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Evaluation of abnormal squamous lesions

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Atypical squamous cells of undetermined significance -ASC-US

Low-grade squamous intraepithelial lesions LSIL

Terminology and histology of cervical intraepithelial neoplasia

LAST System[1]	Cytology	LSIL	HSIL		
	Histology	LSIL	p16 staining should be performed*	HSIL	
Bethesda Classification System[2]	Cytology	LSIL	HSIL		
	Histology	CIN 1	CIN 2	CIN 3	
Previous terminology		Mild dysplasia	Moderate dysplasia	Severe dysplasia	Carcinoma in-situ
Histologic images					

Terminology regarding cytologic and histologic precancerous changes of the uterine cervix. The corresponding terminology from the previous classification systems is shown. Images of the histologic correlates for each category are also shown.

LAST: lower anogenital squamous terminology; LSIL: low-grade squamous intraepithelial lesions; HSIL: high-grade squamous intraepithelial lesions; CIN: cervical intraepithelial neoplasia.
* CIN 2 that is p16-positive is classified as HSIL. CIN 2 that is p16-negative is classified as LSIL.

References:

1. *Darragh TM, Colgan TJ, Thomas Cox J, et al. The Lower Anogenital Squamous Terminology Standardization*

INCIDENCE

A study of 965,360 cervical cytology specimens in patients ages 30 to 64 reported the following distribution of results:

NILM: 96 percent

ASCUS: 2.8 percent

LSIL : 0.97 percent

HSIL: 0.21 percent

AGC: 0.21 percent

SCC– 4.5 per 100,000

RATIONALE AND RISK ESTIMATION

Once a patient's **immediate** and **five-year risk estimates** have been calculated, they are assigned to one of six different management groups.

The six management groups are:

1-Immediate CIN 3+ risk >60 percent: Expedited treatment

2-Immediate CIN 3+ risk 25 to 59 percent: Expedited treatment or colposcopy

3-Immediate CIN 3+ risk 4 to 24 percent: Colposcopy

Immediate CIN 3+ risk <4 percent

4-Five-year CIN 3+ risk ≥0.55 percent: Surveillance in one year

5-Five-year CIN 3+ risk 0.15 to 0.54 percent: Surveillance in three years

6-Five-year CIN 3+ risk <0.15 percent: Surveillance in five years

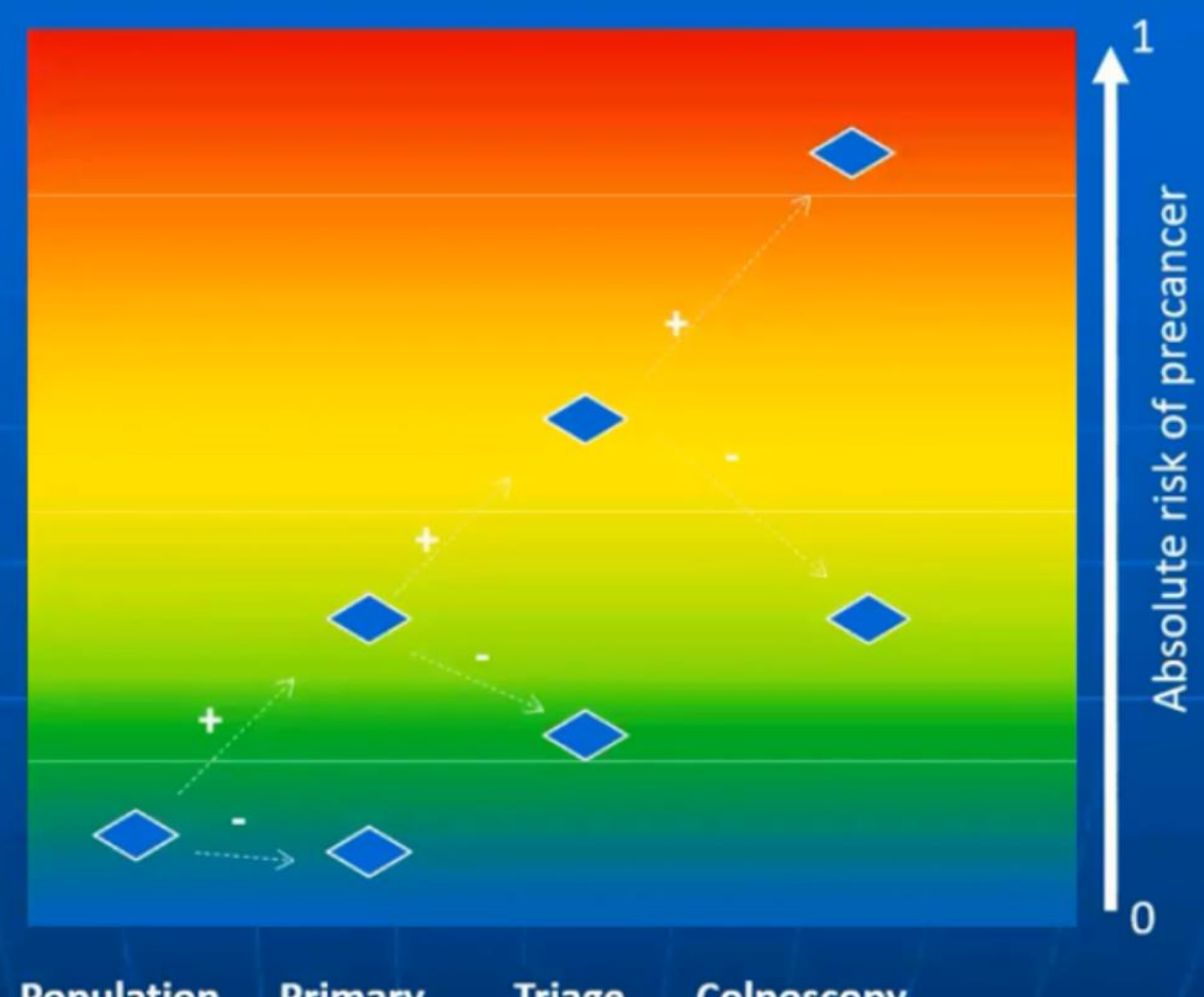
National Guidelines Template

High risk:
Treatment

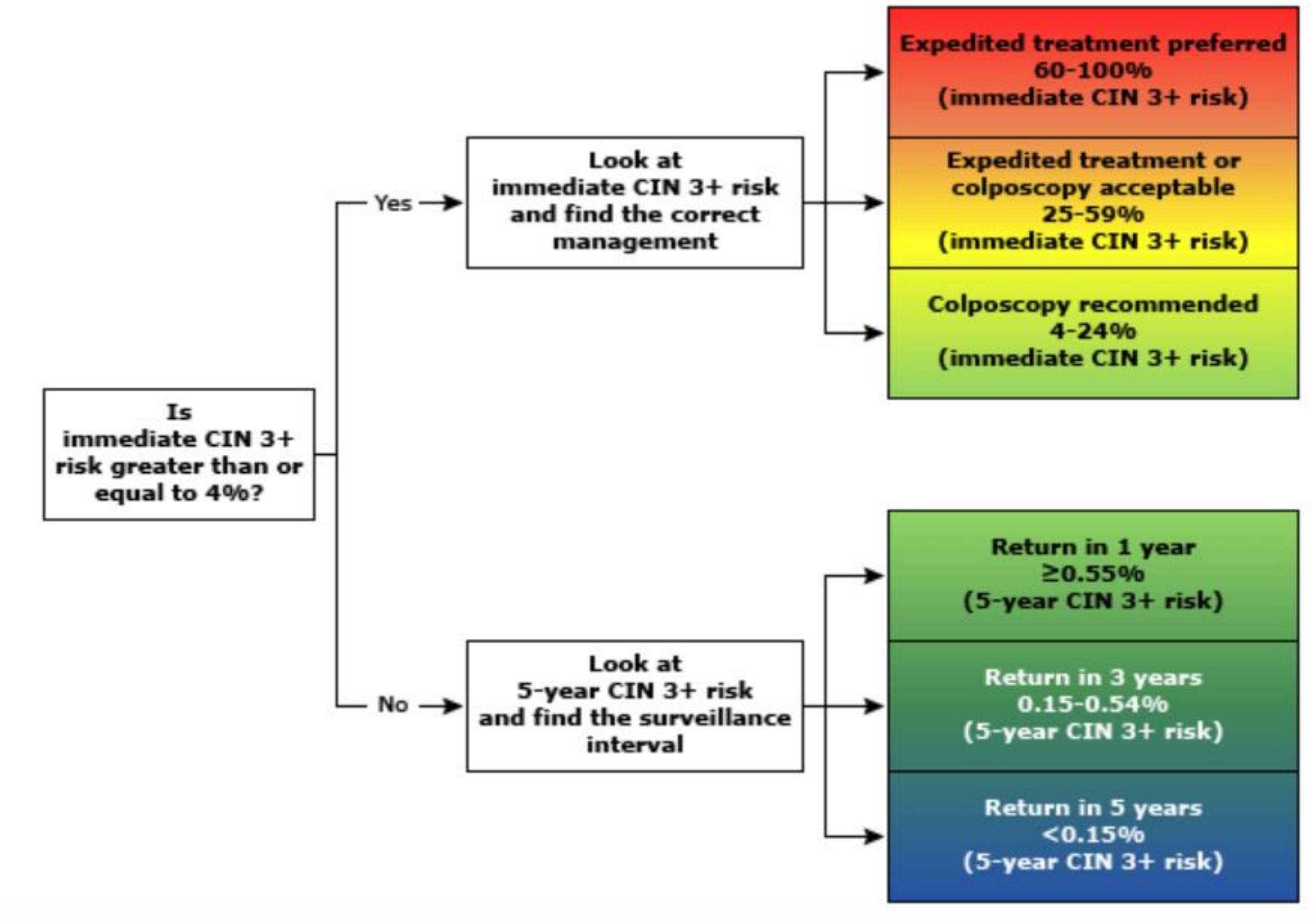
Medium risk:
Colposcopy

Low risk:
Triage or repeat testing

Minimal risk:
Regular screening interval



Algorithm demonstrating how patient risk is evaluated based on the combination of current results and patient history



This algorithm 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.

How to choose?

- **Immediate CIN 3+ risk 4 to 24 percent**

For nonpregnant patients ≥25 years old with an immediate risk of CIN 3+ between 4 and 24 percent, and unknown screening history and

-HPV-positive + ASC-US: risk of CIN 3+ 4.4 percent

-HPV-positive + LSIL: risk of CIN 3+ 4.3 percent

colposcopy is the preferred management option

Treatment with excision may be avoided in those patients in whom colposcopic biopsies demonstrate CIN 2 or less.

Patients who are positive for HPV genotypes **16 and 18** are at an increased risk of CIN 3 and cancer, and they require colposcopy even if cytology is negative.

- در خانمی ۴۰ ساله تست غربالگری co-test انجام شده است. سیتولوژی LSIL وHPV مثبت و Typing انجام نشده است واطلاعی هم از سابقه بیمار در دسترس نیست اقدام بعدی کدام است؟

