Cancer Care Ontario

Colposcopy Community of Practice Webinar

MAY 16TH & MAY 31ST, 2019

Ontario
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Housekeeping Items

- If you a unable to hear us, please dial-in:
  - **416-620-7077 OR 1-866-834-7685**
  - **Access code: 255 6848**
- Please use the chat box or the “Raise Hand” function in your window to alert us if you have a question or comment
- We have muted the line – if you have questions, press ***7** to unmute yourself.
- For technical difficulties, dial ***0** to speak to an operator
- Please note that this session is being recorded and will be available online in the coming weeks

For reference, the *Colposcopy Clinical Guidance Document* and the related colposcopy toolkit documents are provided in your calendar invitations

Welcome to the Colposcopy Community of Practice

About the Colposcopy CoP

- Sixth set of CoP webinars
  - ~120 attendees at Fall 2018 meeting
  - Active engagement and strong feedback

- Today's webinar will be interactive
  - ✓ Live polls during case studies
  - ✓ Q&A periods after each agenda item
  - ✓ Participation is encouraged

- Today's session is a Royal College of Physicians and Surgeons Accredited Group learning Activity – we will issue you a letter of accreditation for 1.5 credit hours if you:
  1. Participate in today's event,
  2. Register as a member of the Colposcopy CoP, and
  3. Complete and submit the post-webinar evaluation survey.

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Have questions? Email us!
ColposcopyCoP@cancercare.on.ca

Today's Agenda

Item	Presenter
Introduction	Dr. Joan Murphy
Colposcopy CoP Updates	Michelle Dueckman
Colposcopy Images: Building Expertise	Dr. Michael Shier
Case #1: AIS management	Dr. Naana Jumah
Questions from the Field: Discharge criteria	Dr. Joan Murphy
Case #2: Conservative management of HSIL in <30	Dr. Rachel Kupets
Questions from the Field: Annual screening in primary care	Dr. Joan Murphy
Concluding Remarks and Accreditation	Dr. Joan Murphy

A special thank you to our CoP Planning Committee:

Dr. Laura White
Dr. Rachel Kupets
Dr. Paul Gurland
Dr. Keiyan Sy

Learning Objectives

We hope that by the end of this meeting, you will better understand:

1. How to build expertise in interpreting colposcopic findings
2. Risk assessment and implications for screening and colposcopy
3. Navigation of colposcopy best-practice pathways

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CoP Updates – **NEW** CoP Resources Hub

MICHELLE DUECKMAN
HEALTH POLICY ANALYST, OCSP

Ontario
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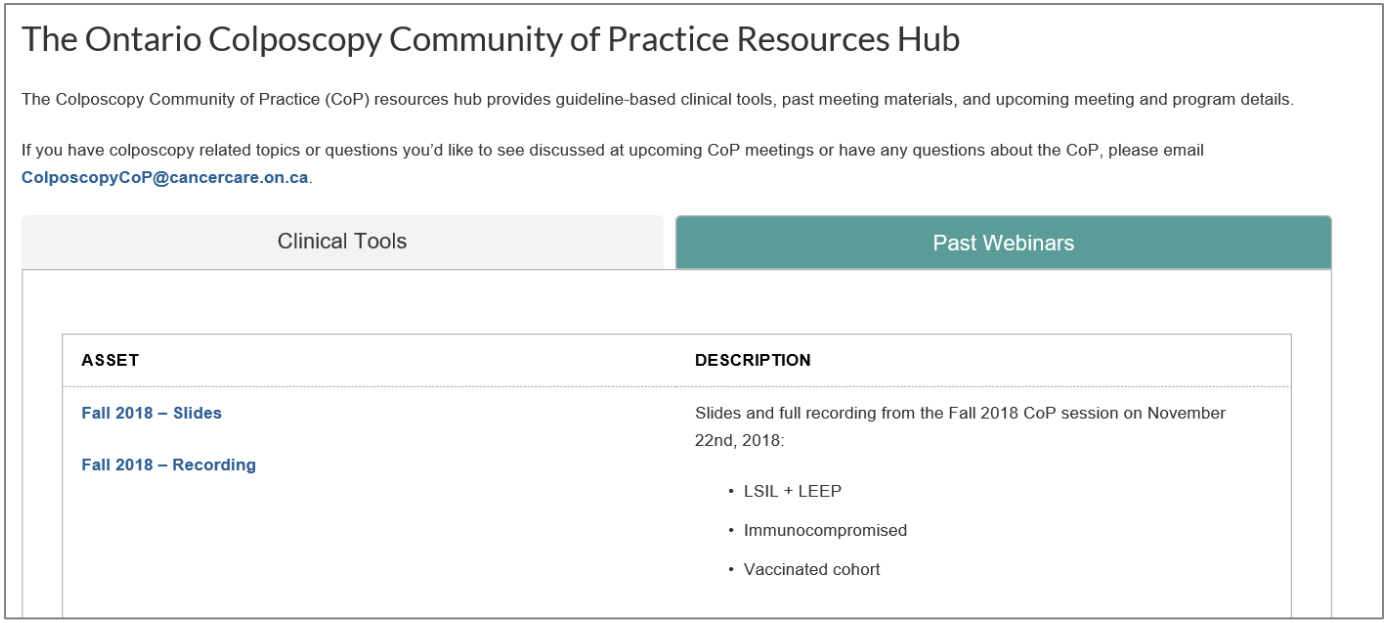
CoP Resources Hub

- One stop resource:
  - Past webinar recordings
  - Past webinar slide decks
  - Guidance documents (e.g. Colposcopy Clinical Guidance, PEBC Screening Guidelines)
- Contact CoP inbox if you misplace the link - not google searchable
- Specific link necessary to access the hub: http://www.cancercareontario.ca/colposcopyhub



The Ontario Colposcopy Community of Practice Resources Hub

The Colposcopy Community of Practice (CoP) resources hub provides guideline-based clinical tools, past meeting materials, and upcoming meeting and program details.

If you have colposcopy related topics or questions you'd like to see discussed at upcoming CoP meetings or have any questions about the CoP, please email ColposcopyCoP@cancercare.on.ca.

Clinical Tools | Past Webinars

ASSET	DESCRIPTION
Fall 2018 – Slides Fall 2018 – Recording	Slides and full recording from the Fall 2018 CoP session on November 22nd, 2018: • LSIL + LEEP • Immunocompromised • Vaccinated cohort

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Colposcopy Images: Building Expertise

DR. MICHAEL SHIER
CSCL TORONTO CENTRAL (LHIN 7)

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Colposcopy Images : Building Expertise

Patient

A 26 year old nulliparous woman is referred to colposcopy with Pap tests showing LSIL. Significant history includes that she is a cigarette smoker and has not been vaccinated against HPV.

You perform colposcopy.

Colposcopy Images : Building Expertise

Q1. Based on colposcopic findings, what type of transformation zone is present?:

A) Type 1

B) Type 2

C) Type 3

D) Type 1 posterior cervix, type 2 anterior cervix


Type 1 Transformation Zone

Colposcopy Images : Building Expertise

Transformation Zone Types:

- Fetal Transformation Zone
- Adult Transformation Zone
  - Mature squamous metaplasia
  - Immature squamous metaplasia

Colposcopy Images : Building Expertise

Transformation Zone Types:

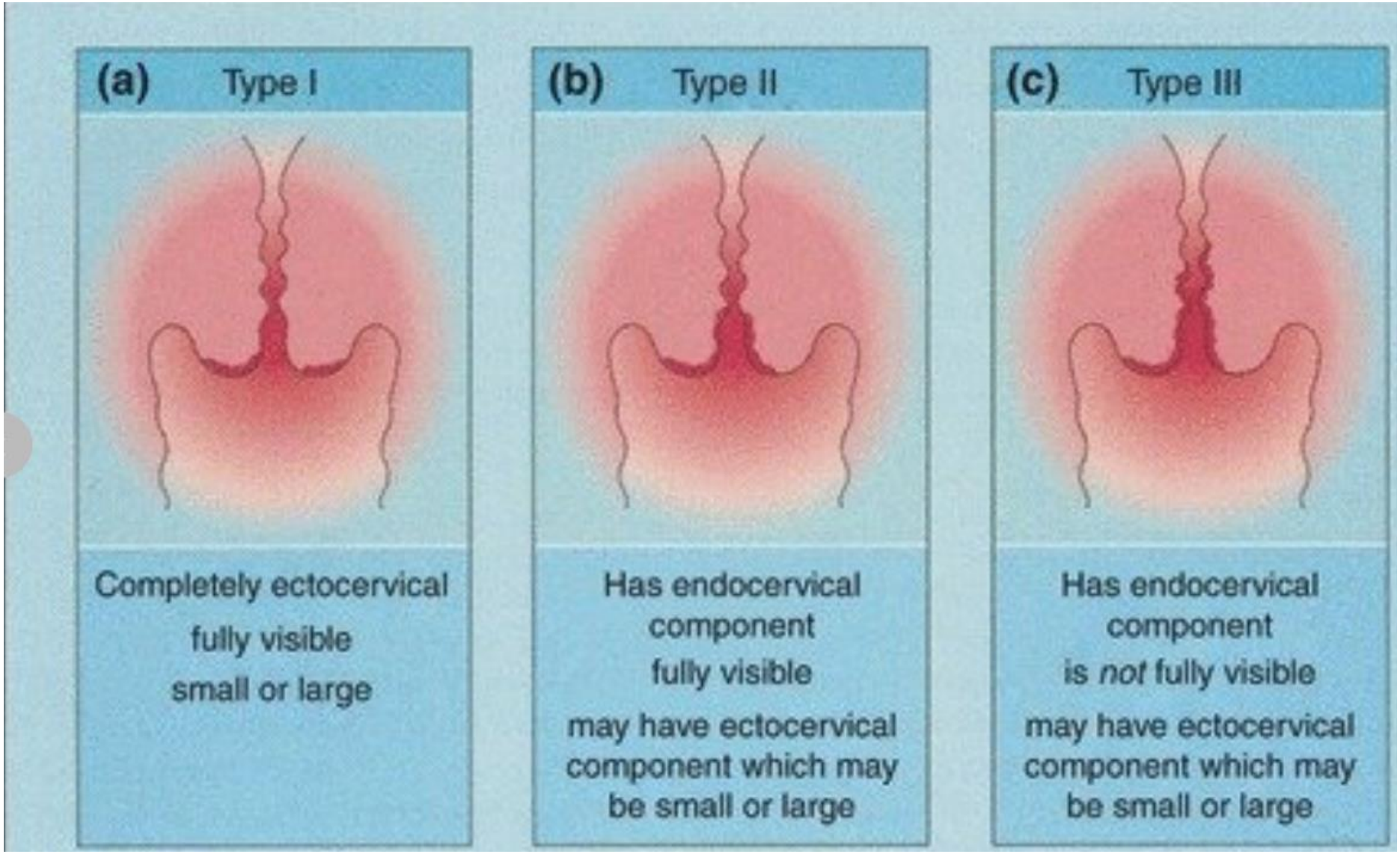
Type 1. Entirely exocervical

Type 2. Extends into endocervical canal, upper limit visible

Type 3. Extends into canal and upper limit not visible

Type 4. Entire transformation zone in canal

Colposcopy Images : Building Expertise



Colposcopy Images : Building Expertise

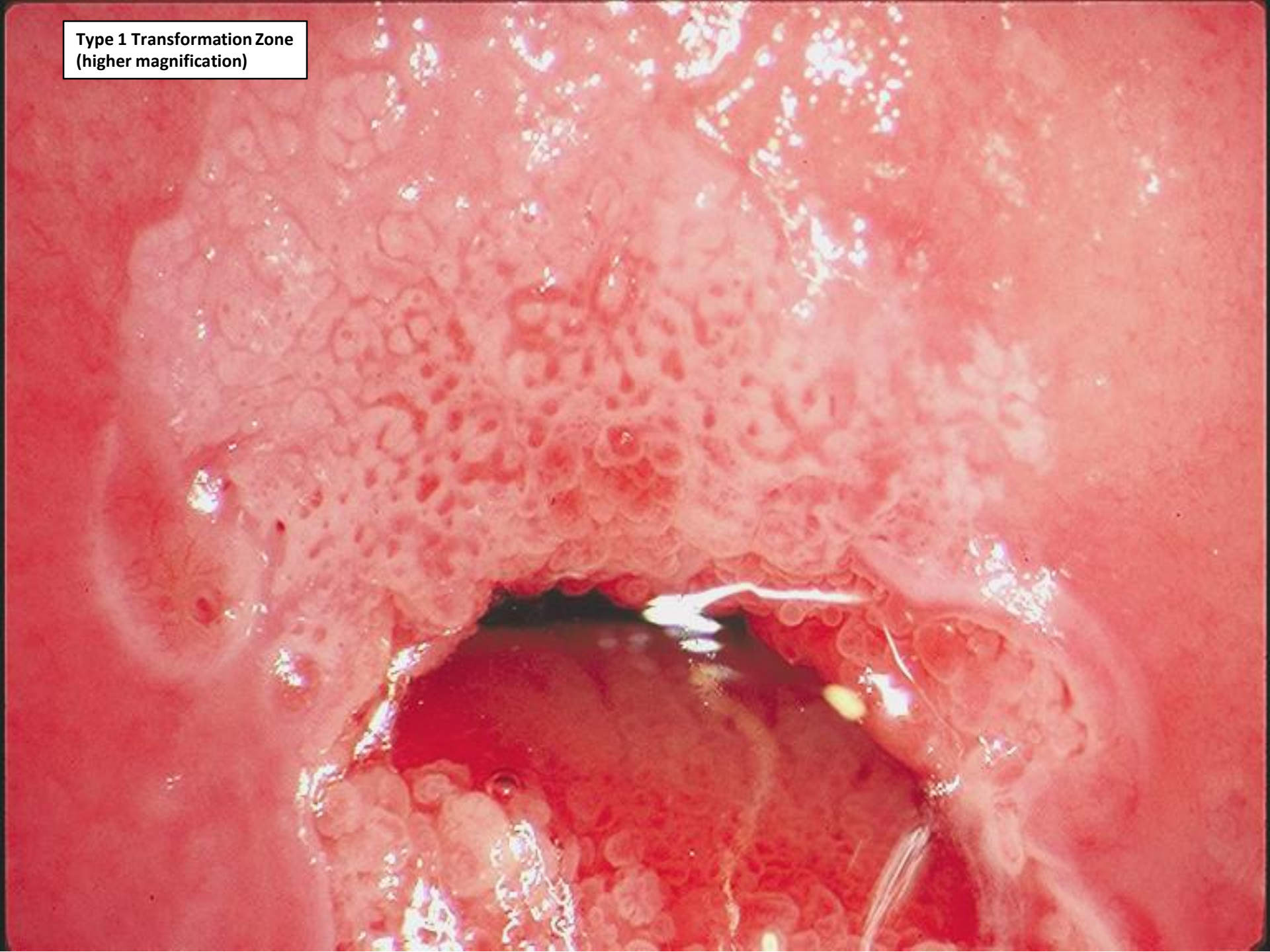
Q2. Based on colposcopic findings, what type of transformation zone is present?:

A) Type 1

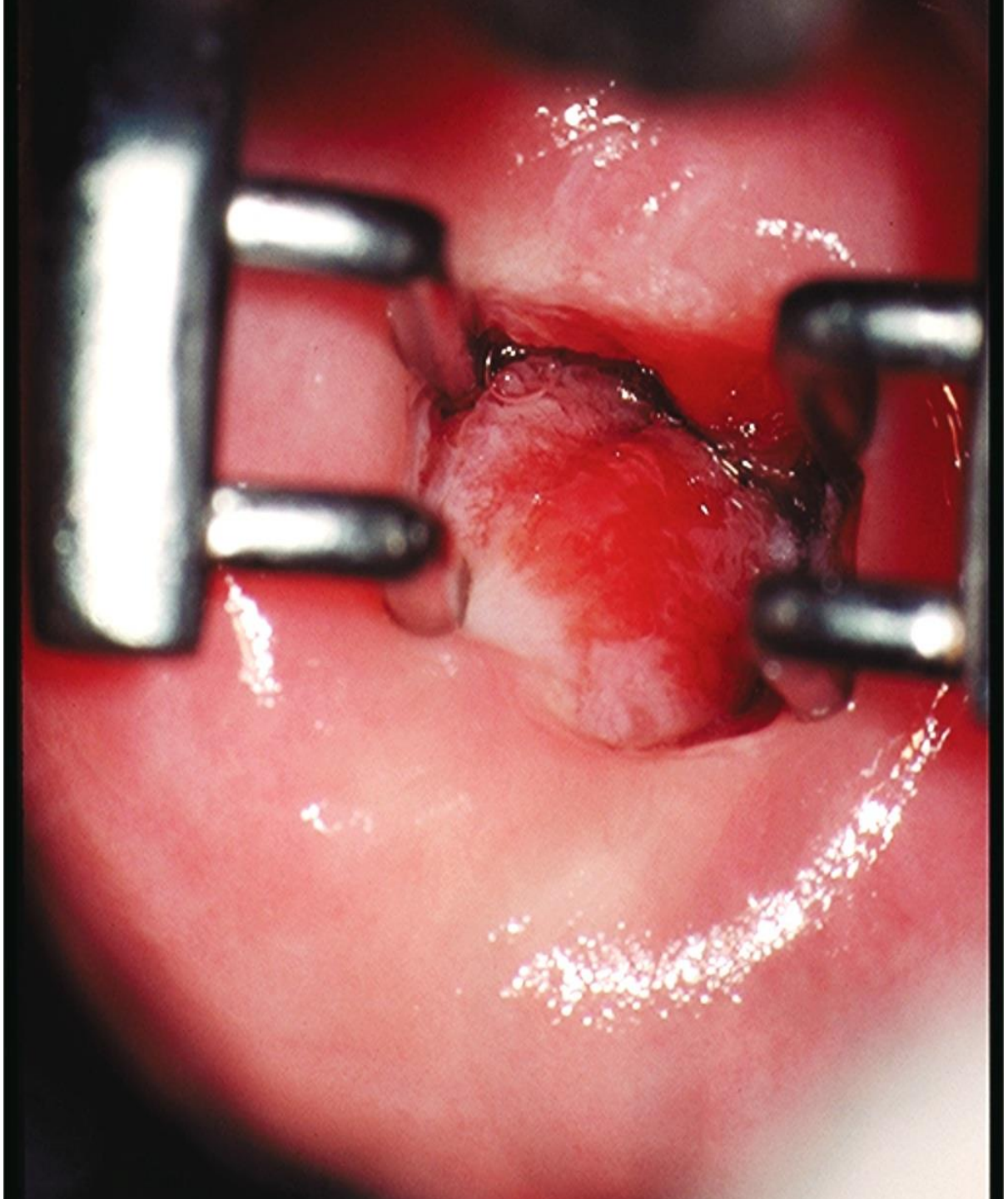
B) Type 2

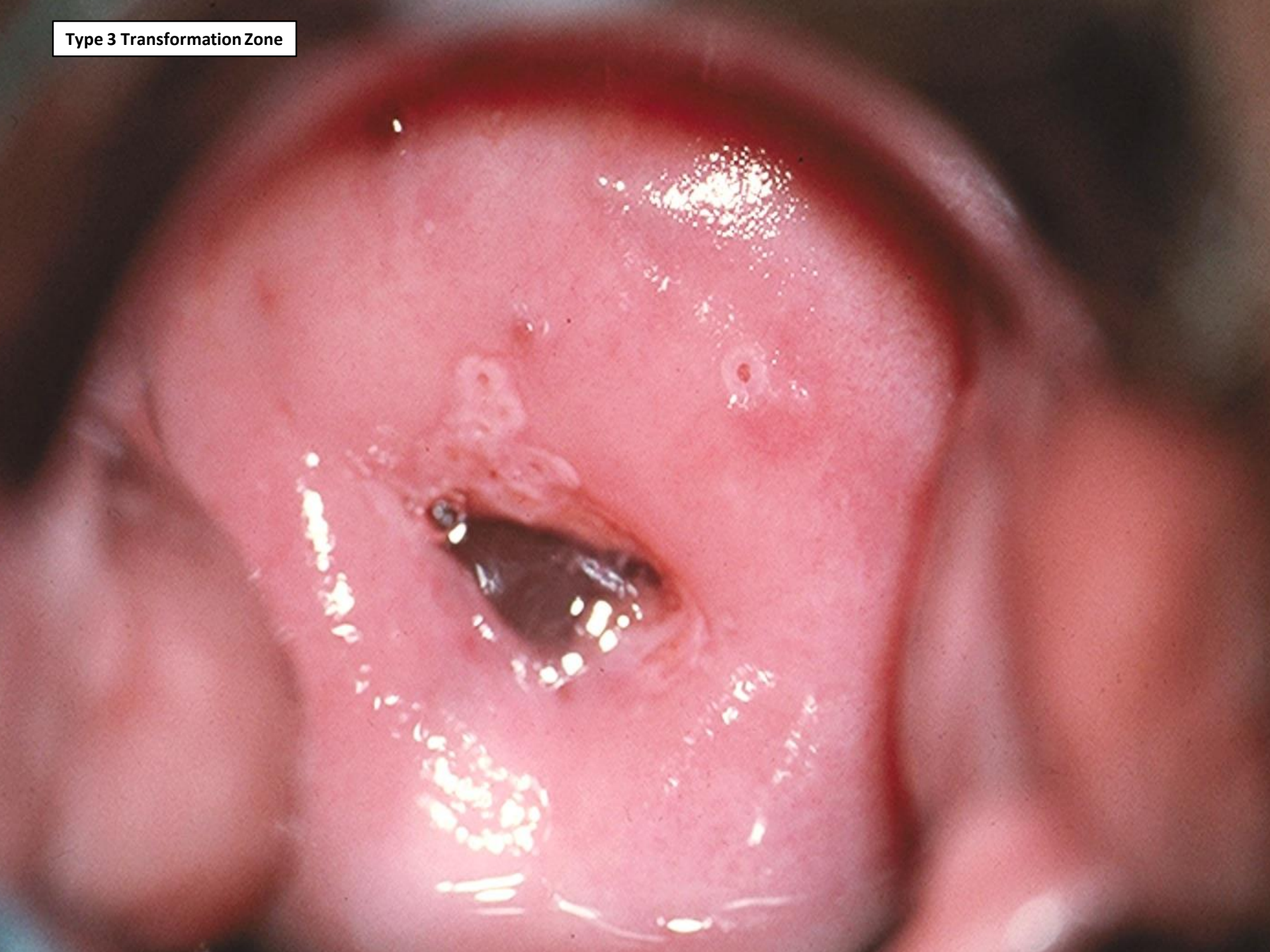
C) Type 3


Type 1 Transformation Zone


Type 1 Transformation Zone
(higher magnification)

