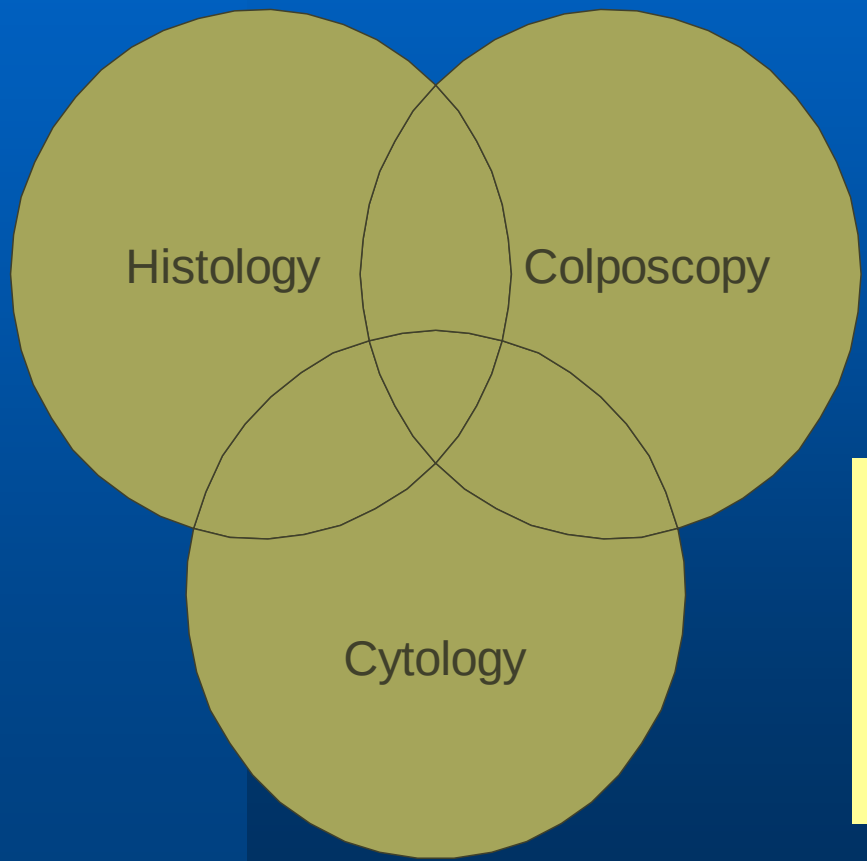
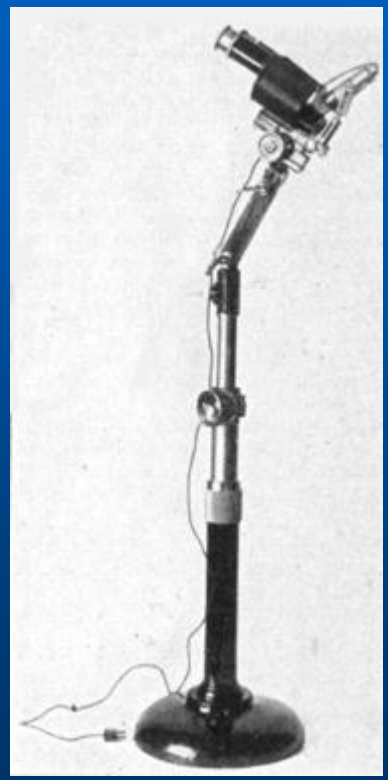
Colposcopy

Attila L Major, MD, PhD

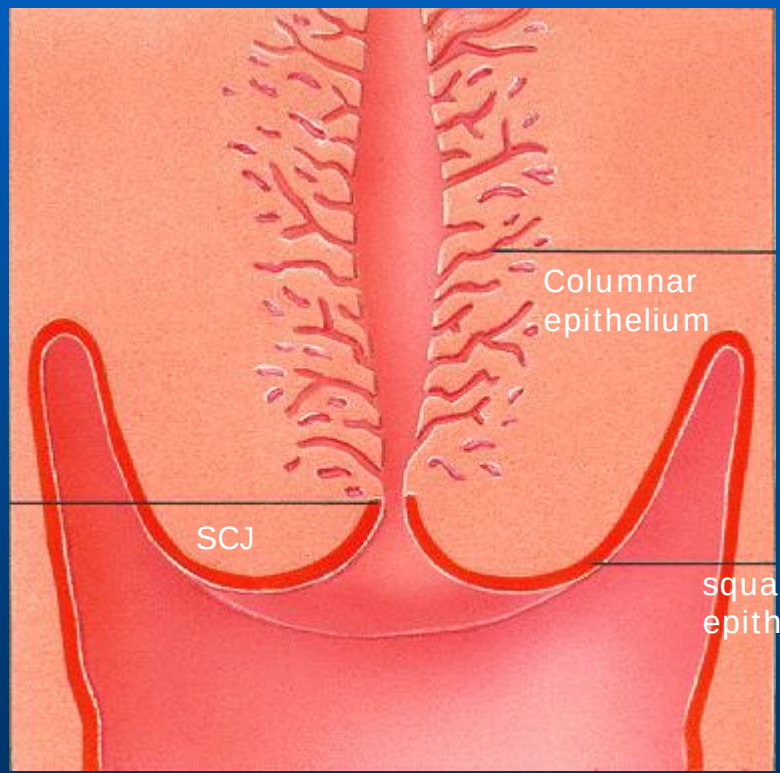


It has been estimated that annual Pap smear testing reduces a woman's chance of dying of cervical cancer from 4 in 1000 to about 5 in 10,000 – a difference of almost 90%

