Adolesan ve Genç Kadınlarda Kolposkopi

Prof. Dr. Tevfik Güvenal
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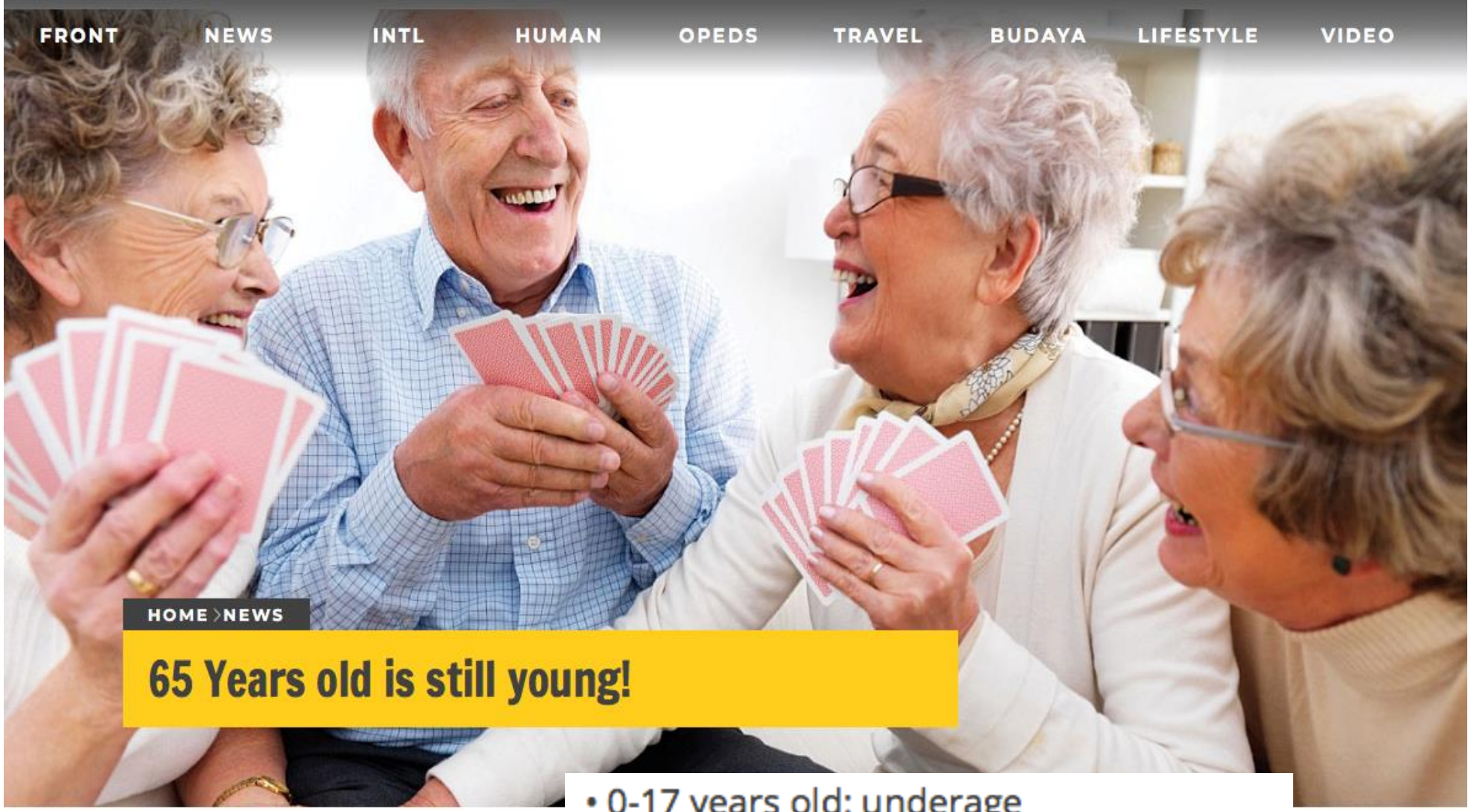


65 Years old is still young!

- 0-17 years old: underage
- 18-65 years old: youth/young people
- 66-79 years old: middle-aged
- 80-99 years old: elderly/senior
- 100+ years old: long-lived elderly

- 10-19 yaş arası ergen/adolesan,
- 20-24 yaş arası genç

- **Adolesan** (Ergenlik) dönemi çocukluk ile erişkinlik arasındaki fiziksel, cinsel ve psikososyal, **‘servikal’** geçiş dönemidir.

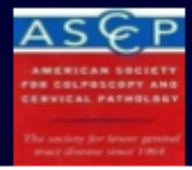
Cervical Cancer Incidence

by Age Group, USCS*, 1998-2002

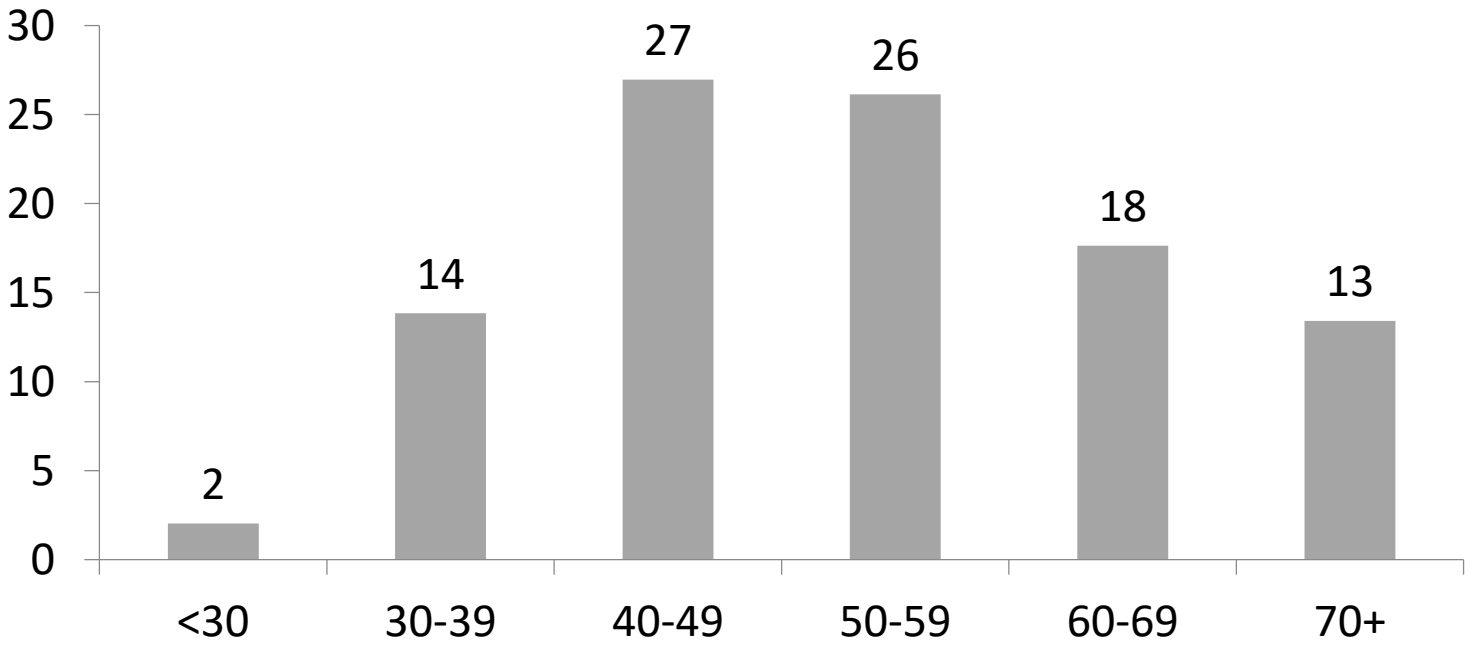
Age	Rate per 100,000
0-19	0.1
20-29	4.5
30-39	13.9
40-49	16.5
50-64	15.4
65+	14.6
All ages	9.4

*United States Cancer Statistics includes data from CDC's National Program of Cancer Registries and NCI's Surveillance, Epidemiology and End Results Program.

Saraiya M et al. Obstet Gynecol 2007;109:360-70.



Serviks
Yaş Dağılımı (2010-2014)



Gültekin M.

Tarama başlama yaşı

- Adolesan yaş grubunda tarama önerilmemektedir

- **21** yaşında başlıyor (ABD gibi)
- **25** yaş (İngiltere, Brezilya gibi)
- **30** yaş (Türkiye gibi)

HPV enfeksiyonu ve SIL

- HPV enfeksiyon oranı 18-22 yaş arası %21-33
- HPV enfeksiyonlarının %90'ı 2 yıl içinde temizlenir (median 9.4 ay)
- Adolesan populasyonunun %19.5'i LSIL/ASC-US ve %1.3'ü HSIL
- 12 aya kadar LSIL'ların %61'i, 36 aya kadar da %91'i regrese olur

Cervical Cancer Screening of Adolescents Should Not Be Encouraged

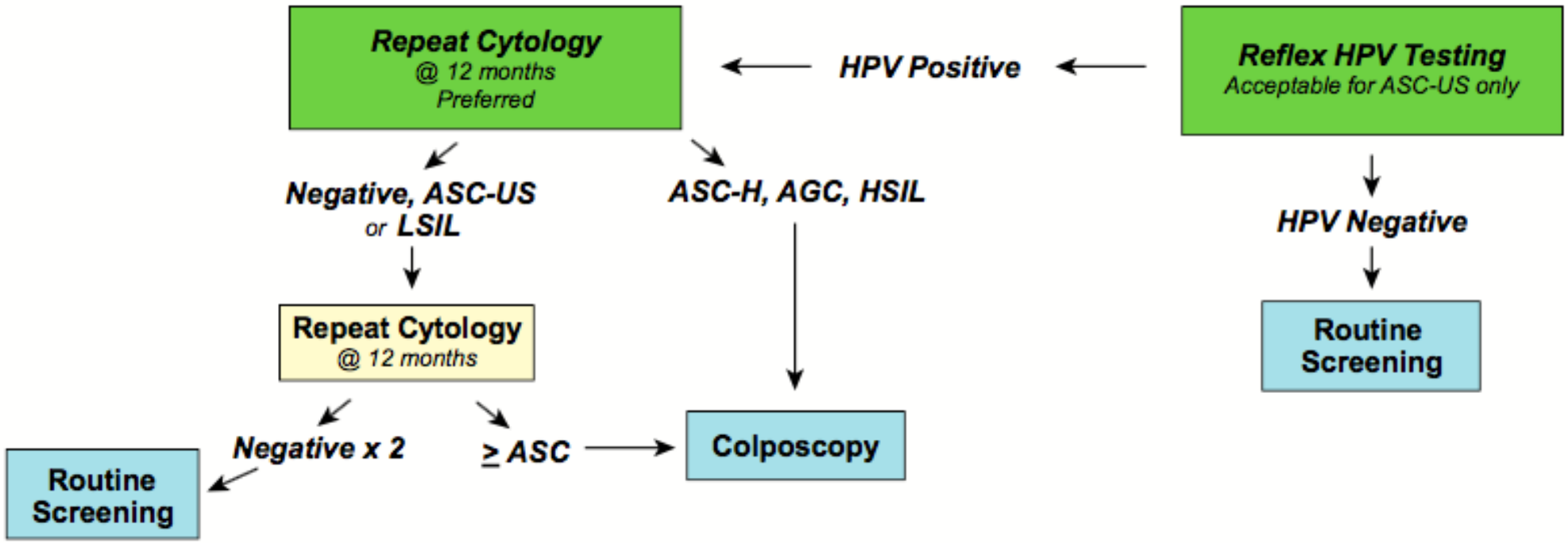
Laílca Quirino Henrique, MD, MSc,
Adriana Bittencourt Campaner, MD, PhD, and Flavia Salomão d'Avila, MD

TABLE 4. Correlation of Cytological Abnormalities Between Adolescents, Young Adults, and Adults

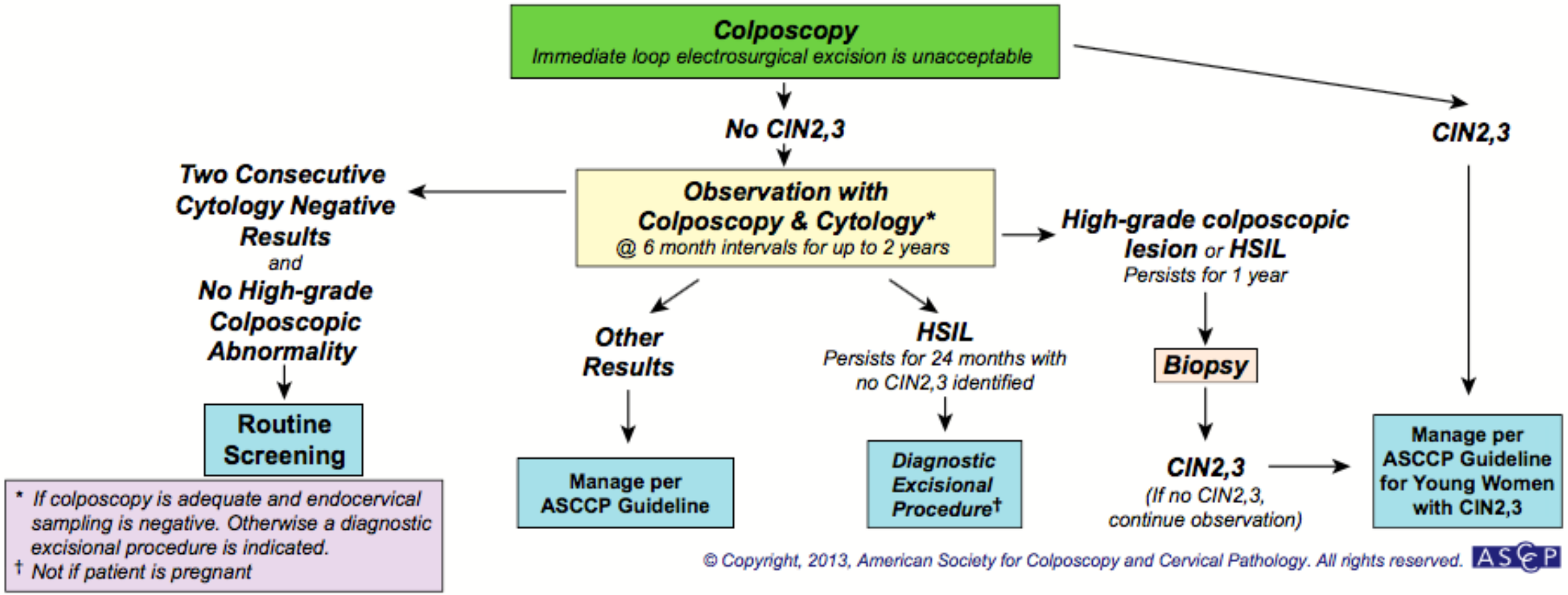
Cytological abnormalities	Prevalence in adolescents (%)	Prevalence in young adults (%)	Prevalence in adults (%)	p^a
Low-grade lesions	97.4	89.1	76.3	<.001
High-grade lesions and cancer	2.6	10.9	23.7	<.001

[a]Chi-square statistical test.

