



A Case-Based Review of Cervical Cancer Screening

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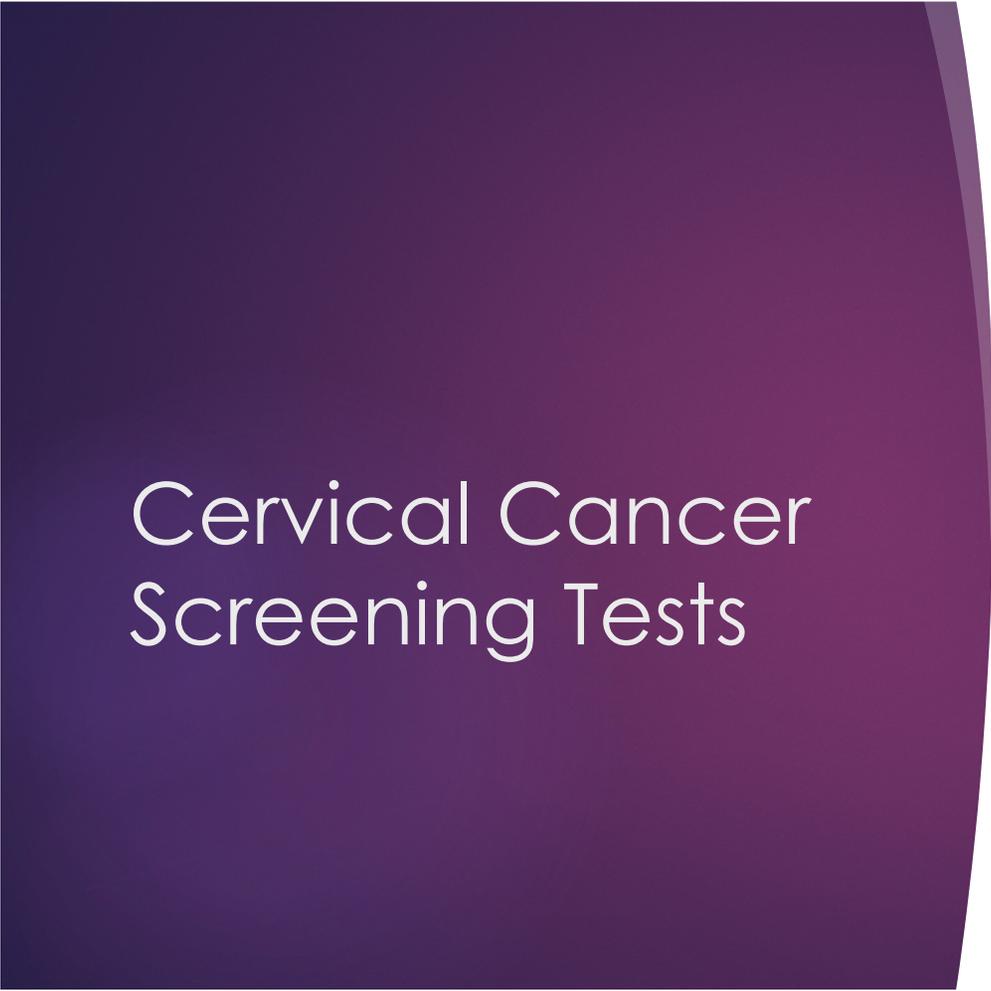
UCLA FAMILY MEDICINE EDUCATIONAL DAY

OCTOBER 8, 2025

“

I have no disclosures (unfortunately).

”



Cervical Cancer Screening Tests

Cervical Cancer Screening Tests

Cytology

- ▶ Pathologist makes a slide of cervical cells to look for abnormal cells
- ▶ Higher specificity (fewer false positives) compared to HPV testing

Sl. No.	Types	Samples	Segmented Cytoplasm
1	Normal Superficial		
2	Normal Intermediate		
3	Normal Columnar		
4	Light dysplastic		
5	Moderate dysplastic		
6	Severe dysplastic		

Cervical Cancer Screening Tests

hrHPV (high risk HPV) Testing

- ▶ Nucleic acid or signal amplification to detect different HPV strains
 - ▶ DNA
 - ▶ E6/E7 mRNA
- ▶ All tests detect strains 16 and 18
- ▶ Depending on test may also check other high-risk strains
 - ▶ Oncogenic strains: 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68
- ▶ Higher sensitivity (detect cervical dysplasia earlier, more false positives)

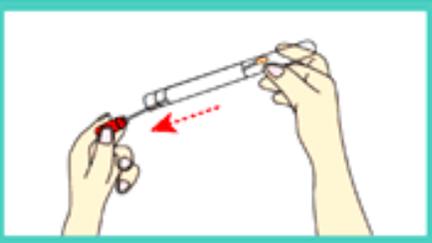
Cervical Cancer Screening Tests

Self-collected hrHPV test

- ▶ Vaginal swab self-collected by patient in health-care setting
 - ▶ Two FDA-approved tests
 - ▶ Onclarity HPV (Becton, Dickinson and Company (BD))
 - ▶ Cobas HPV (Roche Molecular Systems)
 - ▶ Not as sensitive as provider-collected Pap smear
- ▶ Criteria
 - ▶ 30-65+ yo
 - ▶ Immunocompetent
 - ▶ No history of DES exposure
 - ▶ Not in surveillance for prior abnormality

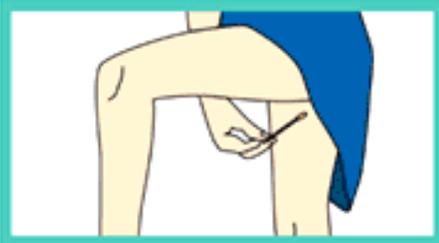


HOW TO TAKE YOUR OWN HPV TEST



STEP ONE

- Lower your underwear
- Twist the red cap and pull out the swab
- Look at the swab and note the red mark closest to the soft tip



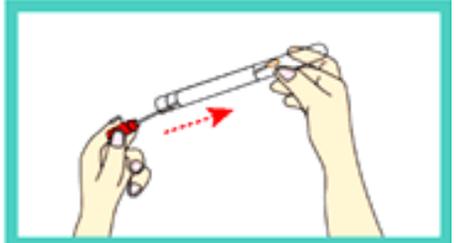
STEP TWO

- Get in a comfortable position
- Insert the swab into your vagina, aiming to insert up to the red mark



STEP THREE

- Rotate the swab gently 1 - 3 times
- Then remove the swab
- It should not hurt



STEP FOUR

- Remove the swab and place it back in the tube
- Return the tube to your doctor or nurse
- If you have any questions, ask your doctor or nurse