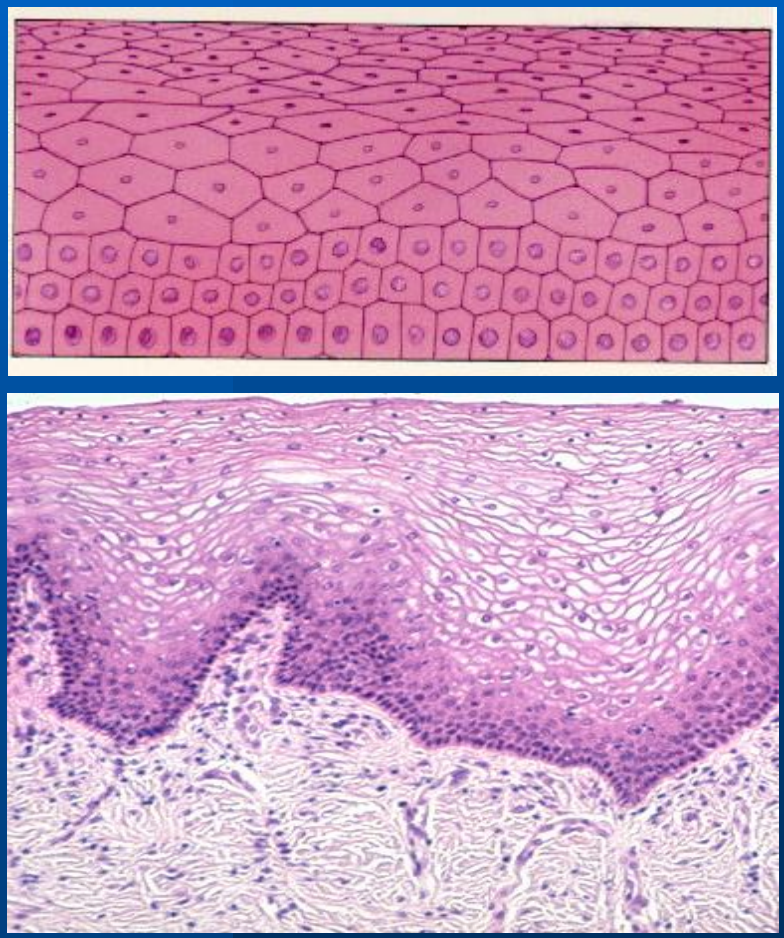
Hinselmann, 1925



Squamous Epithelium



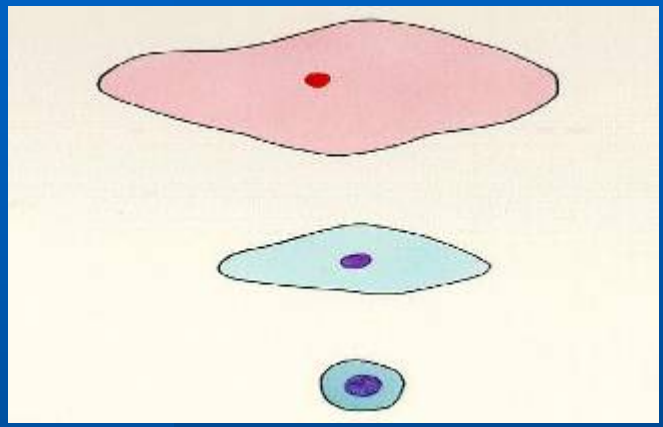
Squamous Epithelium

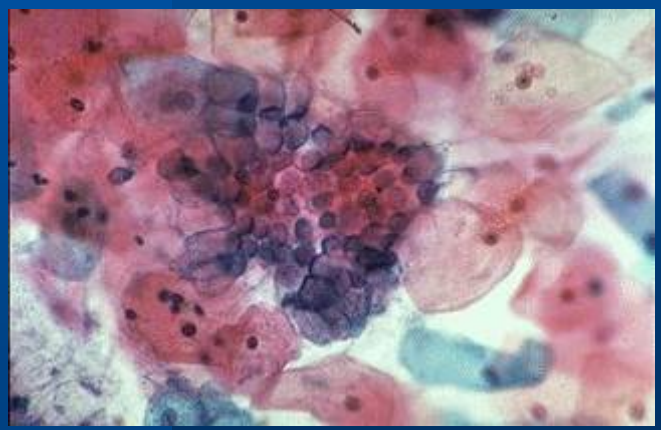


original squamous epithelium

- **stratified, non-keratinizing epithelium**

Cytological features

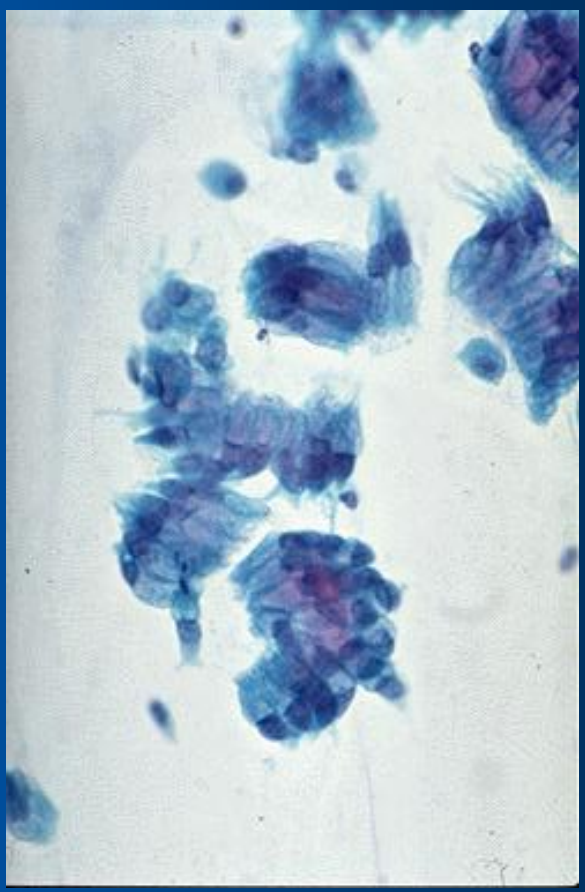


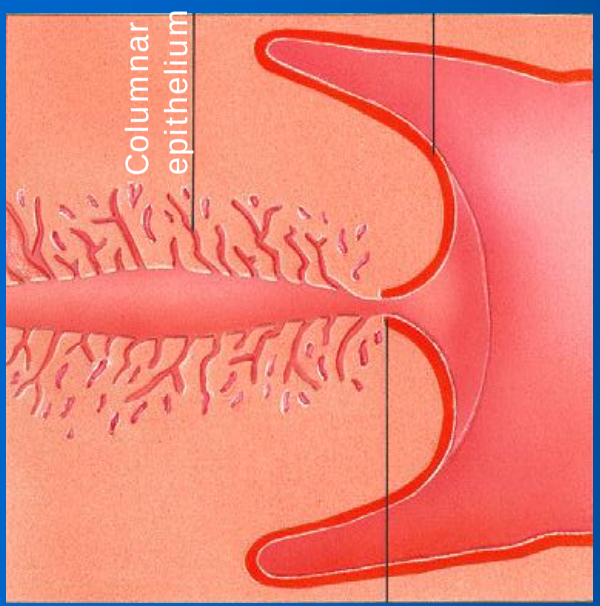


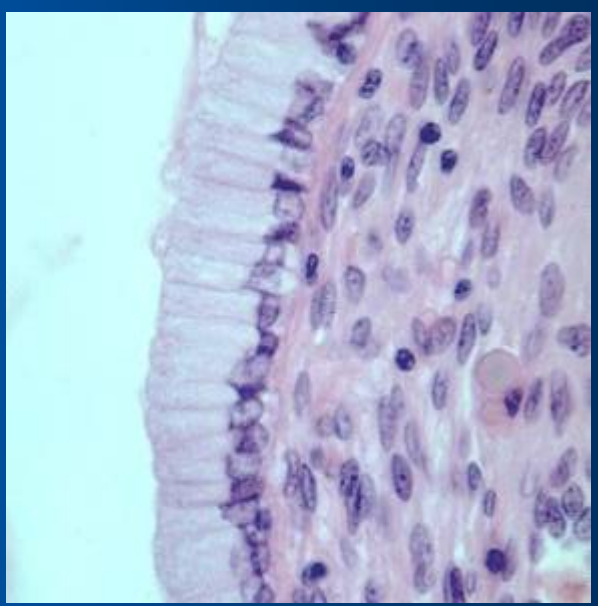
squamous epithelium

- **The standard method for staining cytological preparations is that of Papanicolaou**

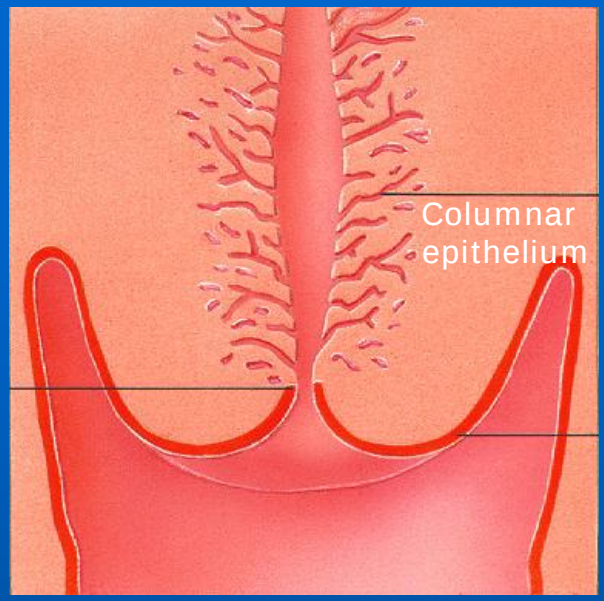
Columnar Epithelium







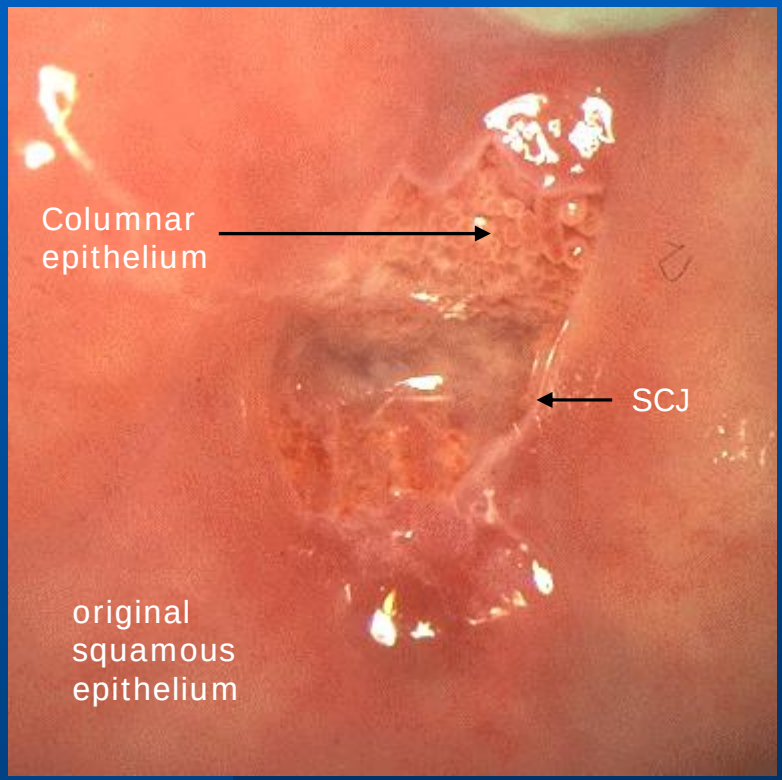
Columnar Epithelium

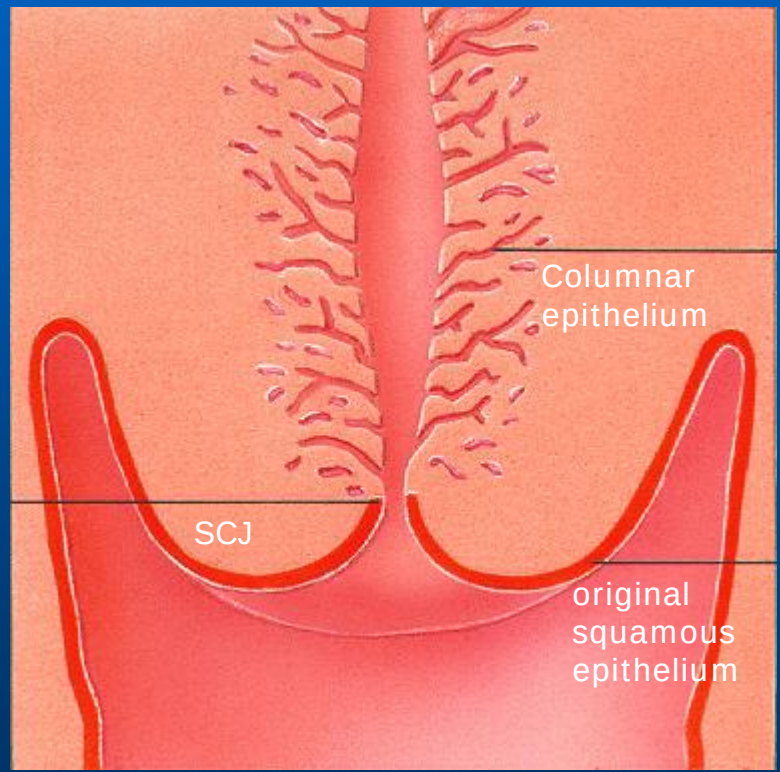


Normal columnar epithelium is easily recognised by its characteristic grape-like or villous appearance.

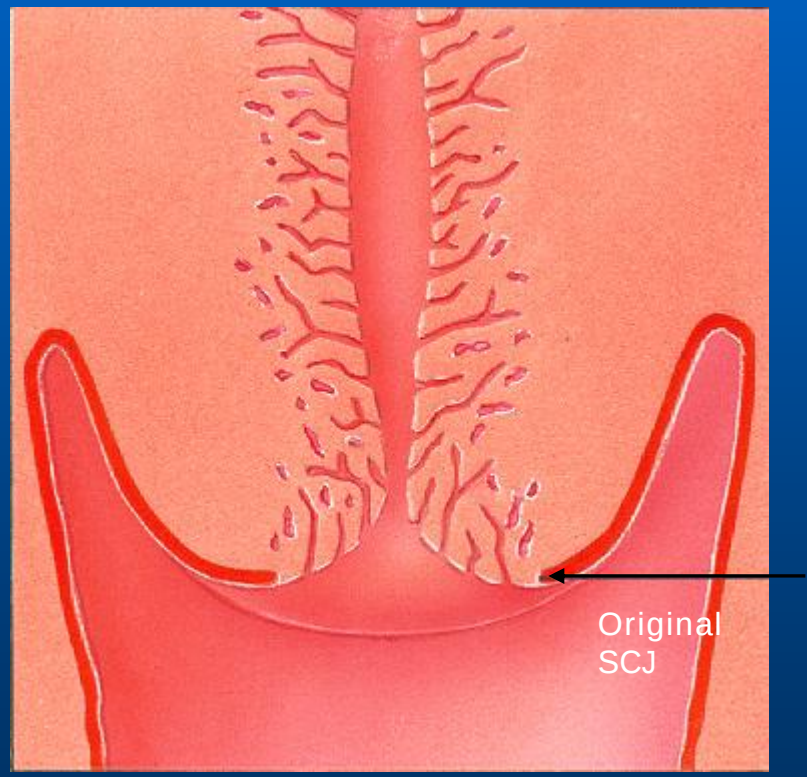
Following application of acetic acid, the villi often appear white and are more easily recognizable.