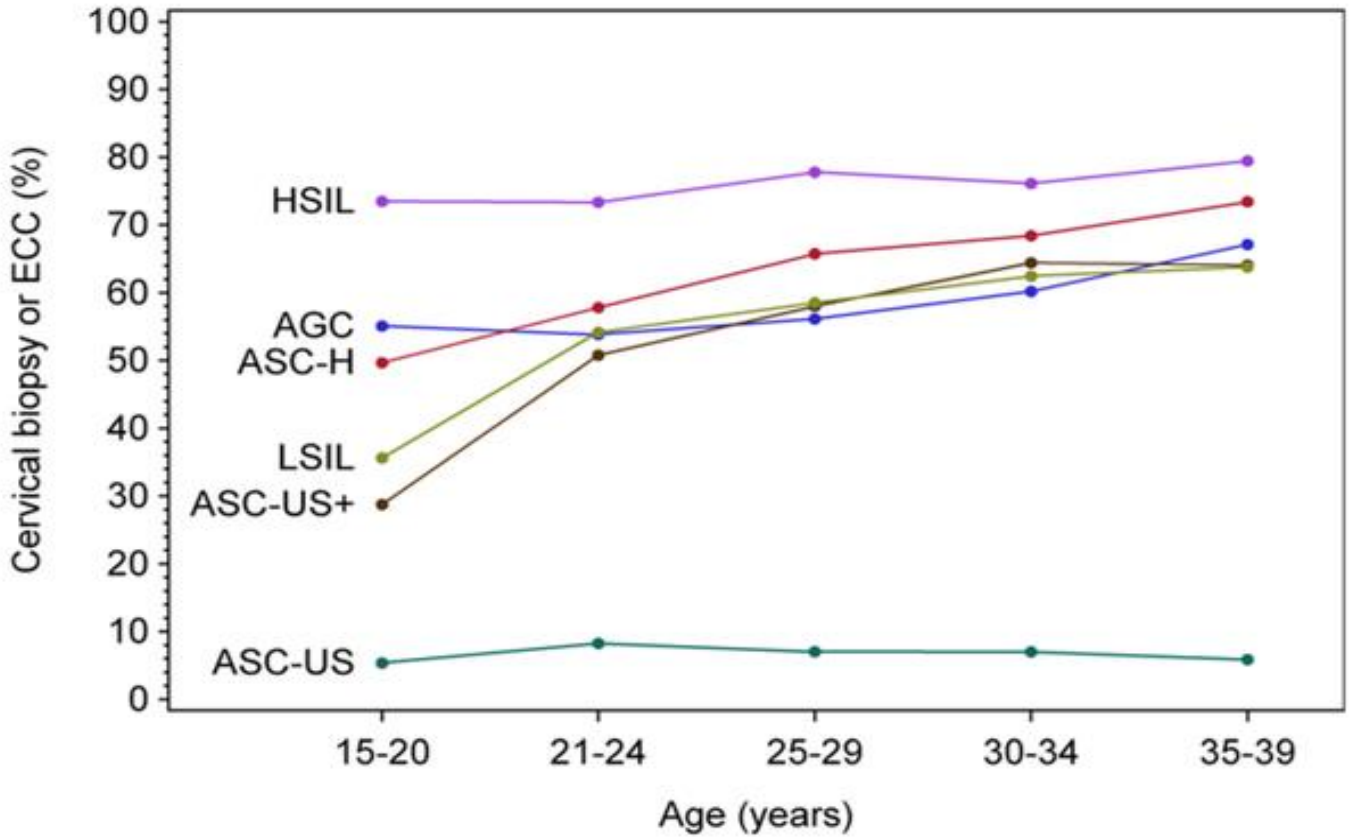
Management of Women Ages 21-24 years with either Atypical Squamous Cells of Undetermined Significance (ASC-US) or Low-grade Squamous Intraepithelial Lesion (LSIL)



Management of Women Ages 21-24 yrs with Atypical Squamous Cells, Cannot Rule Out High Grade SIL (ASC-H) and High-grade Squamous Intraepithelial Lesion (HSIL)



Kolposkopi yapma sıklığı



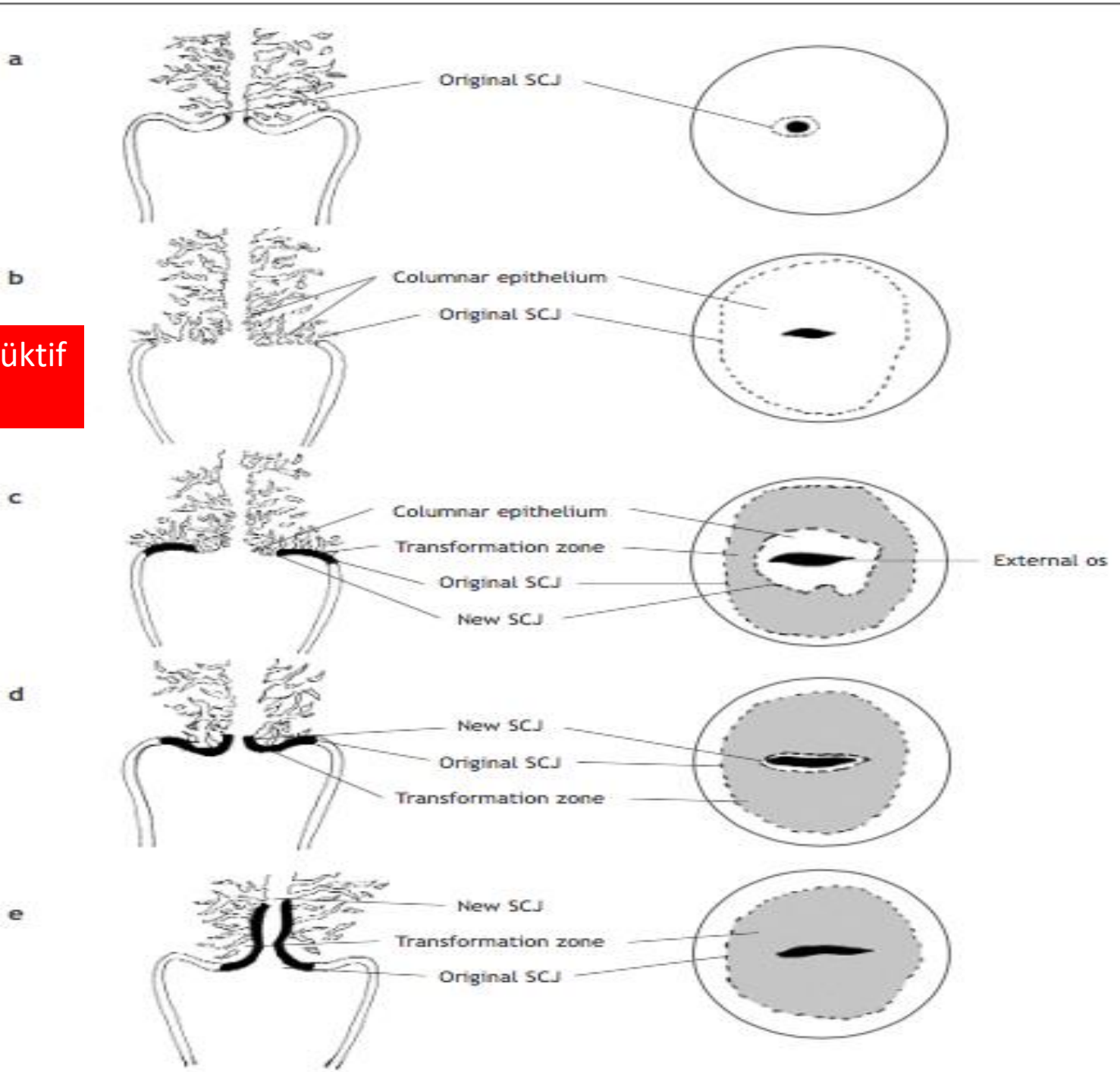
Kolposkopi

- İyi bir kolposkopist serviksin anatomisini ve gelişimini bilmelidir
- Serviksin squamöz epiteli östrojen bağımlıdır.
  - Östrojen eksikliğinde full matürasyon ve glikojenizasyon olmaz.
- Columnar epitelde glikojenizasyon yoktur

- SCJ lokalizasyonu yaşa, menstrüel satatüye, gebelik ve oral kontraseptif kullanımı gibi faktörlere bağlı olarak değişir

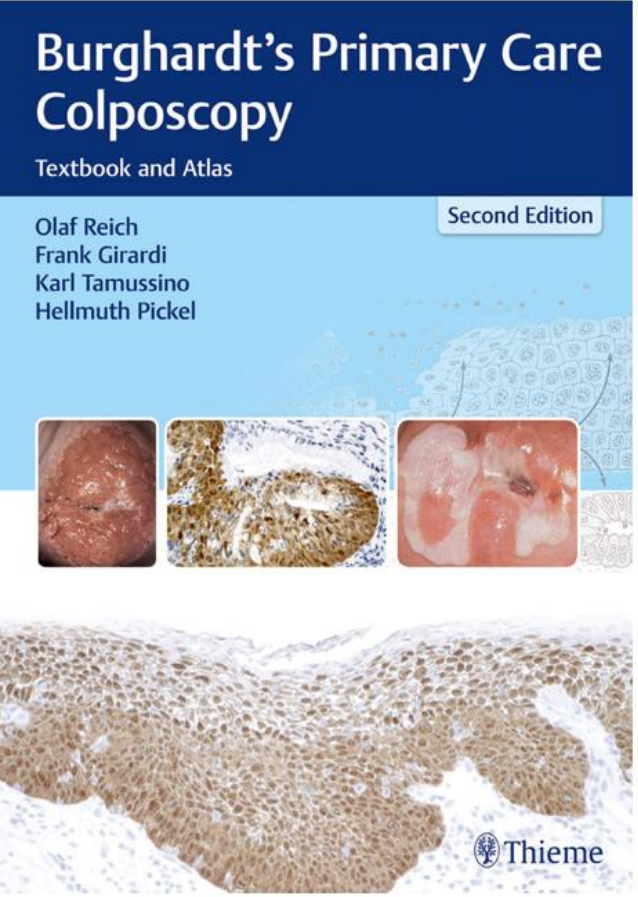
Menarş öncesi

Puberte ve erken reprodüktif yaş sonrası



Ektropion veya Ektopi

- Endoservikal columnar epitelin ektoserviks üzerine everte olmasıdır
- Ektoserviks üzerinde yaygın kırmızı alan olarak görülür
- Ön ve arka dudaklarda daha belirgindir, lateralde daha azdır
- Fizyolojik yani normal bir süreçtir
- Bu durum hatalı olarak erezyon veya ülser olarak da tanımlanır



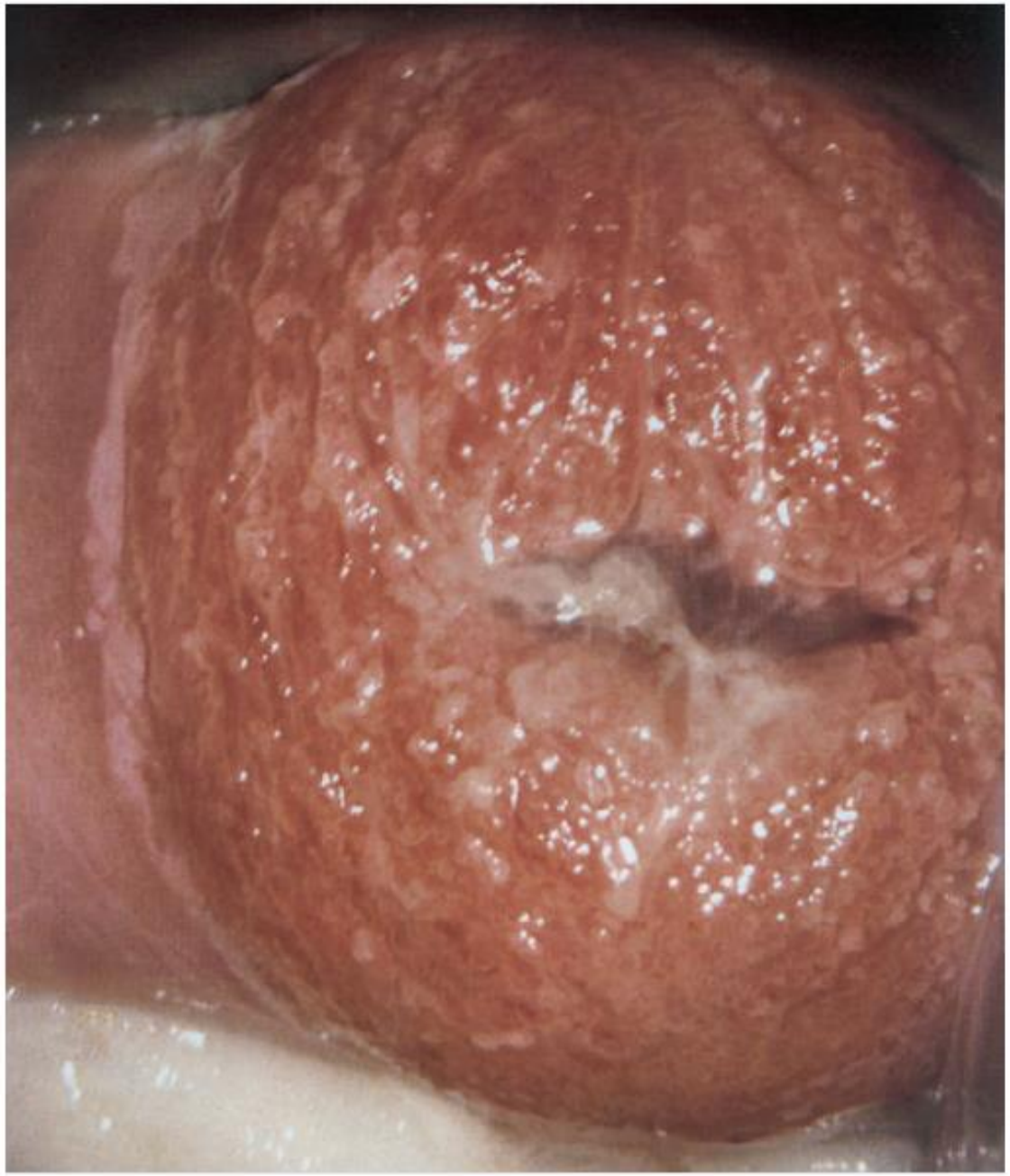


Fig. 6.10 Eversion of the endocervical mucosa (ectopy), with its rugose architecture thrown into sharp relief.