Type 3 Transformation Zone



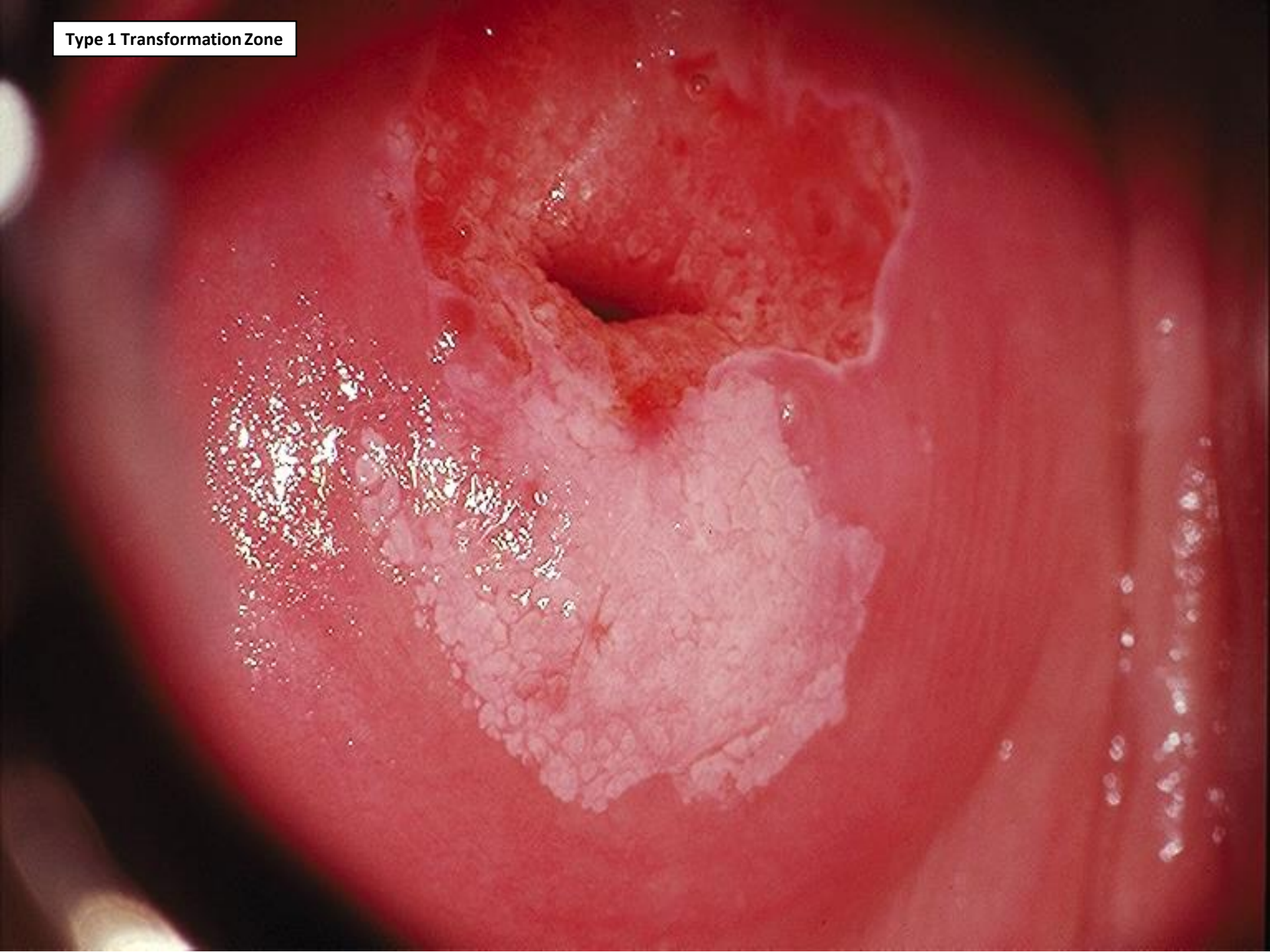

Type 3 Transformation Zone

Colposcopy Images : Building Expertise

Ontario Colposcopy Terminology:

- Unsatisfactory colposcopy
- Inadequate colposcopy

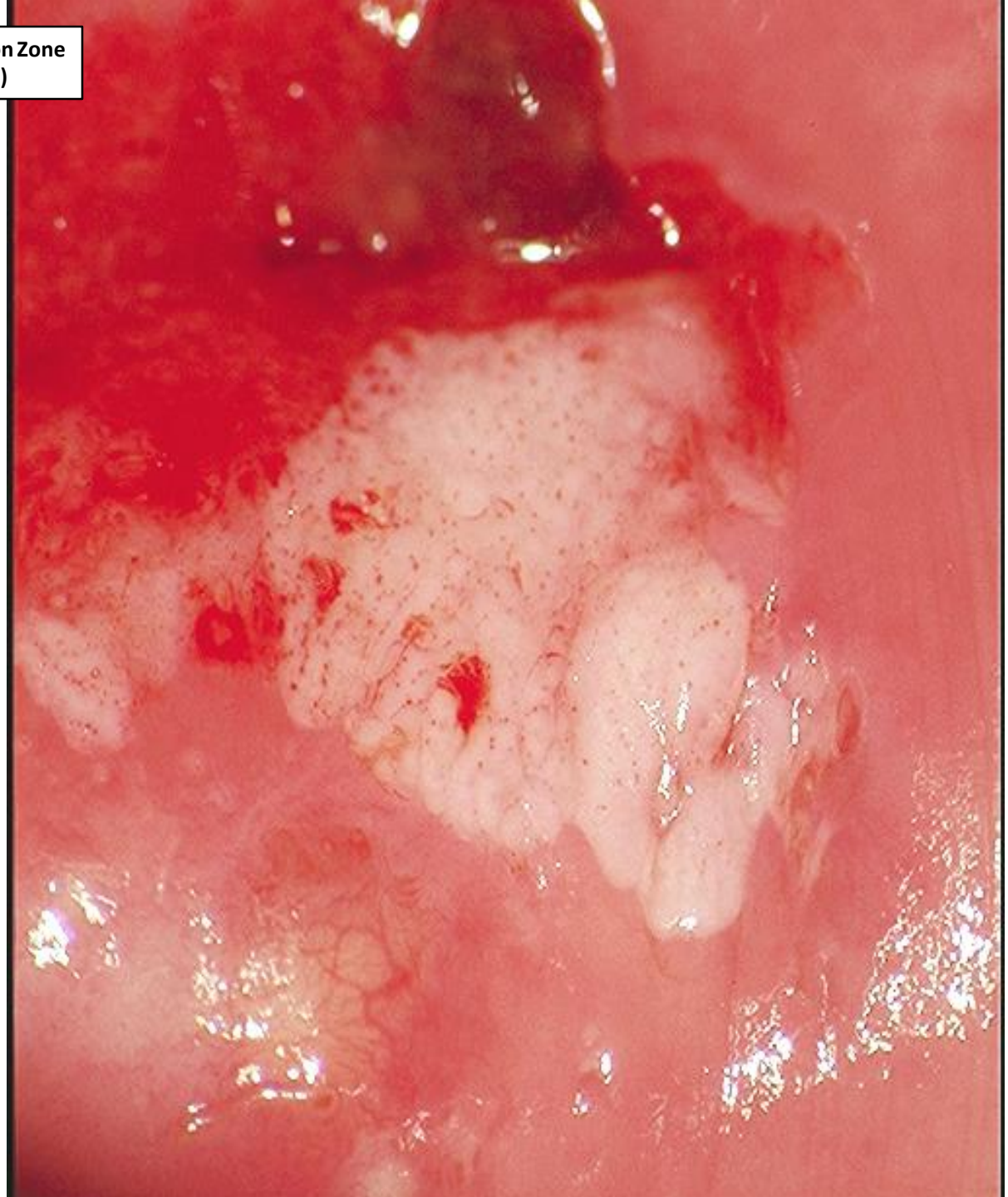
- Type 3 and 4 transformation zones


Type 1 Transformation Zone


Type 1 Transformation Zone
(higher magnification)

Type 1 Transformation Zone

Type 1 Transformation Zone
(higher magnification)



Type 1 Transformation Zone

Colposcopy Images : Building Expertise

Q3. Based on colposcopic findings, what type of transformation zone is present?:

A) Type 1

B) Type 2

C) Type 3

D) Type 4

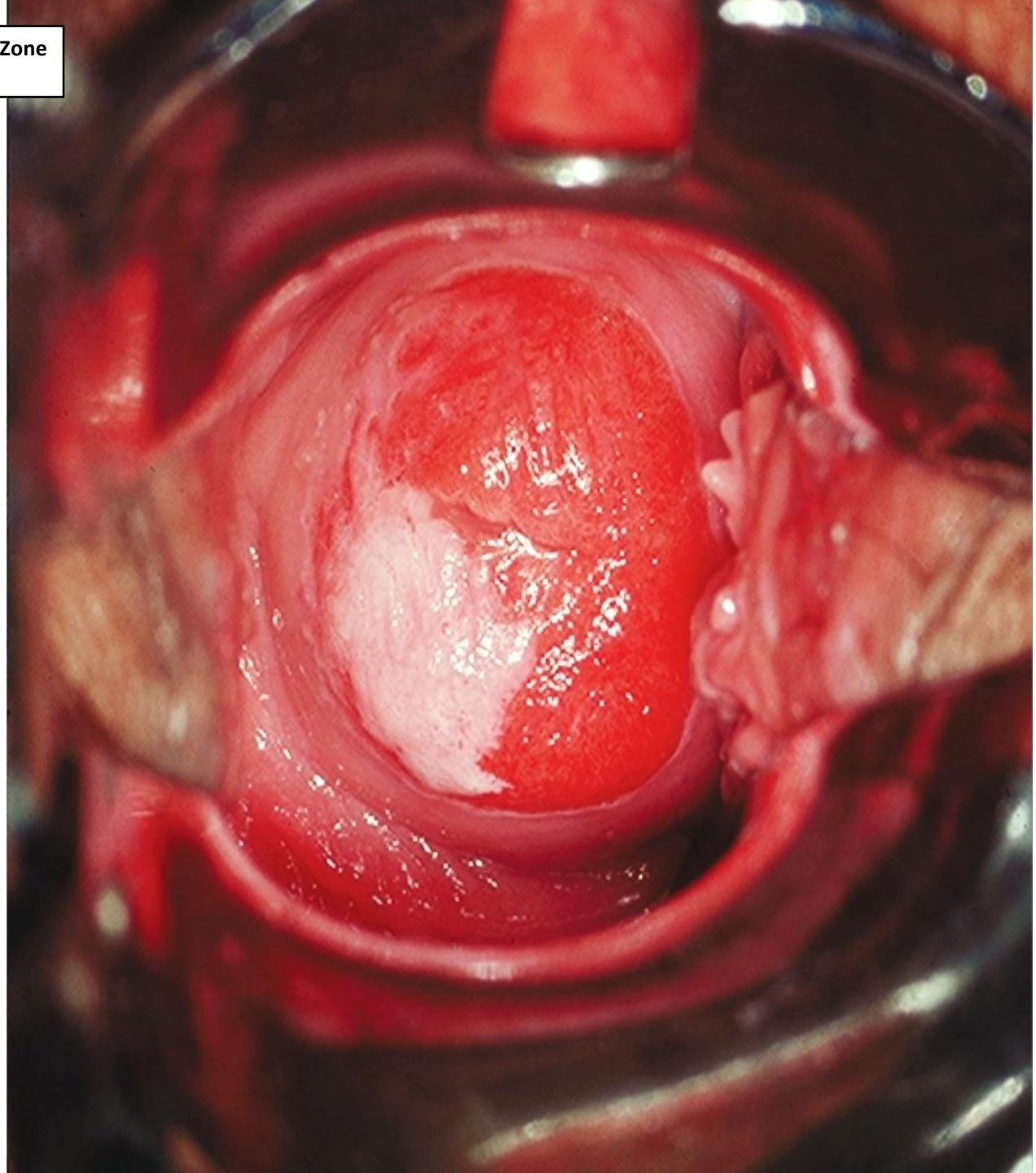
Type 2 Transformation Zone

Colposcopy Images : Building Expertise

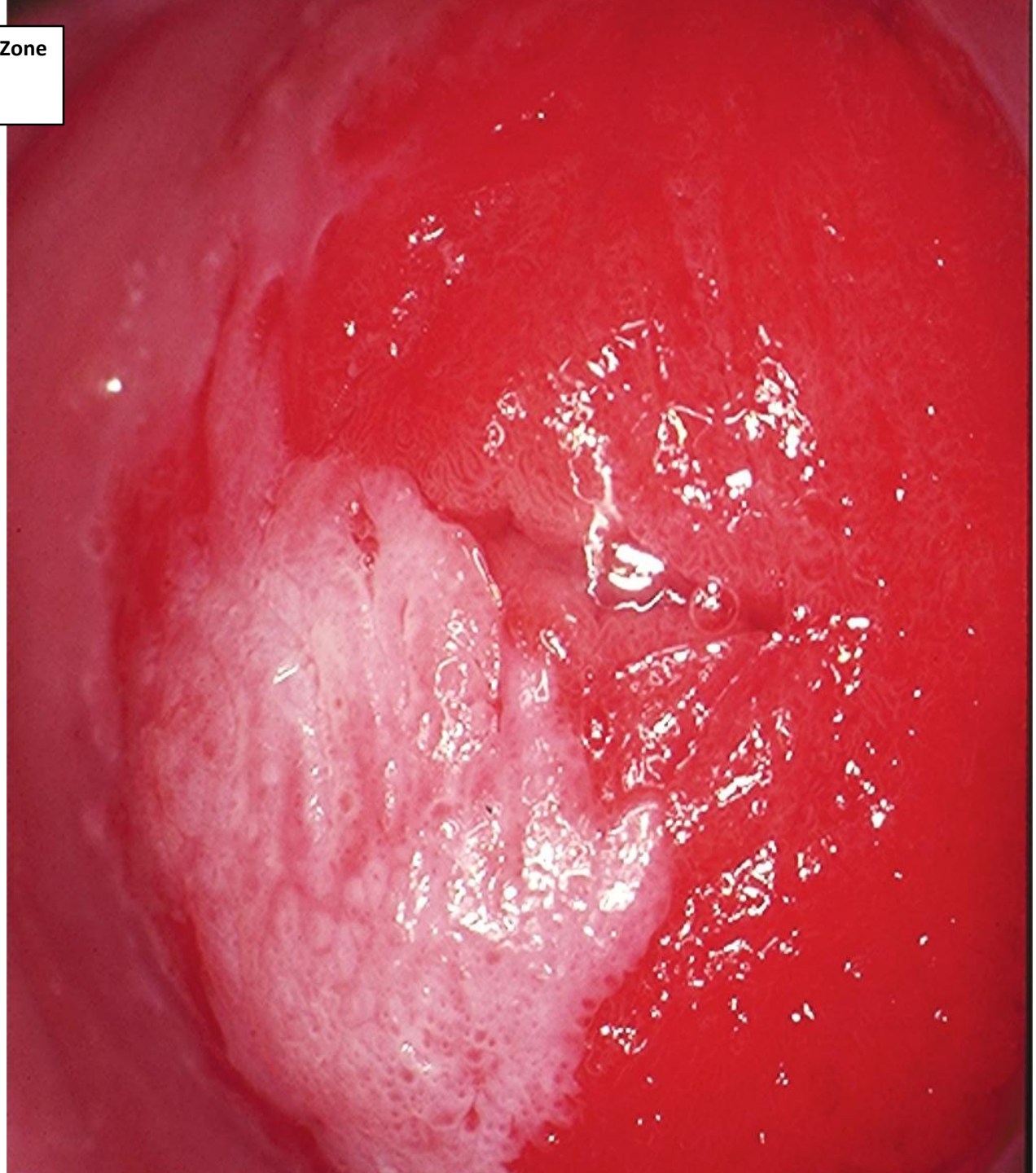
Transformation zone size and lesion size:

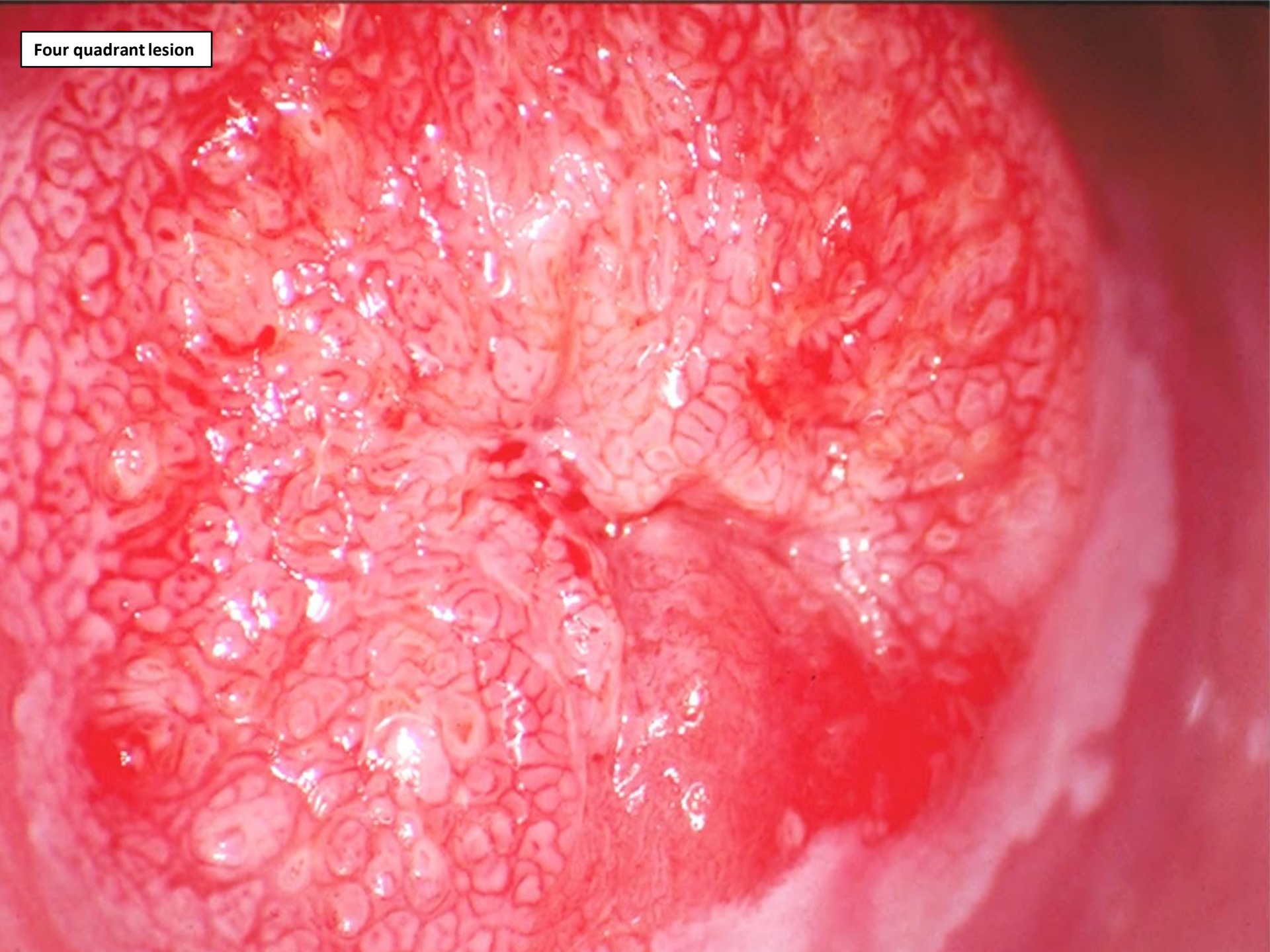
- Number of Quadrants

Type 1 Transformation Zone
One quadrant lesion



Type 1 Transformation Zone
One quadrant lesion
(higher magnification)



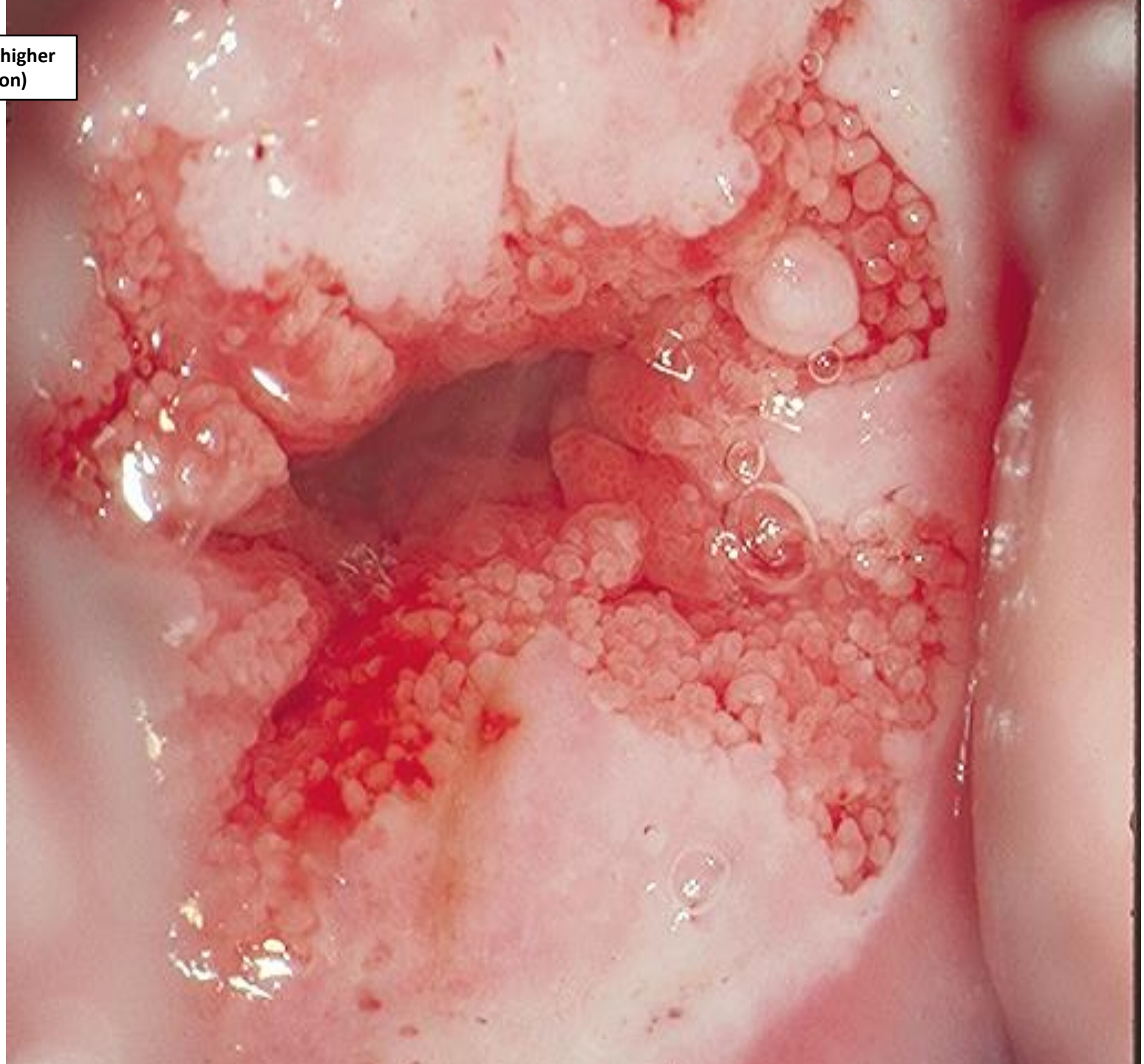

Four quadrant lesion

Colposcopy Images : Building Expertise

Newer colposcopic signs that indicate High Grade Disease:

- Ridge sign
- Cuffed gland openings
- Inner border sign
- Rag sign
- Sharp border sign

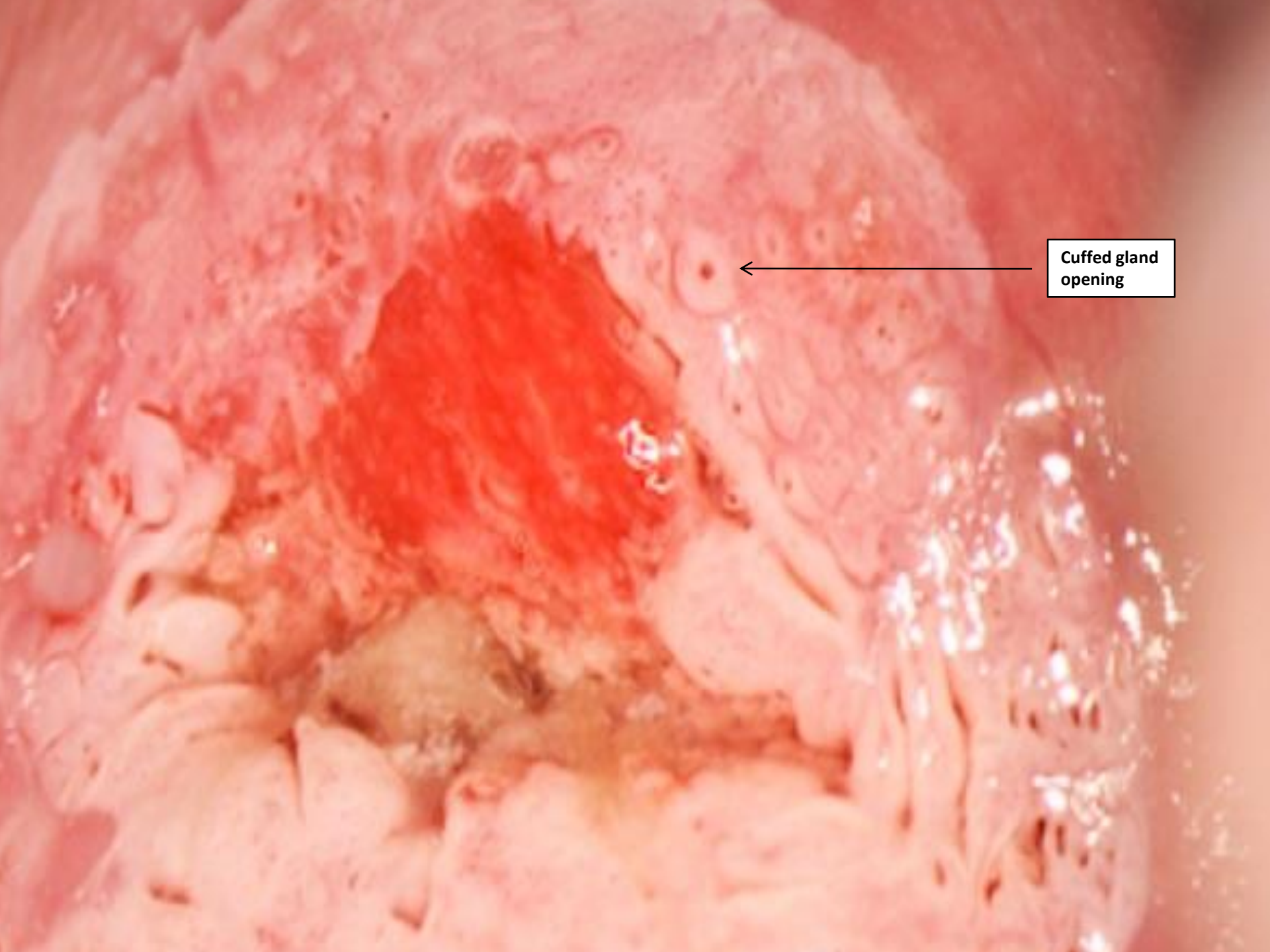
Ridge sign


Ridge sign (higher magnification)