Normal Cevix, Colposcopy

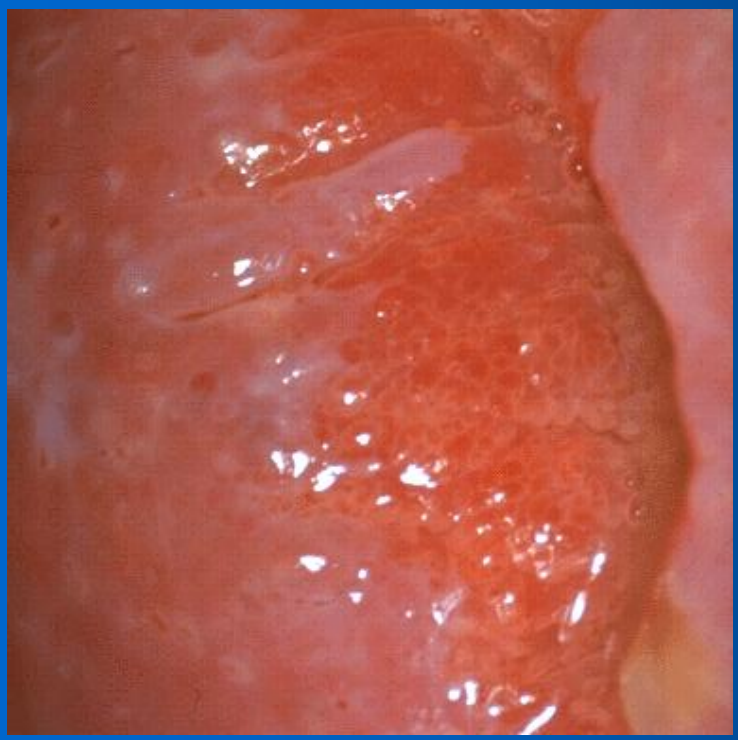


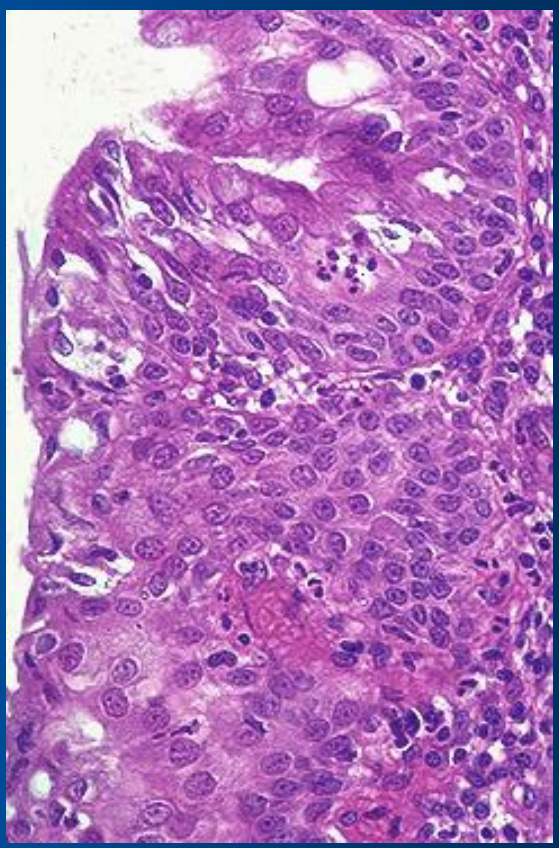


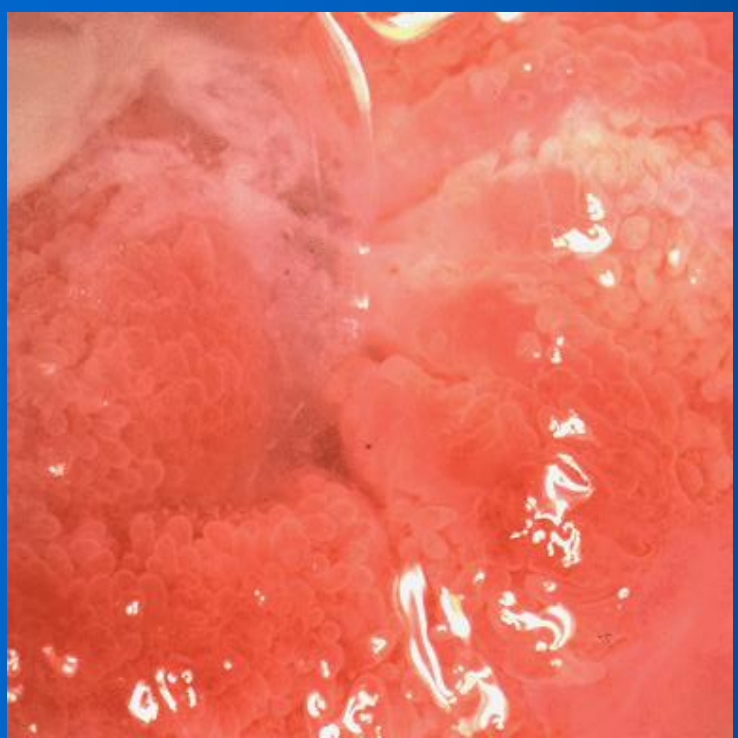
Transformation Zone



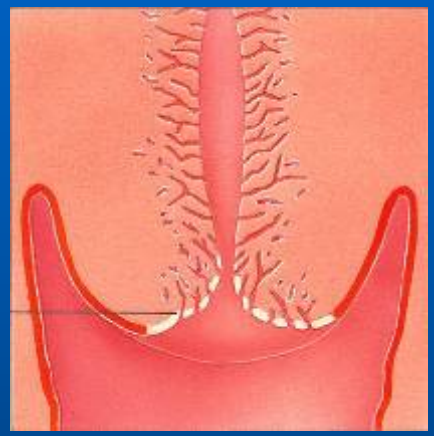
Immature metaplasia







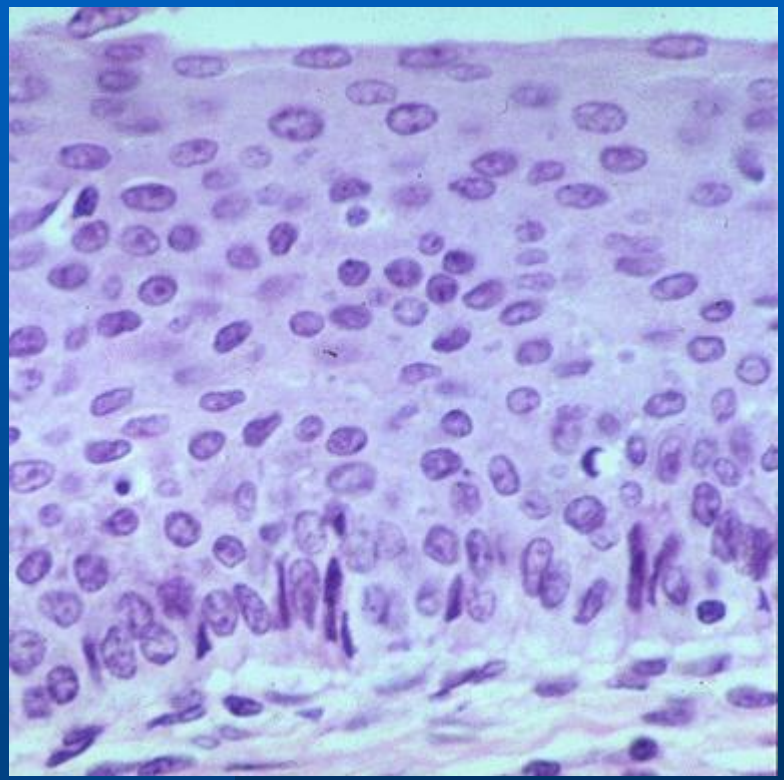
Mature metaplasia

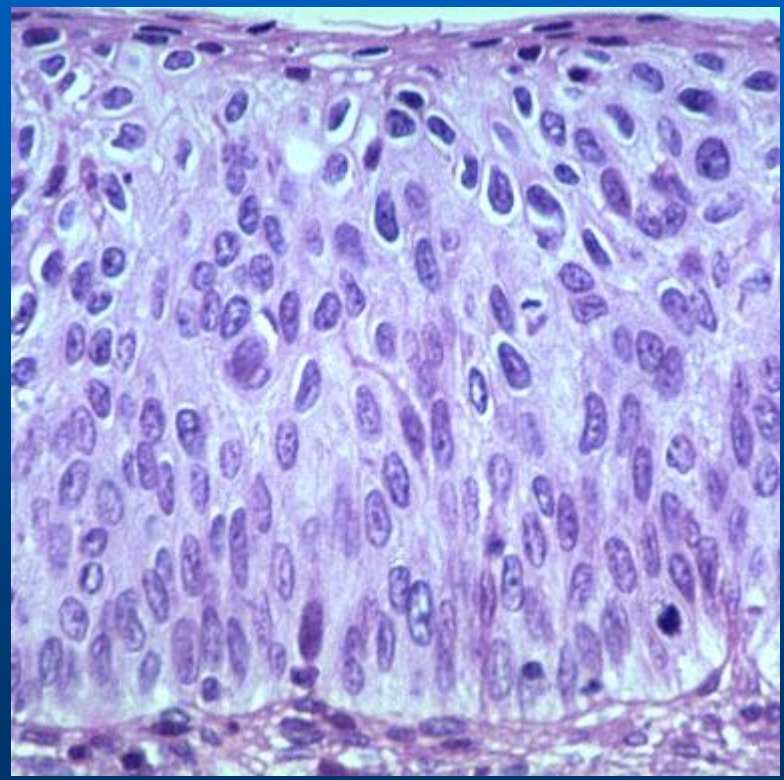


The new epithelium results from transformation of columnar to squamous epithelium, through the process of squamous metaplasia

