

LIV

the hospital for **L**eading **I**nternational **V**ision



LGSIL Cytology, Histology, and Colposcopy

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Cervical Cytology

Pap	WHO	CIN	Bethesda
Class I	Normal		Normal
Class II	Atypic inf.		Benign or ASC
			ASC-US and ASC-H
Class III	Dysplasia		SIL
	Mild	CIN 1	LGSIL
	Moderate	CIN 2	HGSIL
Class IV	Severe	CIN 3	
Class V	CIS		

Cervical Cancer Lifetime Risk

Women
Unchecked

1/100

Women LGSIL
Followed Up

1/500

All CINs (After
Treatment)

1/250

HPV Infection
Without Treatment

5-10/100

Natural History of CINs

	Regression	Persistence	Progression to CIN 3	Invasive Cancer
CIN 1	%60	%40	%10	%1
CIN 2	%40	%40	%20	%5
CIN 3	%33			>%12

Cytologic and Histologic Characteristics of LGSIL

Enlargement of the cell nucleus to at least three times the size of a normal intermediate cell nucleus

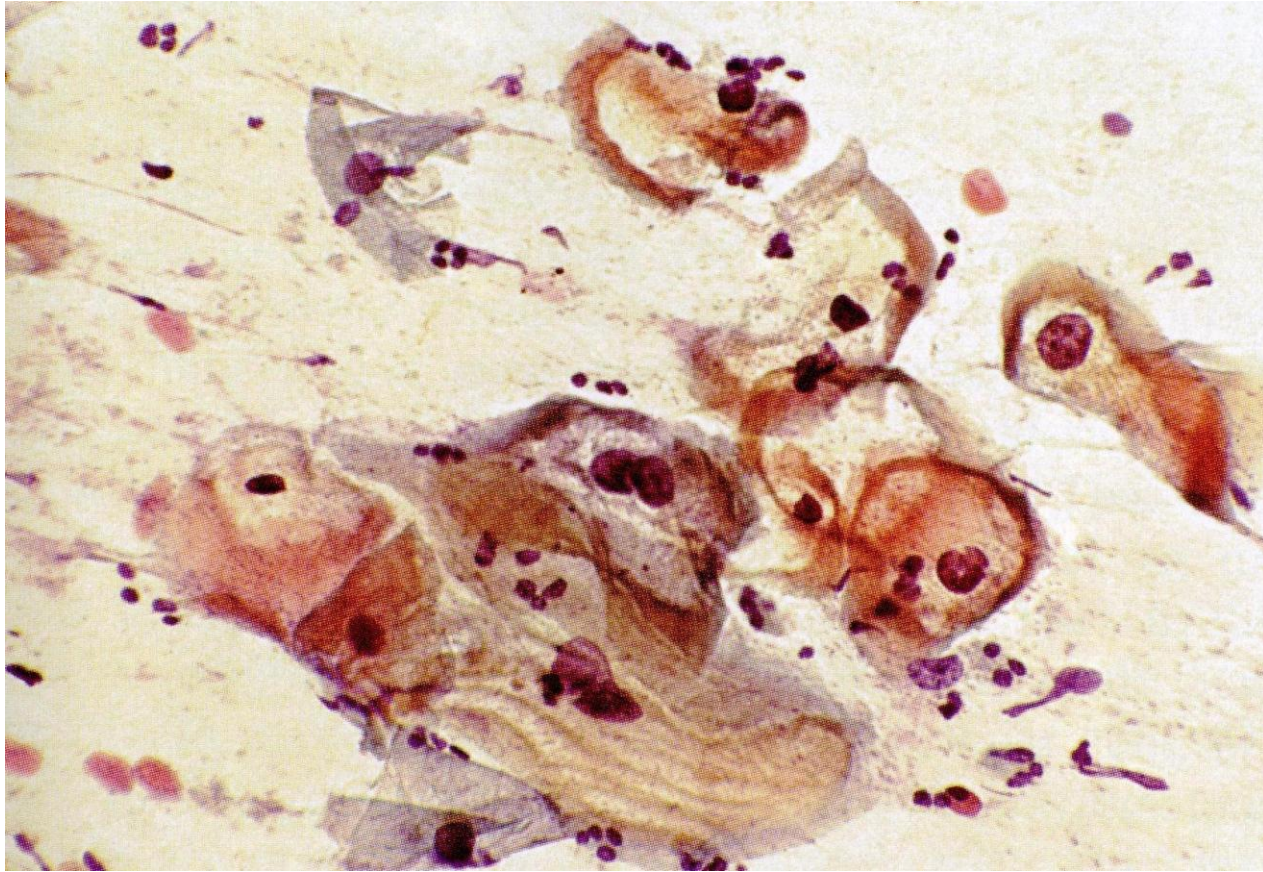
Hyperchromatic chromatin

Frequent binucleation

The koilocyte with its characteristic perinuclear halo or cytoplasmic clearing

- The cytoplasm is frequently pushed to the periphery of the cell
-

Cytologic Characteristics



Cervical Intraepithelial Neoplasia (CIN)