Ektopi (Eversiyon)

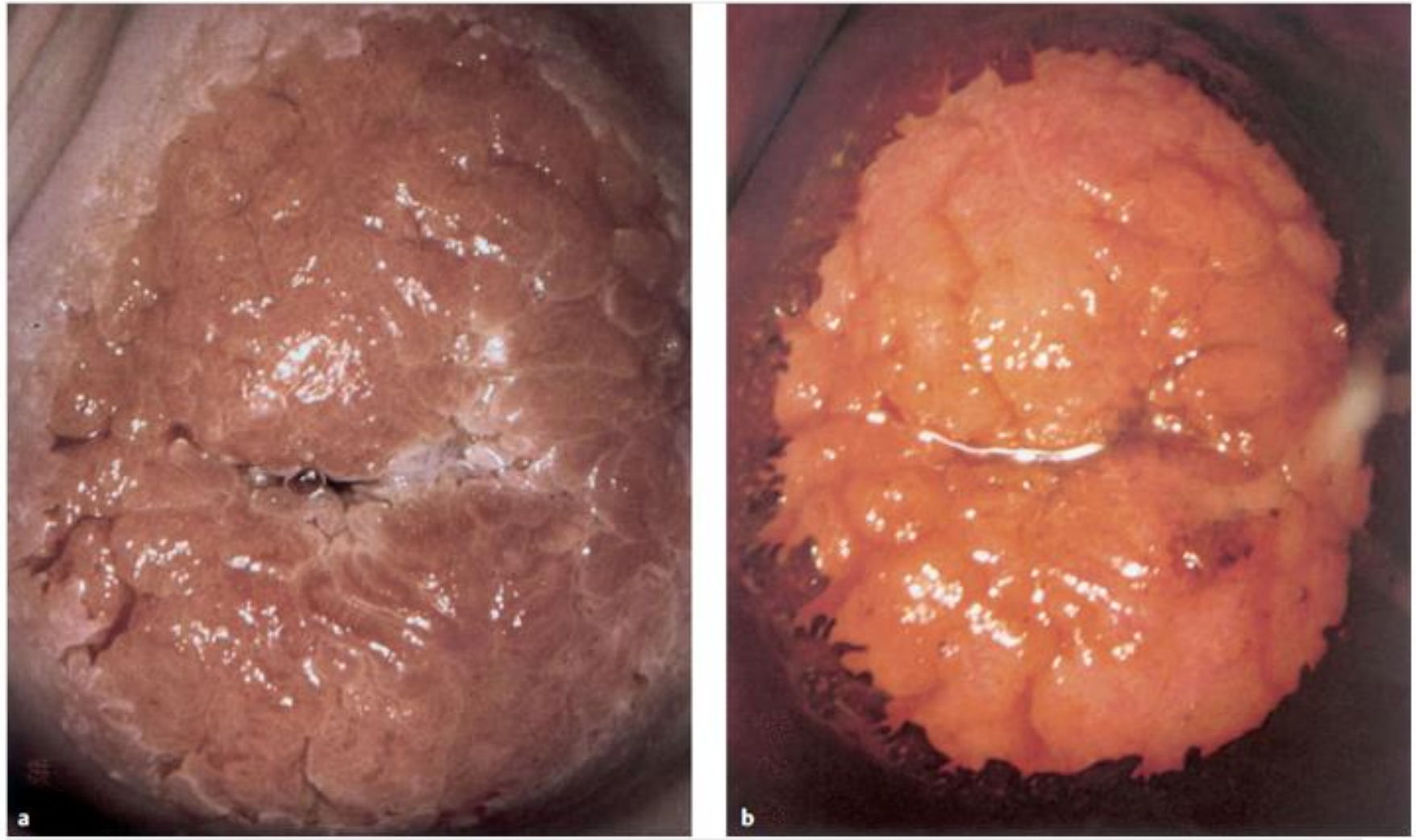


Fig. 6.20 (a) Transformation zone. Centrally, within this ectopy, the villi become plumper and fuse to eventually form a flat surface. **(b)** The same patient after application of iodine. The transformed epithelium is mature and contains glycogen. Gland openings are well displayed. The central part does not take up iodine, which merely covers it like a veil.

Squamoz metaplazi

- Adolesan ve gençlerde aktif squamoz metaplazi süreci başlar
- Metaplazinin farklı evrelerinde kolposkopik görünümde büyük farklılıklar
- Bu durum deneyimsiz kolposkopistler için normal bulgular ile CIN ile ilişkili anormal bulguların ayırt edilmesinde güçlük yaratmaktadır.
- İmmatür metaplastik epitel asetik asit uygulamasından sonra hafifce beyaza dönüşür ve ve başlangıçta kafa karışıklığının en sık nedenidir
- Ancak şüphe duyulduğunda biyopsi alınması kabul edilebilir

Fig. 6.19 Transformation zone. Here, too, the process begins peripherally and spreads toward the center in an irregular manner. Note the smooth surface in spite of the incomplete transformation.

Fig. 6.12 (a) Ectopy with a thin rim of transformation zone (TZ) in a 14-year-old. **(b)** After 2 years, the transformation is more advanced. Squamocolumnar junction fully visible (type 1 TZ). (This image is provided courtesy of O. Baader.)

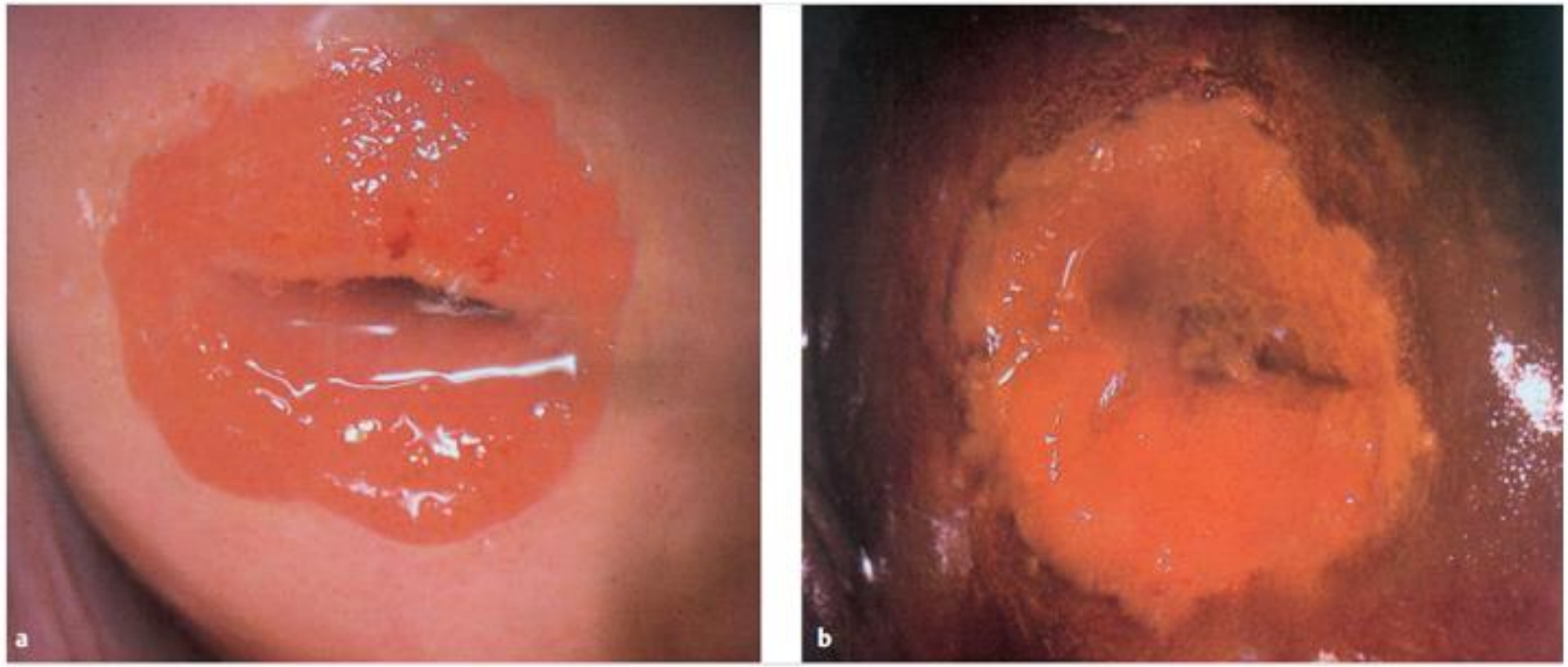


Fig. 6.2 (a) Ectopy before application of acetic acid. The gland openings at the 10 o'clock position indicate earlier transformation. **(b)** After application of iodine. The columnar epithelium does not stain; it is merely discolored by the thin film covering it. The demarcation from the deep brown original squamous epithelium is indistinct.

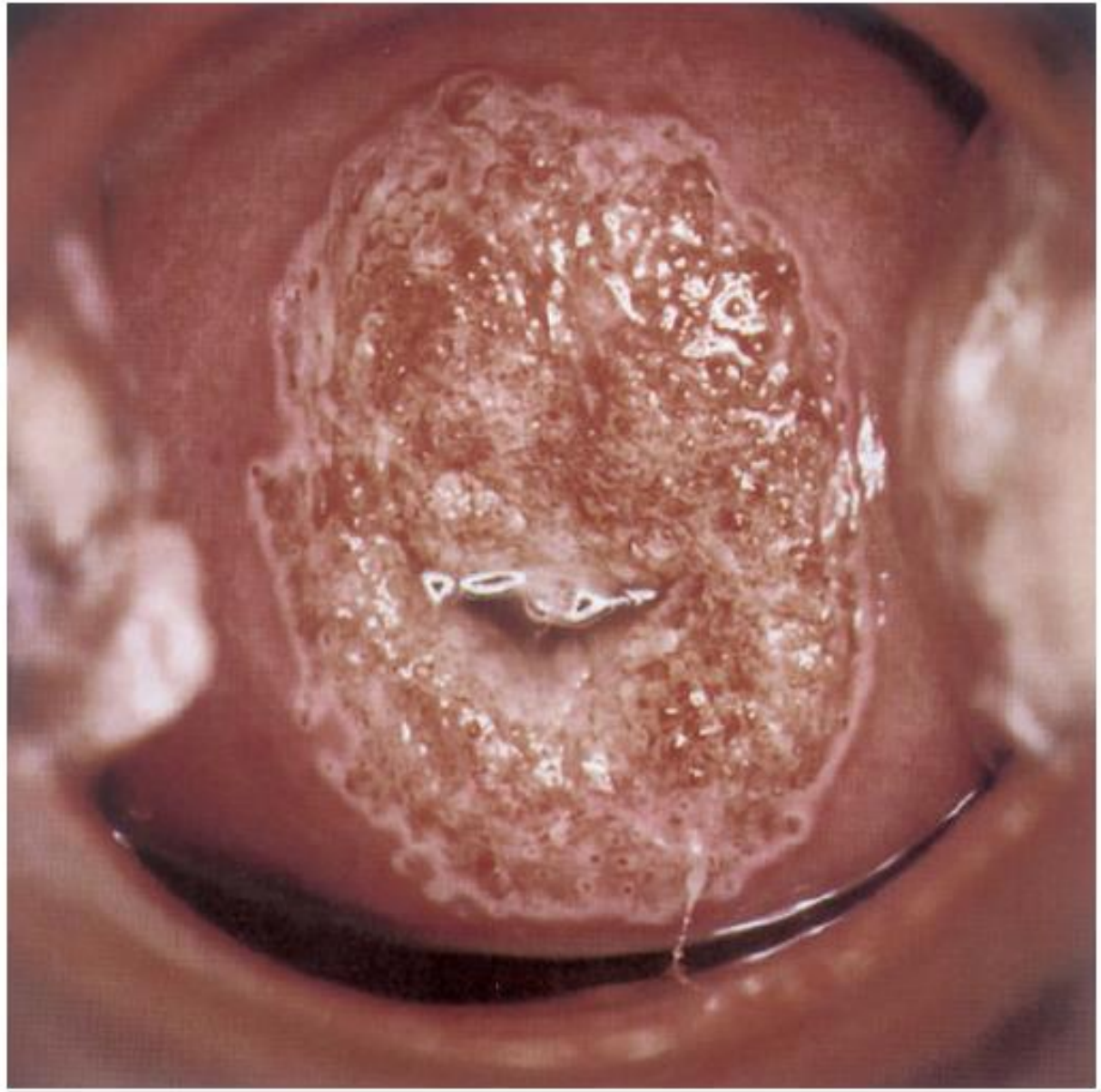


Fig. 6.14 Ectopy with a slim margin of transformation at the periphery in a 29-year-old nullipara (type 1 transformation zone). (This image is provided courtesy of O. Baader.)