Cervical Cancer Screening Tests

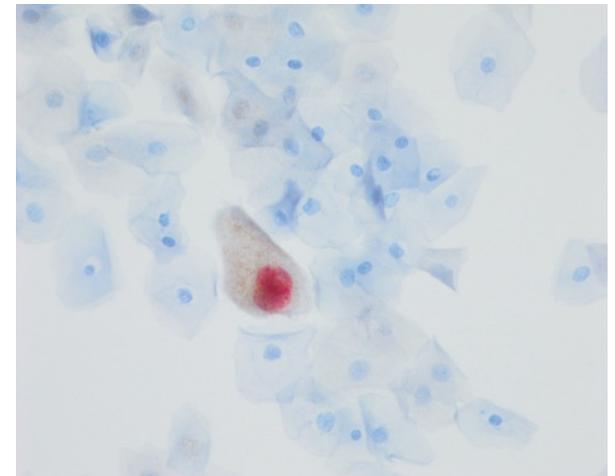
Co-testing

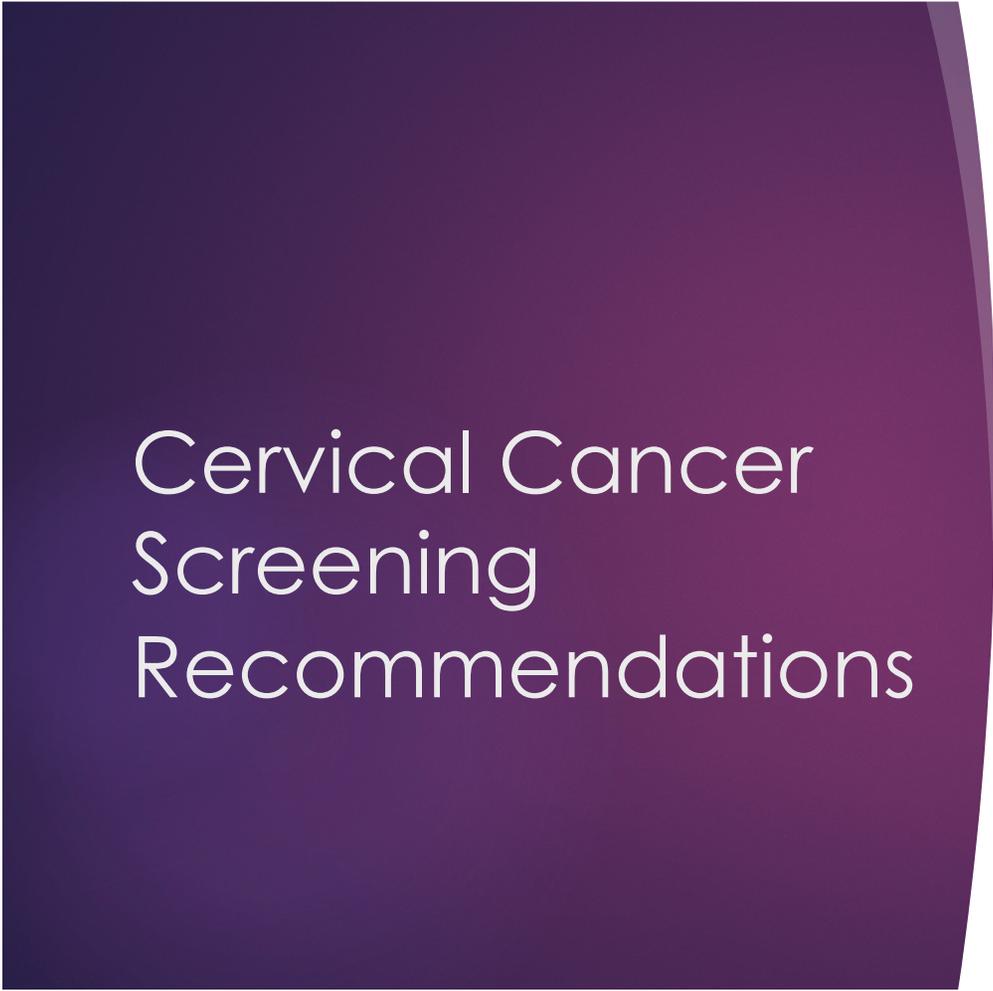
- ▶ Cytology and HPV testing together
- ▶ Highest false-positive rate

Cervical Cancer Screening Tests

p16/Ki-67 Dual Stain (Cintec-plus)

- ▶ Biomarker-based test that can identify oncogenic transformation in cervical cells
 - ▶ p16: marker of HPV-related oncogenic activity
 - ▶ Ki-67: marker of cell proliferation
- ▶ Can be done on same sample as cytology/HPV test
- ▶ Results in fewer unnecessary colposcopies, earlier detection of precancerous lesions, and reduced likelihood of patients being lost to follow-up before cancer is detected
- ▶ NPV for detecting CIN3+: 98-99%





Cervical Cancer Screening Recommendations

Risk Stratification Options for Cervical Cancer Screening



eTABLE A

Risk Stratification Options for Cervical Cancer Screening

Population	Recommendation
Low risk Patients who have had a hysterectomy (including the cervix) because of benign conditions Patients with a cervix but who have comorbidities and decreased life expectancy	No testing
Average risk Patients 25 to 65 years of age with a cervix	Primary HPV testing
High risk* Patients 30 to 65 years of age with a cervix and a high-risk condition (i.e., solid organ transplantation, chronic diseases managed by Janus kinase inhibitors or biologics, immunosuppressive drug treatment, HIV/AIDS, postcoital bleeding, or under surveillance for prior HPV-positive testing per American Society for Colposcopy and Cervical Pathology guidelines)	Cotesting

HPV = human papillomavirus.

*—High risk is not defined by smoking status, drug use, number of sex partners, or age (Demarco M, Egemen D, Hyun N, et al. Contribution of etiologic cofactors to CIN3+ risk among women with human papillomavirus-positive screening test results. *J Low Genit Tract Dis.* 2022;26(2):127-134).

HPV = human papillomavirus.

*—High risk is not defined by smoking status, drug use, number of sex partners, or age (Demarco M, Egemen D, Hyun N, et al. Contribution of etiologic cofactors to CIN3+ risk among women with human papillomavirus-positive screening test results. *J Low Genit Tract Dis.* 2022;26(2):127-134).

USPSTF For Average Risk Patients - 2021

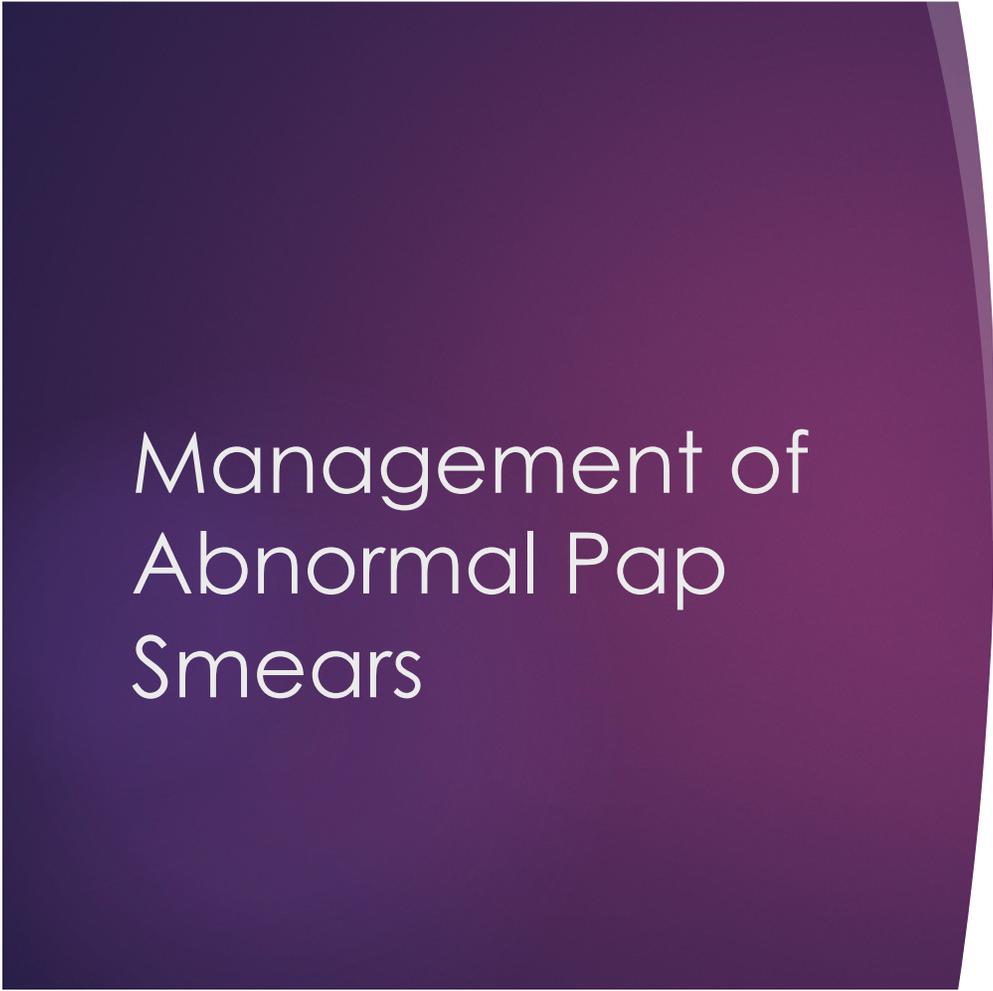
Table 1. USPSTF Recommendations for Routine Cervical Cancer Screening

Population*	Recommendation	USPSTF Recommendation Grade†
Aged less than 21 years	No screening	D
Aged 21–29 years	Cytology alone every 3 years‡	A
Aged 30–65 years	Any one of the following: <ul style="list-style-type: none"> • Cytology alone every 3 years • FDA-approved primary hrHPV testing alone every 5 years • Cotesting (hrHPV testing and cytology) every 5 years 	A
Aged greater than 65 years	No screening after adequate negative prior screening results§	D
Hysterectomy with removal of the cervix	No screening in individuals who do not have a history of high-grade cervical precancerous lesions or cervical cancer	D

Abbreviations: FDA, U.S. Food and Drug Administration; hrHPV, high-risk human papillomavirus testing.