CIN 1

CIN 2

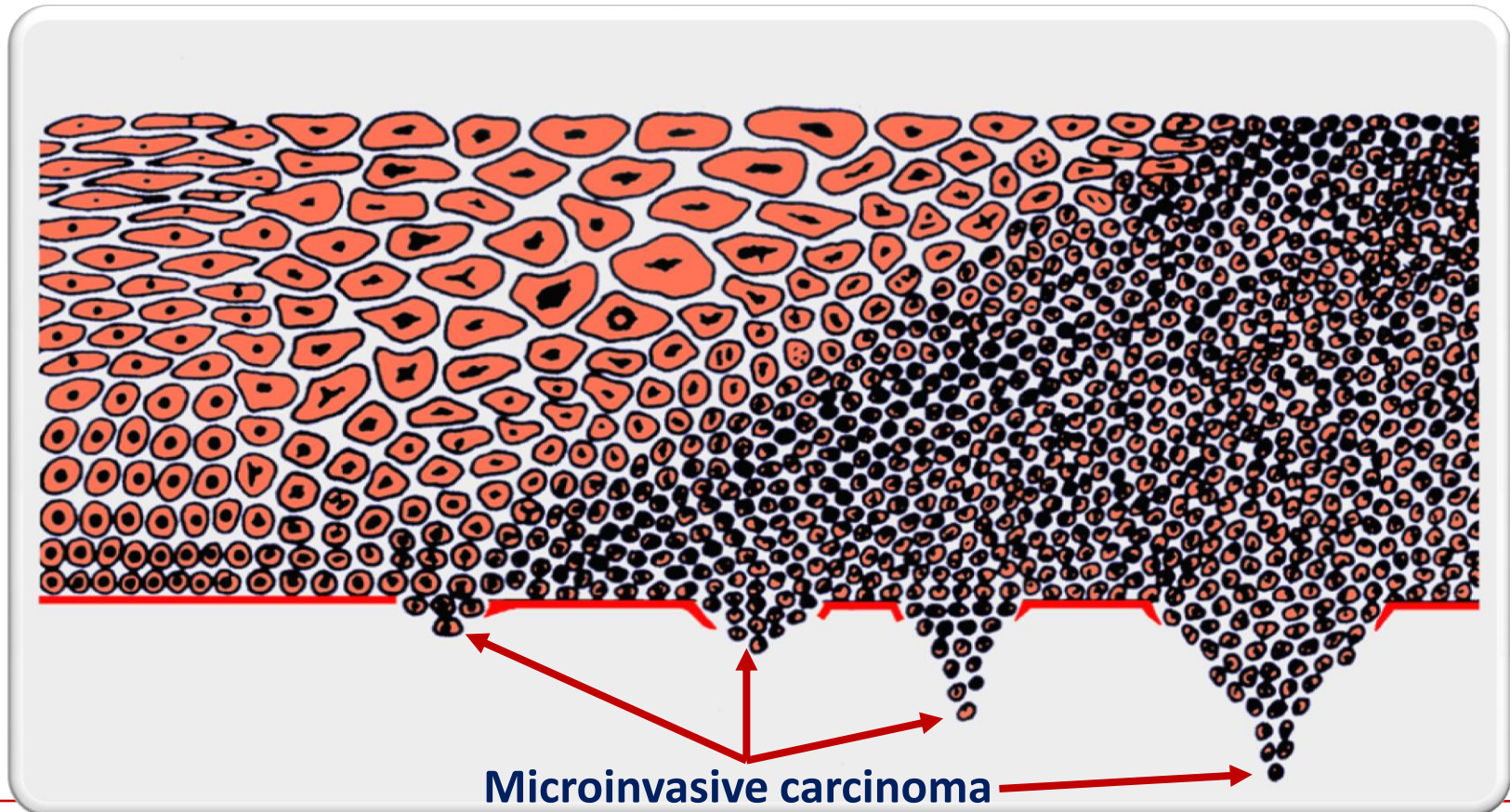
CIN 3

Normal epithelium

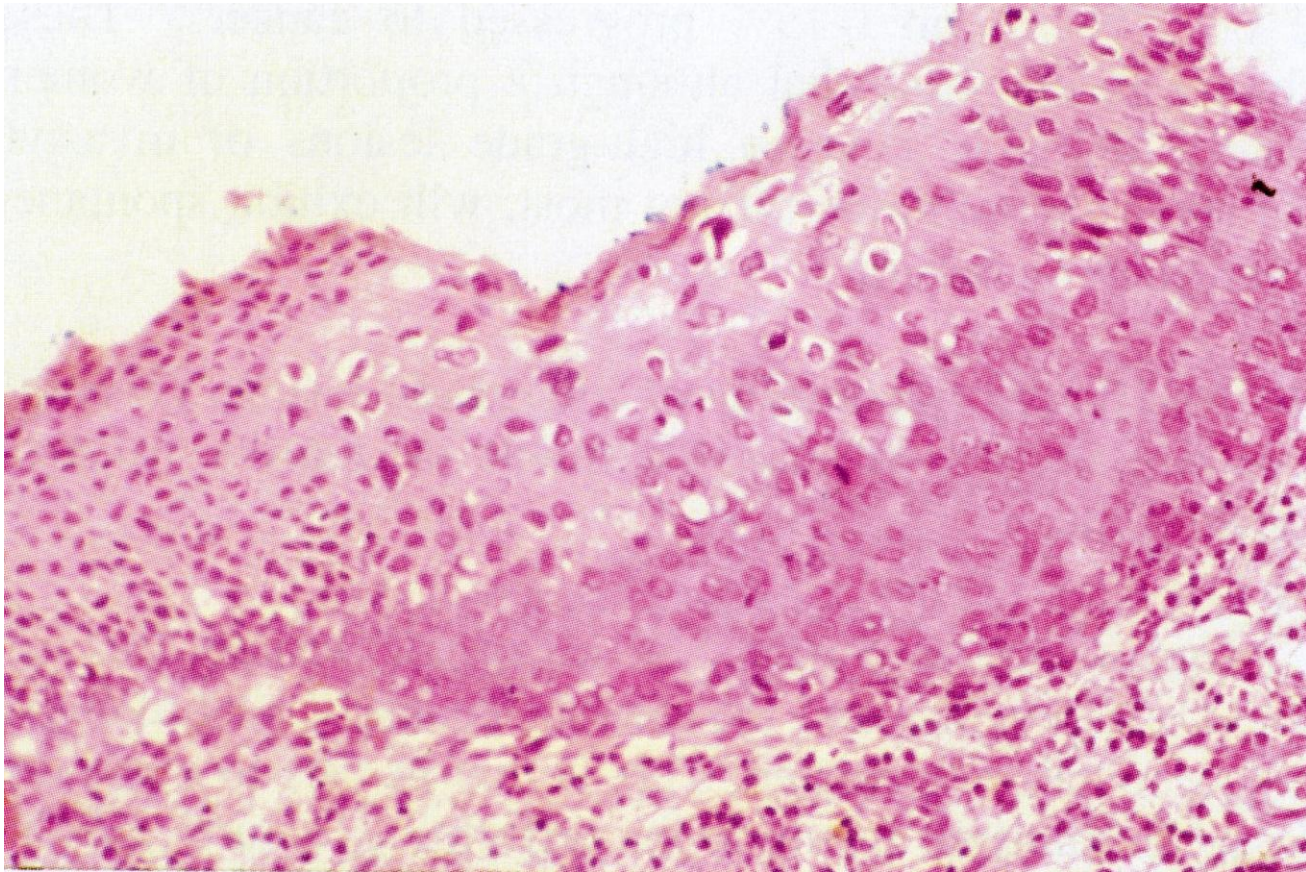
Lower third

Two third

More than two third



Histologic Characteristics



Unsatisfactory Colposcopy in LGSIL

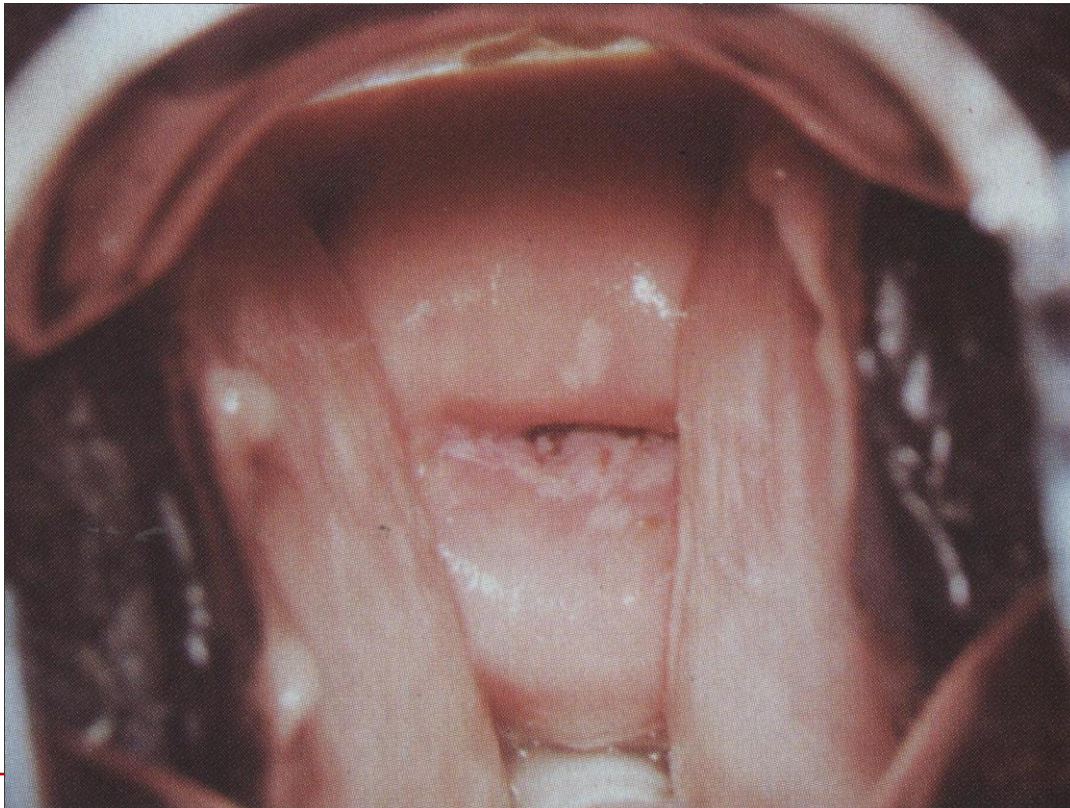