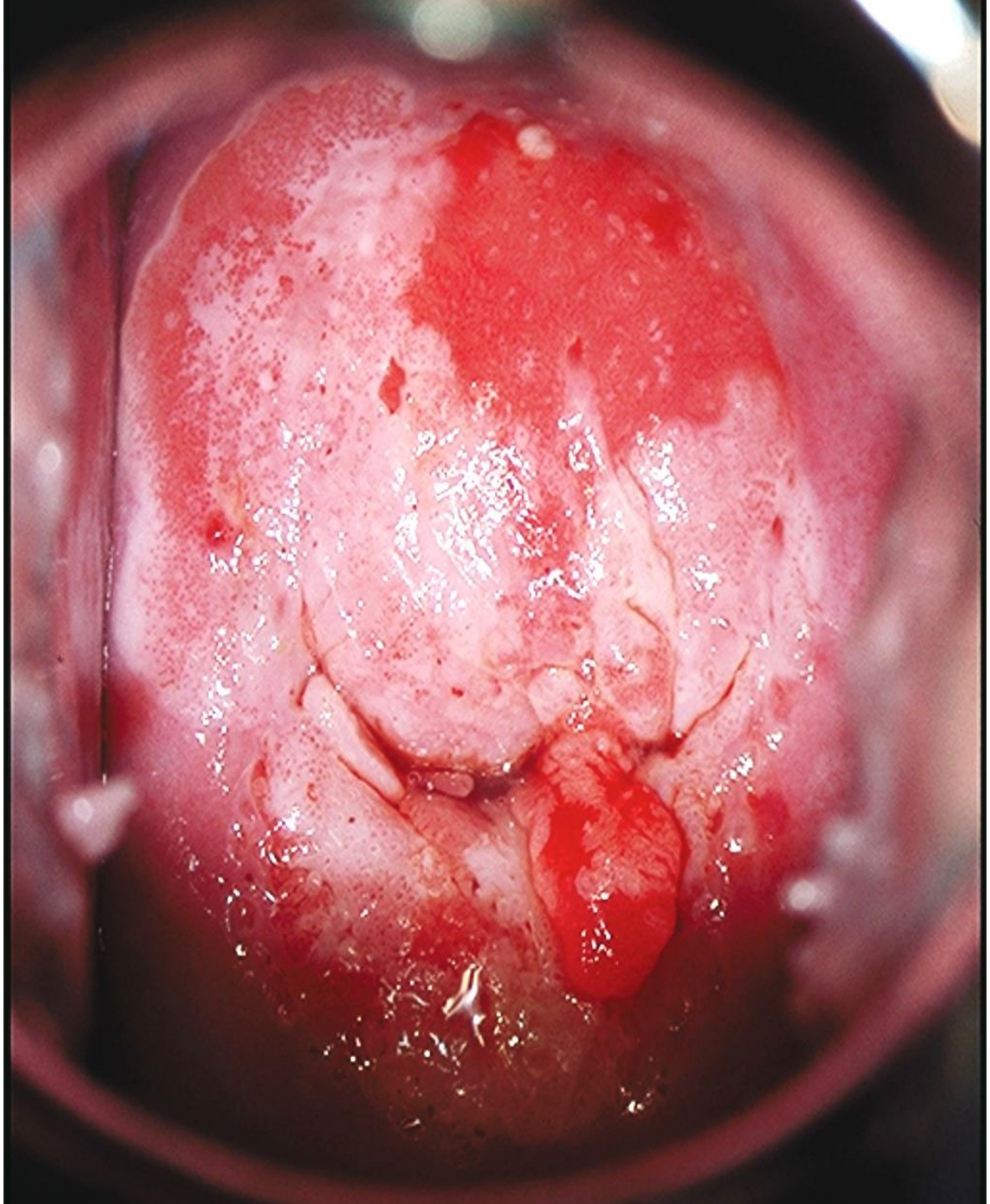
Colposcopy Images : Building Expertise

Ridge or Ledge sign:

- Opaque white epithelium
- No vascular pattern
- Part of a larger lesion

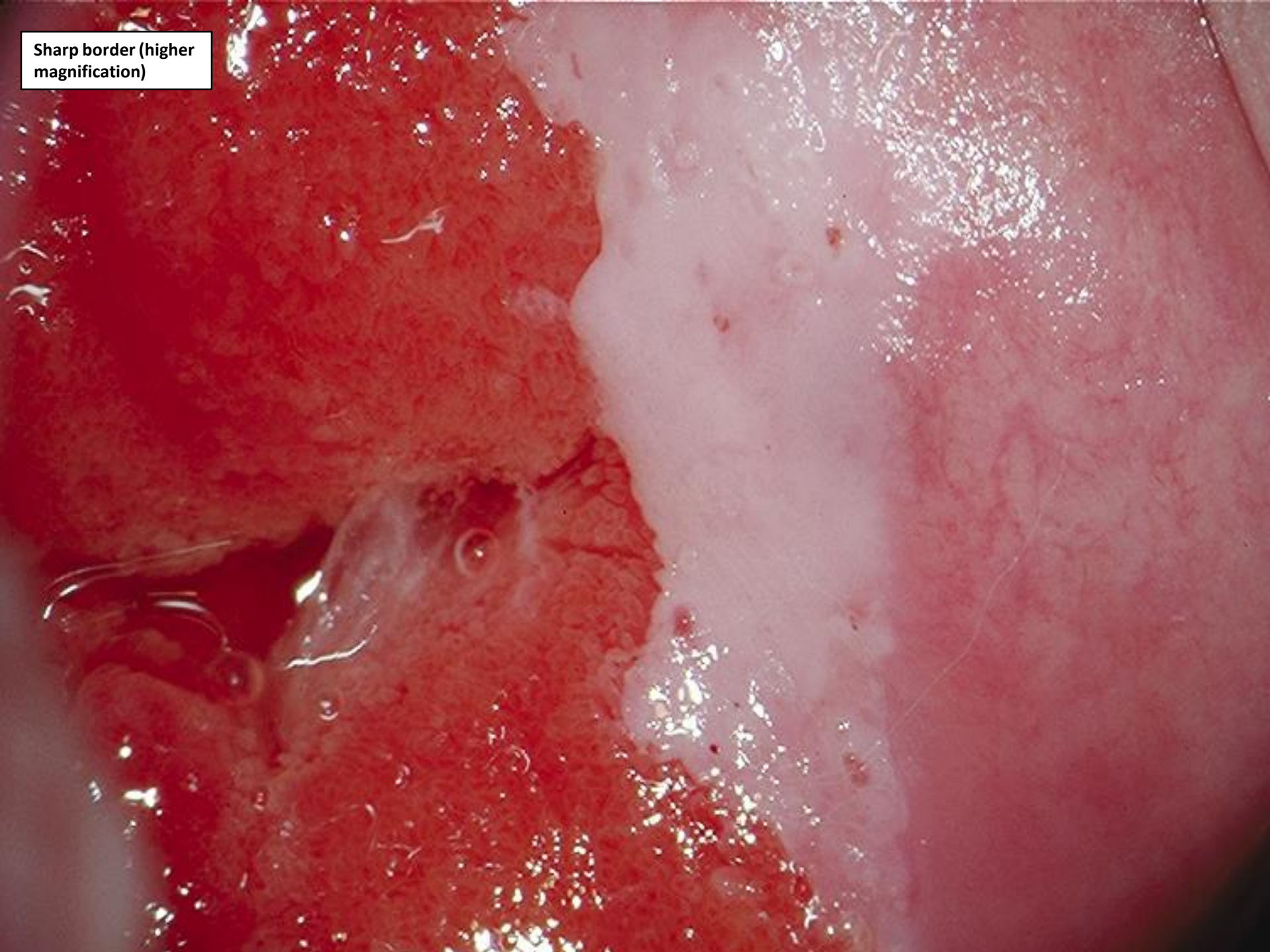

Cuffed gland opening

Inner border sign

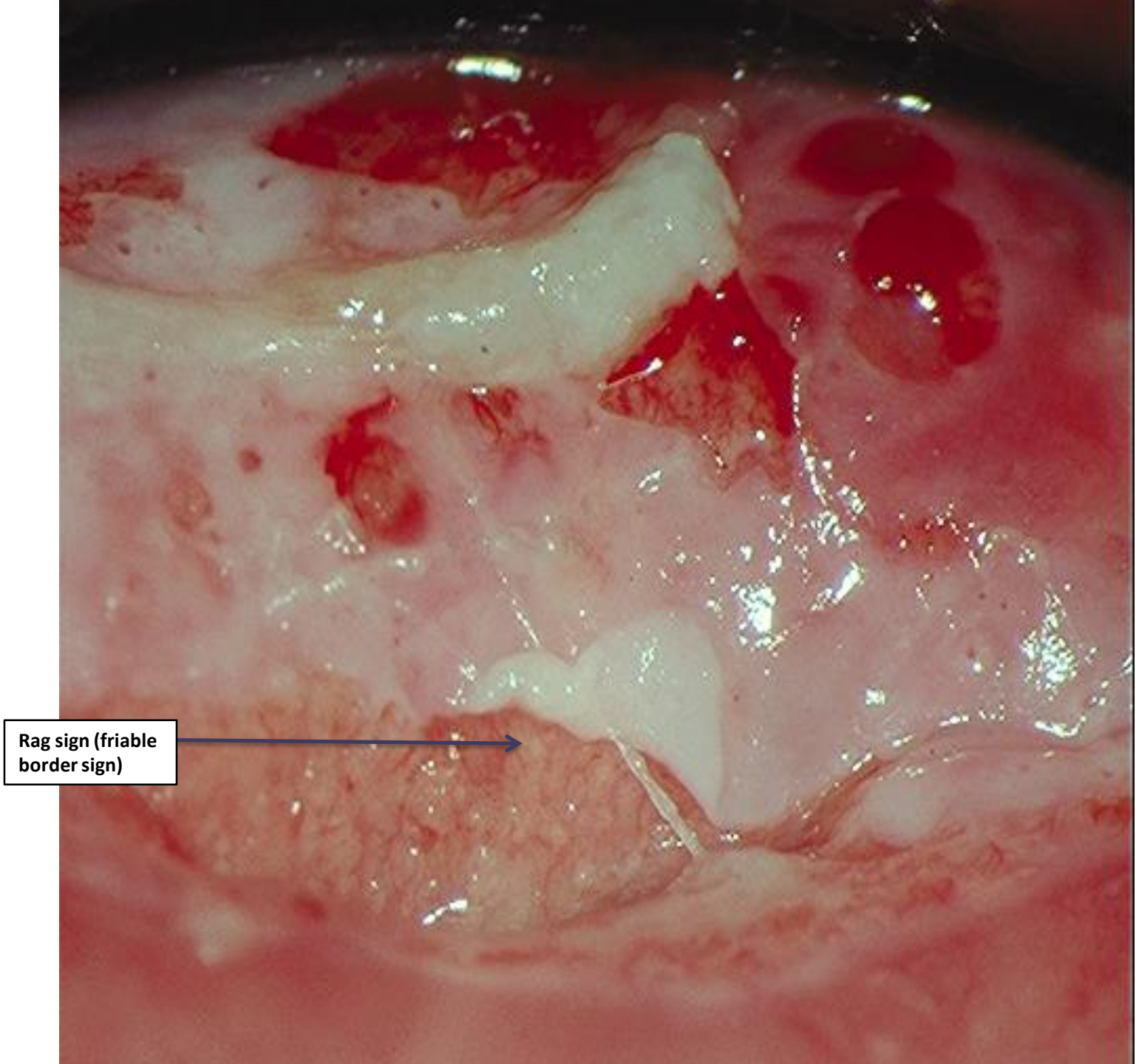


Inner border sign
(higher magnification)