Screening for Patients 25-29 Years Old

- ▶ ACOG and ASCCP state primary hrHPV testing every 5 years can be considered for average risk patients age 25-29 yo
 - ▶ FDA approved for 25-29 yo
 - ▶ Primary hrHPV testing has been demonstrated to be efficacious in 25+ yo
- ▶ USPSTF recommends cytology for 21-29 yo
 - ▶ Higher specificity with cytology (less false positives)
 - ▶ Starting hrHPV screening at 25 yo instead of 30 yo increased the number of colposcopies by 400 colposcopies for every 1000 women



Management of Abnormal Pap Smears

ASCCP Guidelines

ORIGINAL RESEARCH ARTICLE: CERVIX AND HPV

OPEN

2019 ASCCP Risk-Based Management Consensus Guidelines for Abnormal Cervical Cancer Screening Tests and Cancer Precursors

Rebecca B. Perkins, MD, MSc,¹ Richard S. Guido, MD,² Philip E. Castle, PhD,³ David Chelmow, MD,⁴ Mark H. Einstein, MD, MS,⁵ Francisco Garcia, MD, MPH,⁶ Warner K. Huh, MD,⁷ Jane J. Kim, PhD, MSc,⁸ Anna-Barbara Moscicki, MD,⁹ Ritu Nayar, MD,¹⁰ Mona Saraiya, MD, MPH,¹¹ George F. Sawaya, MD,¹² Nicolas Wentzensen, MD, PhD, MS,¹³ and Mark Schiffman, MD, MPH¹⁴ for the 2019 ASCCP Risk-Based Management Consensus Guidelines Committee

Key Words: cervical cytology, HPV testing, management of abnormal cervical cancer screening tests, guidelines

(J Low Genit Tract Dis 2020;24: 102–131)

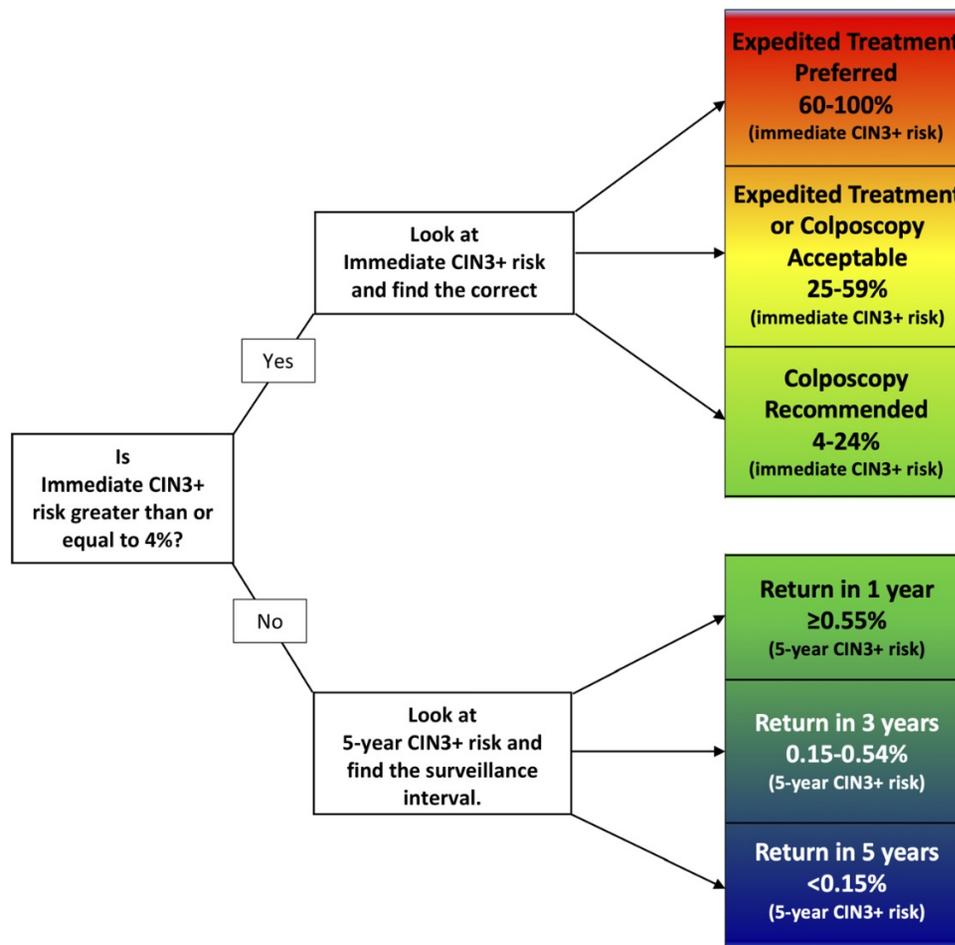
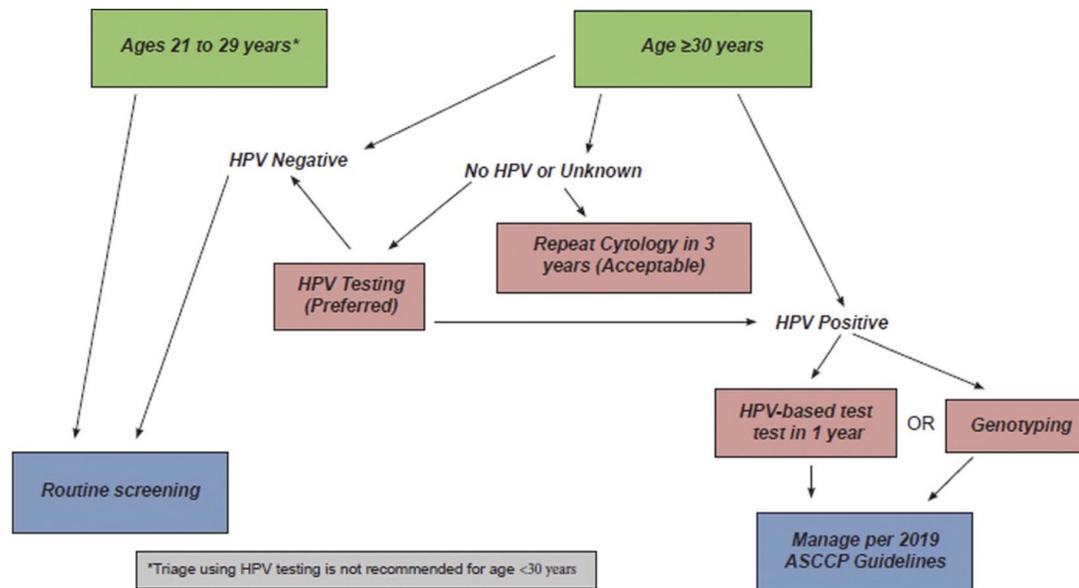


FIGURE 1. This figure demonstrates how patient risk is evaluated. For a given current results and history combination, the immediate CIN 3+ risk is examined. If this risk is 4% or greater, immediate management via colposcopy or treatment is indicated. If the immediate risk is less than 4%, the 5-year CIN 3+ risk is examined to determine whether patients should return in 1, 3, or 5 years.

Example ASCCP Flowchart: Management of Unsatisfactory Pap



There's an App For That!



ASCCP Management Guidelines

Medical

Designed for iPad. Not verified for macOS.



Price: \$14.99

AGE
17+
Years Old

CHART
53
Medical

DEVELOPER

American Society for Colp...

LANGUAGE
EN
English

SIZE
48.4
MB

ASCCP

ASCCP

Screening Management Publications Definitions

USPSTF Screening Guidelines
 ASCCP endorses the United States Preventative Services Task Force (USPSTF) cervical cancer screening guidelines.
uspreventiveservicestaskforce.org

ACS Screening Guidelines
 ASCCP supports the American Cancer Society (ACS) cervical cancer screening guidelines.
cancer.org

ACOG Practice Advisory
 ASCCP endorses the ACOG Practice Advisory: Updated Cervical Cancer Screening Guidelines.
acog.org

ASCCP Statement
 The ASCCP Cervical Cancer Screening Task Force Endorsement and Opinion on the American Cancer Society Updated Cervical Cancer Screening Guidelines.
journals.lww.com

ASCCP

Screening Management Publications Definitions

Age

Under 25 YEARS	25 to 29 YEARS	30 to 65 YEARS	Over 65 YEARS
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Clinical Situation

Routine screening	Evaluation of a colposcopic biopsy	Management of results during post colposcopy surveillance (within past 7 years)	Follow-up after treatment	Special situation: Unsatisfactory test results
Special situation: Post hysterectomy	Special situation: Symptomatic	Special situation: Immunosuppressed		

Help me decide Next →





Case #1



Case #1

- ▶ 45 yo individual presents at your clinic. They are anxious and tell you they have recently had unprotected sex with a new partner. They request to be checked for "everything".
- ▶ What considerations should be made to appropriately manage their cervical cancer screening?

Case #1

- ▶ Eligibility?
 - ▶ Age between 21 – 65 yo
 - ▶ Are they female or transgender (do not assume)?
- ▶ History of abnormal pap smears?
- ▶ Due?

Case #1

- ▶ Patient identifies as female. She is having regular menses every month. She is sexually active with male partners, and has had three partners in the past year. She usually uses condoms but did not with her most recent partner, and last had unprotected intercourse 1 month ago. She does not remember the last time that she had a pap smear, and does not remember having any abnormal pap smears.
- ▶ What will you order for this patient?

Case #1

- ▶ Urine pregnancy test
- ▶ Confirm patient wants to be screened for sexually transmitted diseases
 - ▶ Vaginal swab superior to urine for GC/CT
- ▶ Offer pap smear since patient does not know date of last Pap smear
- ▶ Consider offering HPV vaccination if patient has not previously received it
- ▶ What cervical cancer screening test will you order?