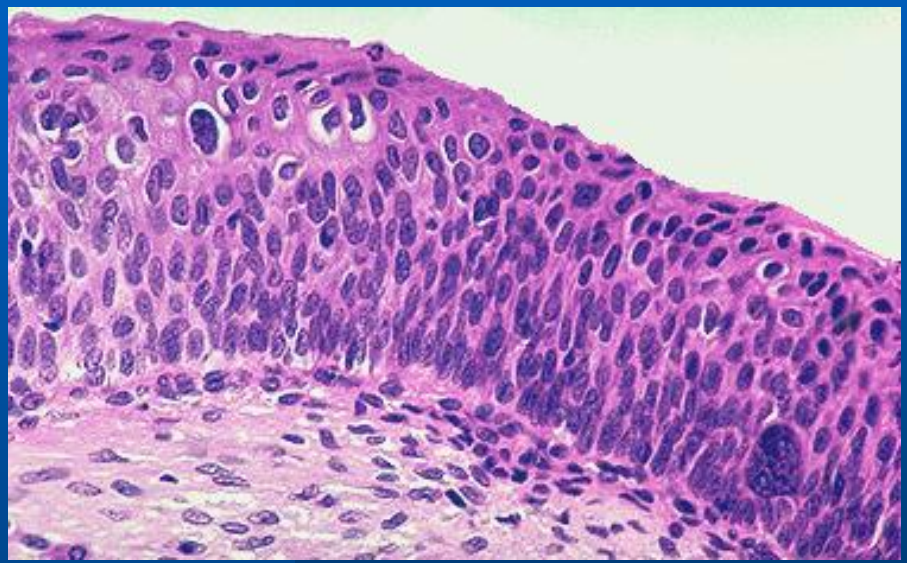
Normal transformation zone

CIN 1 & CIN 2



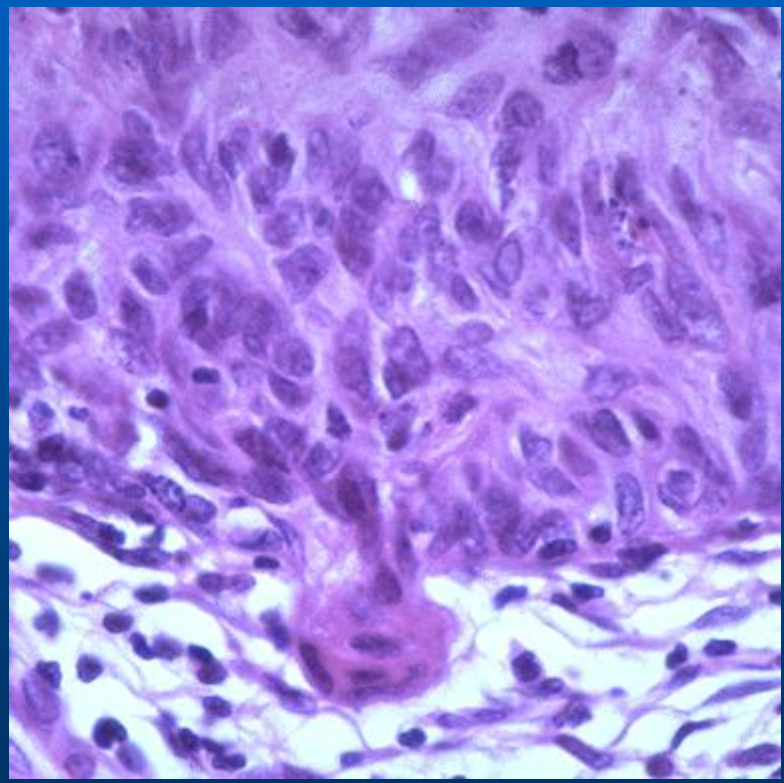


CIN 3



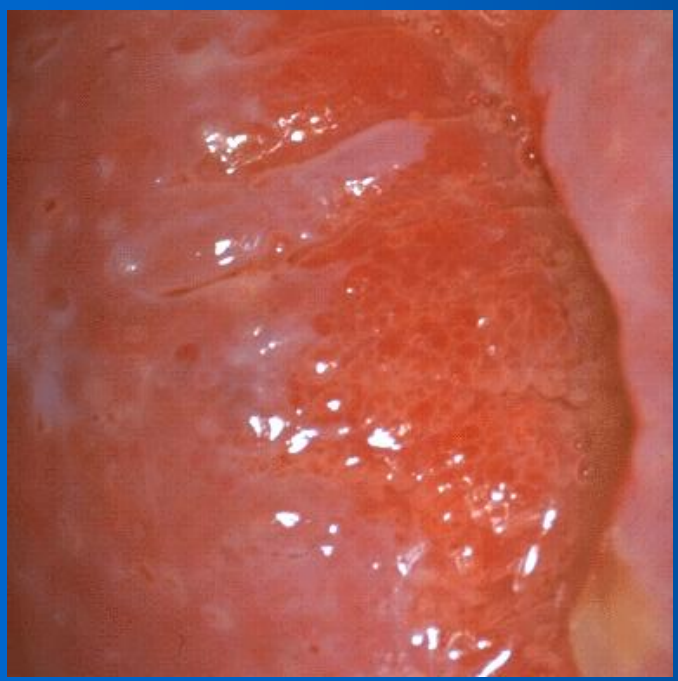
In *CIN 3* differentiation and stratification may be completely absent

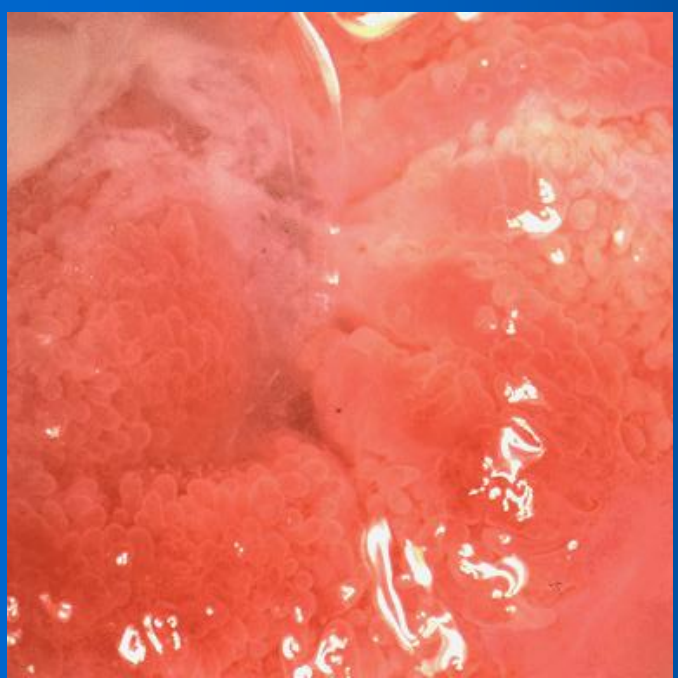
12% ; 2-10 years



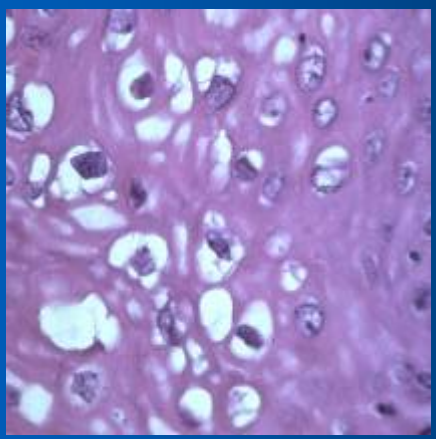
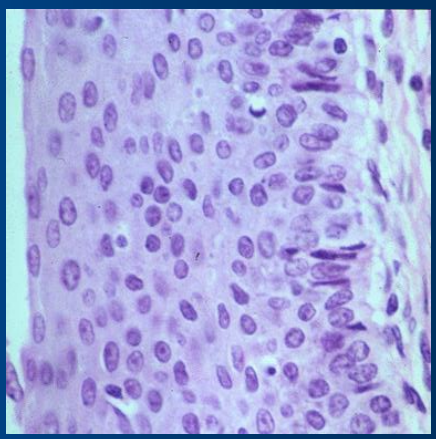
In early stromal invasion a group of cells have breached the epithelial/stromal junction