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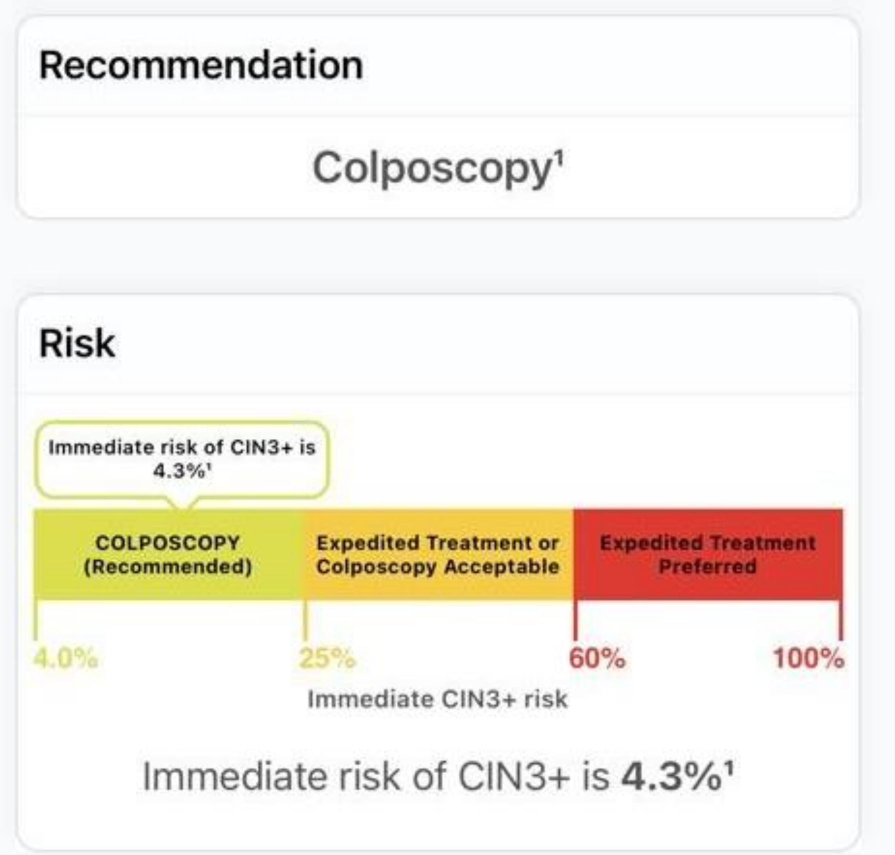
Management of routine screening results

Age: 30 to 65

Current results

- Cotest with positive HPV and abnormal cytology result of LSIL



Immediate CIN 3+ risk <4 percent

Five-year CIN 3+ risk ≥0.55 percent

Surveillance in one year :

When the immediate risk of CIN 3+ is <4 percent **and** the five-year risk is ≥0.55 percent, the patient can be **followed with HPV-based testing in one year**.

Three examples include:

HPV-positive (untyped) with NILM and an unknown history (risk of CIN 3+ at five years 4.8 percent).

HPV-positive with LSIL or less (LSIL, ASC-US, and NILM) and a **prior HPV- negative** screen (risk of CIN 3+ at five years 3.8, 3.8, and 2.3 percent, respectively).

HPV-negative with LSIL and an unknown history (risk of CIN 3+ at five years 2.0 percent).

Management of routine screening results

Age: 30 to 65

Current results

- Cotest with positive HPV and normal cytology

- در خانمی ۳۶ ساله که با پاپ اسمیر LSILو HPV منفی اقدام صحیح کدام است؟

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Management of routine screening results

Age: 30 to 65

Current results

- Cotest with negative HPV and abnormal cytology result of LSIL

Five-year CIN 3+ risk 0.15 to 0.54 percent:

Surveillance in three years :

When the immediate risk of CIN 3+ is <4 percent **and** the five-year risk is between 0.15 and 0.54 percent, the patient can be followed with HPV-based testing in three years.

Two examples include:

HPV-negative with ASC-US and an unknown history (risk of CIN 3+ at five years 0.4 percent).

HPV-negative with ASC-US and a prior HPV-negative screen (risk of CIN 3+ at five years 0.36 percent).