Sharp border


Sharp border (higher magnification)

Rag sign


Rag sign (friable border sign)

Colposcopy Images : Building Expertise

Early signs of invasion:

- Atypical vessels

Four quadrant lesion

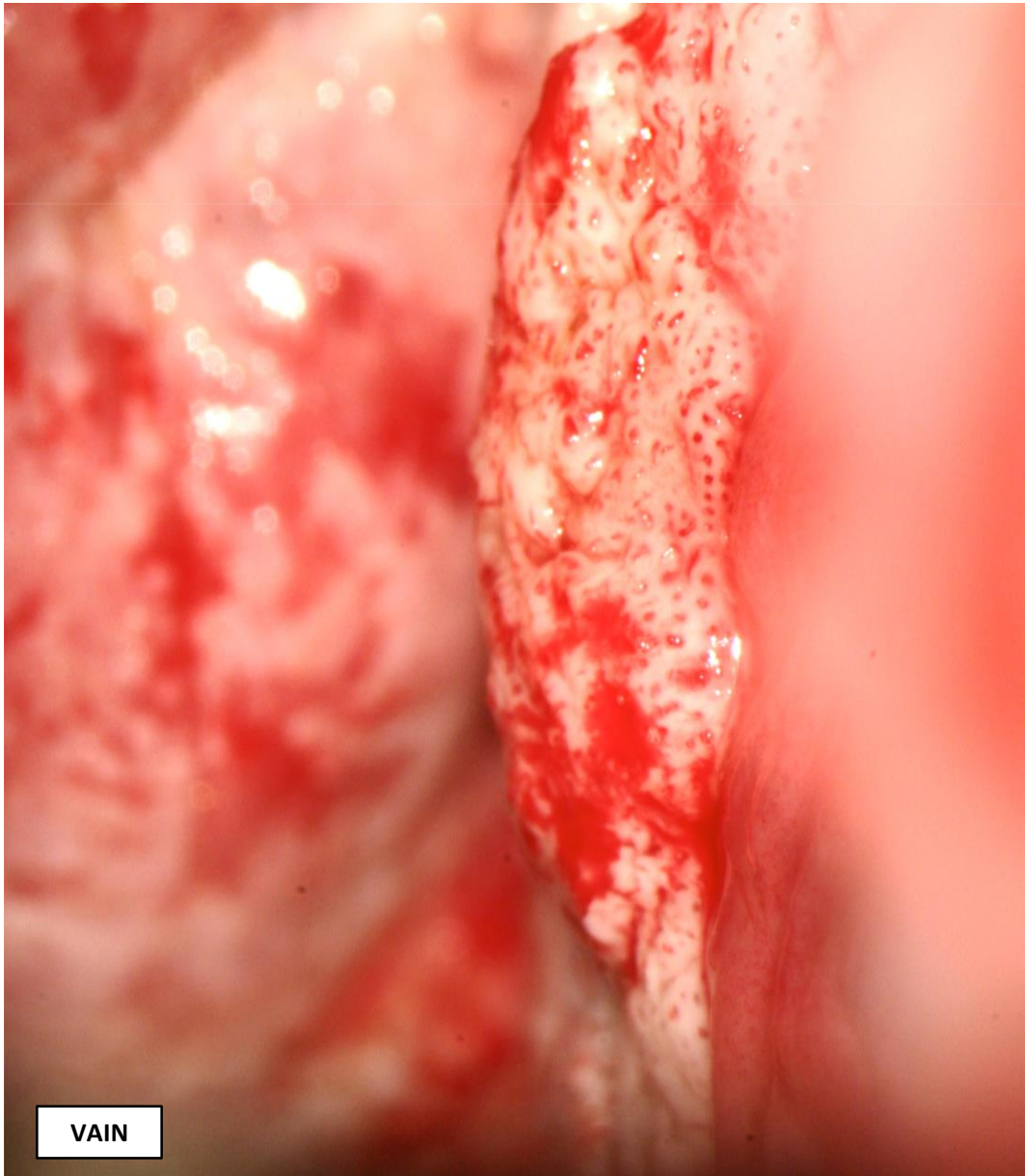
Posterior cervix

Pattern within a pattern (earliest manifestation of atypical vessels)

Colposcopy Images : Building Expertise

Summary:

- Transformation zone types
- Lesion size
- Colposcopic signs



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Case #1: AIS Management

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Case #1

Patient

A 31 year old nulliparous woman is seen by her nurse practitioner for infertility. She has regular periods, a normal BMI and she is a non-smoker. The nurse practitioner notices that she is due for cervical screening. A Pap is done and returns showing AIS.

Q1. The best recommendation would be:

A) See the patient in colposcopy within 4 weeks
B) See the patient in colposcopy within 12 weeks
C) Recommend the primary care provider repeat the Pap and do HPV testing
D) See the patient in colposcopy within 1-2 weeks

Case #1

Visit #1

- The patient is seen in colposcopy within two weeks of receiving the referral.
- The colposcopy findings are:
  - Type 1 Transformation zone
  - Acetowhite epithelium and vascular pattern with punctuation and mosaic change at 5-6 o'clock
  - The inner border is sharp

Case #1

Visit #1

Q2. Based on colposcopic findings you recommend:

A) Repeat Pap and HPV testing

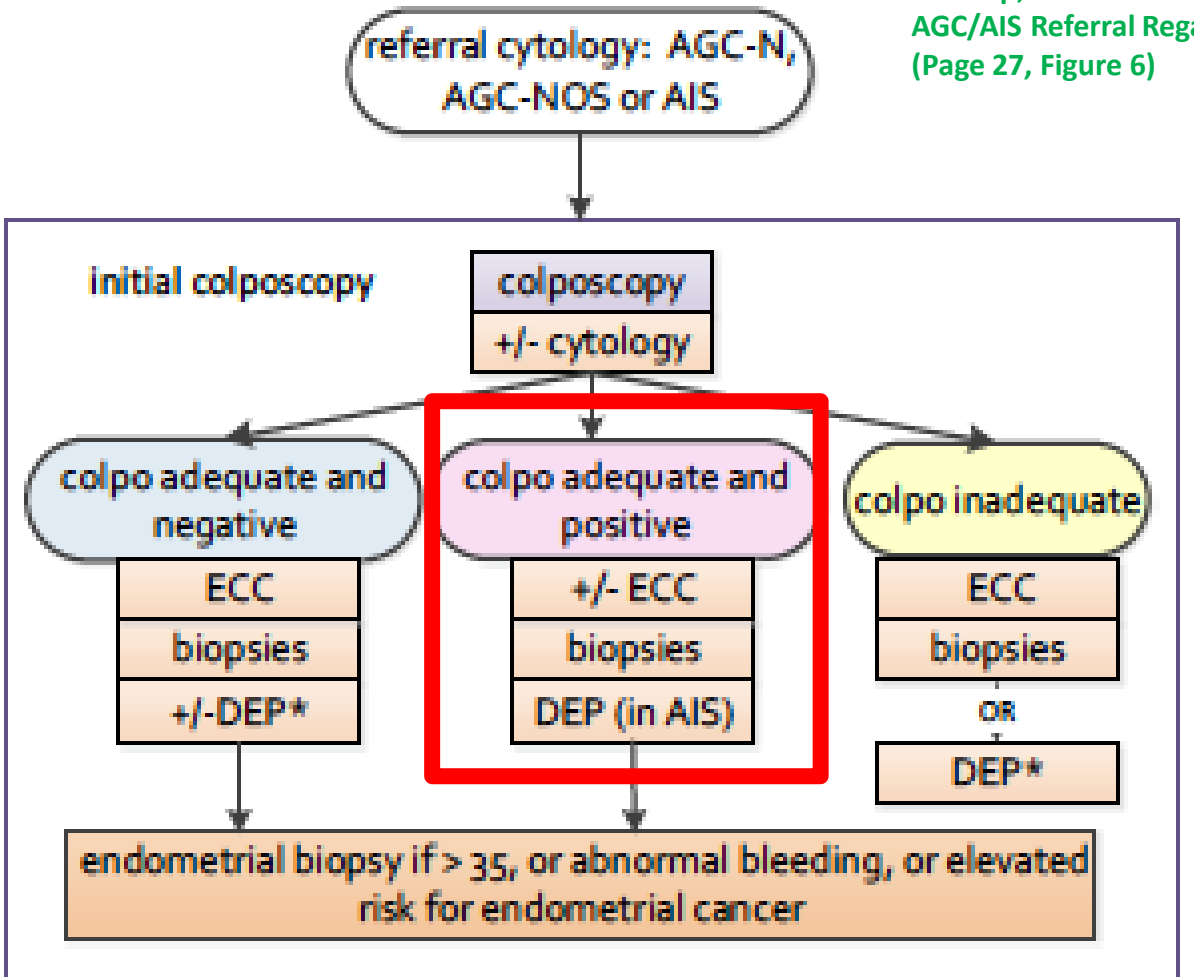
B) ECC

C) LEEP procedure

D) Biopsy of the lesion and endometrial biopsy

Case #1

Workup, Treatment and Management for AGC/AIS Referral Regardless of Age (Page 27, Figure 6)



Case #1

Visit #2

The patient declined a LEEP and elected to proceed with biopsies of the lesion. The biopsy shows AIS and the patient is brought back to colposcopy for treatment.

Q3. You recommend:

A) Treatment with LEEP procedure
B) Treatment with laser vaporization
C) Treatment with cold knife cone
D) Treatment with cryotherapy

Case #1

Visit #2

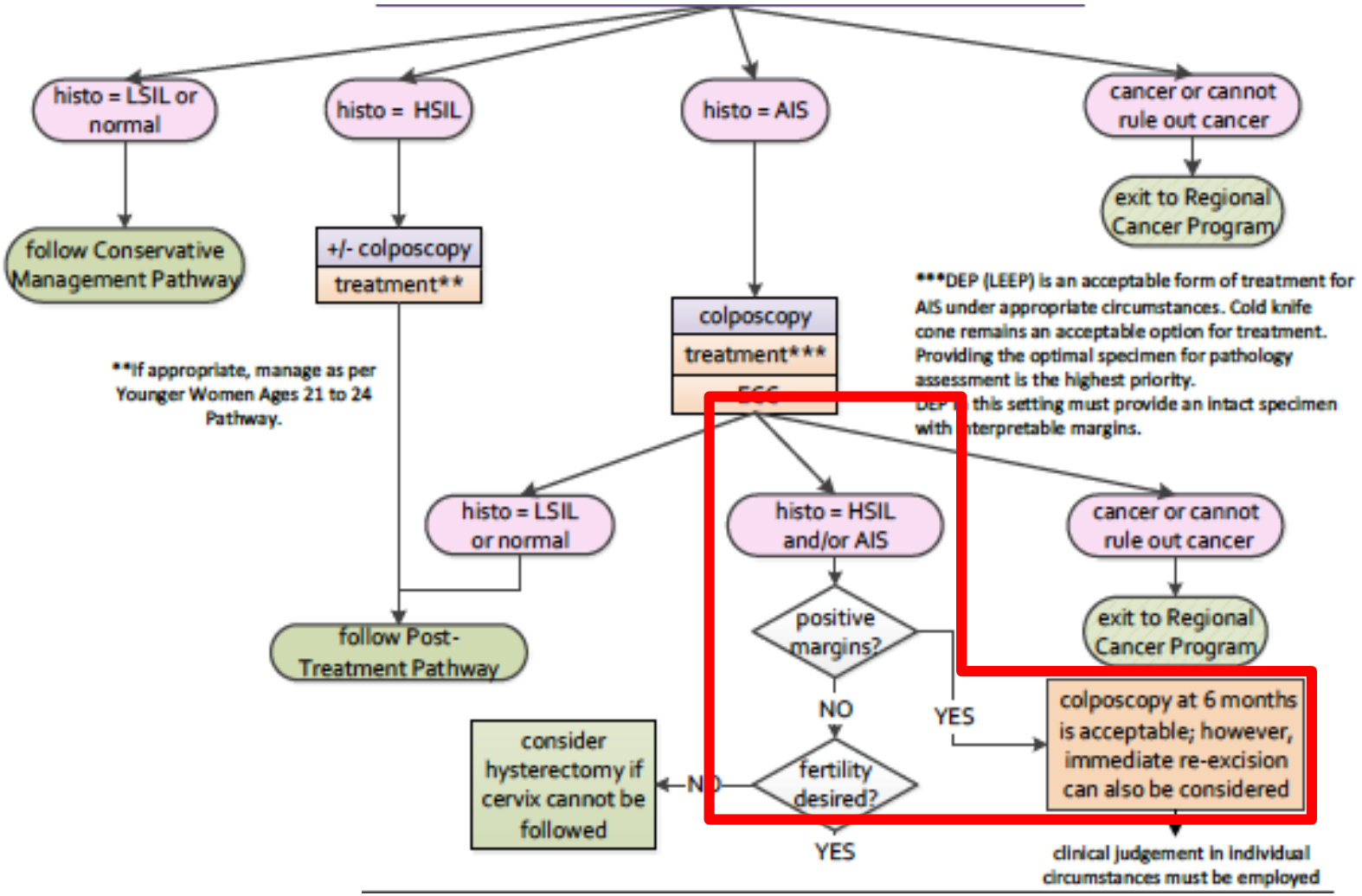
A LEEP is performed followed by a post-LEEP ECC. The margins of the LEEP are positive for AIS as is the post-LEEP ECC.