Acetowhite change





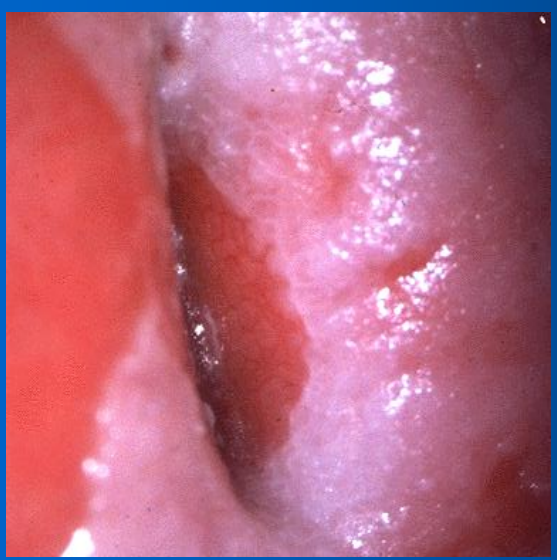
Acetowhite change

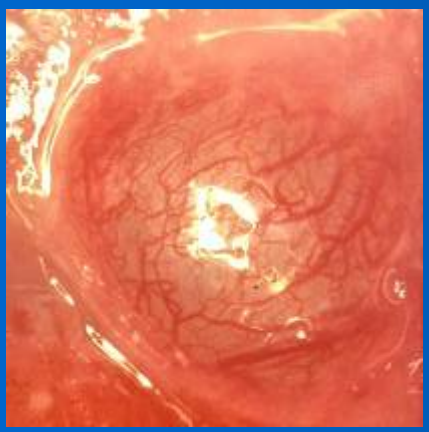




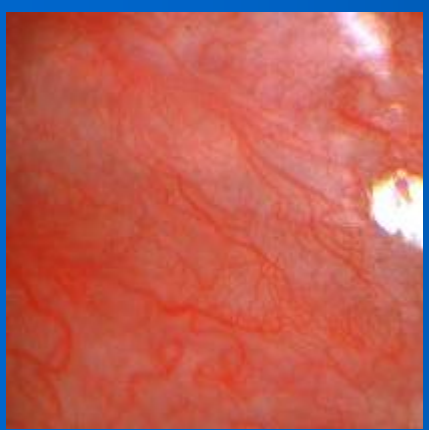
Acetowhite change

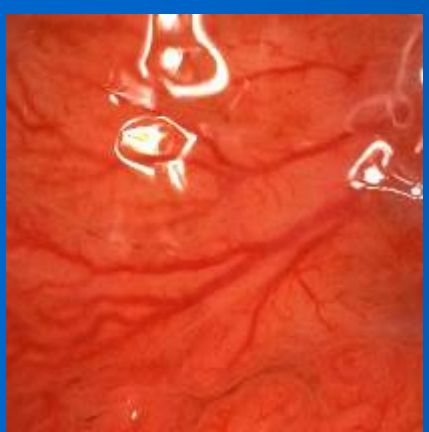


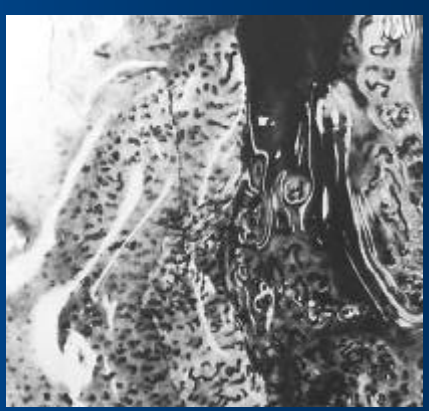
Vascular pattern



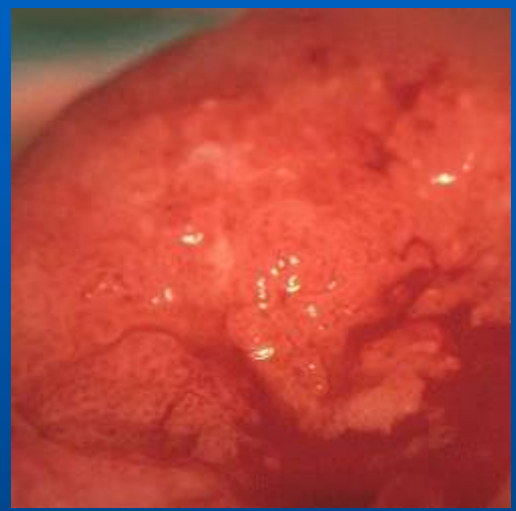


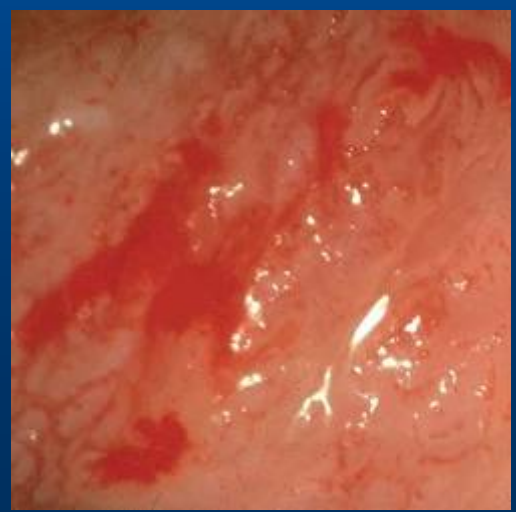


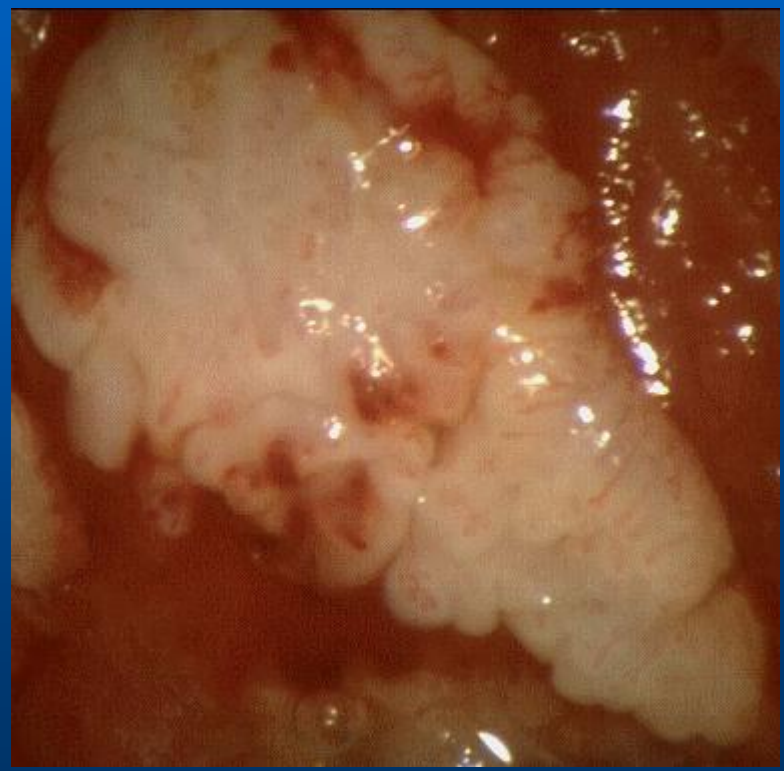


Invasive

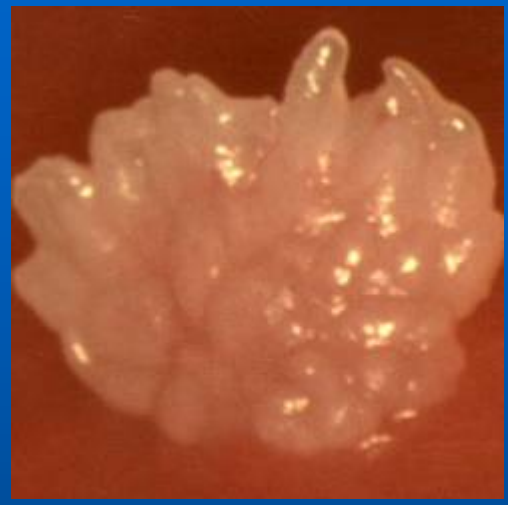
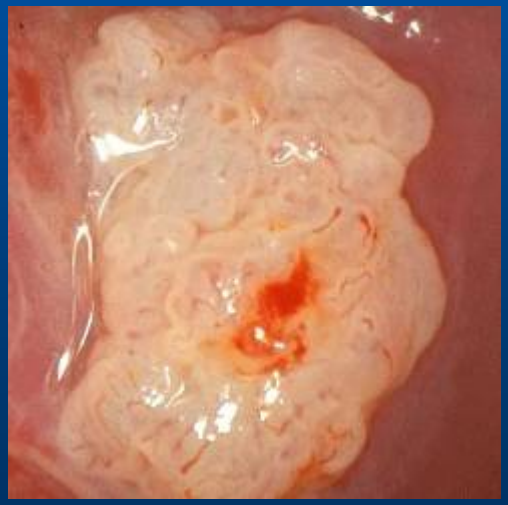


Vulval condylomata acuminata

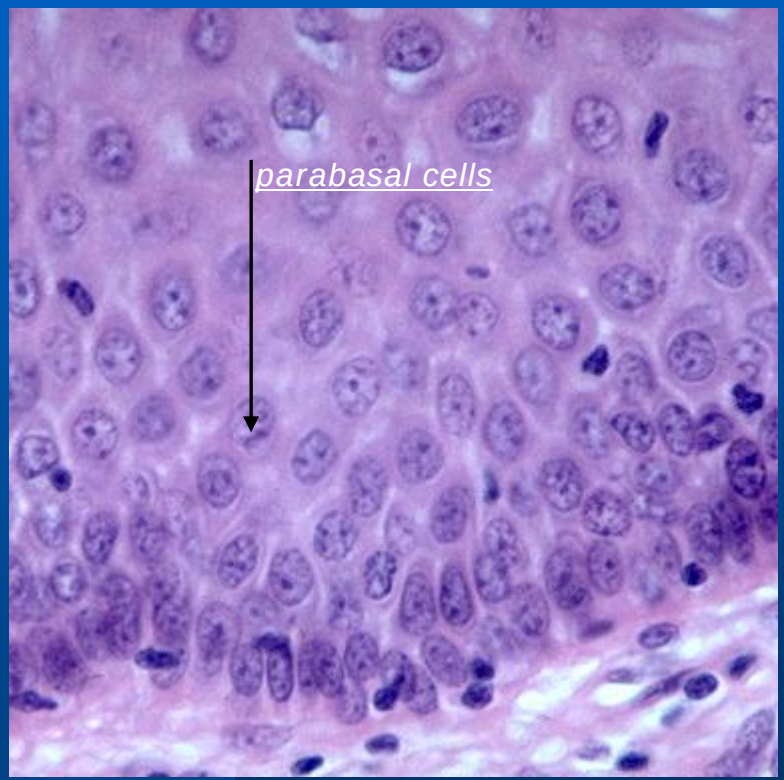


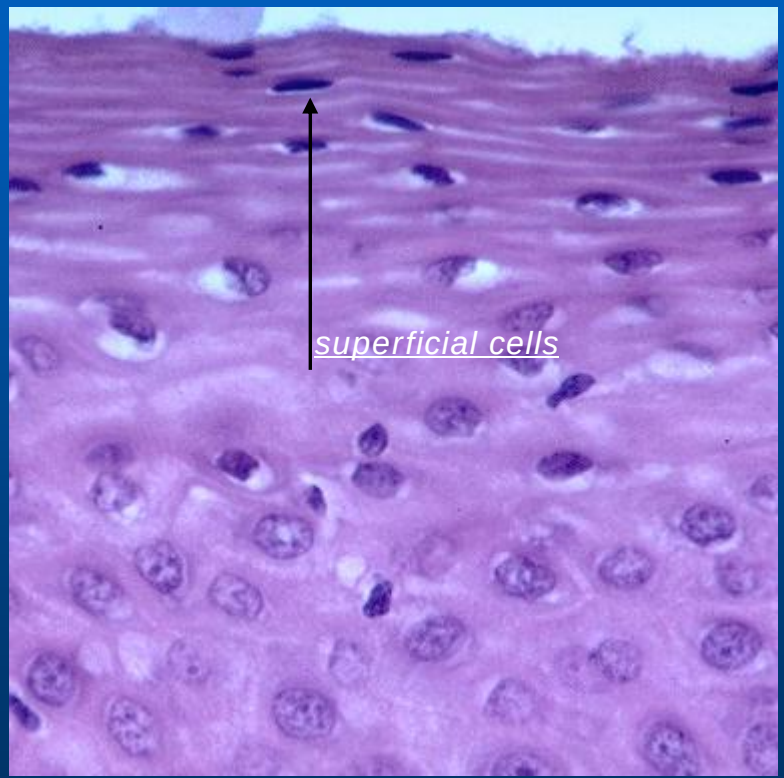
Condyloma



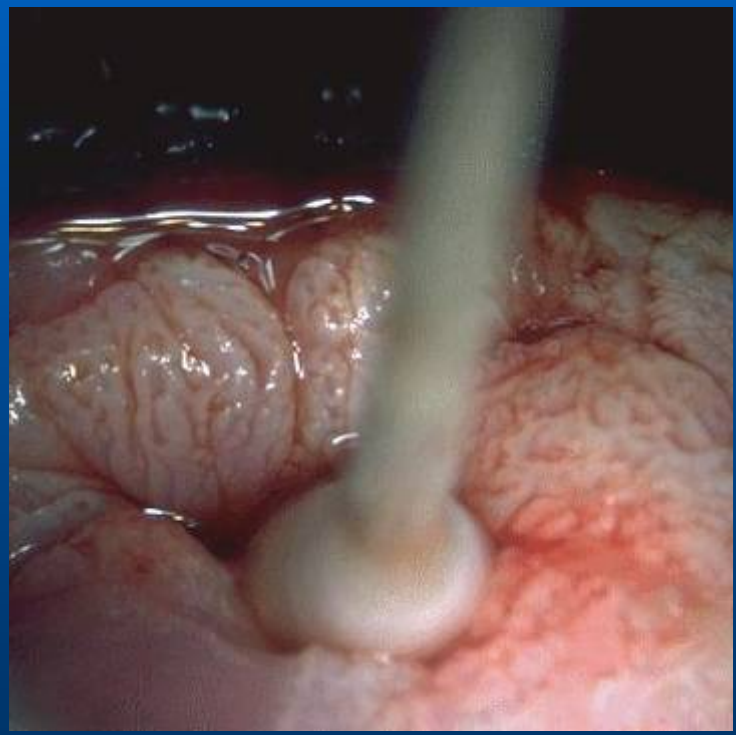



Squamous Epithelium





#1



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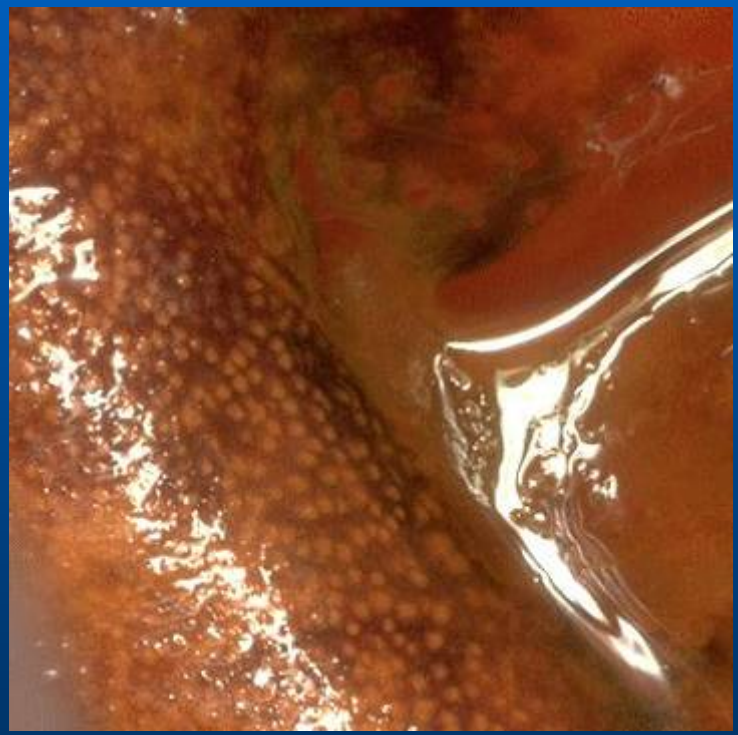
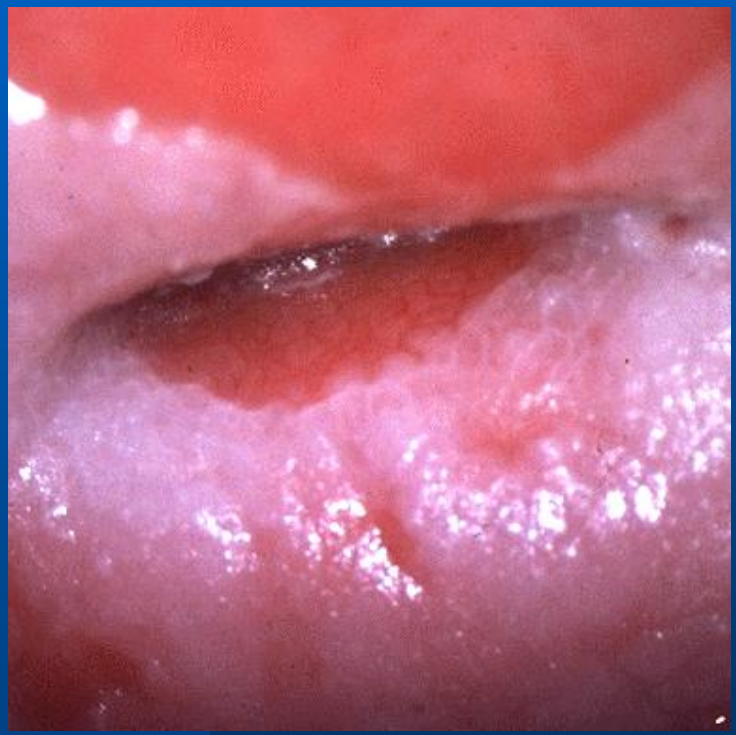