Case #1

- ▶ Average risk patient at 45 yo
- ▶ hrHPV testing only (if available)
- ▶ If negative for HPV, next pap smear will be due in 5 years



Case #2

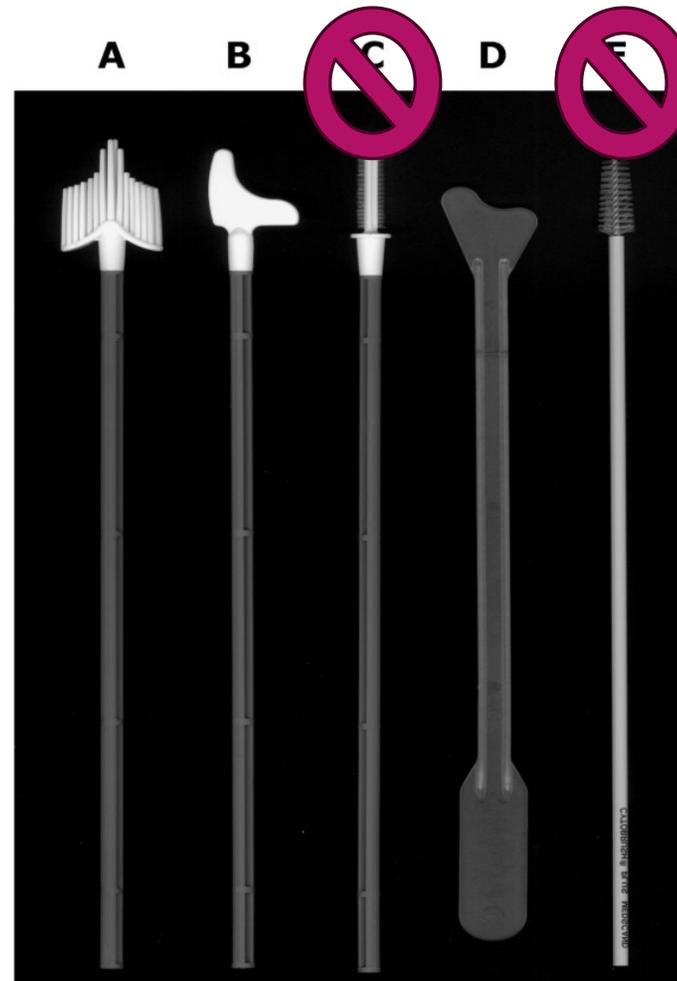
Case #2

- ▶ A 30 yo G1P0 female presents to your clinic for an initial prenatal visit. Her last pap smear was 5 years ago and was NILM and negative for HPV.
- ▶ What, if any, cervical cancer screening considerations should be made?

Case #2

- ▶ Consider benefits and harms of screening
- ▶ Higher false positive rate with screening during pregnancy
 - ▶ Eversion of squamocolumnar junction due to high estrogen levels -> exposed columnar epithelium undergoes squamous metaplasia
 - ▶ Relative immunosuppression may allow for greater HPV activity
- ▶ Pap smears are safe and do not increase risk of miscarriage
 - ▶ Can do as part of routine prenatal visit if due
 - ▶ If patient defers, wait until 4 weeks postpartum to do the pap smear

Case #2



Do not use the cytobrush in a patient who is pregnant or who has an unknown pregnancy status.



Case #3

Case #3

- ▶ A 68 yo female presents to your clinic for a follow up visit. You review her chart, and she has one documented pap smear 6 years ago which was NILM and negative for HPV. She says she has never been told she had a negative Pap smear.
- ▶ What, if any, cervical cancer screening considerations should be made?

Case #3

- ▶ Criteria for stopping cervical cancer screening (have to meet all criteria)
 - ▶ > 65 YO
 - ▶ No history of CIN2+ or high-grade cytology (HSIL, ASC-H, AGC)
 - ▶ Had normal testing within the past 10 years, with the most recent test performed within the past 3 or 5 years depending on the type of test
 - ▶ Three negative Pap (cytology) tests in a row
 - ▶ Two negative HPV tests in a row
 - ▶ Two negative co-tests in a row

Case #3

- ▶ Criteria for stopping cervical cancer screening (have to meet all criteria)
- ▶ > 65 YO
- ▶ No history of CIN2+ or high-grade cytology (HSIL, ASC-H, AGC)
- ▶ Had normal testing within the past 10 years, with the most recent test performed within the past 3 or 5 years depending on the type of test
 - ▶ Three negative Pap (cytology) tests in a row
 - ▶ Two negative HPV tests in a row
 - ▶ Two negative co-tests in a row

Case #3

- ▶ A 68 yo female presents to your clinic for a follow up visit. You review her chart, and she has one documented pap smear 6 years ago which was NILM and negative for HPV. She says she has never been told she had a negative Pap smear.
- ▶ Patient only had one documented co-test in the chart in the past 10 years. She will need one more pap smear today with either co-testing or hrHPV. If it is normal, she will then meet criteria for stopping cervical cancer screening.



Case #4



Case #4

- ▶ Your 23 yo F patient comes in for her physical, and you complete her first pap smear, ordering cytology. Her cytology came back as ASCUS, and her reflex HPV comes back positive.
- ▶ What should you recommend next for your patient?



Screening

Management

Publications

Definitions

Age

Under 25
YEARS

25 to 29
YEARS

30 to 65
YEARS

Over 65
YEARS

Clinical Situation

Routine
screening

Evaluation of
a
colposcopic
biopsy

management
of results
during post
colposcopy
surveillance
(within past
7 years)

Follow-up
after
treatment

Special
situation:
Unsatisfactory
test
results

Special
situation:
Post
hysterectomy

Special
situation:
Symptomatic

Special
situation:
Immunosuppressed

Help me decide

Next →



Screening

Management

Publications

Definitions

Current Cytology



Normal



ASC-US



LSIL



ASC-H



HSIL



AGC

Current HPV



None



HPV-



HPV+

Prior History

Does the patient have abnormal results on the most recent prior screening? Leave blank if history is unknown.

Normal

ASC-US

LSIL

ASC-H

AGC

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Clinical Situation



Testing



Recommendation

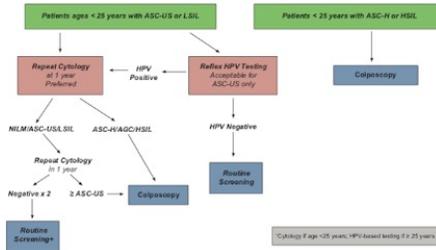
ASC-US / HPV positive with no history of abnormal results

1 year follow up¹

Repeat cytology testing at 1 and 2 years.¹

Cytology screening at follow-up visit¹

Figure 12: Management of Patients Ages < 25 years with Cytologic Abnormalities



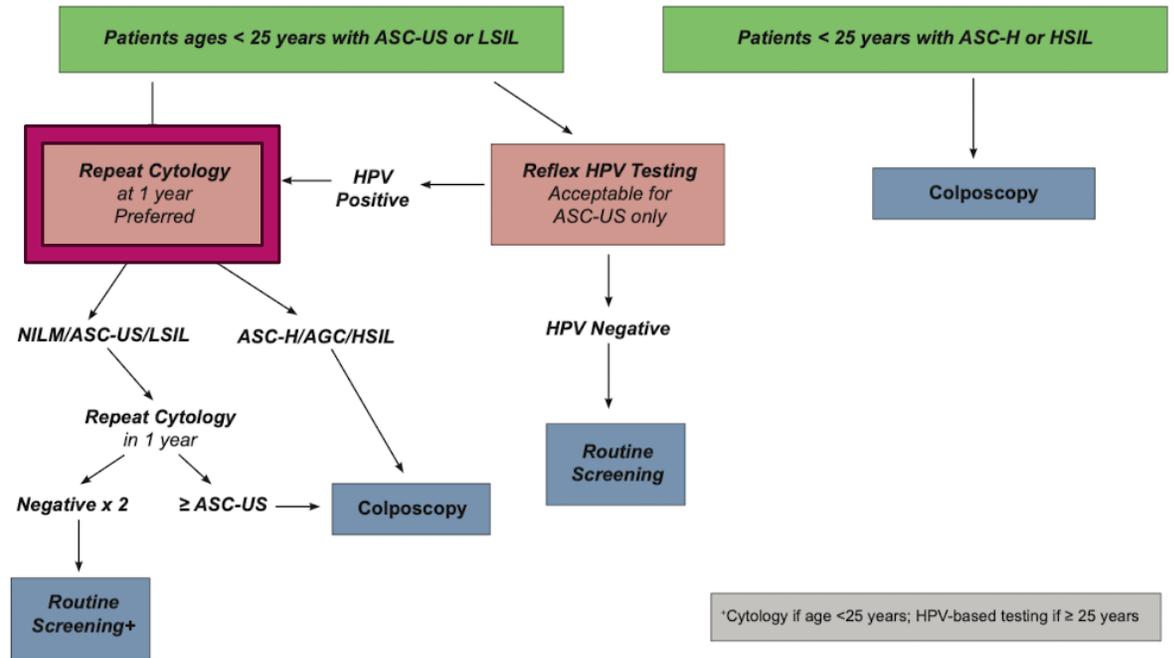
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References