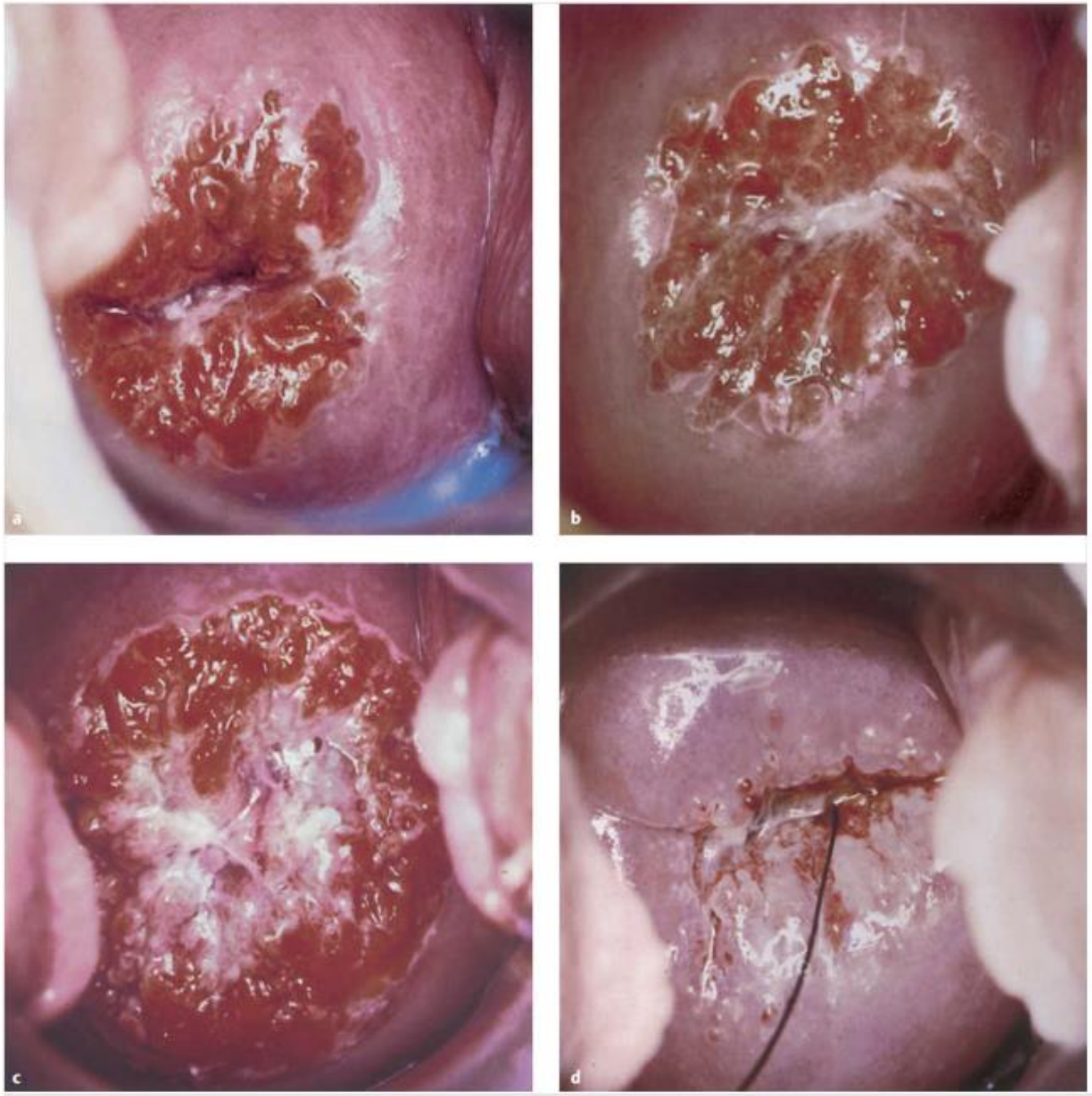


Fig. 6.15 Longitudinal follow-up of a 20-year-old woman beginning oral contraception (OC). **(a)** Before starting OC, there is ectopy with a slim margin of transformation (type 1 transformation zone [TZ]). **(b)** After several months of OC, the ectopy has assumed a strongly coarse papillary appearance. **(c)** At this point, the woman has resumed OC after a vaginal delivery. The ectopy is again apparent. **(d)** The woman received an intrauterine contraceptive device 9 months later and discontinued OC. Three months later, the ectopy has been rapidly transformed (type 1 TZ). (This image is provided courtesy of O. Baader.)

20 yaş

a) OCs başlamadan önce
b) OCs başladıktan sonra
c) Vajinal doğum sonrası OCs
d) OCs' i bıraktıktan 9 ay sonra

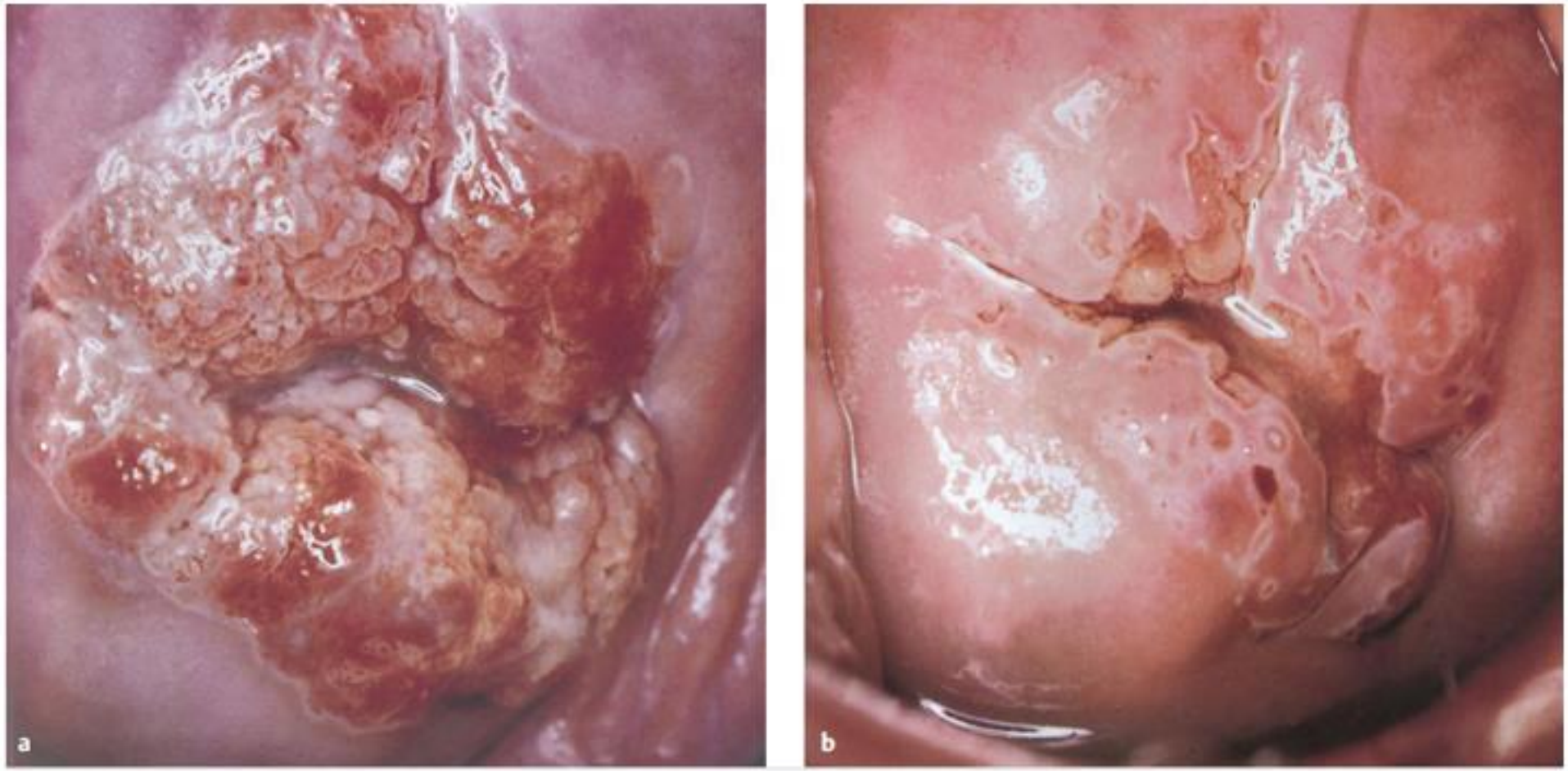


Fig. 6.16 Transformation of marked ectopy with discontinuation of oral contraception (OC). **(a)** Marked ectopy with coarse papillae in a woman with 4 years of OC. **(b)** Only 1 year after discontinued OC (and intrauterine device insertion), there is advanced transformation of the ectopy (type 1 TZ). (This image is provided courtesy of O. Baader.)

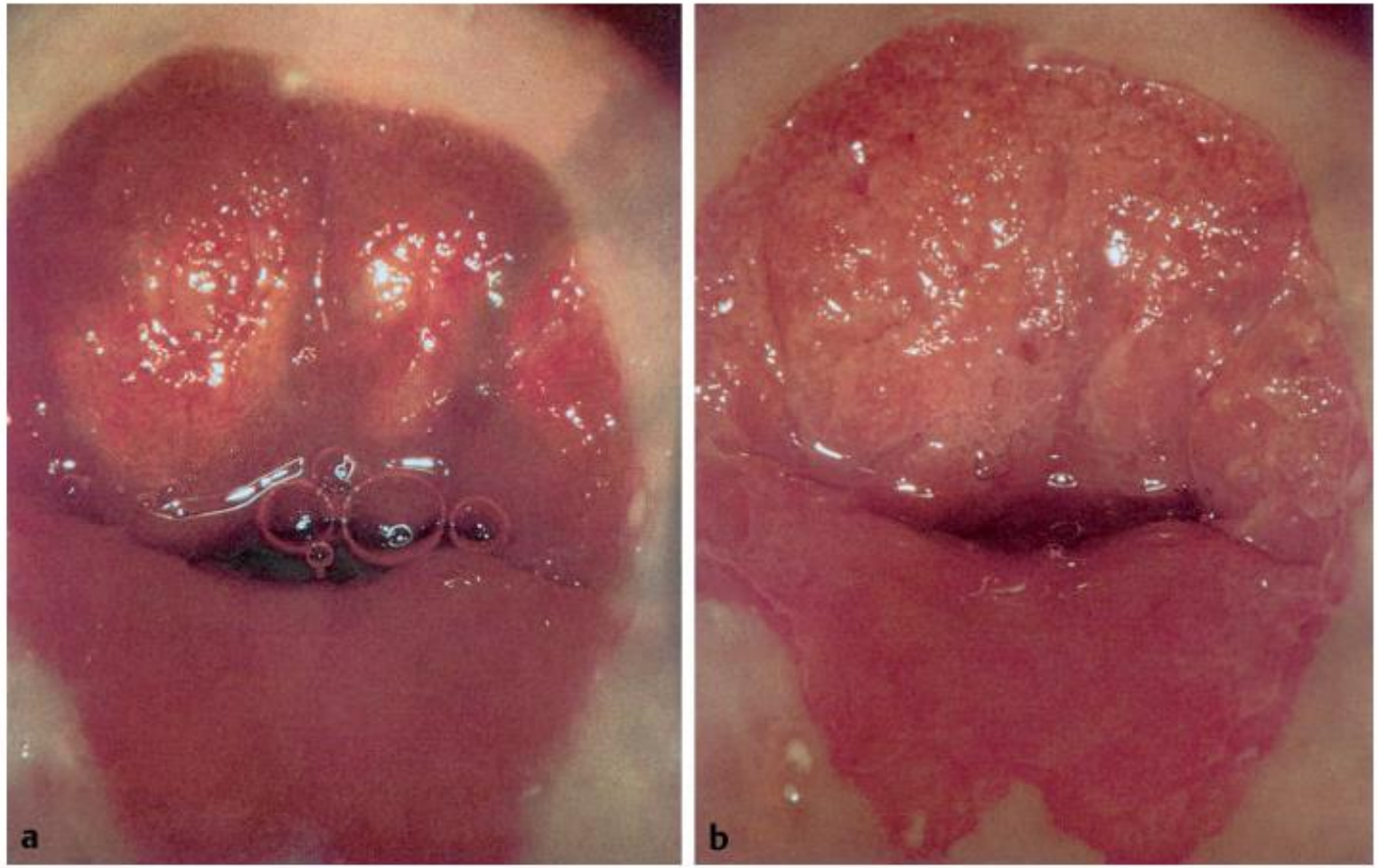


Fig. 3.6 (a) Large intensely red area around external os. The border to the normal squamous epithelium is abrupt. **(b)** Application of 3% acetic acid evokes the grapelike structure of the mucosa covered by columnar epithelium. Note the blanching of the previously intensely red area caused by the swelling of the columnar epithelium. Individual gland openings in the adjacent squamous epithelium on the posterior lip indicate that transformation has occurred.