#3



#4

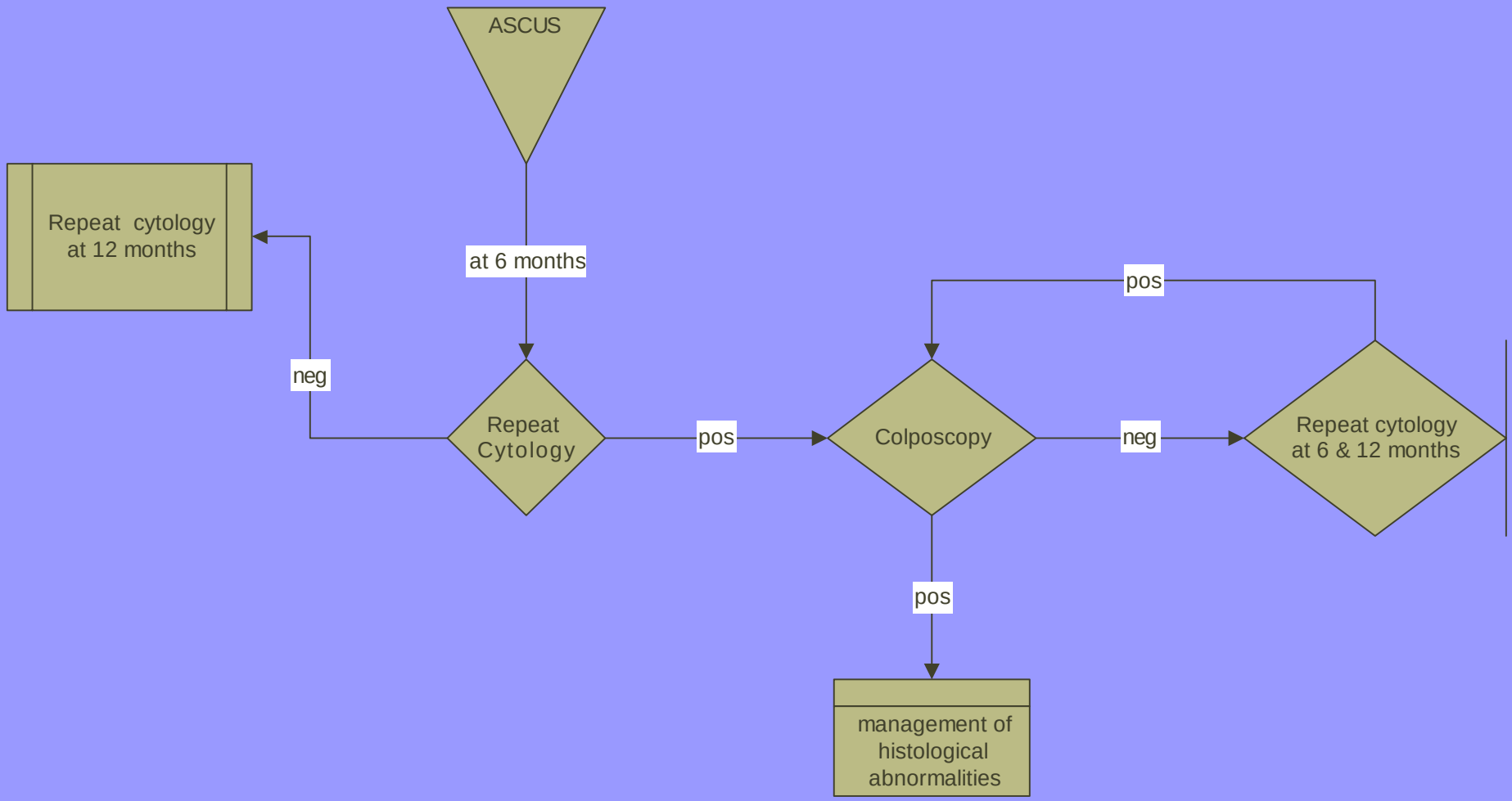
#5

Nomenclature

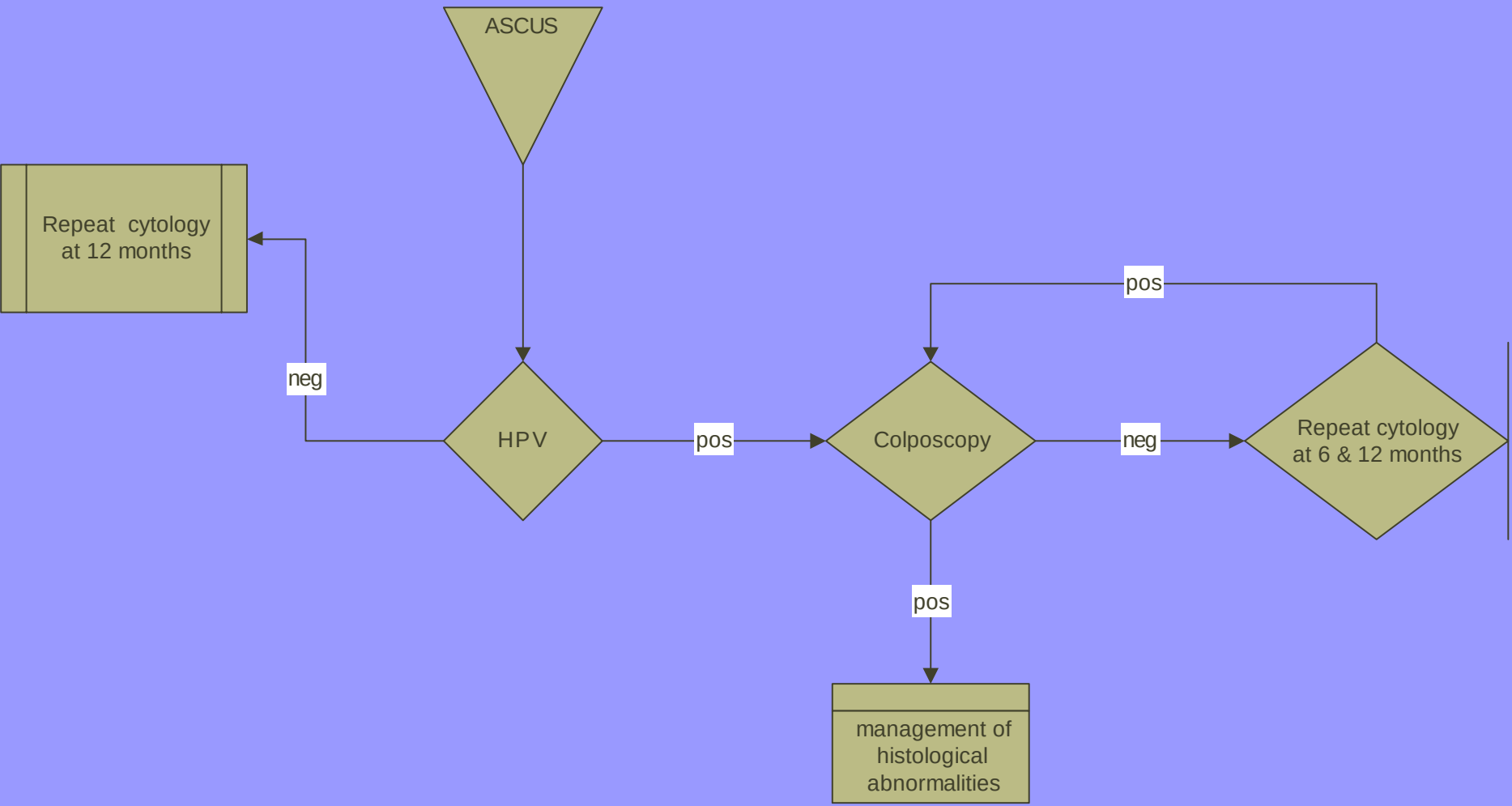
- The concept of *cervical intraepithelial neoplasia* proposes that all degrees of abnormality should be given the same name, as part of a continuous spectrum of disease

CIN I	CIN II	CIN III	
Mild Dysplasia	Moderate Dysplasia	Severe Dysplasia	Carcinoma in situ