Satisfactory Colposcopy in LGSIL



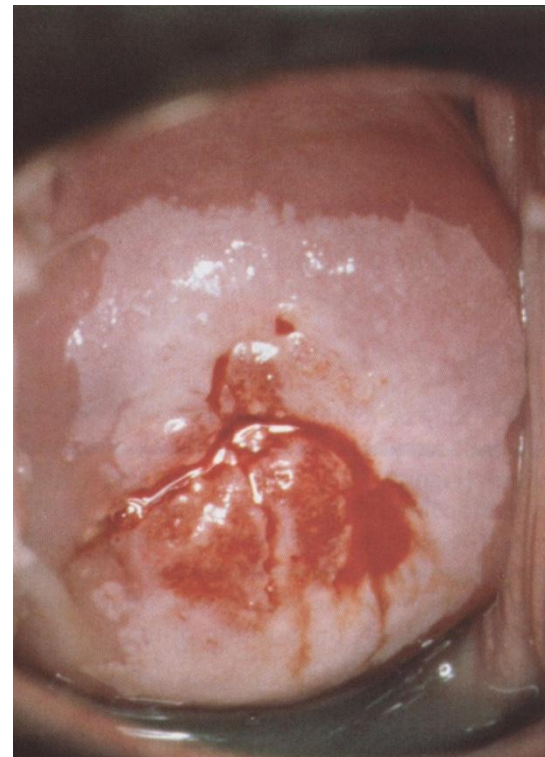
Localization

- Usually SCJ
- Any part of ectocervix or endocervix



Localization

- Better diagnosis at mature transformation zone
- Hard to diagnose at immature metaplasia



