, postmenopausal, or ages 21-24
† Not if patient is pregnant or ages 21-24

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CIN 1: AGE 21-24

Management of Women Ages 21-24 with No Lesion or Biopsy-confirmed Cervical Intraepithelial Neoplasia — Grade 1 (CIN1)

After ASC-US or LSIL

Repeat Cytology @ 12 months

< ASC-H or HSIL

Repeat Cytology @ 12 mos

Negative

> ASC

Colposcopy

Routine Screening

≥ ASC-H or HSIL

After ASC-H or HSIL

Manage per ASCCP Guideline for Women Ages 21-24 with ASC-H or HSIL using postcolposcopy pathway for No CIN2,3

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CIN 1: AGE ≥ 25
CIN 1: PRECEDED BY ASC-H OR HSIL

Management of Women with No Lesion or Biopsy-confirmed Cervical Intraepithelial Neoplasia — Grade 1 (CIN1) Preceded by ASC-H or HSIL Cytology

- **Cotesting @ 12 & 24 months**
  - HPV Negative and Cytology Negative at both visits
  - HPV Positive or Any cytology abnormality except HSIL
  - **Age-specific Retesting @ 3 years**
  - **Colposcopy**

- Or
  - **Diagnostic Excision Procedure**

- Or
  - **Review of cytological, histological, and colposcopic findings**
  - Manage per ASCCP Guideline for revised diagnosis

* Only if colposcopy was adequate and endocervical sampling is negative
† Except in special populations (may include pregnant women and those ages 21-24)
‡ Cytology if age < 30, cotesting if age ≥ 30 years
CIN 2,3: AGE 21-24

Management of Young Women with Biopsy-confirmed Cervical Intraepithelial Neoplasia — Grade 2,3 (CIN2,3) in Special Circumstances*

- Observation — Colposcopy & Cytology* @ 6 month intervals for 12 months
- Treatment using Excision or Ablation of T-zone*

- 2x Cytology Negative and Normal Colposcopy
- Cotest @ 1 year
- Both Tests Negative
- Cotest @ 3 years
- Either Test Abnormal
- Colposcopy Worsens or High-grade Cytology or Colposcopy Persists for 12 Months
- Repeat Colposcopy/Biopsy Recommended
- CIN3 or CIN2,3 persists for 24 months
- Treatment Recommended

* Either treatment or observation is acceptable, provided colposcopy is adequate. When CIN2 is specified, observation is preferred. When CIN3 is specified, or colposcopy is inadequate, treatment is preferred.

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CIN 2,3: AGE ≥ 25

Management of Women with Biopsy-confirmed Cervical Intraepithelial Neoplasia — Grade 2 and 3 (CIN2,3)*

- Management options will vary in special circumstances or if the woman is pregnant or ages 21-24
- If CIN2,3 is identified at the margins of an excisional procedure or post-procedure ECC, cytology and ECC at 4-6mo is preferred, but repeat excision is acceptable and hysterectomy is acceptable if re-excision is not feasible.

Adequate Colposcopy

Either Excision† or Ablation of T-zone*

2x Negative Results

Routine Screening

Inadequate Colposcopy or Recurrent CIN2,3 or Endocervical sampling is CIN2,3

Diagnostic Excisional Procedure†

Any Test Abnormal

Colposcopy With endocervical sampling

Cotesting @ 12 & 24 months

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PREGNANT WOMEN: MY INTERPRETATION

ASC-US
- Age 21-24: Age appropriate follow-up
  - Age ≥ 25: Age appropriate pathway to colposcopy
    - Defer colposcopy until 6 weeks post-partum
      - CIN2+: Defer management until postpartum, unless invasive cancer identified
      - No cytologic, histologic, or colposcopically suspected CIN 2+: Follow-up post-partum

LSIL
- Colposcopy*
  - Defer colposcopy until 6 weeks post-partum
    - CIN2+: Defer management until postpartum, unless invasive cancer identified
    - No cytologic, histologic, or colposcopically suspected CIN 2+: Follow-up post-partum
PREGNANT WOMEN: MY INTERPRETATION

• Colposcopy for everything > LSIL, regardless of age.

• DO NOT collect ECC

• Follow-up CIN 1, 2, 3 postpartum

• Only do an excisional procedure if invasive cancer suspected.
  – Consult with MFM first
ASC C P ALGORITHM MOBILE APP
IPHONE, IPAD AND ANDROID
AVAILABLE THROUGH ITUNES AND GOOGLE PLAY FOR $9.99
ASC C P A L G O R I T H M S B O O K L E T
AVAILABLE TO MEMBERS AND NON-MEMBERS FOR $7.00