Figure 12: Management of Patients Ages < 25 years with Cytologic Abnormalities



¹Cytology if age <25 years; HPV-based testing if ≥ 25 years

Case #4

- ▶ Your 23 yo F patient comes in for her physical, and you complete her first pap smear, ordering cytology. Her cytology came back as ASCUS, and her reflex HPV comes back positive.
- ▶ What should you recommend next for your patient?
 - ▶ Repeat cytology in 1 year

Case #4

- ▶ Your 23 yo F patient comes in for her physical, and you complete her first pap smear, ordering cytology. Her cytology came back as ASCUS, and her reflex HPV comes back positive.
- ▶ What should you recommend next for your patient?
 - ▶ Repeat cytology in 1 year -> ASCUS



Clinical Situation



Testing



Recommendation

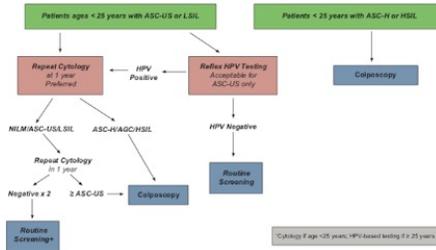
ASC-US / HPV positive with no history of abnormal results

1 year follow up¹

Repeat cytology testing at 1 and 2 years.¹

Cytology screening at follow-up visit¹

Figure 12: Management of Patients Ages < 25 years with Cytologic Abnormalities



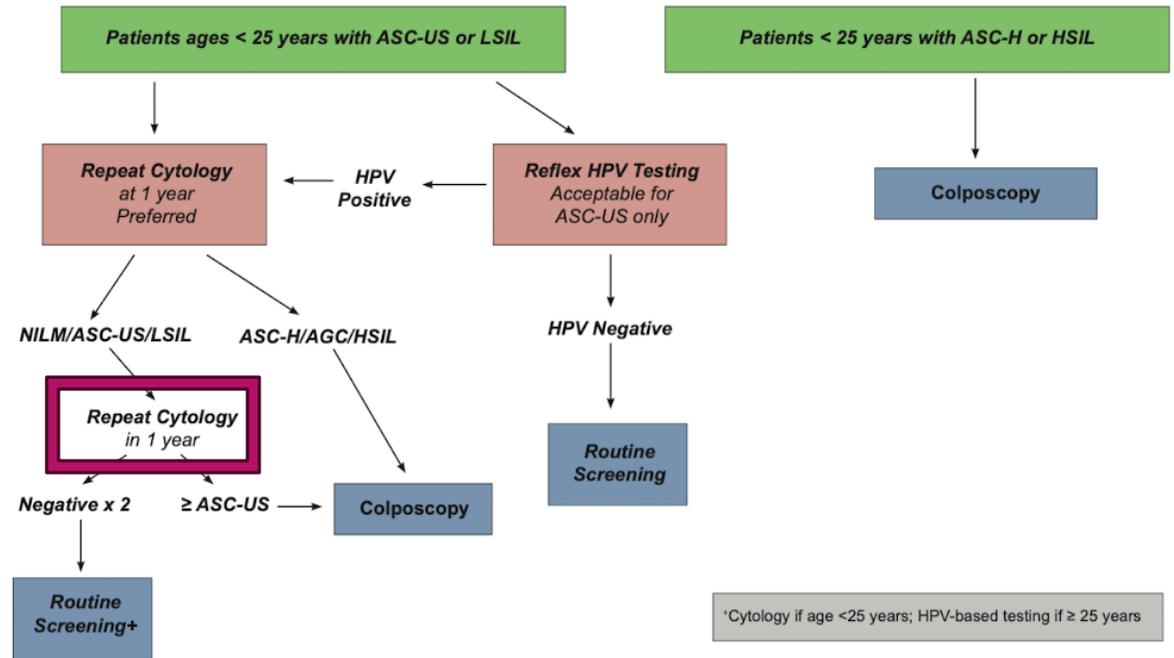
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References

Figure 12: Management of Patients Ages < 25 years with Cytologic Abnormalities



¹Cytology if age <25 years; HPV-based testing if ≥ 25 years



Case #5

Case #5

- ▶ Your 45 yo F has a pap smear that comes back NILM with positive HPV. She has a history of being treated for CIN2.
- ▶ What should you recommend next for your patient?

Age

Under 25 YEARS	25 to 29 YEARS	30 to 65 YEARS	Over 65 YEARS
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Clinical Situation

Routine screening	Evaluation of a colposcopic biopsy	management of results during post colposcopy surveillance (within past 7 years)	Follow-up after treatment	Special situation: Unsatisfactory test results
Special situation: Post hysterectomy	Special situation: Symptomatic	Special situation: Immunosuppressed		

[Help me decide](#) [Next →](#)

Treated Histology

No CIN

Histologic LSIL (CIN 1)

Histologic HSIL (CIN 2)

Histologic HSIL (CIN 3 or Unspecified)

AIS

Current HPV

None	HPV-	HPV+ (untyped or other genotyping)	HPV 16+	HPV 18+
------	------	---	---------	---------

Current Results

A Positive HPV Result needs further testing for triage. What other current results does this patient have?

None

Cytology

Dual Stain

Both



AIS

Current HPV

None HPV- **HPV+ (untyped or other genotyping)** HPV 16+ HPV 18+

Current Results

A Positive HPV Result needs further testing for triage. What other current results does this patient have?

None Cytology Dual Stain Both

Current Cytology

Normal ASC-US LSIL ASC-H HSIL AGC

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HPV positive following treatment

Colposcopy¹

Risk

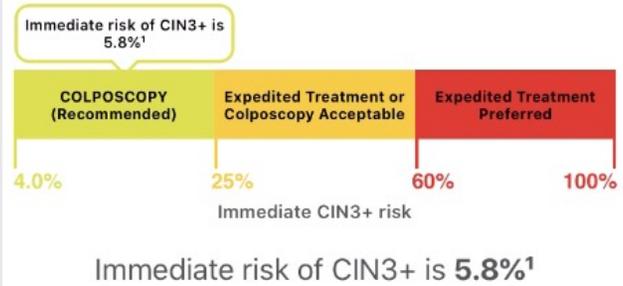
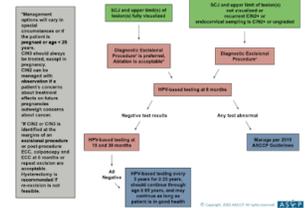


Figure 7: Management of Histologic HSIL (CIN2 or CIN3 or Not Further Specified)¹



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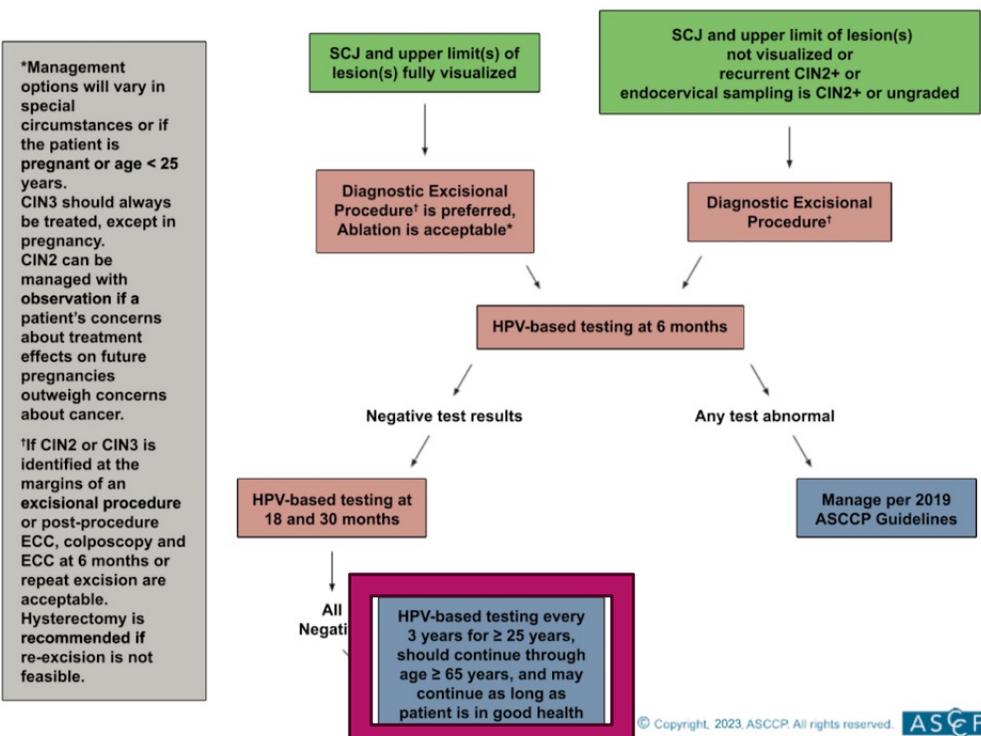
Case #5

- ▶ Your 45 yo F has a pap smear that comes back NILM with positive HPV. She has a history of being treated for CIN2.
- ▶ What should you recommend next for your patient?
 - ▶ Refer for colposcopy
- ▶ How often should she get Pap smears moving forward?