- خانم ۲۷ ساله بدلیل پاپ اسمیر ASCUS تست HPV انجام شده است.HPV منفی می باشد. اقدام بعدی کدام است

- کدام استخانم ۲۷ ساله بدلیل پاپ اسمیر ASCUS تست HPV انجام شده است.HPV منفی می باشد. اقدام بعدی.

Management of routine screening results

Age: 25 to 29

Current results

- Cotest with negative HPV and abnormal cytology result of ASC-US

Five-year CIN 3+ risk <0.15 percent:

Surveillance in five years :

When the immediate risk of CIN 3+ is <4 percent **and** the five-year risk is <0.15 percent, the patient can be followed with HPV-based testing in five years.

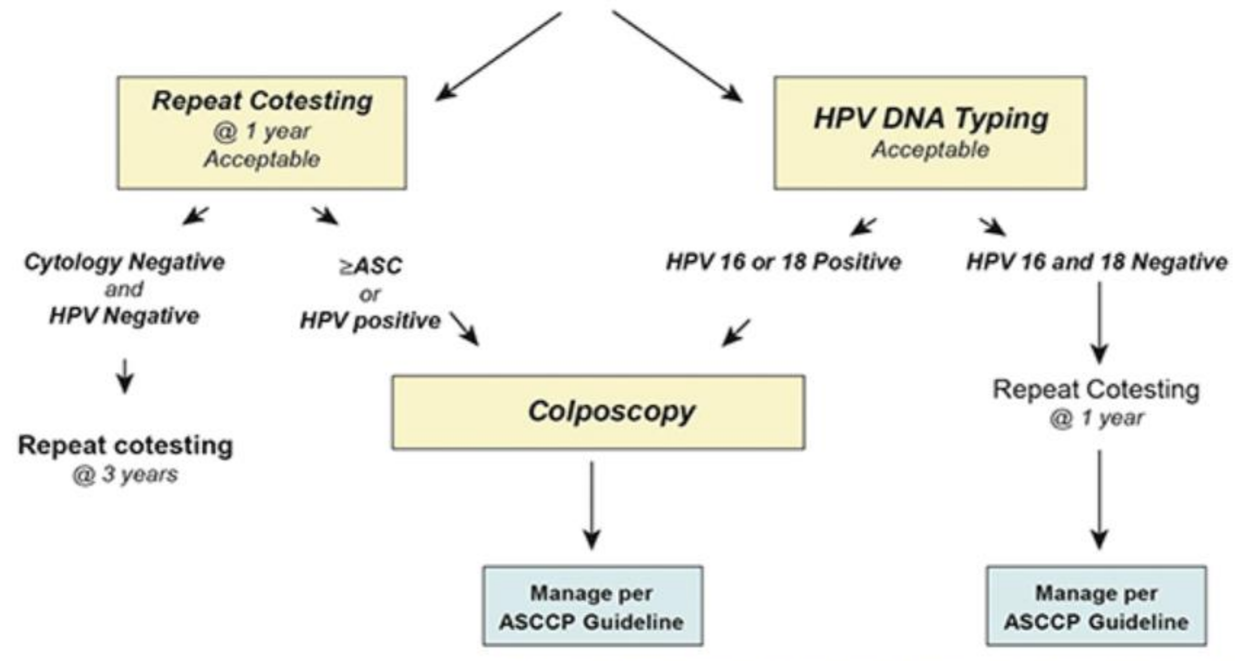
Two examples include:

HPV-negative with no cytology performed (risk of CIN 3+ at five years 0.14 percent).

HPV-negative with NILM (risk of CIN 3+ at five years 0.12 percent).

These risks are similar to the general population and, therefore, follow similar testing intervals as those described in the cervical cancer screening guidelines.