Immature Metaplasia



Immature Metaplasia & CIN1



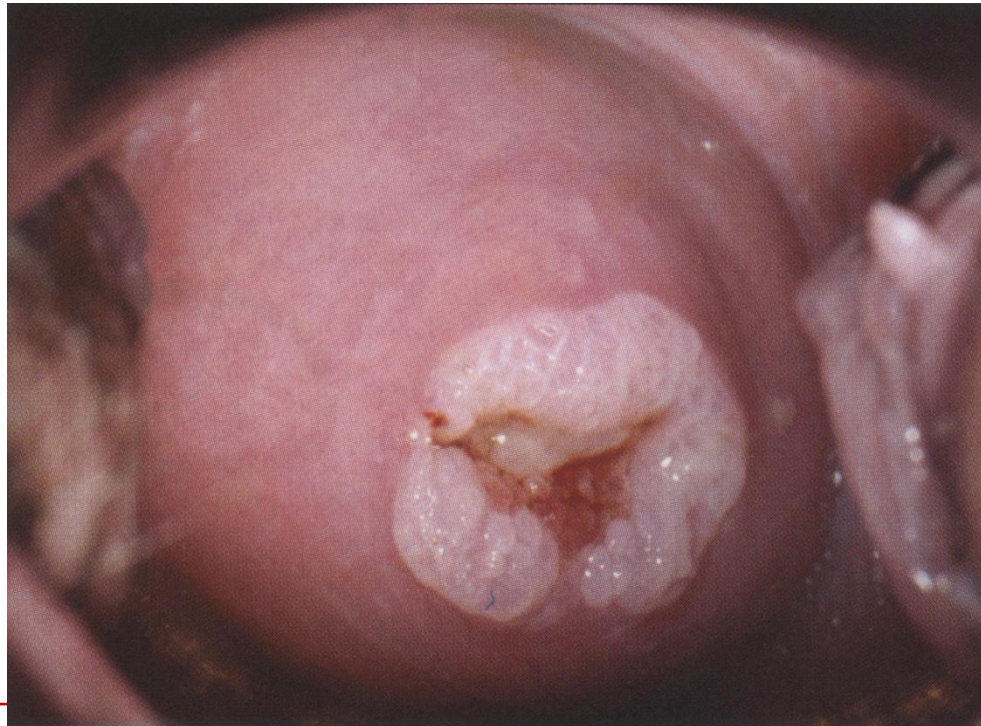
Contour

- Usually macular contour



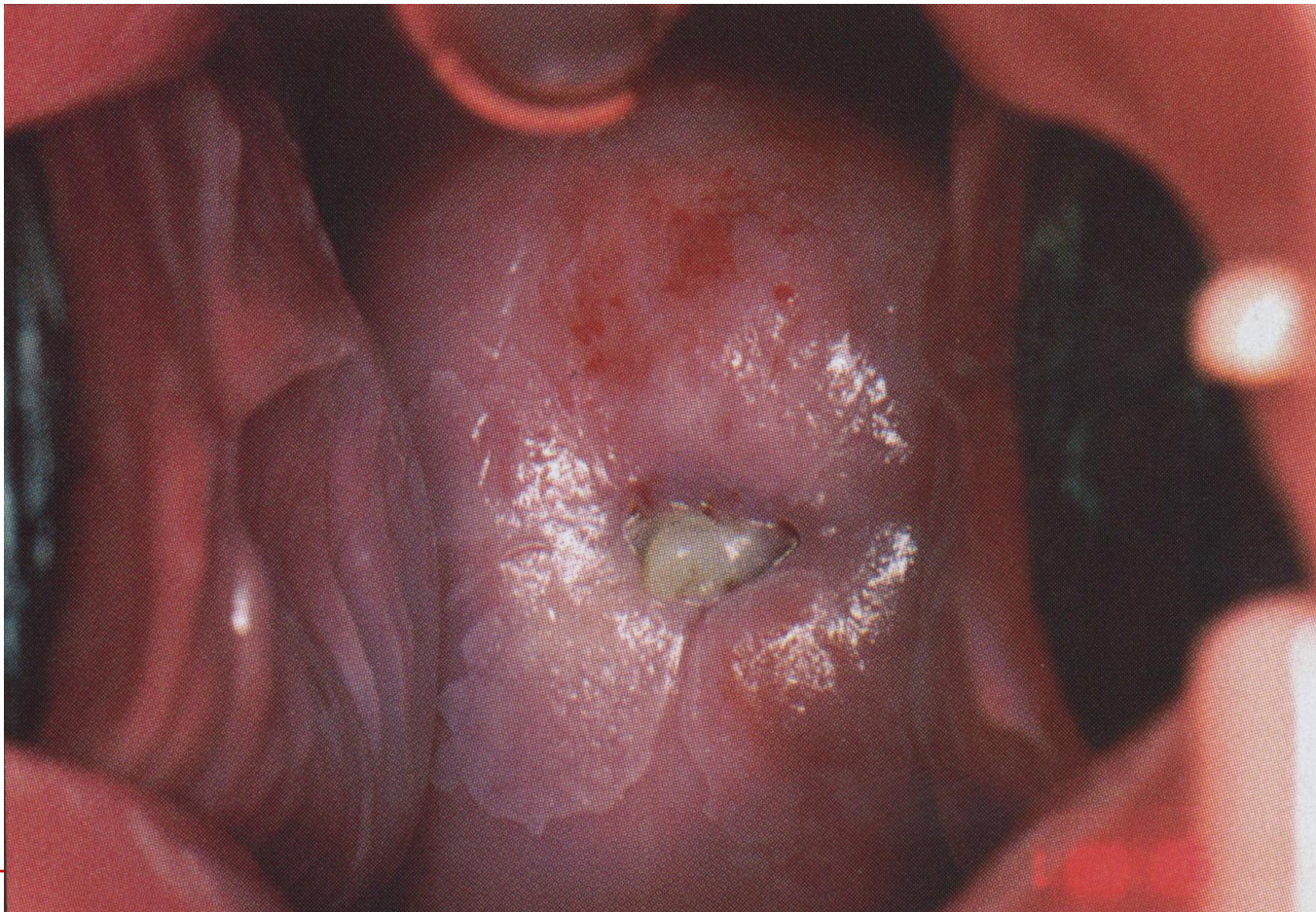
Contour

- Micropapillary, papillary, papular and bulging contours
- Occasionally brain-like appearance