AIS

Current HPV

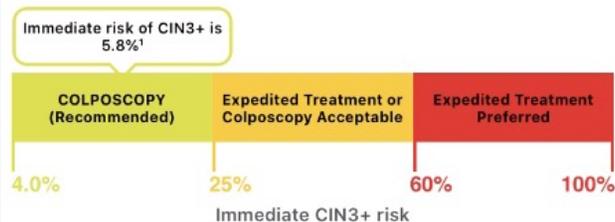
Figure 7: Management of Histologic HSIL (CIN2 or CIN3 or Not Further Specified)*



HPV positive following treatment

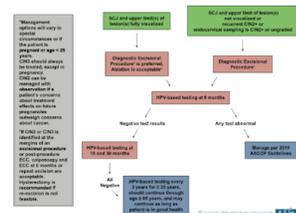
Colposcopy†

Risk



Immediate risk of CIN3+ is 5.8%¹

Figure 7: Management of Histologic HSIL (CIN2 or CIN3 or Not Further Specified)*



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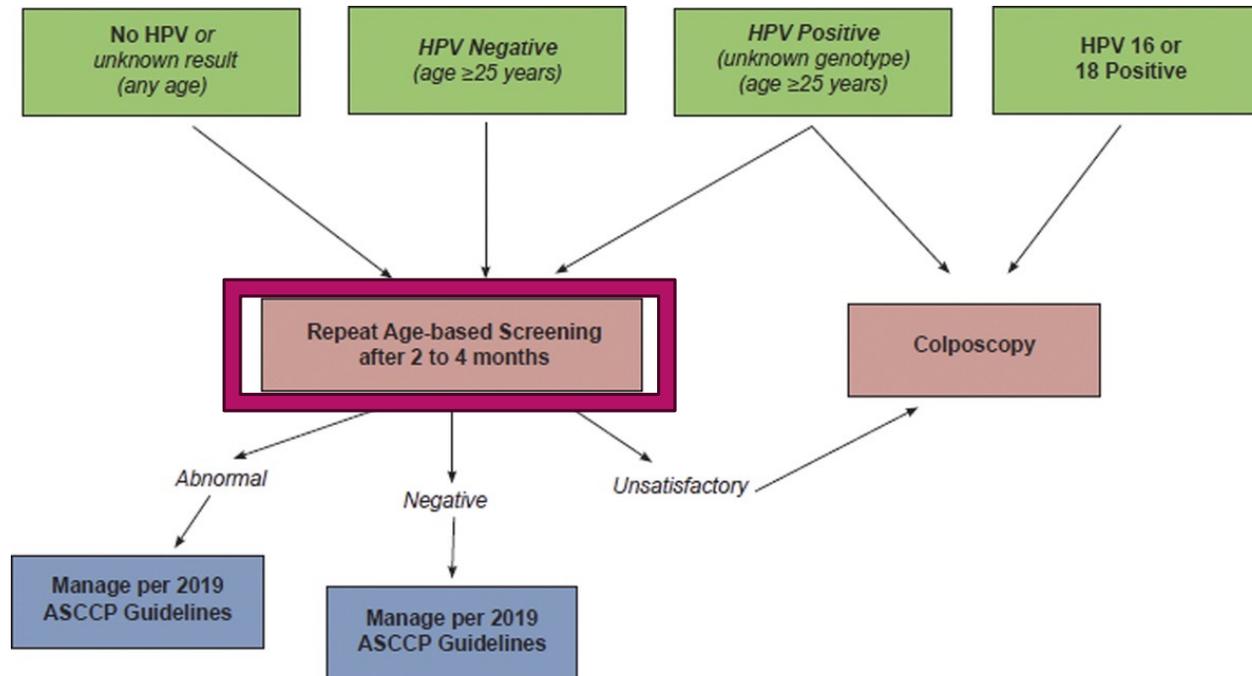


Case #6

Case #6

- ▶ You have a new 28 yo F patient, and are reviewing her prior records. You see she had a pap smear with co-testing two months ago, and the results were unsatisfactory cytology but negative HPV.
- ▶ What should you recommend next for your patient?

Management of Unsatisfactory Pap



Case #6

- ▶ You have a new 28 yo F patient, and are reviewing her prior records. You see she had a pap smear with co-testing two months ago, and the results were unsatisfactory cytology but negative HPV.
- ▶ What should you recommend next for your patient?
 - ▶ Repeat age-based screening in 2-4 months
 - ▶ Negative HPV in setting of unsatisfactory cytology may reflect an inadequate sample
 - ▶ Test not FDA approved for primary HPV testing and cannot be considered valid by itself



Case #7

Case #7

- ▶ Your 30 yo patient presents to your clinic to establish care. She says she has been getting yearly pap smears at her prior provider's office and insists on continuing with yearly pap smears, because she had a friend who died from cervical cancer. She has no history of abnormal pap smears or family history of cancer.
- ▶ How would you counsel this patient?

Case #7

- ▶ Initiate a patient-centered discussion about the benefits and harms of cervical cancer screening and engage the individual in an informed conversation to determine together whether annual screening is appropriate.
- ▶ Risks of pap smears:
 - ▶ Discomfort and bleeding from the pap smear
 - ▶ Anxiety that may result from abnormal results
 - ▶ Over-diagnosis and over-treatment of abnormal cell changes that can go away on their own
 - ▶ Problems with future pregnancies from some treatments during colposcopies (cervical scarring, cervical insufficiency, preterm birth, PPROM)



Case #8

Case #8

- ▶ Your 30 yo patient presents for her physical. You review her pap smear history.
 - ▶ 4 years ago: NILM
 - ▶ 1 year ago: ASCUS, reflex HPV negative
- ▶ What should you recommend next for your patient?

Age

Under 25
YEARS

25 to 29
YEARS

30 to 65
YEARS

Over 65
YEARS

Clinical Situation

Routine
screening

Evaluation of
a
colposcopic
biopsy

management
of results
during post
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surveillance
(within past
7 years)

Follow-up
after
treatment

Special
situation:
Unsatisfactory
test
results

Special
situation:
Post
hysterectomy

Special
situation:
Symptomatic

Special
situation:
Immunosuppressed

Help me decide

Next →



Clinical Situation



Testing



Recommendation

Current HPV

HPV 16+

HPV 18+

HPV+ (untyped)

HPV+ (31/33/35/39/45/51/52/58/68)

HPV+ (other typed)

HPV+ (56/59/66)

HPV-

None

Current Cytology

Cytology Results can affect management, if present. What is the current Cytology Result?

None

Normal

ASC-US

LSIL

ASC-H

HSIL

AGC

Current Cytology

Cytology Results can affect management, if present. What is the current Cytology Result?

None Normal **ASC-US** LSIL ASC-H HSIL AGC

Prior History

Does the patient have abnormal results on the most recent prior screening? Leave blank if history is unknown or if last screen was more than approximately 5 years ago.

HPV Positive
 HPV Negative
 Normal
 ASC-US
 LSIL
 ASC-H
 HSIL
 AGC

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HPV Negative ASC-US

3 year follow up¹

HPV-based screening at follow-up visit²

Risk



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References

1. Egemen D, Cheung LC, Chen X, et al. Risk estimates supporting the 2019 ASCCP Risk-Based Management Consensus Guidelines. *J Low Genit Tract Dis* 2020;24:132-43.
2. Risk estimates supporting the 2019 ASCCP Risk-Based Management Consensus Guidelines. <https://cervixca.nlm.nih.gov/RiskTables/>
3. Perkins RB, Guido RS, Castle PE, et al. 2019 ASCCP risk-based management consensus guidelines for abnormal cervical cancer screening tests and cancer precursors. *J Low Genit Tract Dis* 2020;24:102-31.

Case #8

- ▶ Your 30 yo patient presents for her physical. You review her pap smear history.
 - ▶ 4 years ago: NILM
 - ▶ 1 year ago: ASCUS, reflex HPV negative
- ▶ What should you recommend next for your patient?
 - ▶ Next pap smear in 2 years



Case #9



Case #9

- ▶ Your 45 yo patient presents for her physical. You review her pap smear history.
 - ▶ 10 years ago: NILM, neg HPV
 - ▶ 5 years ago: LSIL, neg HPV
 - ▶ 2 years ago: ASCUS, neg HPV
- ▶ What should you recommend next for your patient?