Management of Women ≥ Age 30, who are Cytology Negative, but HPV Positive



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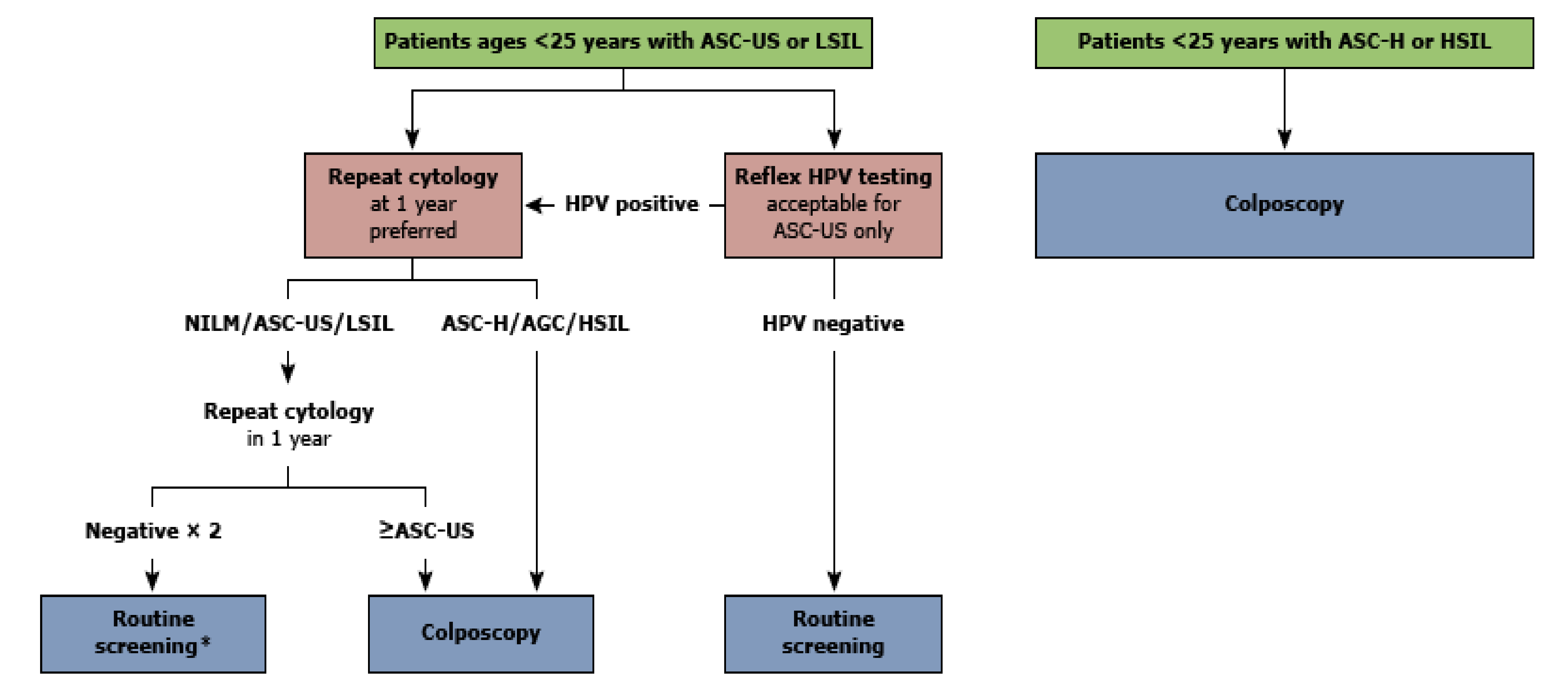