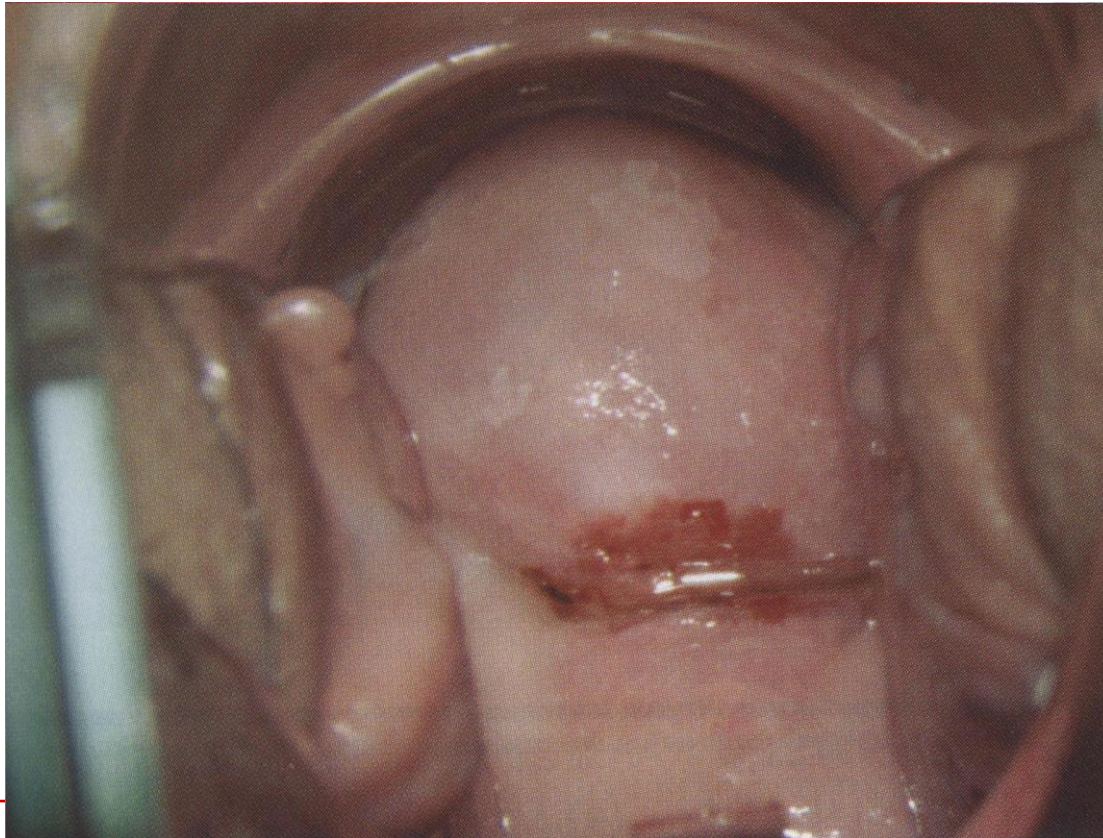
Margin

- Diffuse and asymmetrically shaped

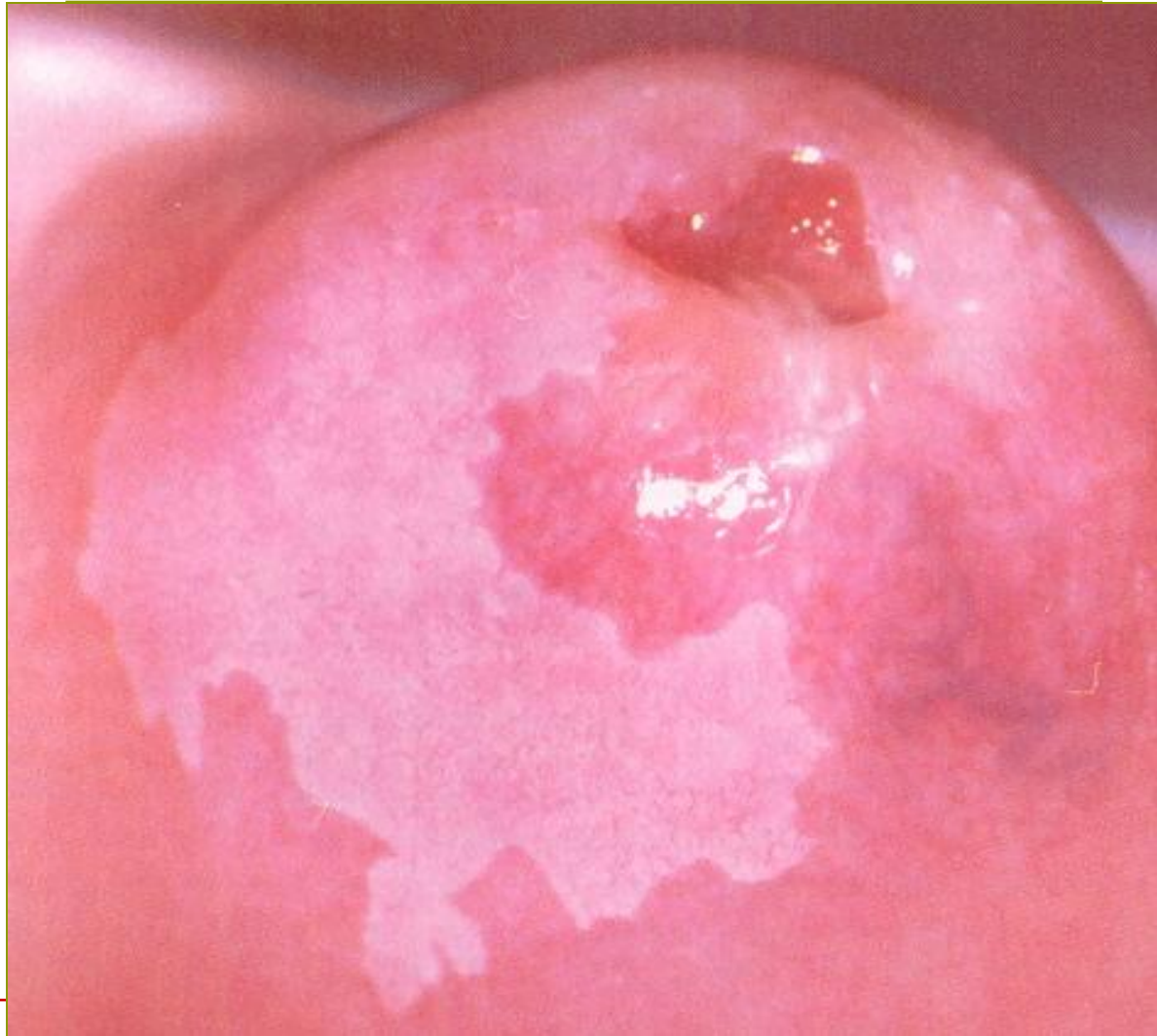


Margin

- Characteristical irregular, geographic and hairy design



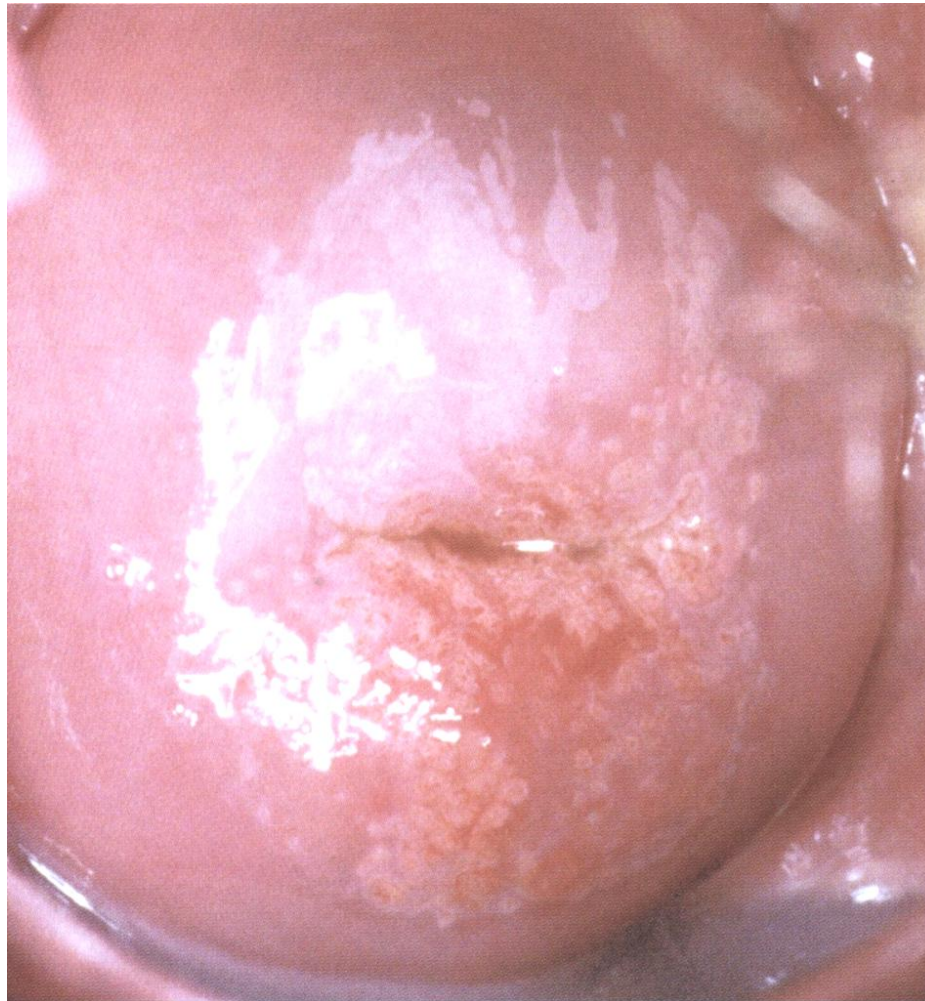