Age

Under 25 YEARS	25 to 29 YEARS	30 to 65 YEARS	Over 65 YEARS
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Clinical Situation

Routine screening	Evaluation of a colposcopic biopsy	management of results during post colposcopy surveillance (within past 7 years)	Follow-up after treatment	Special situation: Unsatisfactory test results
Special situation: Post hysterectomy	Special situation: Symptomatic	Special situation: Immunosuppressed		

[Help me decide](#) [Next →](#)



Current HPV

- HPV 16+
- HPV 18+
- HPV+ (untyped)
- HPV+ (31/33/35/39/45/51/52/58/68)
- HPV+ (other typed)
- HPV+ (56/59/66)
- HPV-
- None

Current Cytology

Cytology Results can affect management, if present. What is the current Cytology Result?

<input type="checkbox"/> None	<input type="checkbox"/> Normal	<input checked="" type="checkbox"/> ASC-US	<input type="checkbox"/> LSIL	<input type="checkbox"/> ASC-H	<input type="checkbox"/> HSIL	<input type="checkbox"/> AGC
-------------------------------	---------------------------------	--	-------------------------------	--------------------------------	-------------------------------	------------------------------

Current Cytology

Cytology Results can affect management, if present. What is the current Cytology Result?

None Normal **ASC-US** LSIL ASC-H HSIL AGC

Prior History

Does the patient have abnormal results on the most recent prior screening? Leave blank if history is unknown or if last screen was more than approximately 5 years ago.

HPV Positive
 HPV Negative
 Normal
 ASC-US
 LSIL
 ASC-H
 HSIL
 AGC

← Back Next →



HPV Negative ASC-US with LSIL history

1 year follow up¹

HPV-based screening at follow-up visit²

Risk



← Back Start Over

References

1. Egemen D, Cheung LC, Chen X, et al. Risk estimates supporting the 2019 ASCCP Risk-Based Management Consensus Guidelines. *J Low Genit Tract Dis* 2020;24:132–43.
 2. Perkins RB, Guido RS, Castle PE, et al. 2019 ASCCP risk-based management consensus guidelines for abnormal cervical cancer screening tests and cancer precursors. *J Low Genit Tract Dis*



Case #9

- ▶ Your 45 yo patient presents for her physical. You review her pap smear history.
 - ▶ 10 years ago: NILM, neg HPV
 - ▶ 5 years ago: LSIL, neg HPV
 - ▶ 2 years ago: ASCUS, neg HPV
- ▶ What should you recommend next for your patient?
 - ▶ Patient is overdue for Pap smear, offer HPV-based screening today



Case #10

Case #10

- ▶ Your 45 yo patient presents for her physical. You review her pap smear history.
 - ▶ 3 years ago: ASCUS, hrHPV+
 - ▶ 2.5 years ago: colposcopy- CIN1
 - ▶ 1.5 years ago: normal with +hrHPV
 - ▶ 6 months ago: ASCUS with neg HPV
- ▶ What should you recommend next for your patient?

Age

Under 25
YEARS

25 to 29
YEARS

30 to 65
YEARS

Over 65
YEARS

Clinical Situation

Routine
screening

Evaluation of
a
colposcopic
biopsy

Management
of results
during post
colposcopy
surveillance
(within past
7 years)

Follow-up
after
treatment

Special
situation:
Unsatisfacto
ry test
results

Special
situation:
Post
hysterectom
y

Special
situation:
Symptomatic

Special
situation:
Immunosupp
ressed

Help me decide

Next →



Clinical Situation



Testing



Recommendation

Colposcopy

No CIN

Histologic
LSIL (CIN 1)

Histologic
HSIL (CIN 2)

Histologic HSIL
(CIN 3 or Unspe...)

AIS

Cytology preceding colposcopy

Management of CIN 1 or lesser is based on the previous cytology result. What was the cytology preceding colposcopy?



Normal



ASC-US



LSIL



ASC-H



HSIL



AGC

Current HPV

HPV 16+

HPV 18+

HPV+ (untyped)

HPV+ (31/33/35/39/45/51/52/58/68)

HPV+ (other typed)

HPV+ (56/59/66)

HPV-

Current Cytology

None

Normal

ASC-US

LSIL

ASC-H

HSIL

AGC

HPV 18+

HPV+ (untyped)

HPV+ (31/33/35/39/45/51/52/58/68)

HPV+ (other typed)

HPV+ (56/59/66)

HPV-

Current Cytology

None

Normal

ASC-US

LSIL

ASC-H

HSIL

AGC

Prior History

Does patient have a prior screening with HPV positive results and/or abnormal cytology since colposcopy?

No History

No History of Abnormalities

Yes- History of Abnormality

← Back

Next →



Clinical Situation



Testing



Recommendation

HPV Negative ASC-US with Abnormal History

1 year follow up¹

Guideline for cases in which colposcopy was previously recommended but not completed:
Colposcopy is recommended if the previous result was high-grade cytology [ASC-H, AGC, HSIL, or a more severe cytologic interpretation]³

If colposcopy was greater than one year ago, then a repeat colposcopy is indicated.²

HPV-based screening at follow-up visit²

Special populations

Over 65



Multiple Colposcopies



← Back

Start Over

References

2. Perkins RB, Guido RS, Castle PE, et al. 2019 ASCCP risk-based management consensus guidelines for abnormal cervical cancer screening tests and cancer precursors. *J Low Genit Tract Dis* 2020;24:102–31.
3. Perkins RB, Guido RS, Castle PE, et al. 2019 ASCCP Risk-Based Management Consensus Guidelines: Updates Through 2023. *J Low Genit Tract Dis* 2024;28:3–6.

Case #10

- ▶ Your 45 yo patient presents for her physical. You review her pap smear history.
 - ▶ 3 years ago: ASCUS, hrHPV+
 - ▶ 2.5 years ago: colposcopy- CIN1
 - ▶ 1.5 years ago: normal with +hrHPV
 - ▶ 6 months ago: ASCUS with neg HPV
- ▶ What should you recommend next for your patient?
 - ▶ Repeat colposcopy since it has been > 1 year since the last colposcopy



Case #11



Case #11

- ▶ Your 35 yo F patient had a pap smear with HPV 16, and you performed her colposcopy. Her colposcopy came back with CIN 2.
- ▶ What should you recommend next for your patient?
 - ▶ It depends on her desire for future fertility



Age

Under 25
YEARS

25 to 29
YEARS

30 to 65
YEARS

Over 65
YEARS

Clinical Situation

Routine
screening

Evaluation of
a
colposcopic
biopsy

management
of results
during post
colposcopy
surveillance
(within past
7 years)

Follow-up
after
treatment

Special
situation:
Unsatisfactory
test
results

Special
situation:
Post
hysterectomy

Special
situation:
Symptomatic

Special
situation:
Immunosuppressed

Help me decide

Next →



Clinical Situation



Testing



Recommendation

Colposcopy

No CIN

Histologic
LSIL (CIN 1)

Histologic
HSIL (CIN 2)

Histologic
HSIL (CIN 3)

Histologic HSIL
(Unspecified)

AIS

Future pregnancy

Are there concerns about future pregnancy?

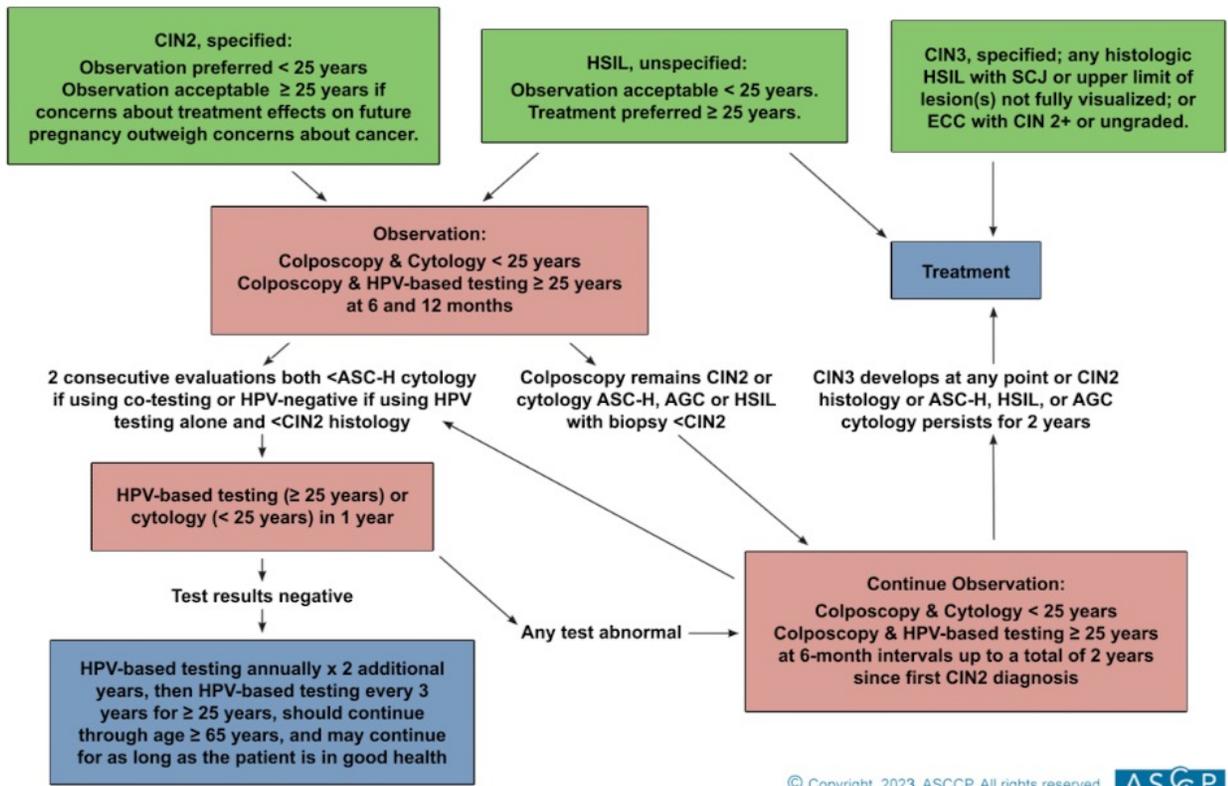
Yes

No

← Back

Next →

Figure 8: Management of CIN2 at age <25 years or for those concerned about the effects of treatment on future pregnancy