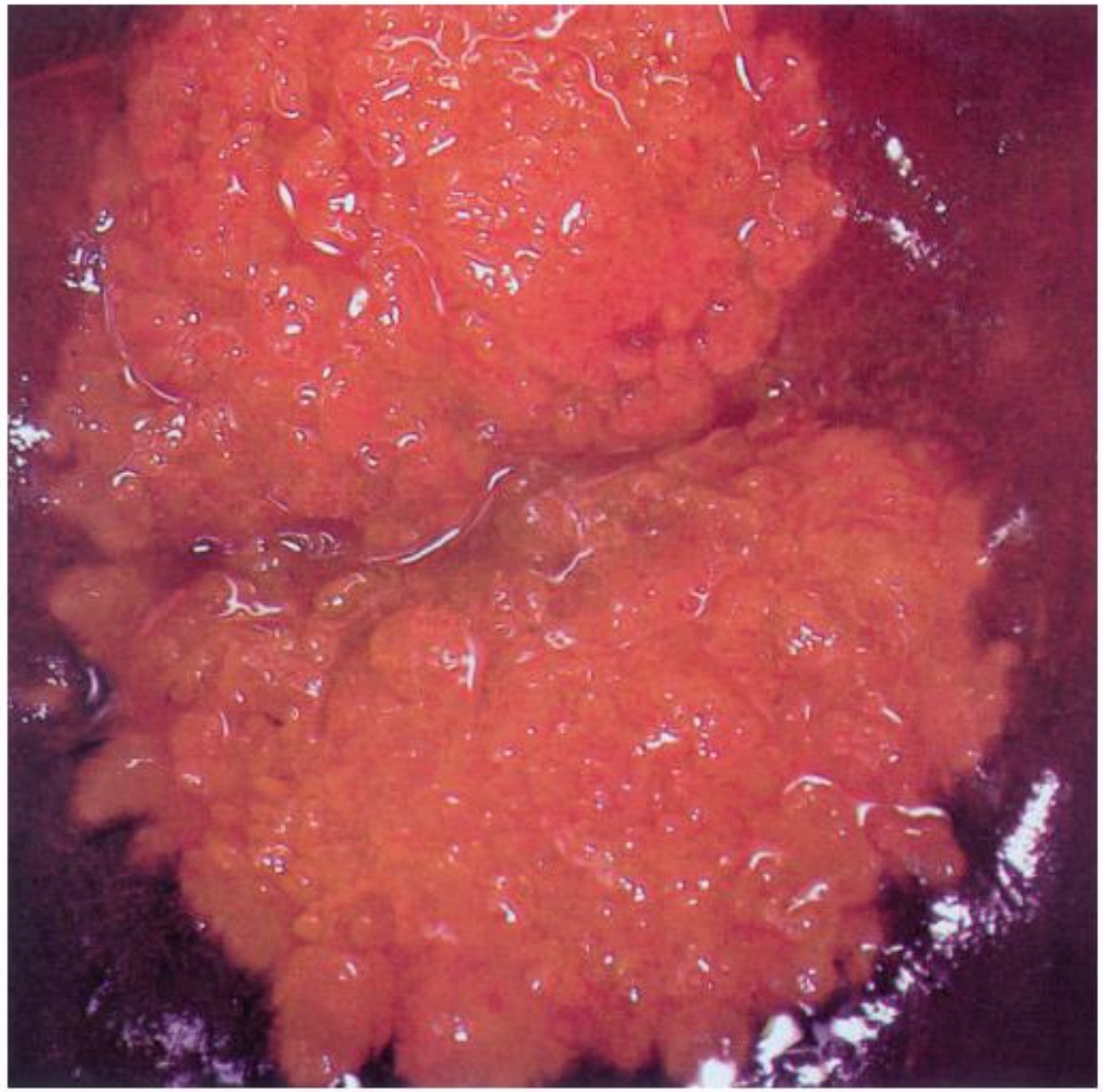
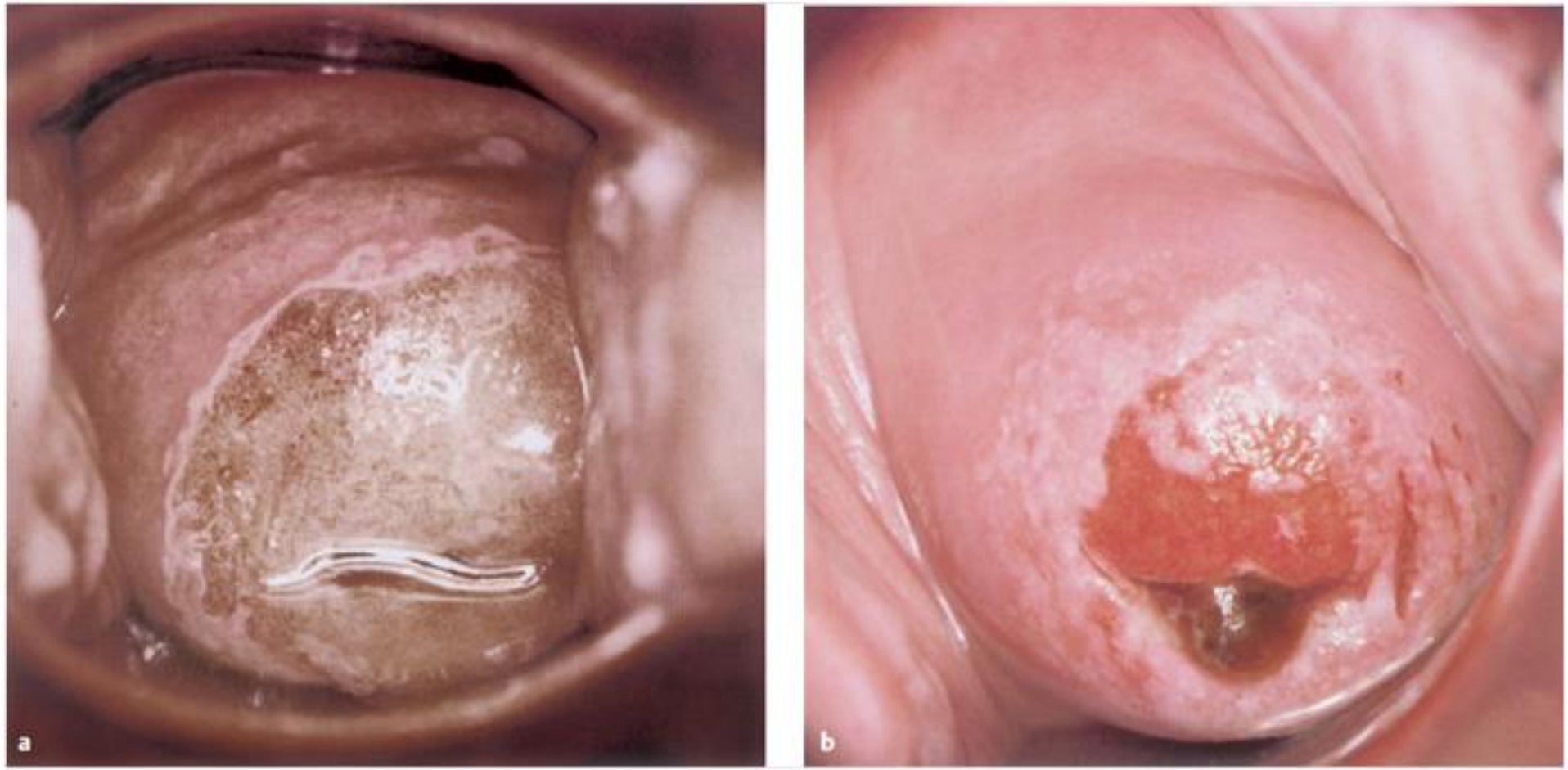


Fig. 3.10 The columnar epithelium of an ectopy does not stain with iodine (iodine negative). It shows only a slight discoloration due to the thin film of solution veiling it. The original epithelium stains characteristically deep brown.

Fig. 6.11 Apparent eversion (ectopy) of a cervix with a patulous os resulting from wide separation of the speculum. A thin rim of transformation zone is visible near the junction with the original squamous epithelium.



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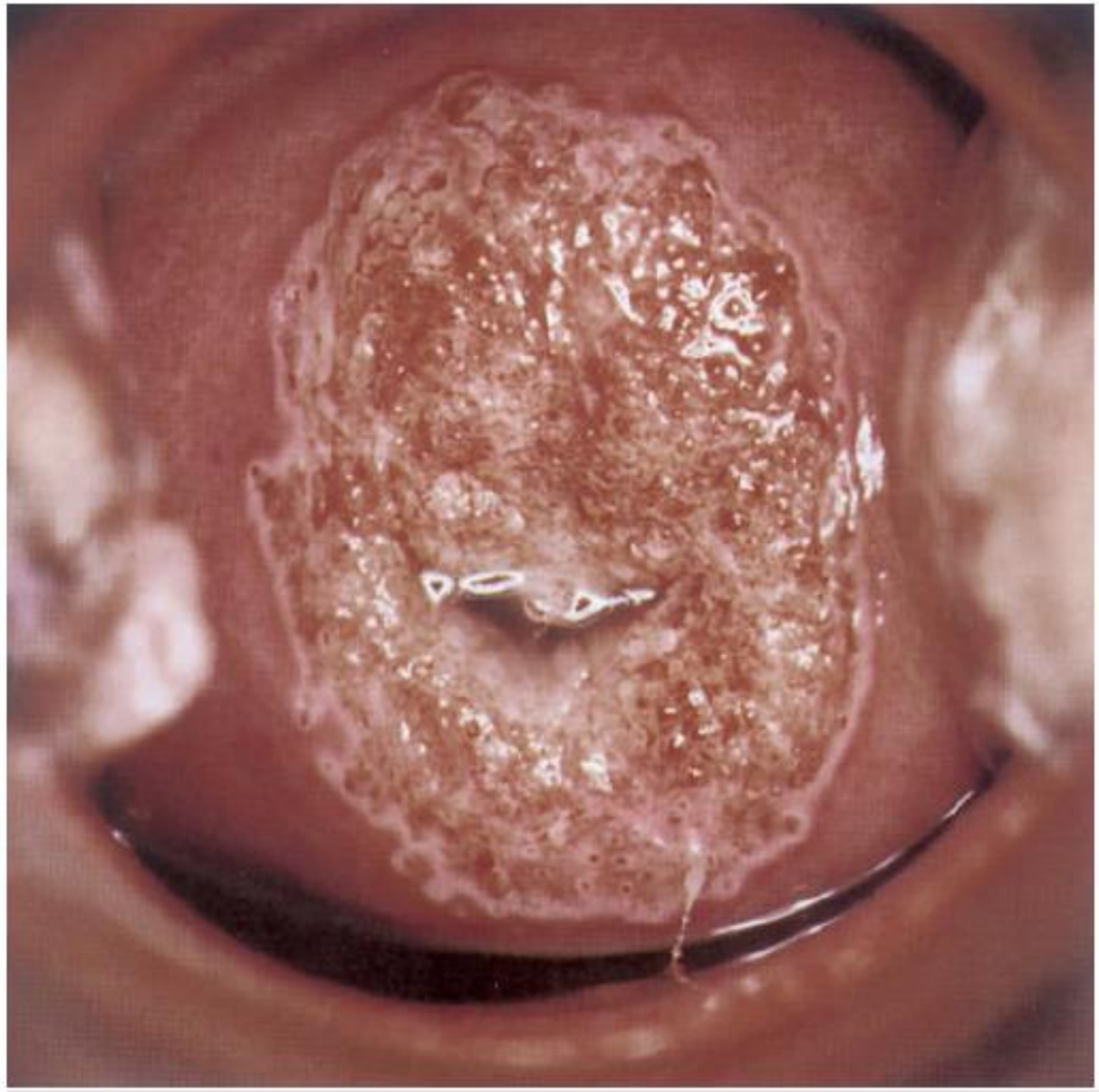

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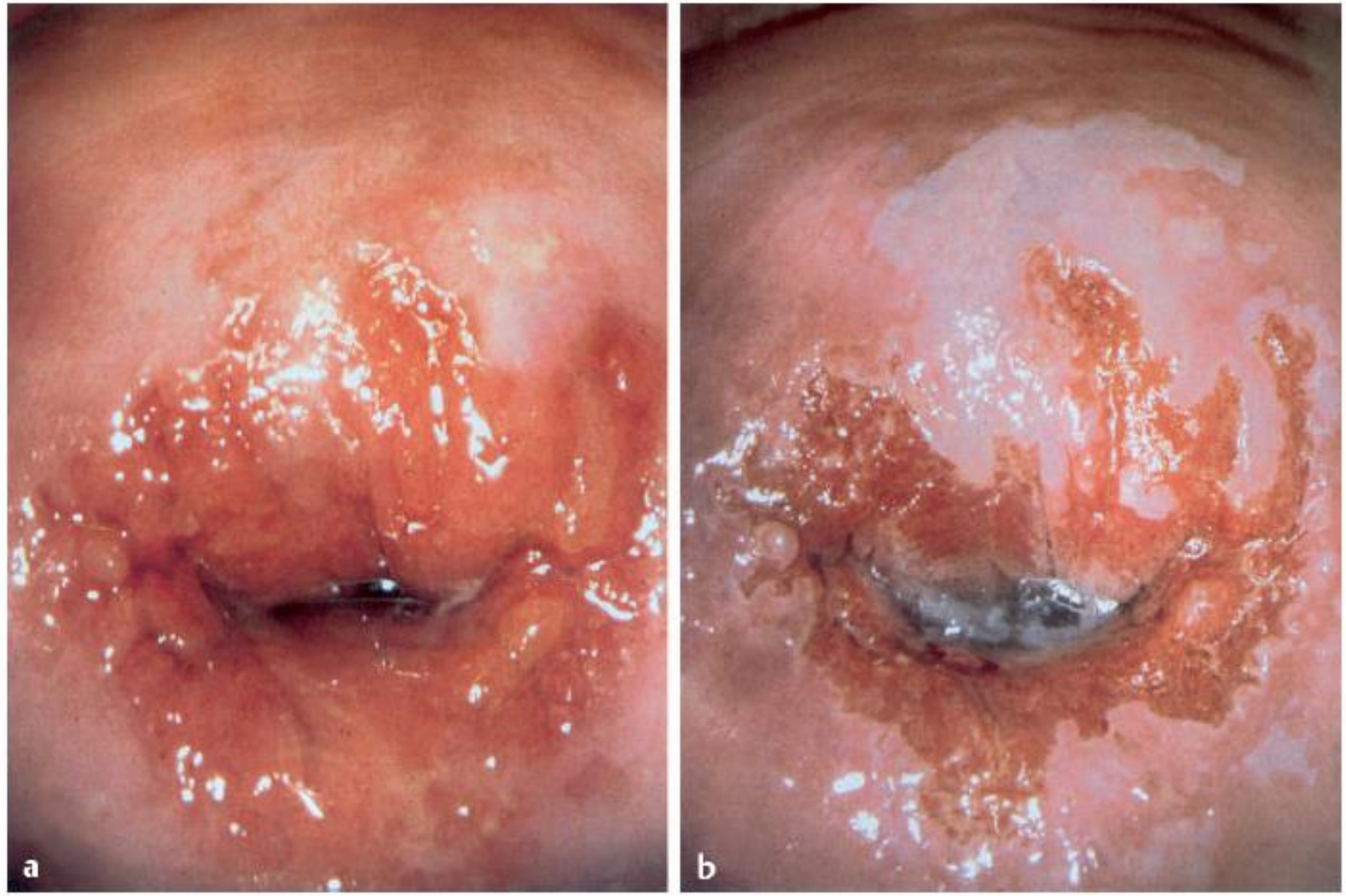

Fig. 3.8 (a) Before application of acetic acid, the transformation zone is inconspicuous. The experienced colposcopist will detect an early lesion at 12 o'clock position outside the transformation zone. **(b)** The white color and mosaic pattern of HSIL (CIN 3) are due to cellular edema caused by acetic acid.