Q4. You recommend:

A) Repeat colposcopy in 3 months or less
B) Repeat LEEP
C) Repeat colposcopy in 6 months
D) Treatment with Laser

Case #1

Workup, Treatment and Management for AGC/AIS Referral Regardless of Age (Page 27, Figure 6)



Case #1

After discussion of the results, the patient wants to proceed with a repeat LEEP as her cervical abnormalities are delaying fertility treatment.

A LEEP procedure is performed and the results show AIS with clear margins. The patient is scheduled to return to colposcopy in six months.

Case #1

Visit #3

The patient returns for her six month follow-up. You ask the patient about the timing of her last period. She replies that she's so stressed about her abnormal Paps and her fertility treatment that she can't remember.

Q5. At this point you:

A) Do an HPV test

B) Delay colposcopy until you get a pregnancy test

C) Repeat Pap test and ECC if no visible lesion

D) Repeat Pap test and perform colposcopy

Case #1

A pregnancy test was performed and is positive. The Pap test shows AIS cannot rule out invasion. You discuss the findings with the patient and recommend a referral to oncology.

The patient is thrilled about the pregnancy but worries that the LEEP procedures may affect her pregnancy.

Q6. You counsel the patient that:

A) There is no impact of LEEP on pregnancy

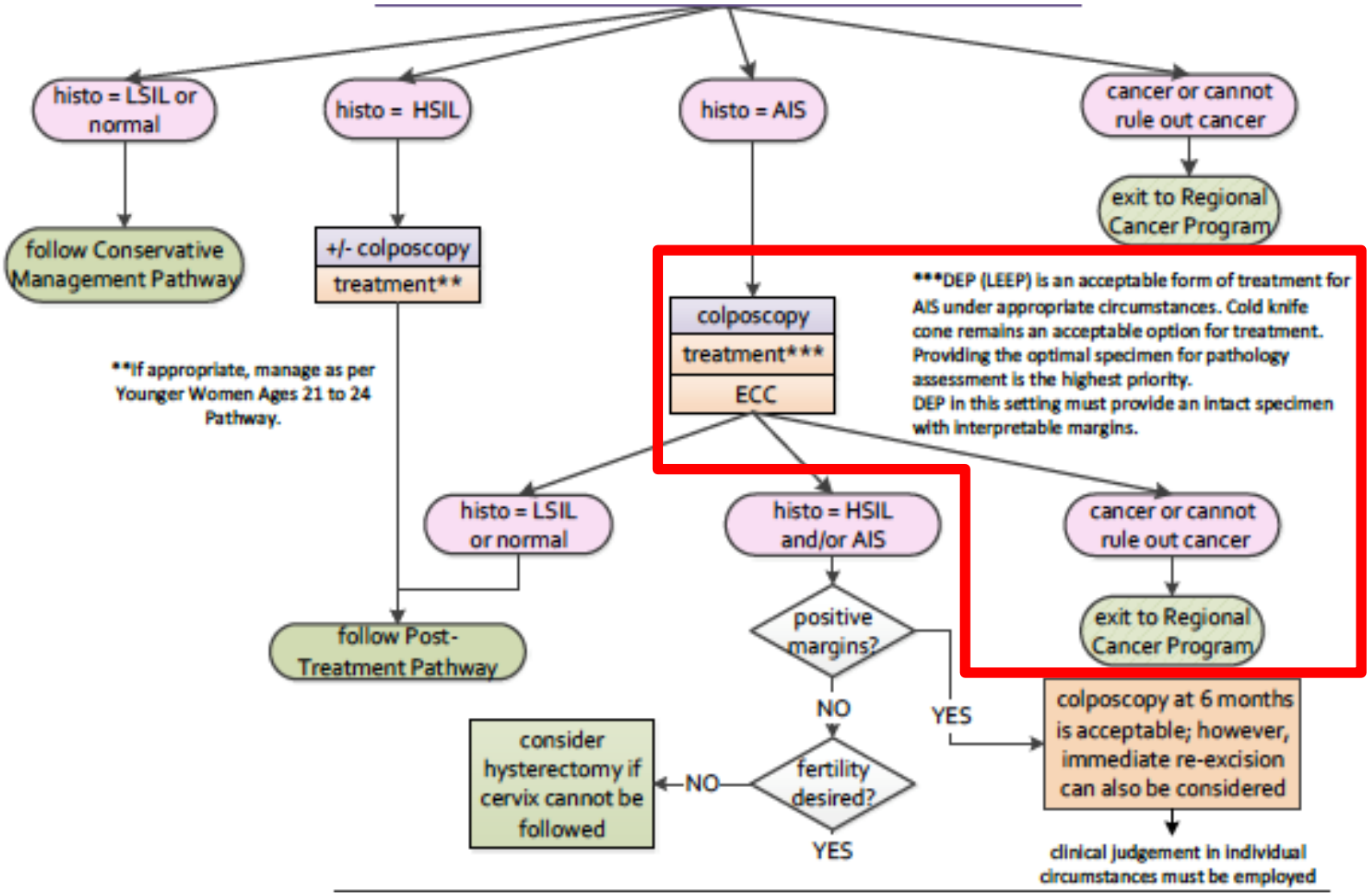
B) The patient will need a cervical cerclage

C) The risk of pregnancy complications increases with the number of LEEP procedures

D) The patient will need a Cesarean section

Case #1

Workup, Treatment and Management for AGC/AIS Referral Regardless of Age (Page 27, Figure 6)



Case #1

Oncology recommends colposcopy and Pap testing every three months during pregnancy. Pap testing during pregnancy both return NILM.

You are concerned about the discrepancy in results from the previous Pap test showing AIS.

Q7. You recommend:

A) Do an HPV test

B) Pathology review

C) Delay post-partum follow up to six months

D) Both A and B

E) Other

Case #1

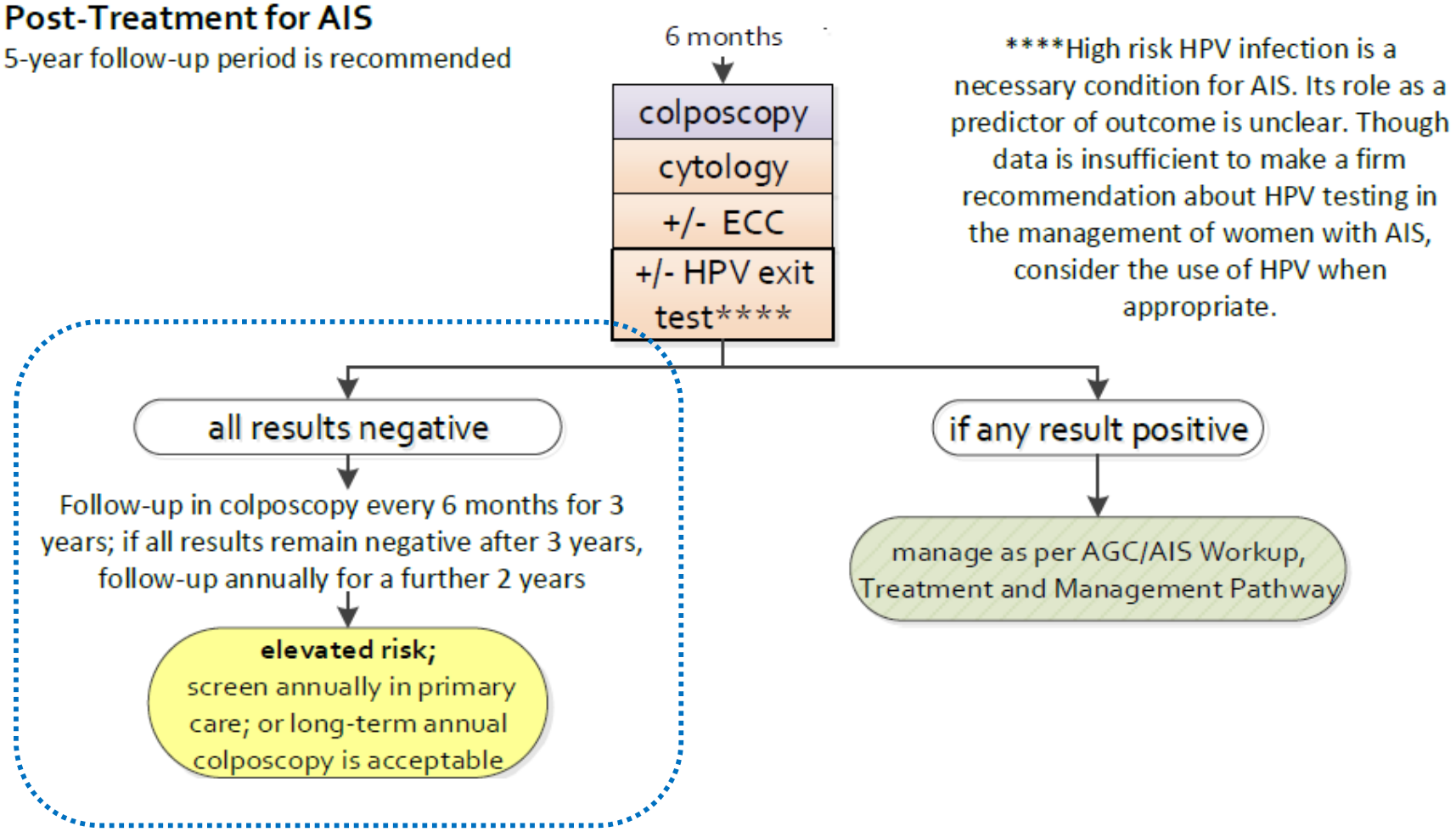
The HPV test shows HPV 16/18 and the Pathology review confirms the findings on the Pap tests. The patient returns for her post-partum colposcopy three months following a C-section for arrest of descent at full dilation. Colposcopy is negative and her Pap is NILM. She wonders if she will be stuck in colposcopy forever.

Q8. Of the following options you recommend:

A) Follow-up colposcopy in 6 months with Pap test and ECC
B) Discharge to primary care provider for Pap in 1 year
C) Hysterectomy when childbearing is complete
D) Repeat HPV test in one year

Case #1

Workup, Treatment and Management for AGC/AIS Referral Regardless of Age (Page 27, Figure 6)



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Questions from the Field: Discharge Criteria

DR JOAN MURPHY
CLINICAL LEAD, OCSP

Ontario
Cancer Care Ontario

Questions from the Field: Discharge Criteria

- Questions from the Field:
  - What are the pros and cons of returning persistent low grade abnormal cytology patients to PCP? Specifically in situations where patient cannot pay for HPV testing.
  - How do we implement HPV testing as part of the guideline when it is not covered? Most patients are not willing to pay.
  - Do we ever repeat the HPV test?