Geographic Design



Geographic Design



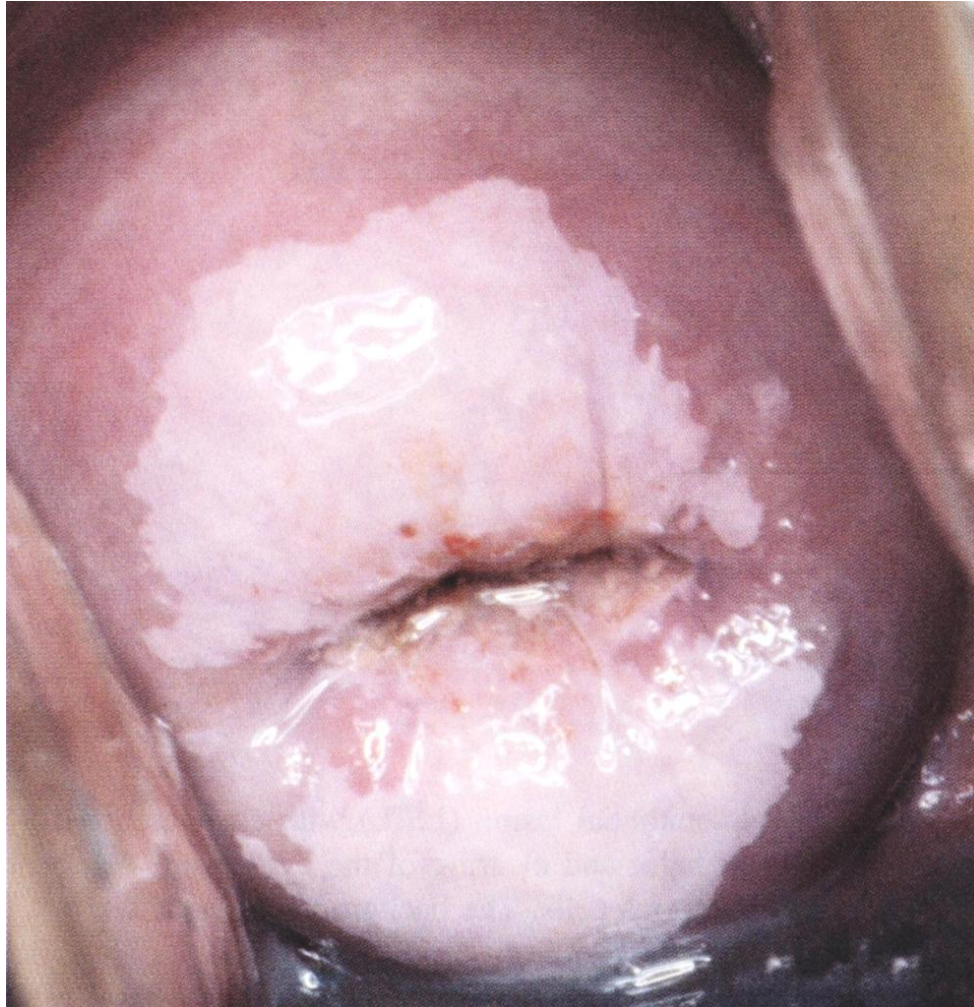
Geographic Tongue



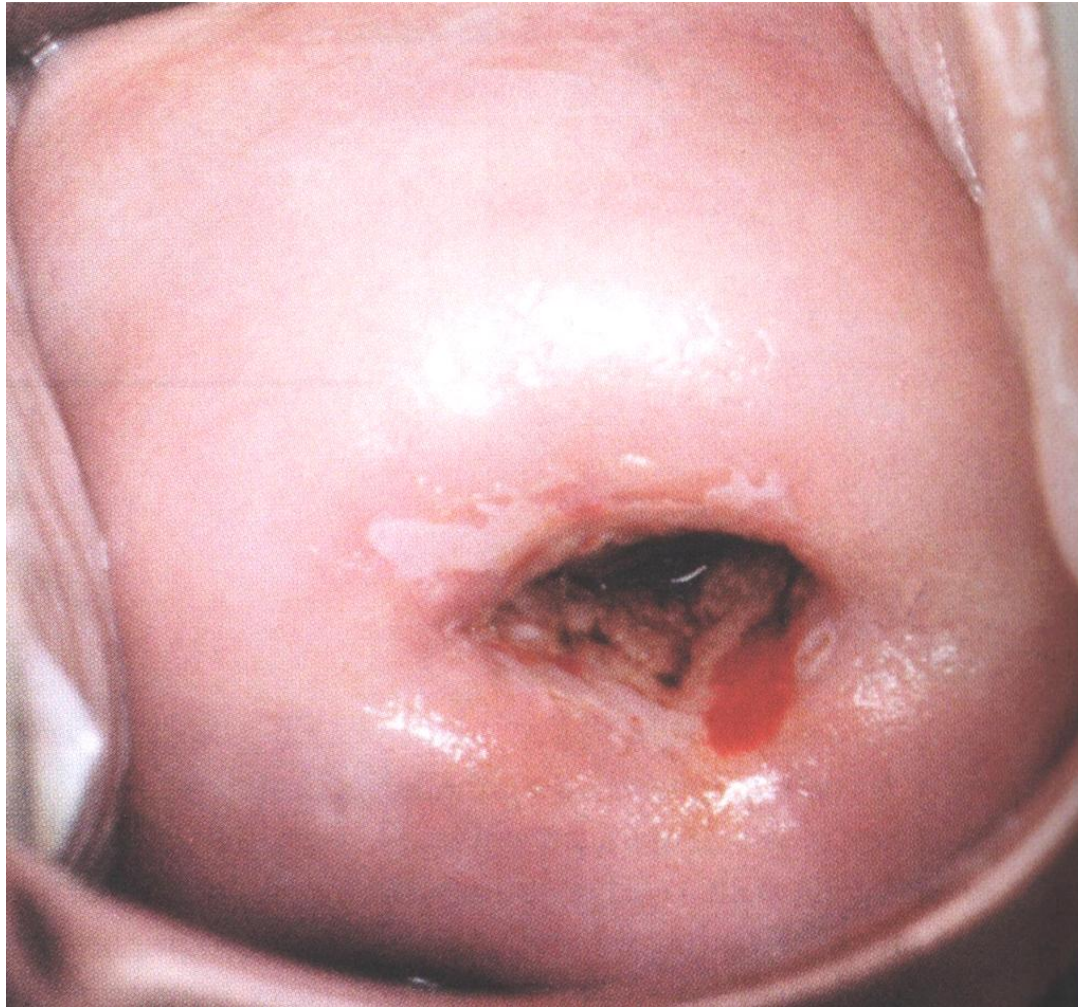
Geographic Design



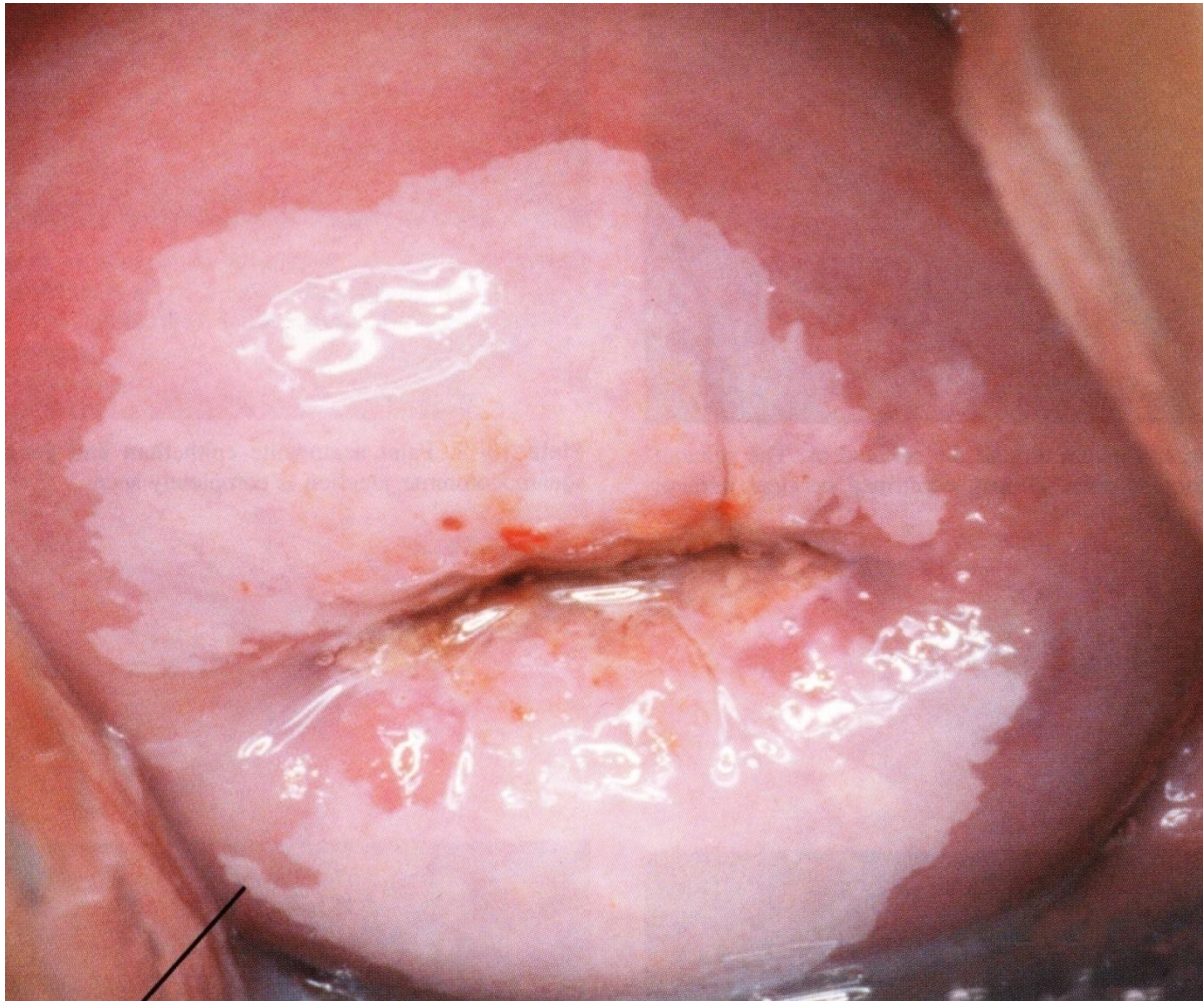
Geographic Design



Geographic Design