Colposcopic and Cytologic Findings Among Adolescents Referred to Two Urban Teaching Hospitals

J Pediatr Adolesc Gynecol (1996) 9:190–194

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Table 1. Age Distribution and Referral Pap Smear Findings Among 62 Adolescents Referred to Two Urban Colposcopy Clinics

	Referral Cytology Results				
Age	Atypia	LGSIL[a]	HGSIL[b]	Not Recorded	Total
13	0	2	0	0	2 (3%)
14	0	6	1	0	7 (11%)
15	7	12	2	4	25 (40%)
16	14	12	1	1	28 (45%)
Total	21 (34%)	32 (52%)	4 (6%)	5 (81%)	62 (100%)

[a]LGSIL = low-grade squamous intraepithelial lesion.
[b]HGSIL = high-grade squamous intraepithelial lesion.

Table 2. Biopsy Findings According to Patient Age Among 62 Adolescents Undergoing Colposcopy at Two Urban Colposcopy Clinics

	Biopsy Results						
Age	N.D.[a]	Unknown	Infl[b]	Atypia/koilo[c]	CIN 1	CIN 2	% CIN
13	1	0	0	1	0	0	0
14	4	0	0	2	0	1	14
15	5	0	8	8	3	1	16
16	9	1	4	6	5	3	29
Total	19 (31%)	1 (2%)	12 (19%)	17 (27%)	8 (13%)	5 (8%)	21

[a]N.D. = not done.
[b]Infl = inflammation.
[c]Koilo = koilocytosis.

İnvazif kanser ve CIN 3 gözlenmemiş

(J Low Genit Tract Dis 2016;20: 224–229)

Findings and Outcomes in a Prevaccination Cohort of Women Younger Than 25 Years Attending a Tertiary Colposcopy Service

Yasmin L. Jayasinghe, MBBS, FRANZCOG, PhD,[1,2,3] Rani Bhat, MBBS, MS, MRCOG,[4] Michael Quinn, AM MBChB, MGO, MRCP(UK), FRCOG, FRANZCOG, CGO,[1,2] C. David H. Wrede, MA MB BChir(Cantab.) FRCS (Eng.) FRCOG FRANZCOG,[1,2] and Jeffrey H.J. Tan, MBBS, FRCOG, FRANZCOG[1,2]

TABLE 2. Cervical Biopsy Findings in Women Younger Than 25 Years According to Referral Cytology

	Colposcopic biopsy findings (total n = 4104)						
Referral cytology	**Normal n (%)**	**LGEA[f] n (%)**	**HGEA[g] n (%)**	**Other[h] n (%)**	**Subtotal (those who had a punch biopsy) n**	**Biopsy not performed n (%)**	**Total n (%)**
Cytology not recorded	169 (19.6)	257 (29.7)	190 (22.0)	9 (1.0)	625	235 (27.2)	864 (100.0)
Neg[a]	30 (19.7)	29 (19.1)	8 (5.3)	3 (2.0)	70	82 (53.9)	152 (100.0)
pLSIL[b]	20 (28.1)	22 (31.0)	15 (21.1)	0	57	14 (19.7)	71 (100.0)
LSIL[c]	417 (22.4)	773 (41.5)	278 (14.9)[i]	21 (1.1)	1,489	372 (20.0)	1861 (100.0)
pHSIL[d]	83 (27.0)	84 (27.4)	82 (26.7)[j]	7 (2.2)	256	51 (16.6)	307 (100.0)
HG[e]	115 (14.2)	224 (27.6)	392 (48.3)[k]	13 (1.6)	744	68 (8.3)	812 (100.0)
Inconclusive	7 (17.0)	10 (24.3)	10 (24.3)[l]	1 (2.4)	28	13 (31.7)	41 (100.0)
Subtotal	841 (20.5)	1399 (34.1)	975 (23.8)	54 (1.3)	3269	835 (20.3)	4104 (100.0)

[a]Negative.
[b]Possible low-grade squamous intraepithelial lesion.
[c]Low-grade squamous intraepithelial lesion.
[d]Possible high-grade squamous intraepithelial lesion.
[e]High-grade cytology, comprising high-grade squamous intraepithelial lesion (n = 809), and adenocarcinoma in situ (n = 3).
[f]Lowgrade epithelial abnormality, includes cervical condyloma.
[g]High-grade epithelial abnormality.
[h]Inconclusive or noncervical.
[i]2 with ACIS on punch biopsy, 1 with postcoital bleeding and HSIL smear at colposcopy then cervical cancer (CC) on punch biopsy.
[j]1 with ACIS.
[k]4 with ACIS, 1 with CC on punch biopsy.
[l]1 with ACIS.

4 ACIS, 1 CC

Jayasinghe YL, J Low Genit Tract Dis 2016

Management of Cervical Intraepithelial Neoplasia 2 in Adolescent and Young Women

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J Pediatr Adolesc Gynecol (2007) 20:269e274

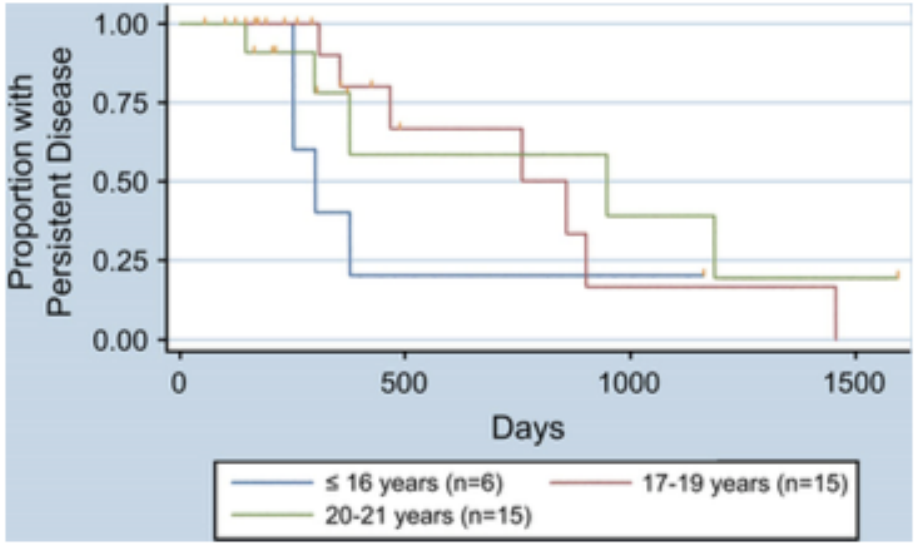


Fig. 2. Time to disease regression for adolescents and young women with CIN 2 by age category (n = 36). *P* value for test of equality of survivor curves = 0.38.

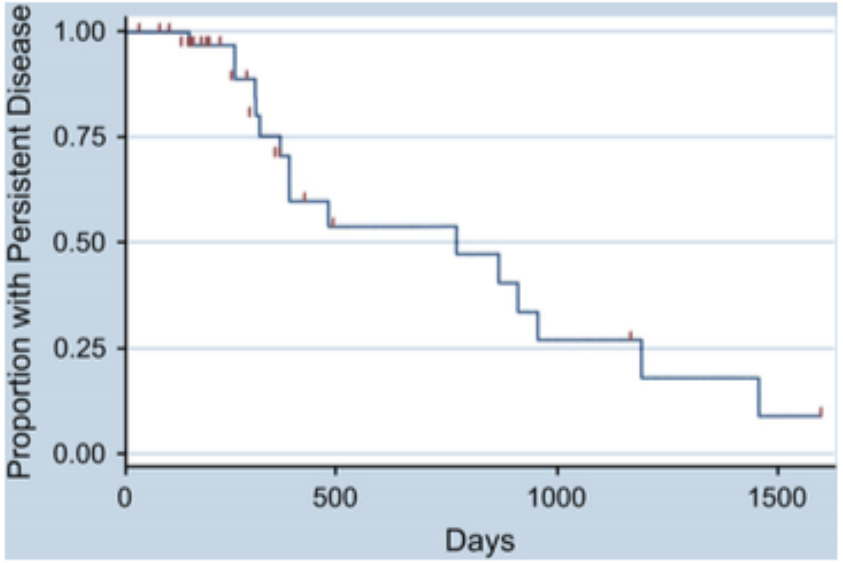


Fig. 1. Time to disease regression for adolescents and young women with CIN 2 managed expectantly (n = 36).

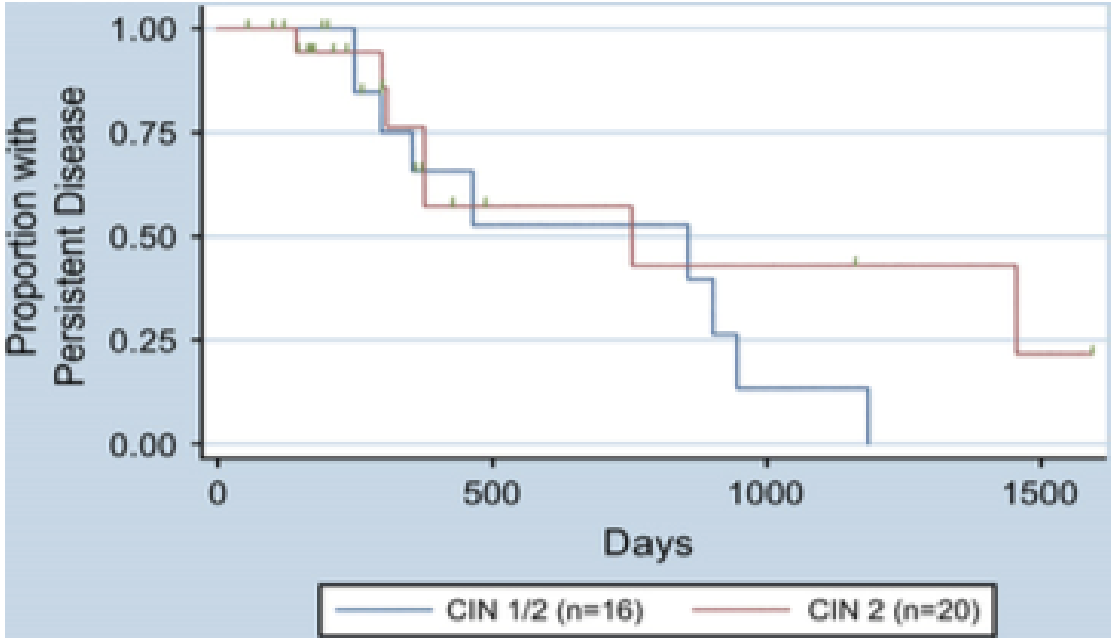


Fig. 3. Time to disease regression for adolescents and young women with CIN 1/2 versus CIN 2. *P* value for test of equality of survivor curves = 0.28.

Observational Management of CIN 2 in Young Women: A Prospective Multicenter Trial

Peter Sykes, MBChB, FRANZCOG,[1,2] Carrie Innes, PhD,[1] Dianne Harker, MA,[1] Martin Whitehead, MBChB,[3,4] Rachael van der Griend, MBChB,[4] Beverley Lawton, MBChB,[5] Merilyn Hibma, PhD,[6] Peter Fitzgerald, MBChB,[7] Narena Dudley, MBChB,[8] Simone Petrich, MD,[9] Jim Faherty, MD,[10] Cecile Bergzoll, MD,[11] Lois Eva, MBChB,[12] Catherine Parker, MBChB,[2] Lynn Sadler, MBChB,[12] and Bryony Simcock, MBChB[1,2]

TABLE 1. Rate of Regression in Retrospective and Prospective Studies of Observational Management of Women With CIN 2

Reference	*n*	Mean age (range)	Period, y	Regression rate
Munro et al. (2016)[13]	924	Not stated (18–24)	2	60
McAllum et al. (2011)[14]	157	20.9 (<25)	2	62
Moscicki et al. (2010)[15]	95	Not stated (13–24)	2	62
Guedes et al. (2007)[16]	45	30 (18–61)	1	42
Discacciati et al. (2011)[17]	42	26.5 (17–47)	1	74
Fuchs et al. (2007)[18]	36	Not stated (11–20)	2	50
Monteiro et al. (2010)[19]	17	15.3 (11–19)	2	58
Moore et al. (2007)[20]	23	19 median (13–21)	1.5	65

Sykes P. et al. 2016

AOGS
Acta Obstetricia et Gynecologica Scandinavica

Table 2. Treatment performed and final histologic condition at time of treatment by management category (within 12 months of CIN2 diagnosis).