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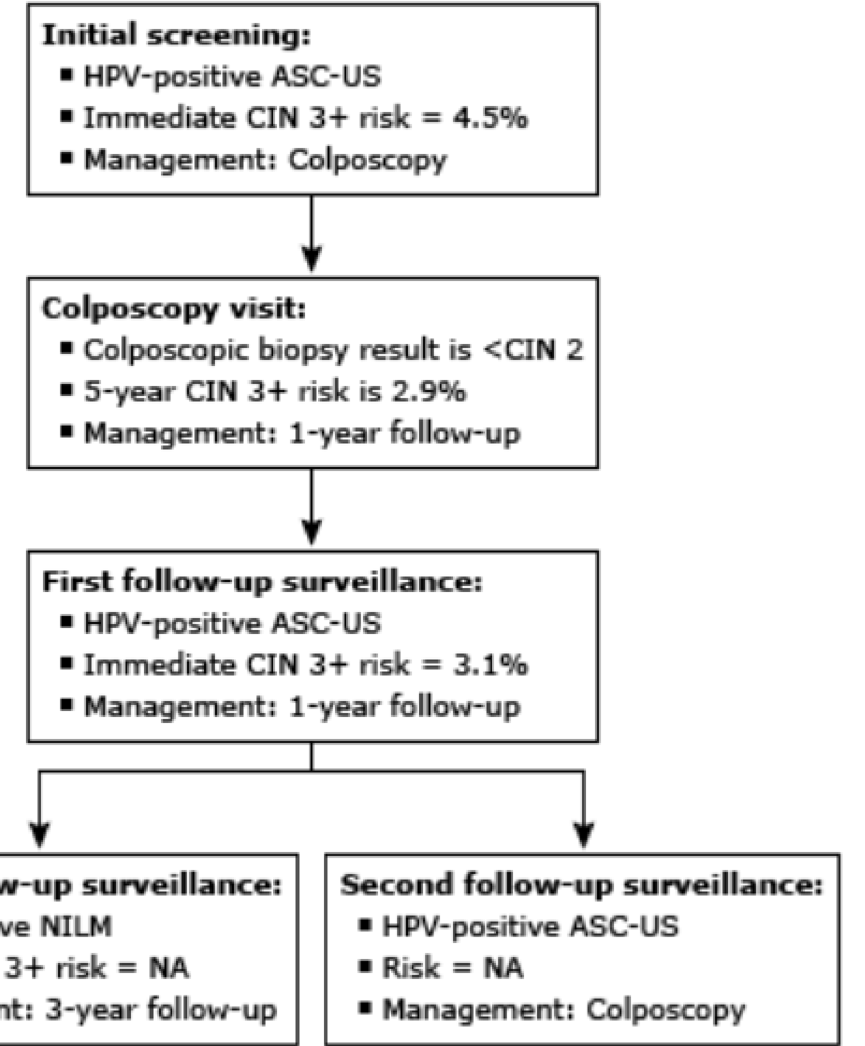
Example of how patients are managed based on risk estimates (using a common low-grade screening abnormality, HPV-positive ASC-US)



- خانمی ۳۵ ساله بدلیل LSIL تحت کولپوسکوپی بیوپسی قرار گرفته است.جواب پاتولوژی CINI گزارش شده است. اقدام صحیح بعدی کدام است؟

MANAGEMENT OF PATIENTS ≥25 YEARS

CIN 1

Preceded by LSIL or less :

Patients with CIN 1 preceded LSIL, ASC-US, or NILM but **positive for HPV** are at low risk for the development of cervical cancer, and observation is therefore recommended .