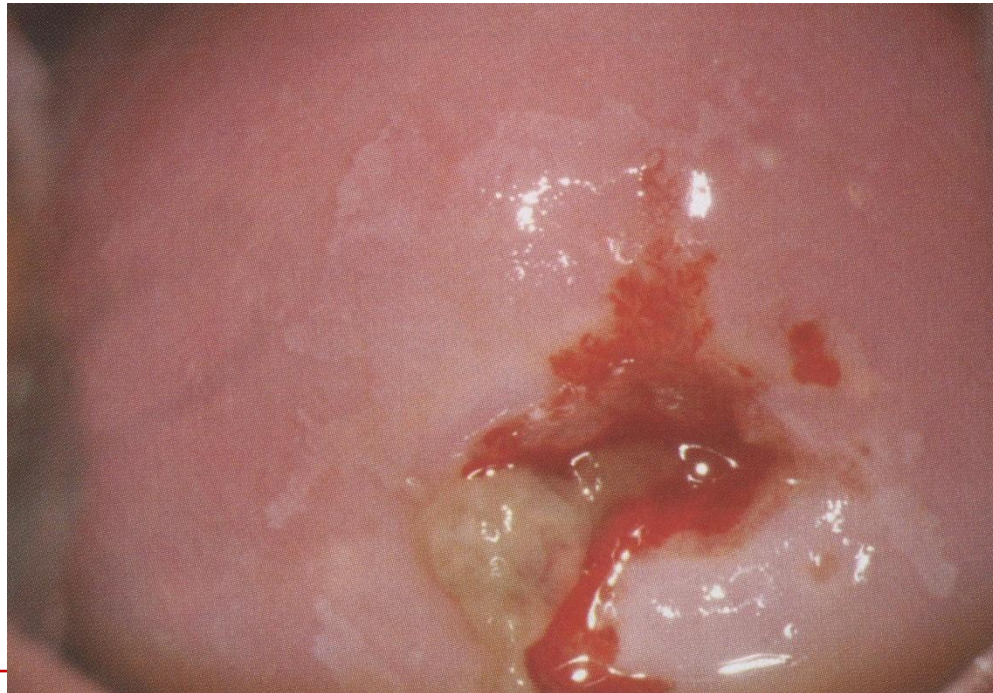


Geographic Design

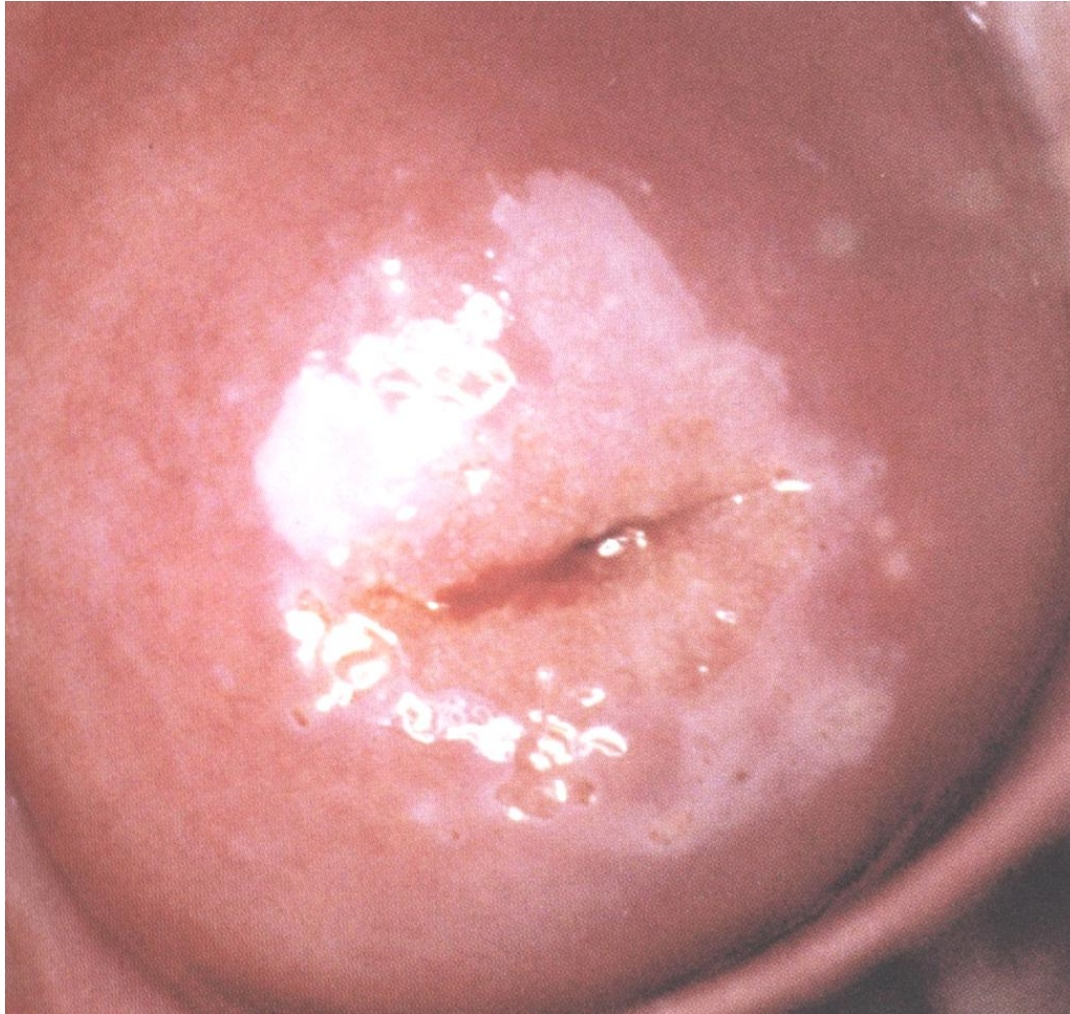


Colour

- Colour is subjective thus may not be classified
- Faint white after acetic acid
- Effect of acetic acid disappears by 65% in 4 minutes



