CAP-ASCCP Lower Anogenital Squamous Terminology (LAST) Standardization Project

Biomarkers in HPV-Associated Lower Anogenital Squamous Lesions

Algorithms
Biomarkers in HPV-Associated Lower Anogenital Squamous Lesions

Recommendation 1

** Strong and diffuse block positive p16 results support a categorization of precancerous disease.

* Mimic of HSIL means: morphologies that can be confused with HSIL such as immature squamous metaplasia, atrophy, repair/regeneration due to inflammation; all of which are within the broad NILM category.

** p16-negative NILM

** p16-positive HSIL

* Mimic of HSIL means: morphologies that can be confused with HSIL such as immature squamous metaplasia, atrophy, repair/regeneration due to inflammation; all of which are within the broad NILM category.

** Strong and diffuse block positive p16 results support a categorization of precancerous disease.
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Recommendation 2

* Strong and diffuse block positive p16 results support a categorization of precancerous disease.
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Recommendation 3

BIOPSY
Professional disagreement where morphologic differential includes -IN 2 or -IN 3

p16 stain

- p16-negative
  - LSIL or
  - HSIL mimic or
  - non-HPV-associated pathology

- p16-positive*
  - HSIL

* Strong and diffuse block positive p16 results support a categorization of precancerous disease.
Biomarkers in HPV-Associated Lower Anogenital Squamous Lesions

Recommendation 4

**BIOPSY**
Morphologically unequivocal
- NILM
- IN 1
- IN 3

**NO**
p16 stain

**NILM**
**LSIL**
**HSIL**
**Biomarkers in HPV-Associated Lower Anogenital Squamous Lesions**

**Recommendation 4a**

* Strong and diffuse block positive p16 results support a categorization of precancerous disease. Any identified p16-positive area must meet H&E morphologic criteria for a high-grade lesion to be reinterpreted as such.

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**BIOPSY**

Morphologic < -IN 1 identified in high-risk patient:

Prior cytology of HSIL, ASC-H, ASC-US/HPV16 +, or AGC (NOS)

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**p16 stain**

- **p16-negative**
  - LSIL or non-HPV-associated pathology

- **p16-positive**
  - HSIL

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Any identified p16-positive area must meet H&E morphologic criteria for a high-grade lesion to be reinterpreted as such. **Strong and diffuse block positive p16 results support a categorization of precancerous disease.**
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Abbreviations

AGC(NOS): Atypical Glandular Cells—Not Otherwise Specified
ASC-H: Atypical Squamous Cells—cannot exclude HSIL
ASC-US: Atypical Squamous Cells—Undetermined Significance
H&E: Hematoxylin and Eosin
HSIL: High-Grade Squamous Intraepithelial Lesion
LSIL: Low-Grade Squamous Intraepithelial Lesion
NILM: Negative for Intraepithelial Lesion or Malignancy
The Lower Anogenital Squamous Terminology Standardization Project for HPV-Associated Lesions: Background and Consensus Recommendations from the College of American Pathologists and the American Society of Colposcopy and Cervical Pathology

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Reference:


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