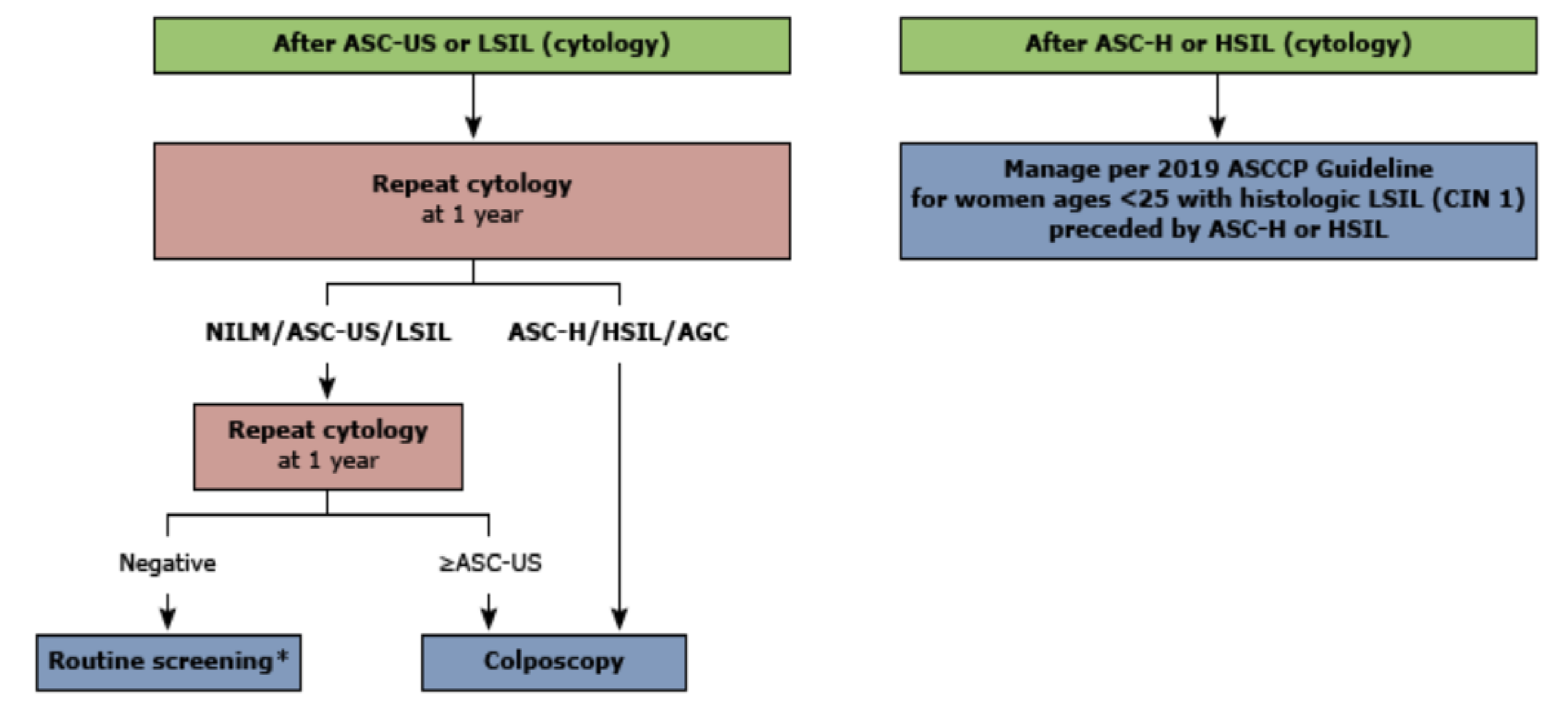
For LSIL, HPV-positive :One- and five-year risks were 0.7 and 2.3 percent.

For ASC-US, HPV-positive :One- and five-year risks were 0.5 and 2.6 percent.

For NILM, HPV-positive : One- and five-year risks were 0.7 and 2.8 percent.

In all three of these examples, given the low risk of developing CIN 3**+,** **one-year follow-up with HPV-based testing is recommended.**

Management of histologic LSIL (CIN 1) in patients younger than 25 years



This algorithm describes management of histologic LSIL (CIN 1) in patients younger than 25 years.

Persistent for two years :

Persistent CIN 1 has a low risk of progression to CIN 3+.

In the cohort study described above, after two consecutive colposcopic biopsies demonstrated CIN 1, 48 percent of patients continued to be HPV-positive, and of those, over 90 percent had follow-up cytology that was LSIL or less.

These data support a conservative approach to management.

Observation is preferred and perform HPV-based testing in one year.

Treatment with a diagnostic excisional procedure (LEEP, cold knife cone, and laser cone biopsy) or ablation (with cryotherapy, laser ablation, and thermoablation) is acceptable.

Thank You