	Immediate treatment group (n = 1493)	Percentage (%)	Conservative treatment group (n = 924)	Percentage (%)
Treatment performed				
Laser destruction	58	3.9	25	2.7
Cold knife cone biopsy	138	9.2	35	3.8
LEEP	1,297	86.9	402	43.5
No treatment record present (within 24 months of CIN2 diagnosis)*	0	0	462	50.0
Treatment outcome				
Negative	82	5.5	24	2.6
Low-grade intraepithelial abnormality	176	11.8	49	5.3
CIN2	933	62.5	212	22.9
CIN3	231	15.5	144	15.6
Adenocarcinoma-in-situ	11	0.7	8	0.9
Squamous cell carcinoma	<5**	–	0	0.0
Adenocarcinoma	<5**	–	0	0.0
No treatment outcome available	58	3.9	487	52.7

CIN, cervical intraepithelial neoplasia; LEEP, loop electrosurgical excisional procedure.

*No histologic condition was reported because cervical cytology test results were used to determine the outcome in the conservative treatment group, or the treatment was ablation and no histologic condition was available.

**Due to small case numbers, <5 has been reported to ensure women's confidentiality.

TABLE 1

Demographics for the entire adolescent cohort

Demographic	Group followed with surveillance cervical cytologic findings and/or colposcopy (n = 355)	Group referred from incident colposcopy/biopsy to LEEP (n = 146)	*P* value
Age (y)			
Median	19	20	
Range	13-21	16-21	
Race (n)			
White	234 (66%)	110 (76%)	.027
Black	78 (22%)	15 (10%)	
Hispanic	32 (9%)	20 (13%)	
Native American	7 (2%)	1 (2%)	
Other		4 (1%)	
Contraception (n)			
None	103 (29%)	13 (9%)	<.0002
Oral contraceptive	142 (40%)	62 (43%)	NS
Depo Provera	96 (27%)	55 (38%)	.014
Condoms	14 (4%)	14 (10%)	.008
Intrauterine device	4 (<1%)	2 (1%)	NS
Parity: 0 (n)	217 (61%)	72 (46%)	.002
Median life-time sexual partners (range)	4 (1-100)	5 (1-33)	NS
Tobacco: current/past use (n)	149 (42%)	80 (55%)	.007

TABLE 2

Referral cytologic findings for the surveillance (n = 355) and immediate LEEP (n = 146) group, with biopsy results and final LEEP results for the immediate LEEP group

Variable	Surveillance group (n)	LEEP group (n)
Referral cytologic evidence		
Atypical*	82 (23%)	38 (26%)
LSIL	217 (61%)	54 (37%)
HSIL	56 (16%)	54 (37%)
Biopsy results		
Normal	142 (40%)	9 (6%)
CIN 1	154 (44%)	15 (10%)
CIN 2	39 (11%)	77 (53%)
CIN 3	11 (3%)†	45 (31%)
LEEP pathologic findings		
Normal	—	9 (6%)
CIN 1	—	15 (10%)
CIN 2	—	77 (53%)
CIN 3	—	45 (31%)

* Atypical squamous cell cytologic evidence on 2 occasions.

† Referred for immediate LEEP but refused and were followed with cervical cytologic evaluation and colposcopy.

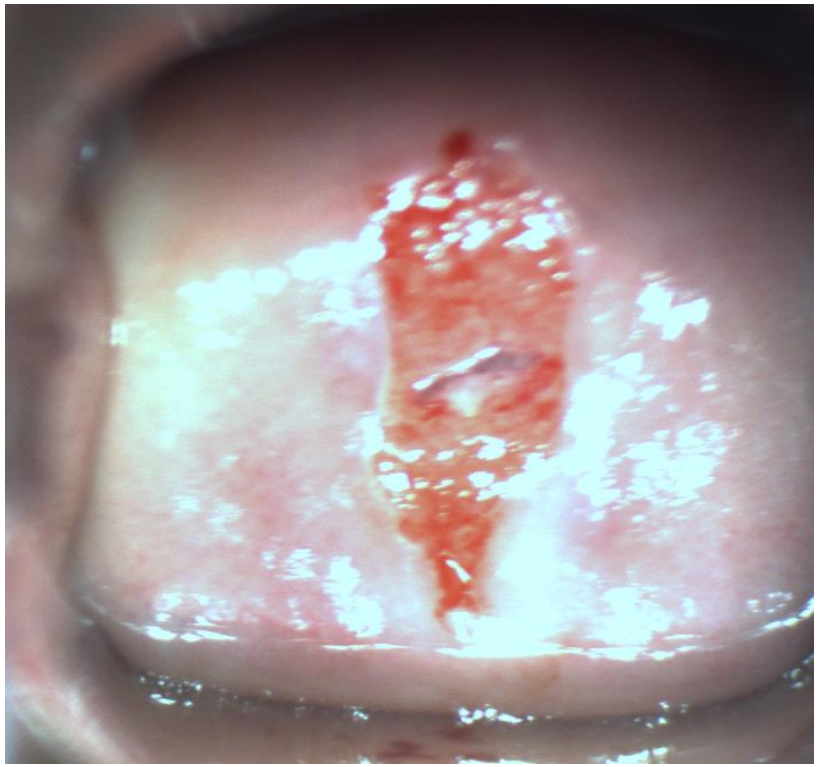
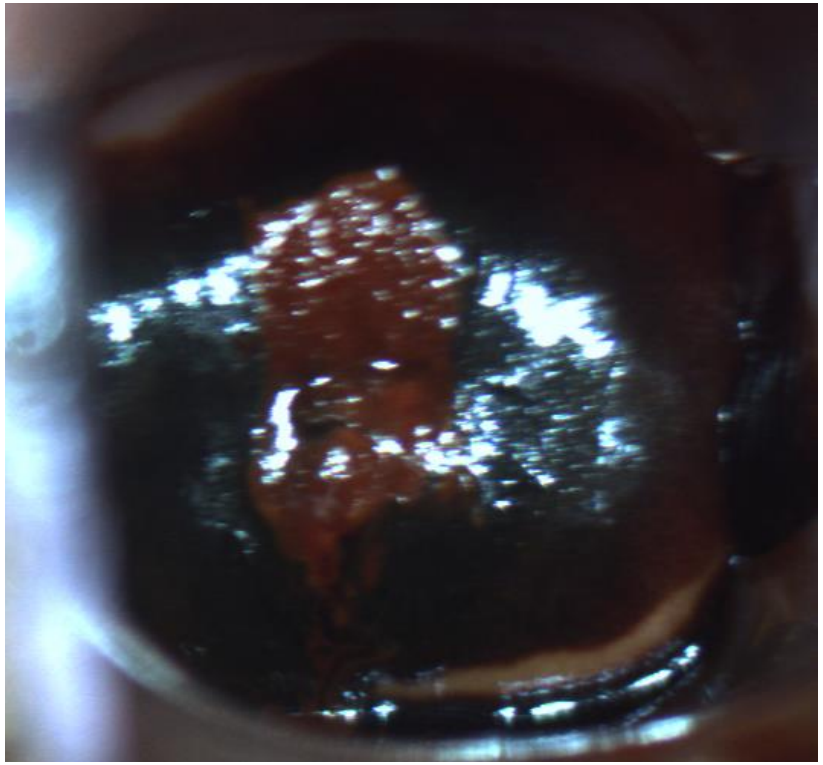
Ekzisyonel işlem sonrası obstetrik morbitite

- Düşük
- Erken doğum
- Erken membran rüptürü

- **Derin eksizyon ile ilişkilidir**

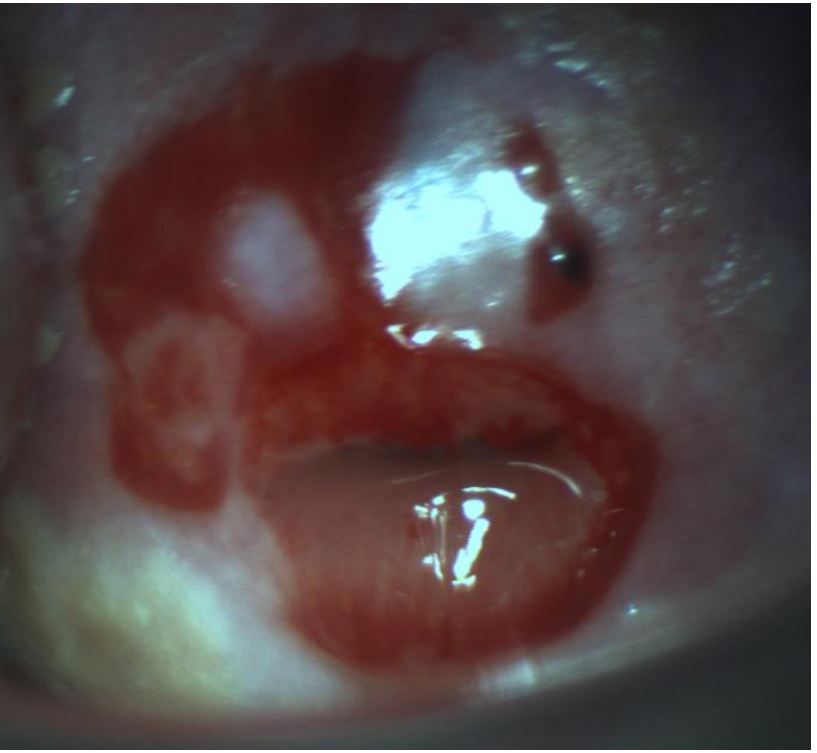
Bjorge T, Obstet Gynecol. 2016
Kyrgiou M, BMJ, 2014

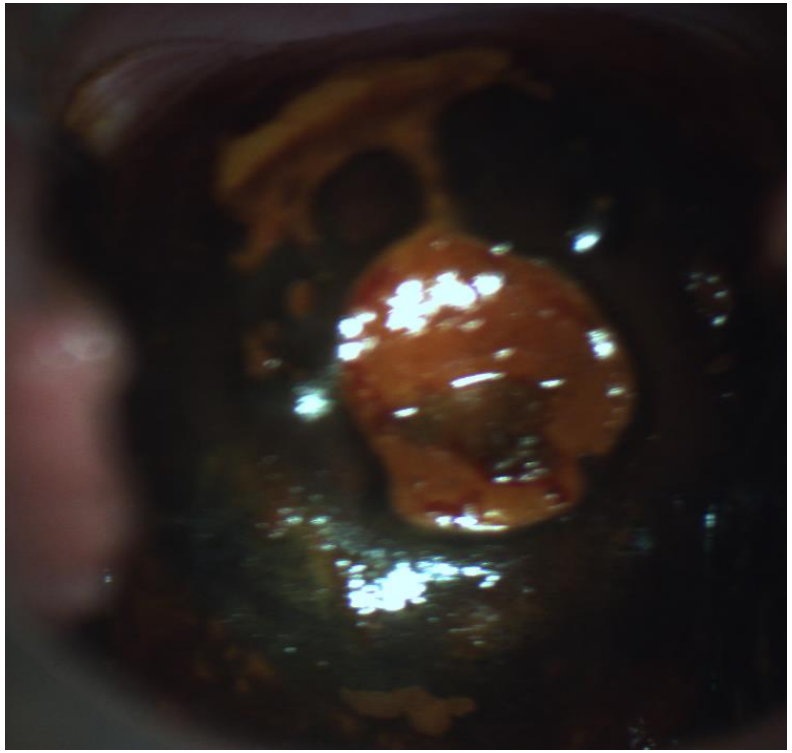
23 yaş, HPV (+), Smear: LSIL

Biyopsi yapılmadı

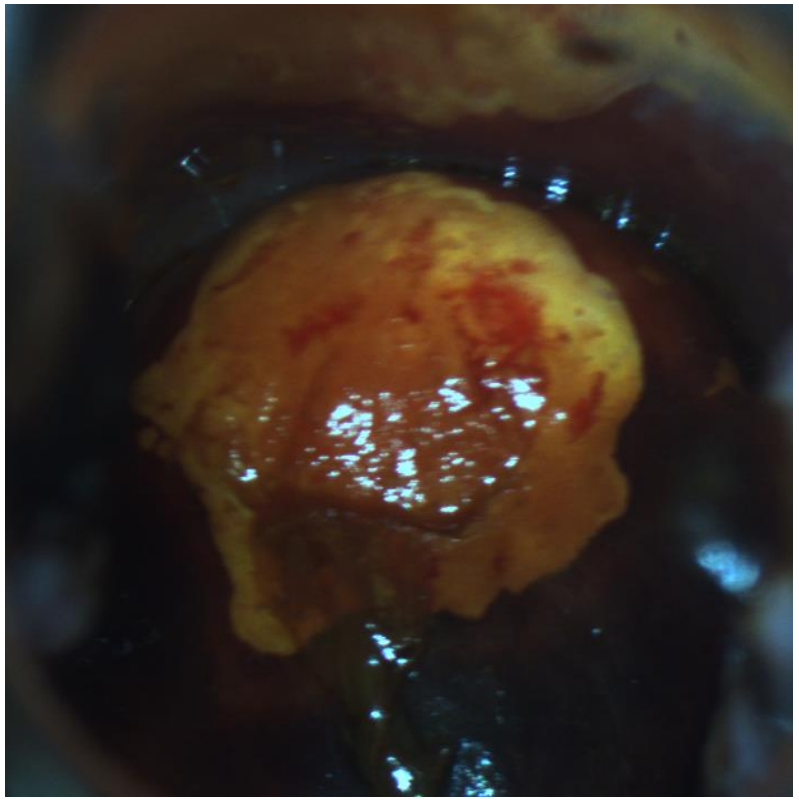
26 yaş, postkoital kanama, smear: normal