Faint Acetowhite Epithelium



Faint Acetowhite Epithelium



Vessels

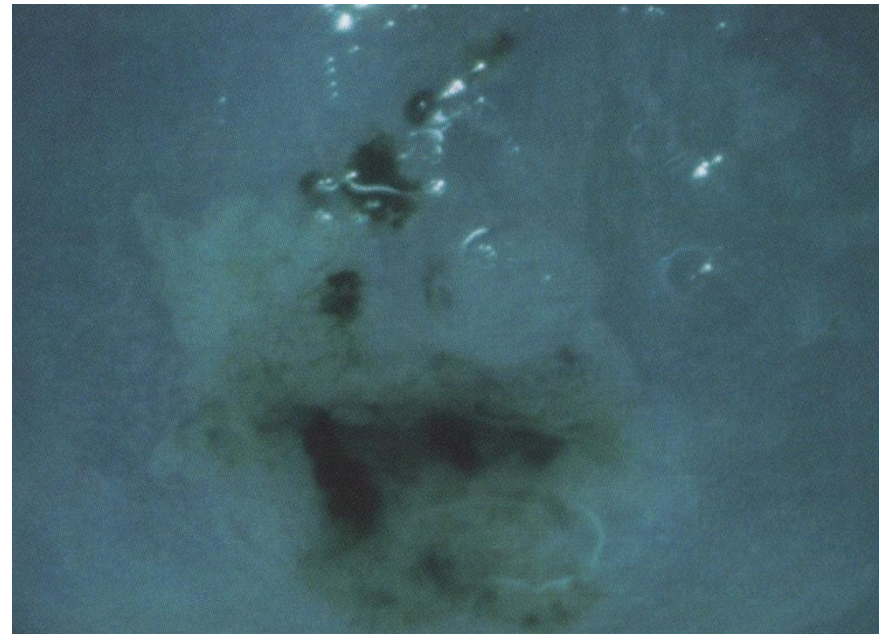
- Absence of atypical vessels
 - Thin, narrow calibrated uniform vessels
 - Increased intercapillary distance but vascular spaces unaffected
 - Fine mosaic appearance or punctuation
-

Fine Punctation



Vessels

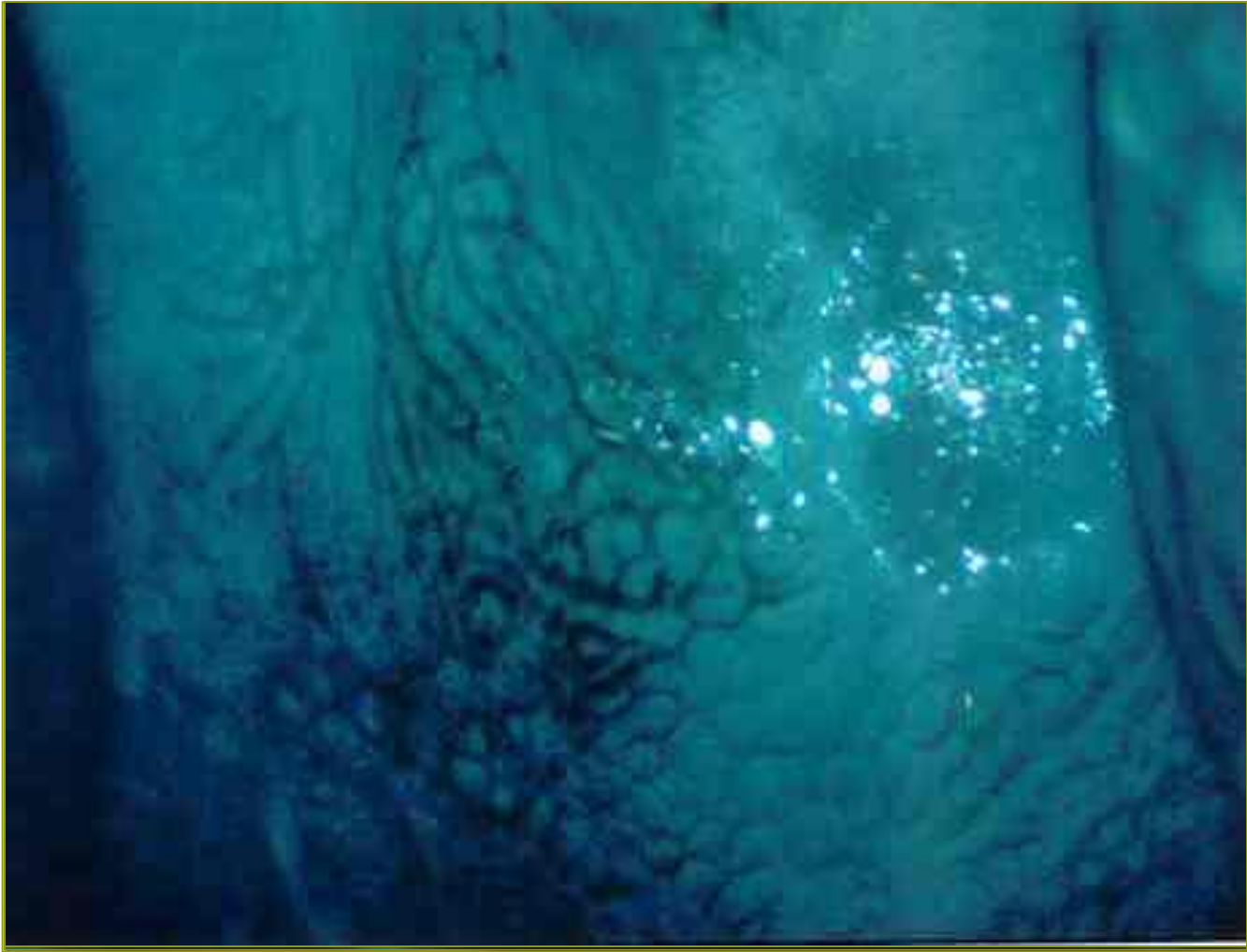
- Fine mosaic pattern



Fine Mosaic Pattern



Fine Mosaic Pattern



Condylomas



Schiller's (Iodine) Test

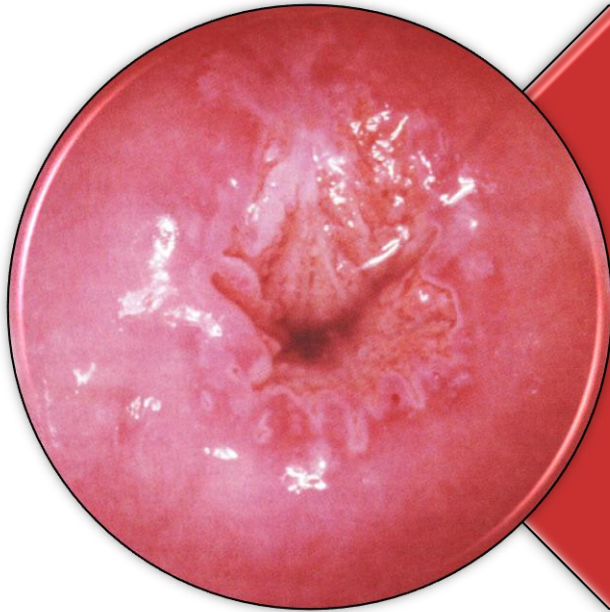
- CIN 1 lesions are iodine-negative and only in mustard-yellow color



Schiller's (Iodine) Test



In Pregnancy



LGSIL may be underdiagnosed colposcopically because of the normal physiologic changes of cervix

- Acetowhite reaction problematic
- Estrogen-mediated eversion of the endocervix
- The new proliferation of the endocervical papillae

Other Findings

Lesions
usually
small

Unifocally
or
multifocally

Summary of Colposcopy in LGSIL