Clinical Situation



Testing



Recommendation

Colposcopy

No CIN

Histologic
LSIL (CIN 1)

Histologic
HSIL (CIN 2)

Histologic
HSIL (CIN 3)

Histologic HSIL
(Unspecified)

AIS

Future pregnancy

Are there concerns about future pregnancy?

Yes

No

← Back

Next →



Histologic HSIL (CIN 2)

Treatment¹

Diagnostic excisional procedure is preferred and ablation is acceptable when the preceding colposcopy was satisfactory.¹

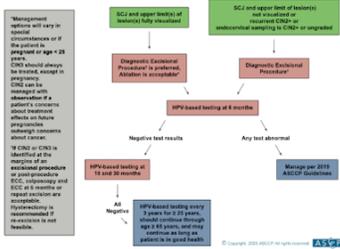
After treatment, HPV-based testing at 6 months is preferred at follow-up visit¹

Special populations

Over 65

Pregnancy

Figure 7: Management of Histologic HSIL (CIN2 or CIN3 or Not Further Specified)¹



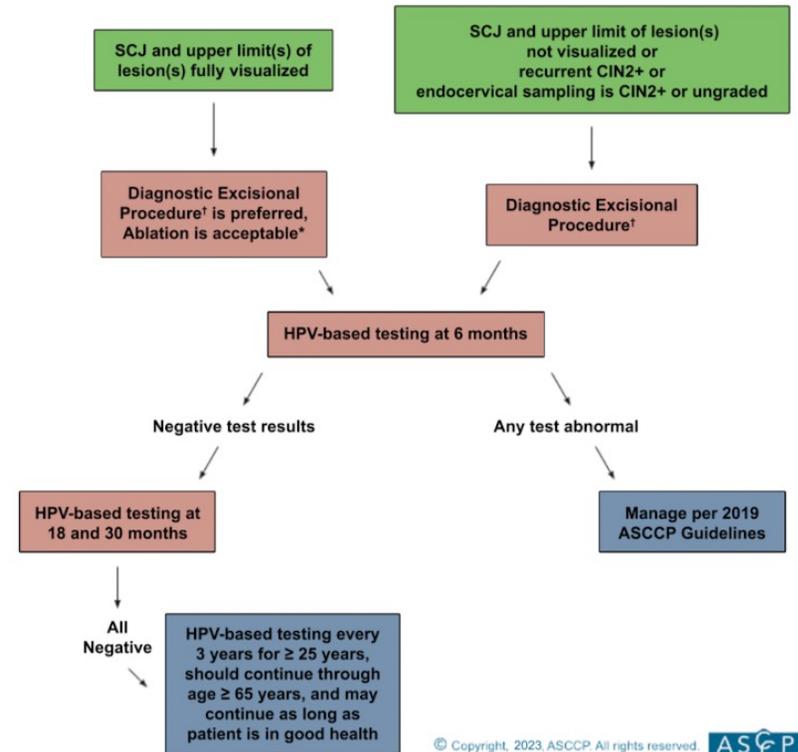
← Back

Start Over

Figure 7: Management of Histologic HSIL (CIN2 or CIN3 or Not Further Specified)¹

*Management options will vary in special circumstances or if the patient is pregnant or age < 25 years. CIN3 should always be treated, except in pregnancy. CIN2 can be managed with observation if a patient's concerns about treatment effects on future pregnancies outweigh concerns about cancer.

¹If CIN2 or CIN3 is identified at the margins of an excisional procedure or post-procedure ECC, colposcopy and ECC at 6 months or repeat excision are acceptable. Hysterectomy is recommended if re-excision is not feasible.





Case #12

Case #12

- ▶ You complete a pap with co-testing on your 48 yo F patient. The pap smear is NILM, with benign endometrial cells seen on cytology. HPV is negative.
- ▶ What should you recommend next for your patient?
 - ▶ Need more information



Table 2. Relative risk factors for significant endometrial abnormality in a patient greater than 40 with endometrial cells on a Pap test.

Lower risk	Higher risk
On Hormone Replacement Therapy (HRT)	No HRT
Still cycling or perimenopausal	Post menopausal
Asymptomatic	Vaginal Bleeding
Benign appearing endometrial cells	Abnormal appearing endometrial cells

7 Greenspan, DL, Cardillo M, Davey DD, Heller DS, et al. Endometrial cells in cervical cytology: Review of cytologic features and clinical assessment. *Journal of lower genital tract disease*, 10(2): 111-122, 2006.

Case #12

- ▶ ASCCP guidelines
 - ▶ Asymptomatic premenopausal patients with benign endometrial cells
-> no further evaluation is recommended
 - ▶ Asymptomatic postmenopausal patients with benign endometrial cells
-> endometrial assessment
- ▶ Endometrial assessment always indicated for:
 - ▶ Abnormal vaginal bleeding
 - ▶ Atypical endometrial cells



Case #13

Case #13

- ▶ A 26 yo F with HIV presents for a physical. She has never had a pap smear before. You offer her a pap smear today
- ▶ What cervical cancer screening should you order?
- ▶ How often should she get cervical cancer screening?

Case #13

Patients with Immunosuppression

- ▶ Screening
 - ▶ Start at 21 yo: cytology only screening
 - ▶ Continue cytology only q year for 3 years
 - ▶ Continue cytology only every 3 years until 30 years old
 - ▶ Cytology alone or co-testing every 3 years after 30 yo for the remainder of the patient's lifetime
- ▶ Management of abnormal results
 - ▶ Colposcopy recommended for all results of HPV+ ASCUS or higher
 - ▶ For all cytology results of LSIL or worse, colposcopy recommended regardless of HPV test result

Case #13

- ▶ A 26 yo F with HIV presents for a physical. She has never had a pap smear before. You offer her a pap smear today
- ▶ What cervical cancer screening should you order?
 - ▶ Cytology only
- ▶ How often should she get cervical cancer screening?
 - ▶ Yearly for 3 years with cytology only, then q3 years starting at 30 yo with cytology alone or co-testing

Summary

- ▶ Ensure patients > 65 yo had appropriate prior screening before discontinuing cervical cancer screening
- ▶ If a patient has a history of abnormal Pap smears and/or colposcopies, it is helpful to document the patient's history in their A/P or problem list to make it easier to track
- ▶ Use of the ASCCP app is helpful to calculate the immediate risk of CIN3+ to guide management
- ▶ Patients who are immunosuppressed need more frequent screening

References

- ▶ Perkins RB et al. 2019 ASCCP Risk-Based Management Consensus Guidelines for Abnormal Cervical Cancer Screening Tests and Cancer Precursors. *Journal of Lower Genital Tract Disease*. 2020;24:102-131.
- ▶ Cheung LC et al. 2019 ASCCP Risk-Based Management Consensus Guidelines: Methods for Risk Estimation, Recommended Management, and Validation. *Journal of Lower Genital Tract Disease*. 2020;24(2):90-101.
- ▶ Harper DM, Bettcher CM, and Young AP. It is time to switch to primary HPV screening for cervical cancer. *Am Fam Physician*. 2024;109(1).
- ▶ Cervical Cancer: Screening. U.S. Preventive Services Task Force. Aug 2018. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/cervical-cancer-screening>. Accessed October 1, 2025.
- ▶ Greenspan, DL, Cardillo M, Davey DD, Heller DS, et al. Endometrial cells in cervical cytology: Review of cytologic features and clinical assessment. *Journal of Lower Genital Tract Disease*. 10(2): 111-122, 2006.
- ▶ Harper DM et al. p16/ki-67 dual stain triage of individuals positive for HPV to detect cervical precancerous lesions. *International Journal of Cancer*. 2025.