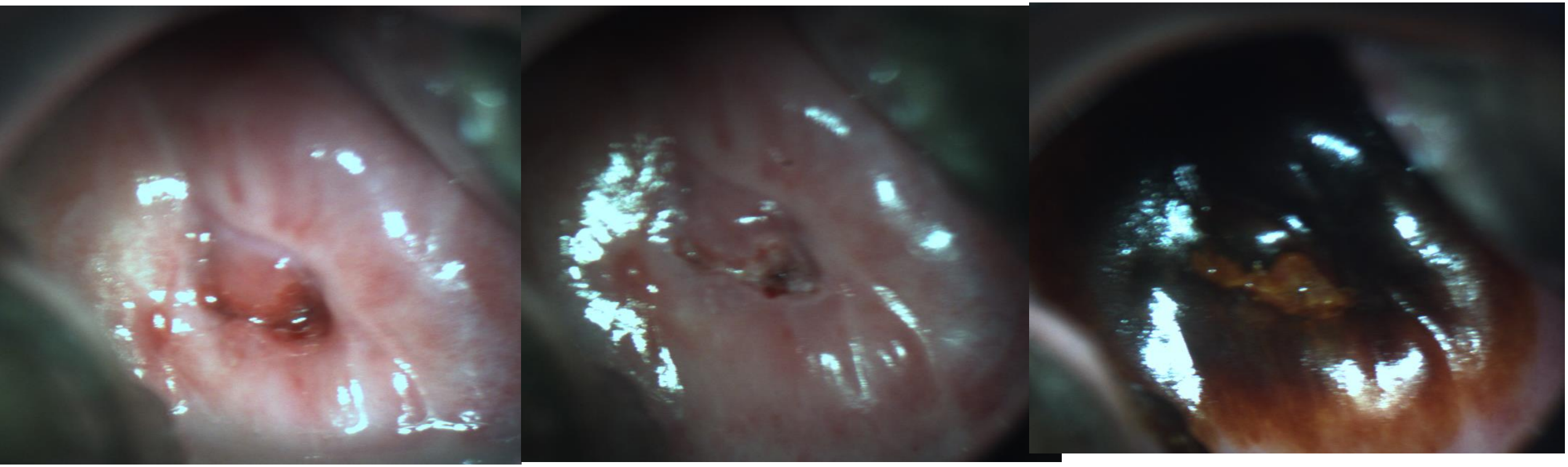
Saat 1, 12, 6 ve 9 biyopsiler
Yangısal ve Reaktif değişiklikler

30 yaş, smear:HSIL



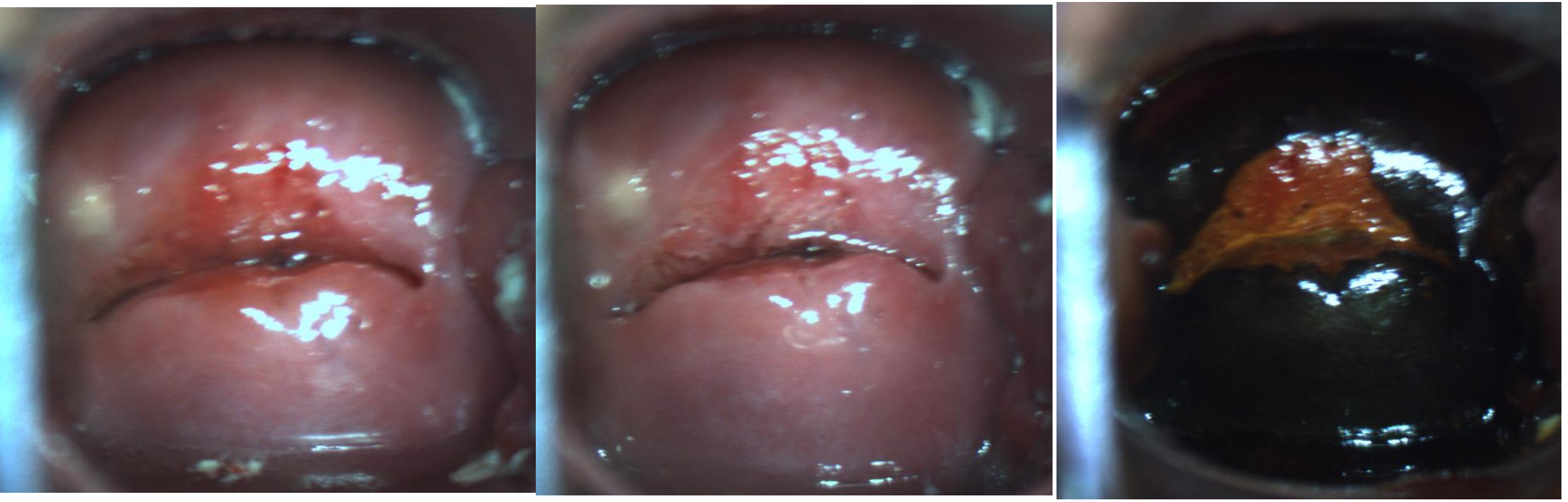
Saat 6, 9 ve 12 CIN3
Saat 3 CIN2
Saat 11 Normal

LEEP’den 1 yıl sonra aynı hasta



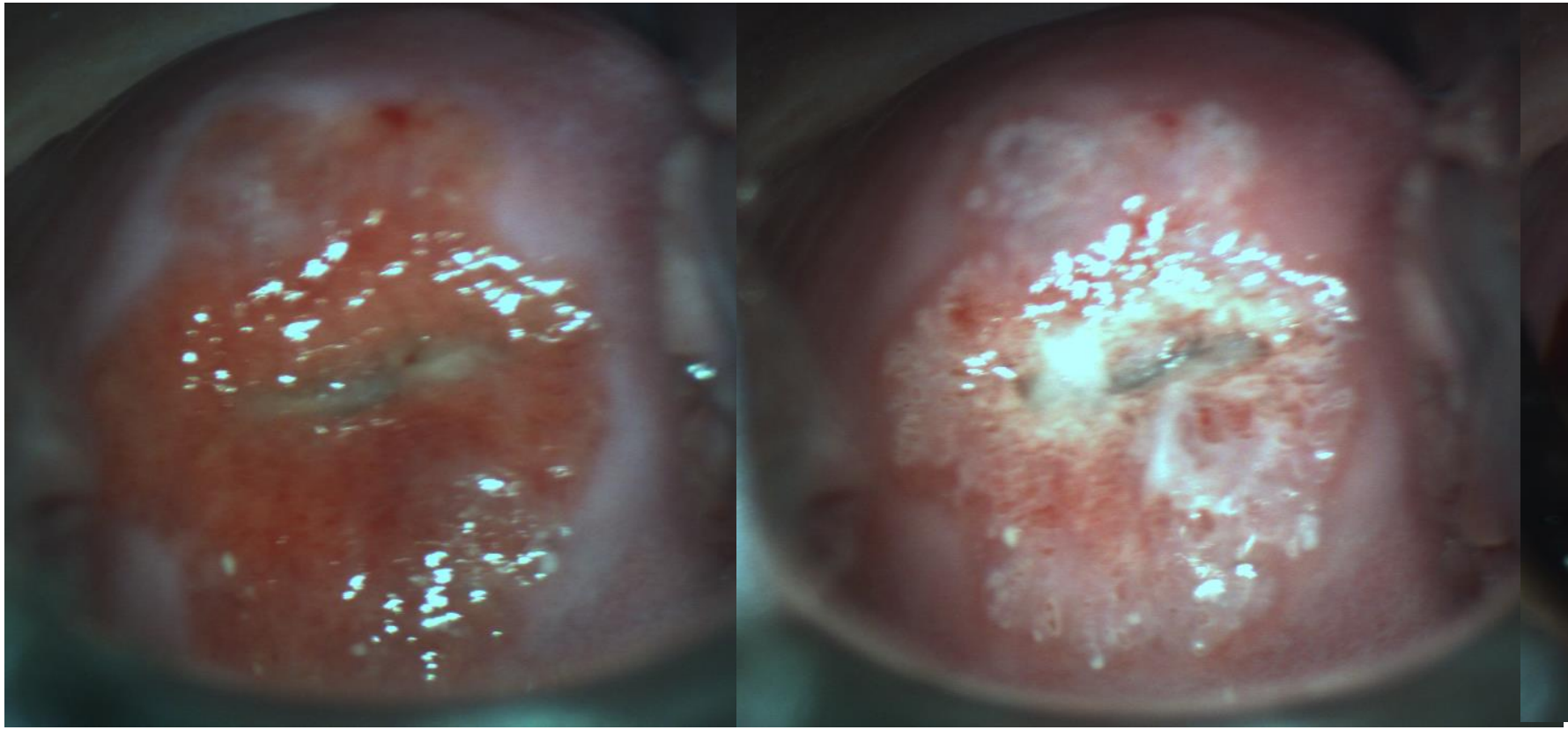
Saat 9 ve 12 biyopsi: Normal
ECC: Normal

26 yaş, Smear: LSIL



Saat 11, 12 biyopsi; CIN 1

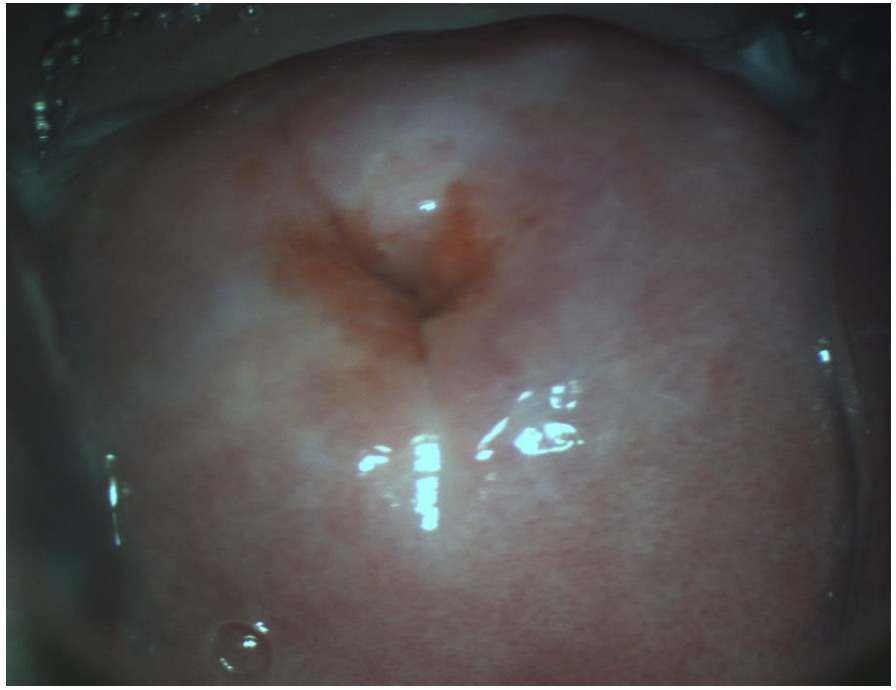
30 yaş, HPV 16 (+), smear: normal

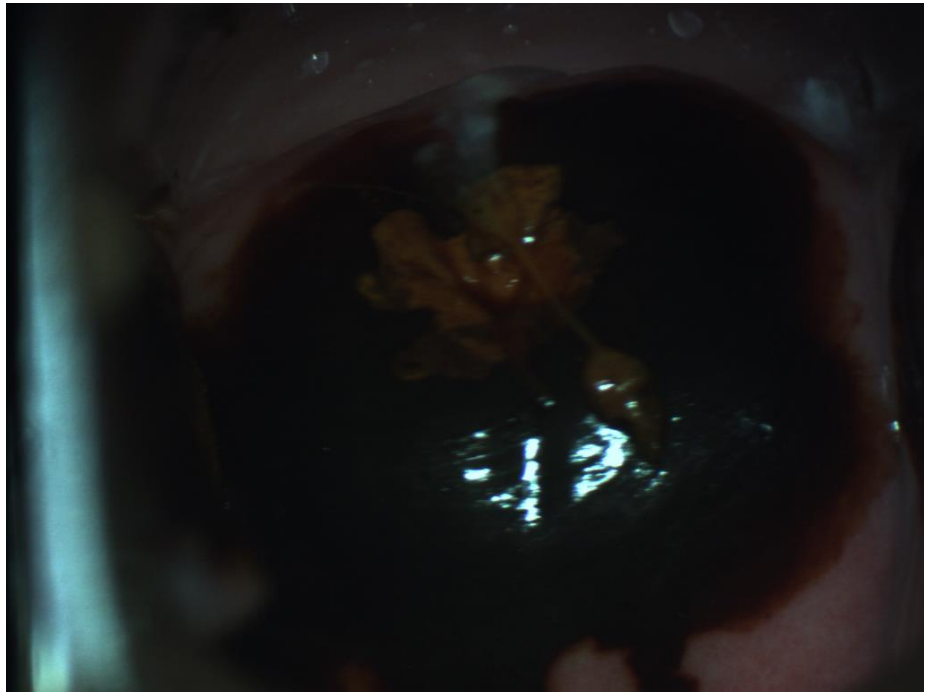


Saat 11: CIN2
Saat 6, 9, 12: CIN1

LEEP sonucu CIN1

21 yaş, HPV 16, Smear: LSIL





Saat 12, 11 biyopsiler; CIN1

Özet

- Adolesanlarda taramaya gerek yok
- 20-30 yaş arası kadınların taraması yapılabilir
- Çoğunlukla düşük dereceli lezyonlar söz konusudur
- Kolposkopi yüksek dereceli sitolojilerde ve/veya riskli grupta düşünülmelidir
- Serviksteki fizyolojik görünümlere aşina olmak gerekir, yine de şüpheli ise biyopsi yapılmalıdır
- Lezyonların gerileme potansiyeli yüksek olduğu için daha konservatif tedaviler tercih edilmelidir.

İlginiz için teşekkür ederim.