ASC-US

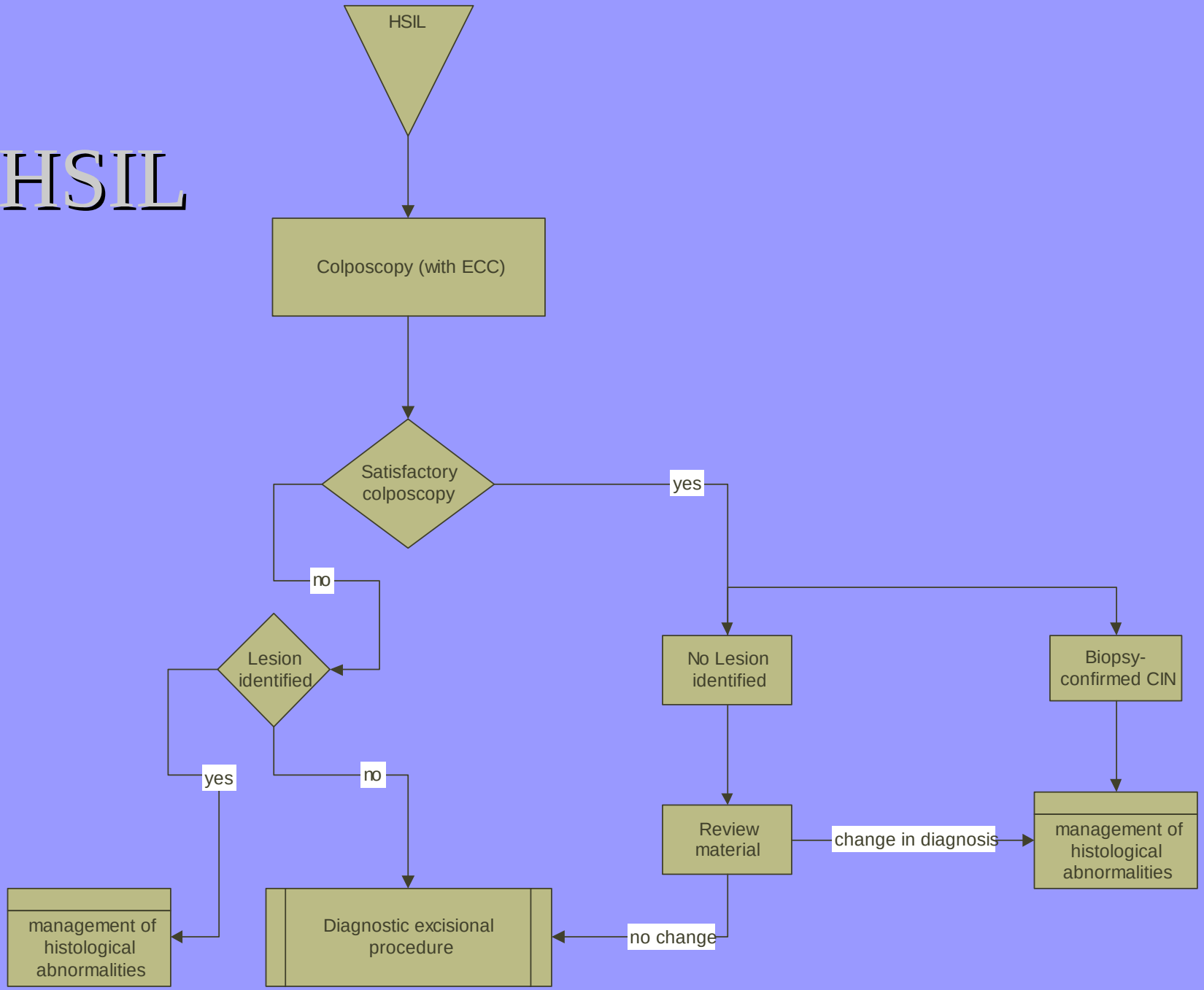

ASCUS
at 6 months
Repeat cytology at 12 months
neg
Repeat Cytology
pos
Colposcopy
pos
neg
Repeat cytology at 6 & 12 months
pos
management of histological abnormalities

ASC-US

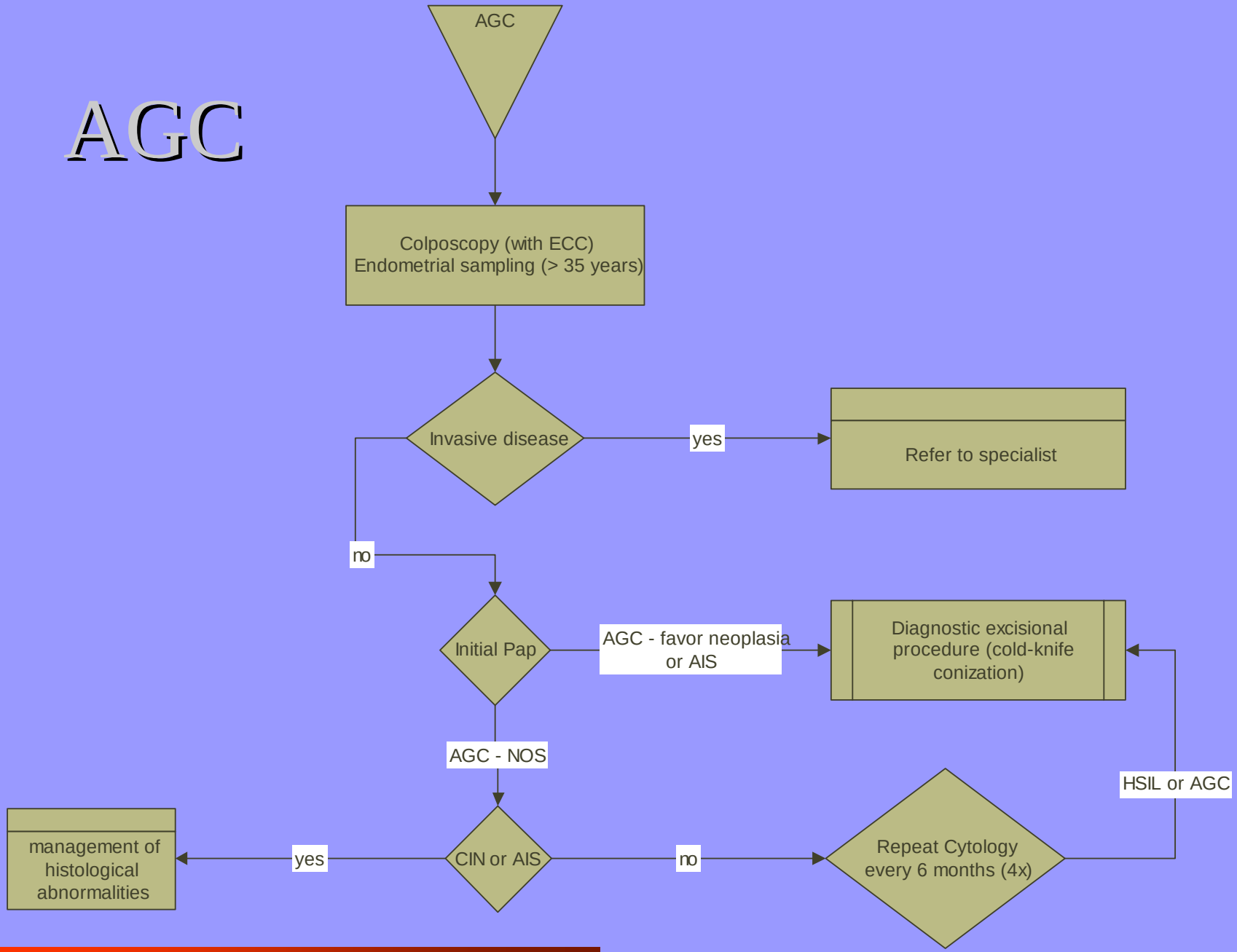


Management Option 1.

HSIL

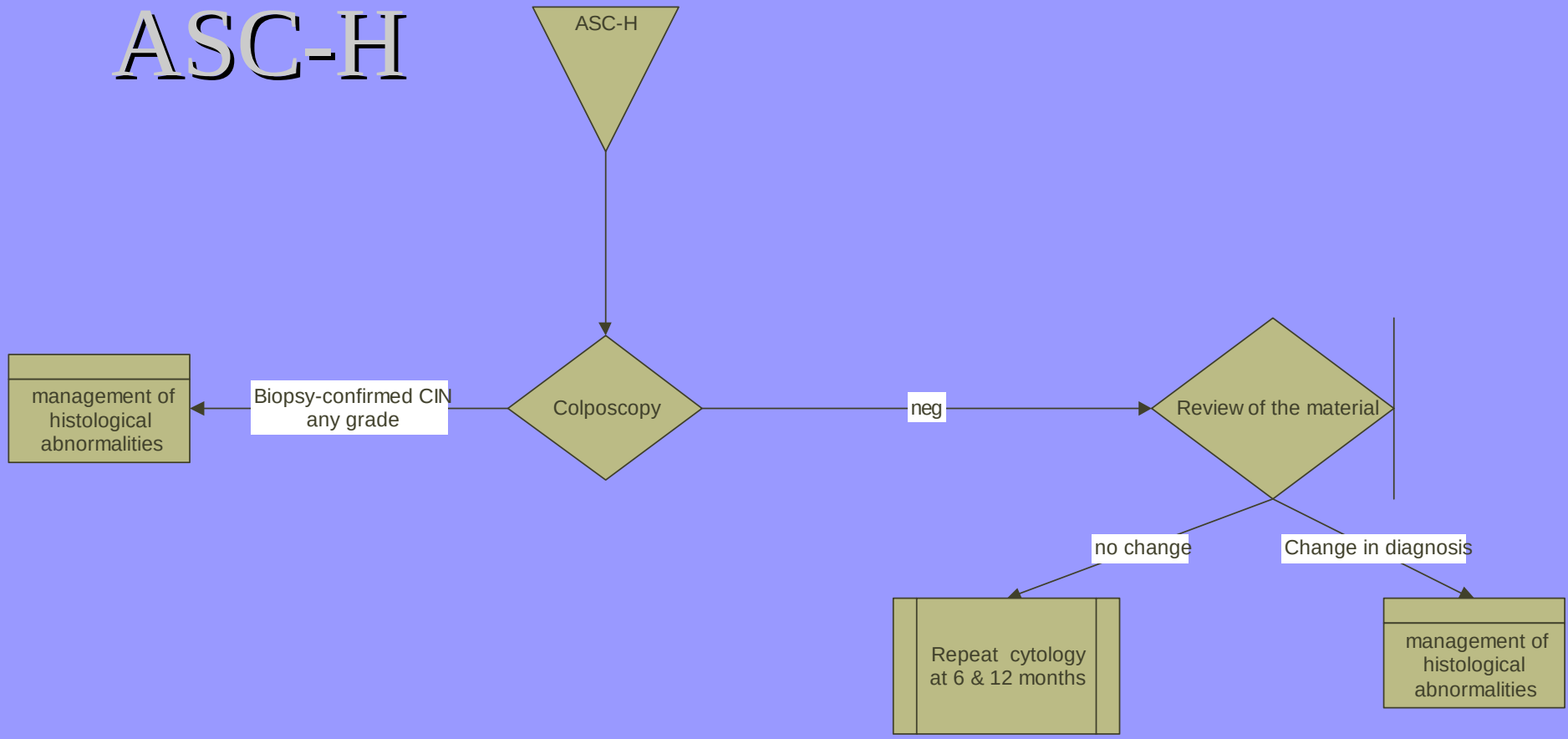

HSIL
Colposcopy (with ECC)
Satisfactory colposcopy
yes
no
Lesion identified
yes
no
No Lesion identified
Biopsy-confirmed CIN
Review material
change in diagnosis
management of histological abnormalities
management of histological abnormalities
Diagnostic excisional procedure
no change

AGC



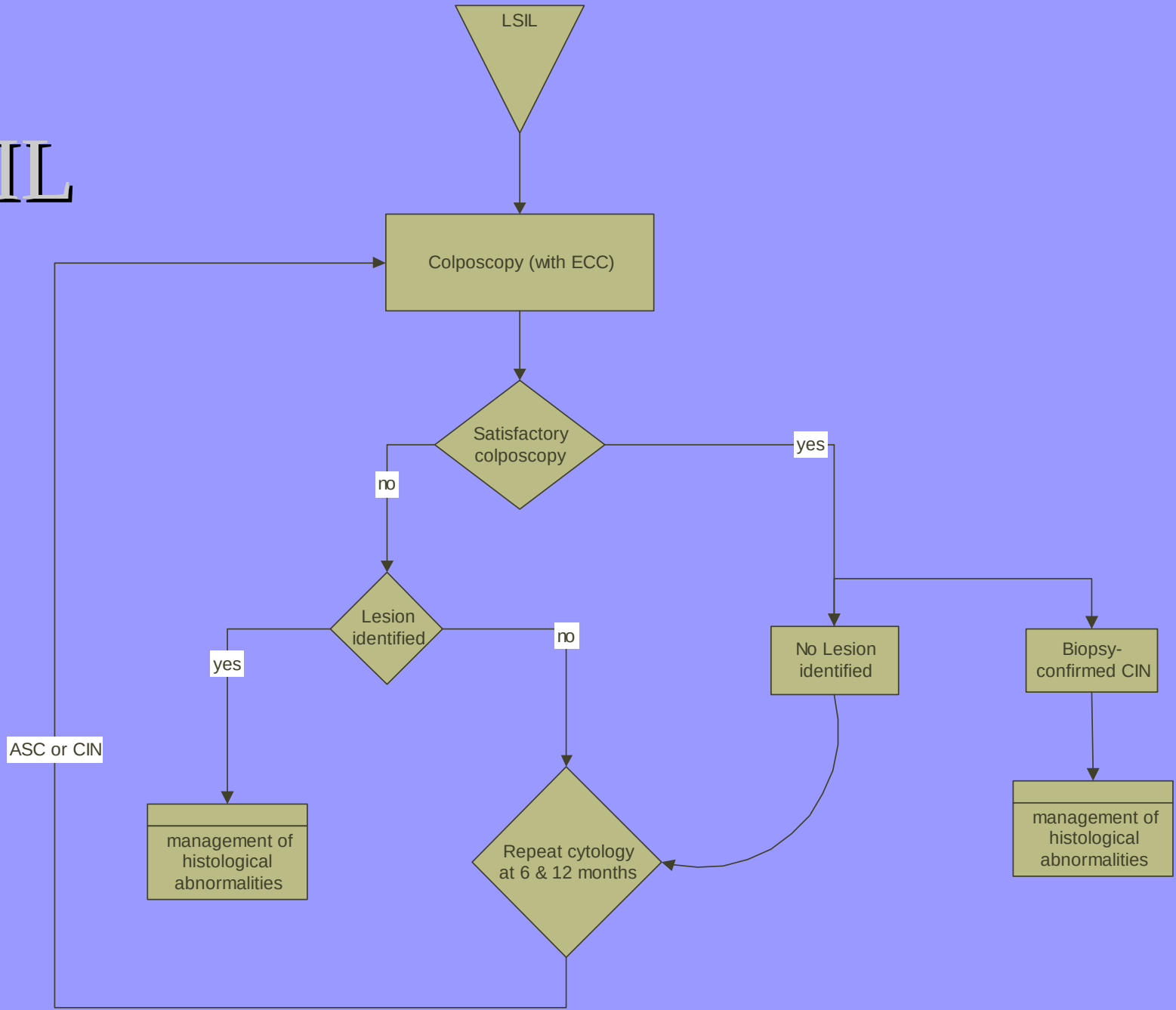
Management AGC (Atypical Glandular Cells)

ASC-H

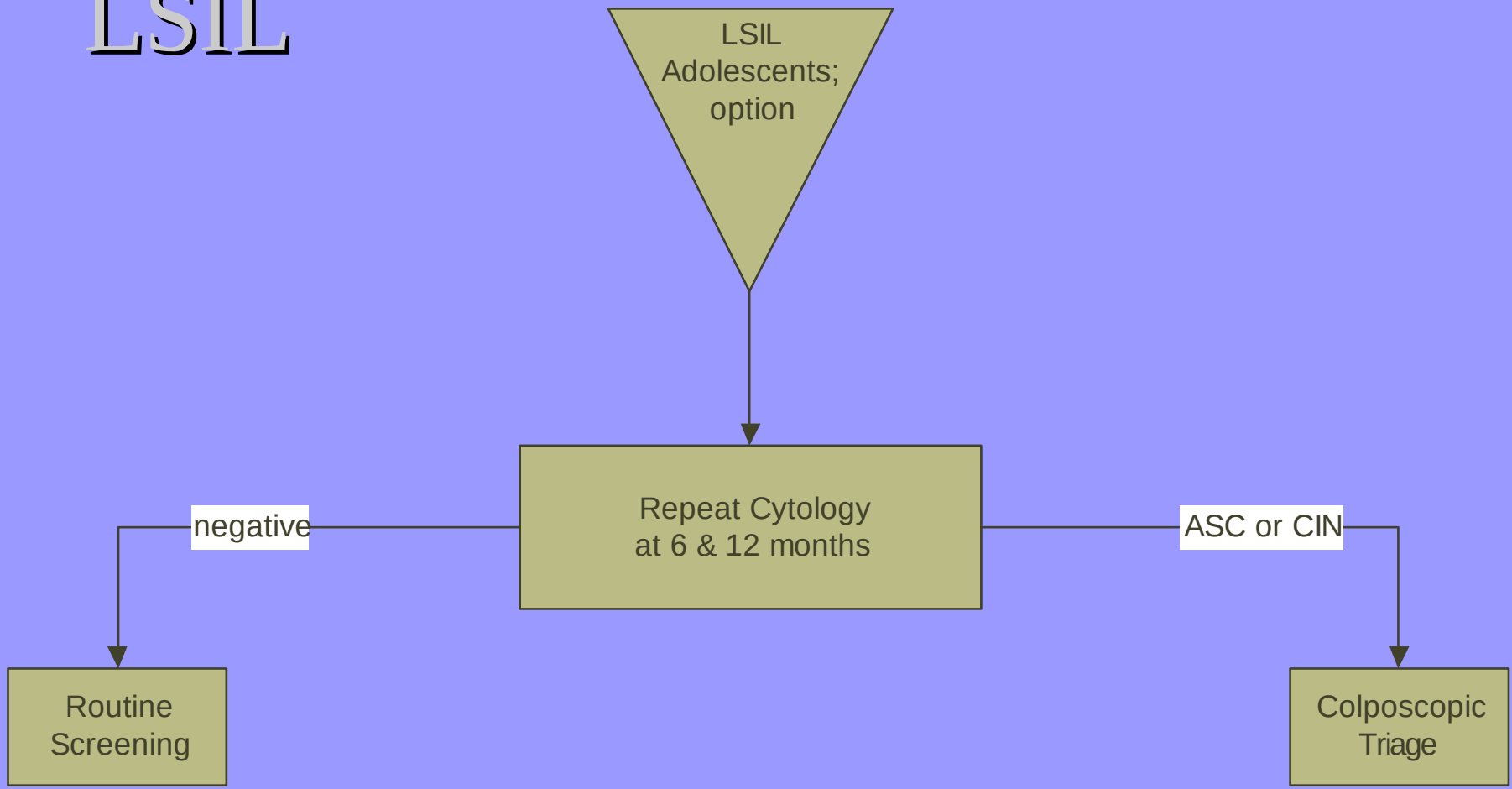


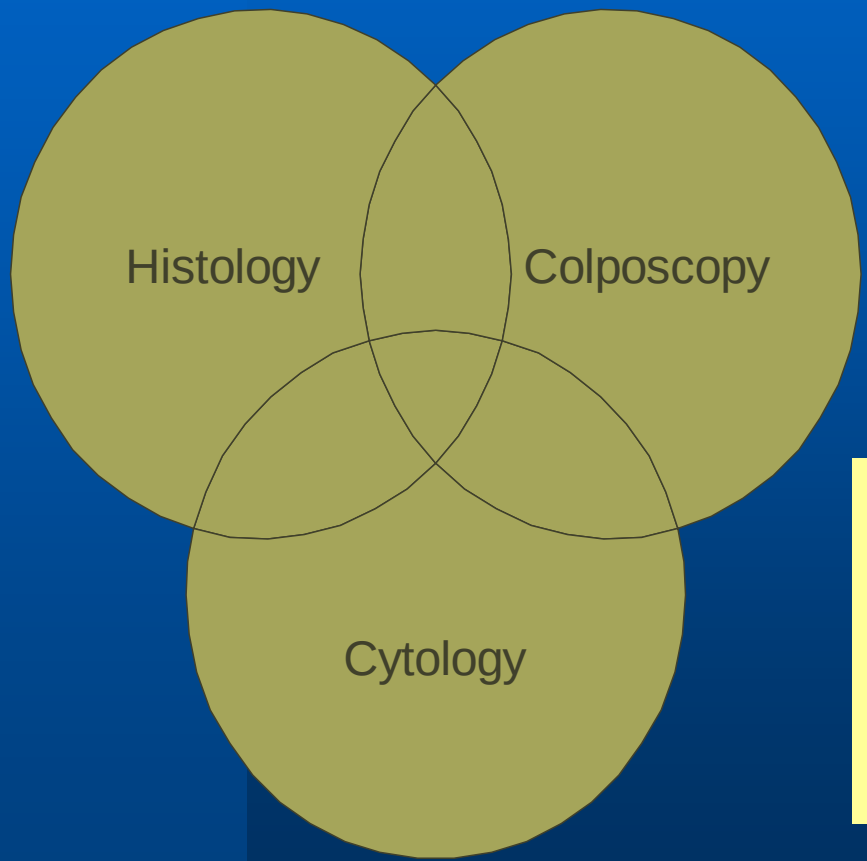
Management ASC-H (cannot exclude high-grade SIL)

LSIL


LSIL
Colposcopy (with ECC)
Satisfactory colposcopy
yes
no
Lesion identified
yes
no
ASC or CIN
management of histological abnormalities
Repeat cytology at 6 & 12 months
No Lesion identified
Biopsy-confirmed CIN
management of histological abnormalities

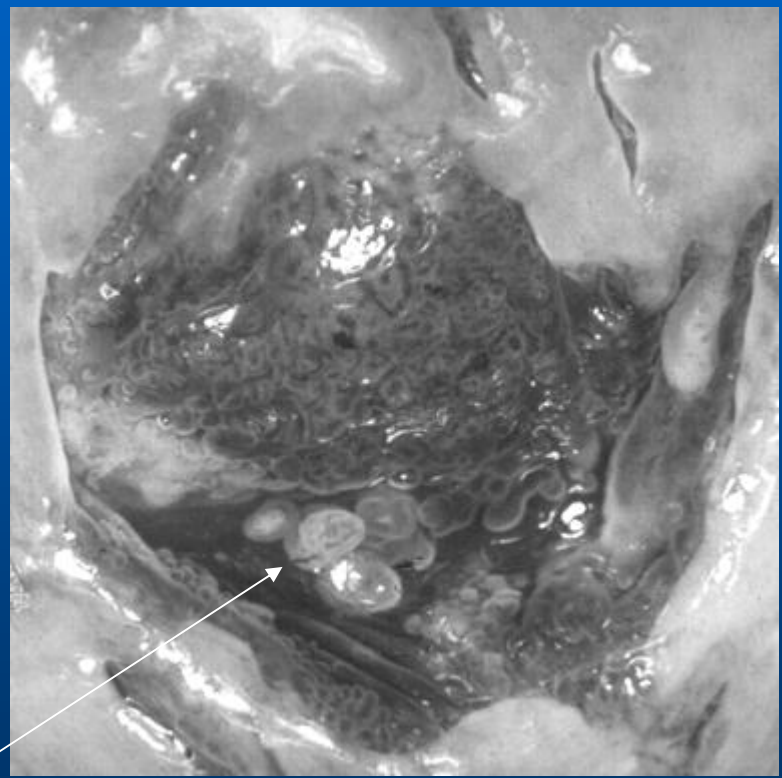
LSIL


LSIL
Adolescents;
option
Repeat Cytology
at 6 & 12 months
negative
ASC or CIN
Routine
Screening
Colposcopic
Triage



It has been estimated that annual Pap smear testing reduces a woman's chance of dying of cervical cancer from 4 in 1000 to about 5 in 10,000 – a difference of almost 90%

Microglandular endocervical hyperplasia



polypoidal villi

non-pathologic condition

Nomenclature

CIN I	CIN II	CIN III	
Mild Dysplasia	Moderate Dysplasia	Severe Dysplasia	Carcinoma in situ

Screening

It has been estimated that annual Pap smear testing reduces a woman's chance of dying of cervical cancer from 4 in 1000 to about 5 in 10,000 – a difference of almost 90%

Microglandular endocervical hyperplasia