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Case #2: Conservative management of HSIL in <30 y/o

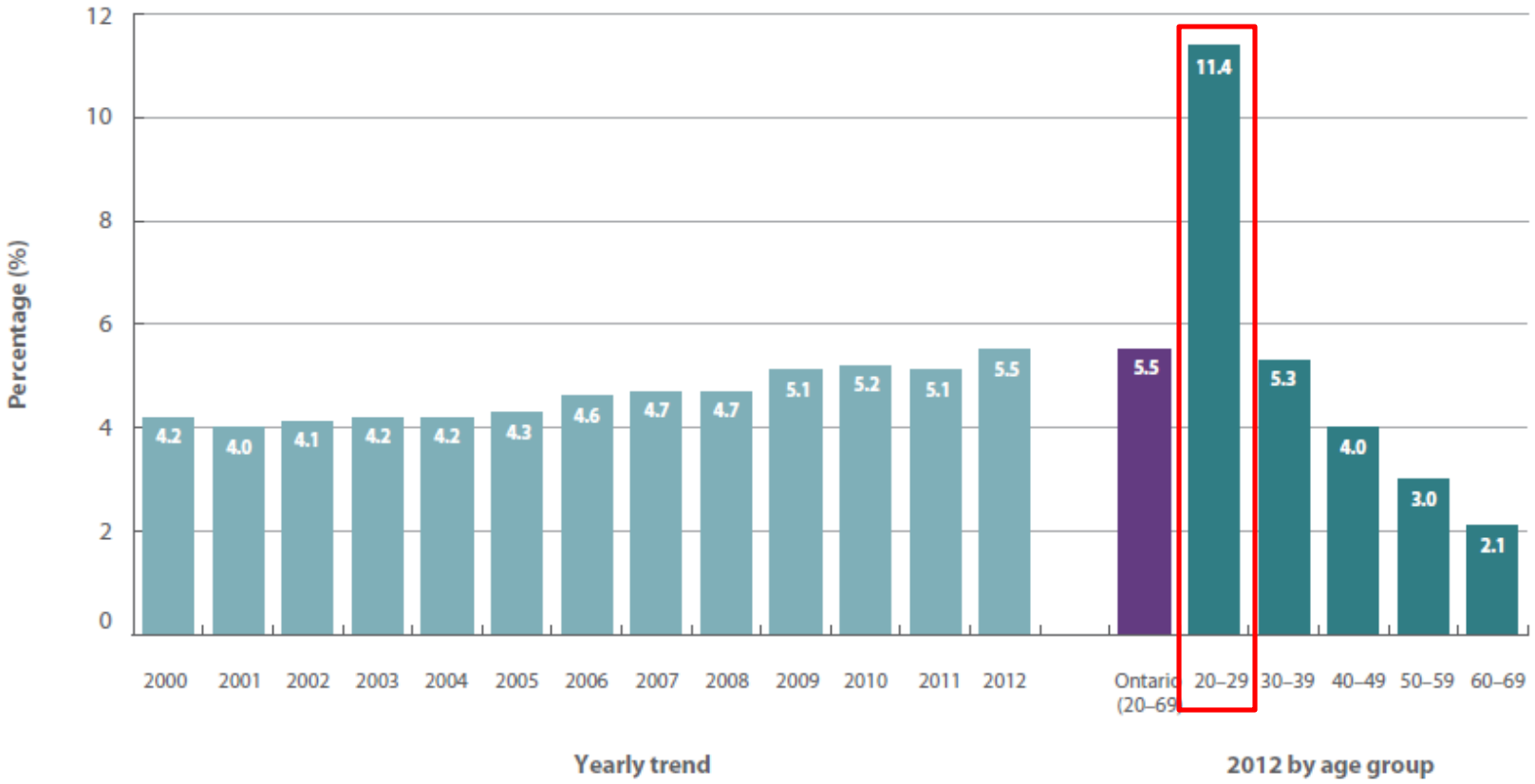
DR. RACHEL KUPETS
SCIENTIFIC LEAD, OCSP

Ontario
Cancer Care Ontario

Case #2

- Highest rates of cervical dysplasia are in women <30 y/o

Percentage of Ontario screen-eligible women 20 to 69 years of age who had an abnormal Pap test result in a 12-month period, by year (2000–2012) and by age group



Case #2

Patient

- 23 y/o nulliparous
- Missed school-based HPV vaccination
- Referred with LSIL
  - Screening: LSIL on first Pap; family physician repeated Pap 6 months later
- At first colpo visit, colpo adequate/satisfactory:
  - Biopsy: HSIL

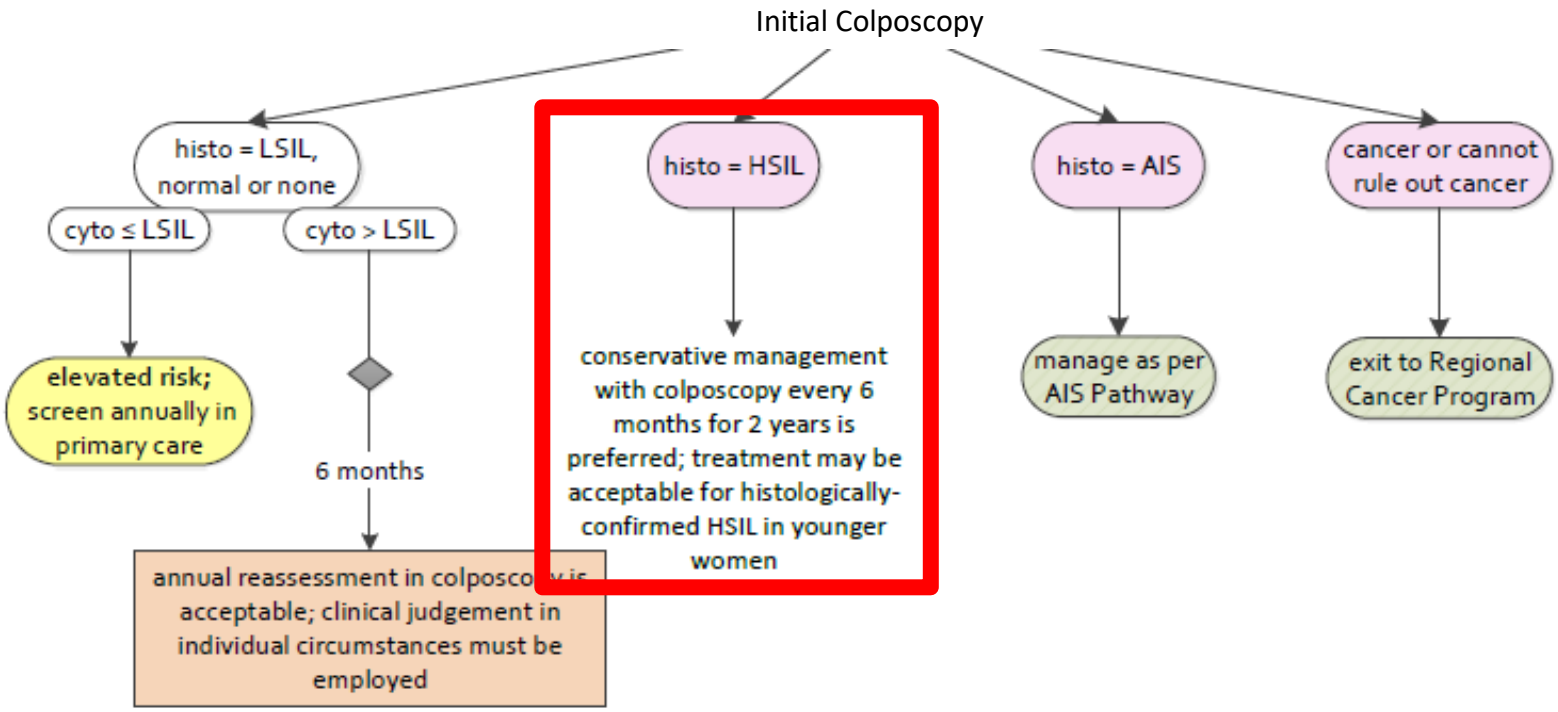
Case #2

Q1: What are your recommendations?

A) LEEP
B) Laser
C) F/U colpo in 6 months

Case #2

Recommended clinical pathway for Management of Younger Women Ages 21 to 24 (Page 24, Figure 5)



Case #2

Best Practice Pathway for Management of Younger Women Ages 21 to 24 (Page 23, Table 5)

Additional Information on Younger Women	• Factors contributing to the treatment of histologically confirmed HSIL include: ○ severity of visual findings; ○ patient fertility concerns; ○ patient willingness and likely compliance to follow-up as advised; and ○ ability of the practice to ensure adherence to ongoing follow-up recommendations.

Case #2

Patient tells you she is concerned about it “turning into cancer”; her grandmother died of cervical cancer

Q2: You tell her the risk of HSIL “turning into cervical cancer” is:

A) 5%

B) 0%

C) 1%

Case #2

Gynecologic Cytopathology

Natural History of Cervical Intraepithelial Neoplasia

A Meta-analysis

Scott B. Cantor, Ph.D., E. Neely Atkinson, Ph.D., Marylou Cardenas-Turanzas, M.D., Dr.P.H., J. L. Benedet, M.D., Michele Follen, M.D., Ph.D., and Calum MacAulay,

The 6-month mean predictive transition probability for high grade squamous intraepithelial lesions (HSIL) to cancer was 0.0037

Case #2

Women <30 y/o: rates of progression/regression

Author & Year	Study Design	Study Details	Follow-up	Progression Rate	Regression Rate
Tainio et al. (2018)	Meta-analysis	• 36 studies • N= 1069 in <30 y/o subgroup	2 years	11%*	60%
Bekos et al. (2018)	Meta-analysis	• 7 studies • N= 141 in <25 y/o subgroup • CIN1-3	Undefined	11%**	45%
McAllum et al. (2011)	Retrospective review	• N= 157 <25 y/o	8 months (median)	N/A	62%
Moscicki et al. (2010)	Prospective cohort	• N= 95 • Mean age 20.4 y/o	3 years	15%**	68%

*unclear if any progression to invasive cancer occurred in <30 y/o subgroup

**no progression to invasive cancer observed with conservative management

Case #2

Patient is comfortable with conservative management. She is followed for 2 years, every 6 months.

She is now 25 y/o and her current biopsy shows HSIL

Q3: What are your recommendations?

A) Continue to observe
B) Cold knife cone
C) LEEP/laser

Case #2

You offer her a LEEP. She tells you that she read LEEPs can "cause pregnancy problems".

How do you counsel her about pregnancy risks with excisional/ablative treatments of the cervix?

Case #2

Evidence on adverse obstetrical outcomes associated with treatment for CIN

Author & Year	Study Design	Study Details	Findings
Kyrgiou et al. (2017)	Meta-analysis	• 69 studies • 6,357,823 pregnancies	• RR = 1.75 ; risk of PTB (<37wk) in treated women (10.7%) compared to untreated (5.4%) • RR = 1.87 ; risk of PTB for excisional (11.2%) compared to untreated (5.5%) • RR = 1.35 ; risk of PTB for ablative (7.7%) compared to untreated (4.6%)
Conner et al. (2014)	Meta-analysis	• 19 studies • N = 6,589 with history of LEEP; 1,415,015 without	• RR = 1.61 ; risk of PTB (<37wk) in women treated with LEEP (8.8%) compared to no LEEP (5.1%) • Women with history of LEEP have similar risk of preterm birth when compared to women with prior dysplasia, but no cervical excision (RR = 1.08)

Case #2

Evidence on adverse obstetrical outcomes associated with treatment for CIN

Author & Year	Study Design	Study Details	Findings
Jin et al. (2013)	Meta-analysis	• 26 studies • N = 36,954 treated; 1,794,174 without treatment	• RR = 1.98 ; risk of severe PTB (<32wk) (1.4% vs. 0.9%) • Increasing LEEP volume or depth was not associated with an increased rate of PTB (<37wk)

McGee et al. (2012)	Population level cohort study	• N = 381, 617
		• 180, 586 deliveries
			• Cervical excisional procedures (CEP) increase the risk of adverse obstetrical outcomes
			  • Cervical incompetence; OR = 2.55
			  • Preterm birth; OR = 1.46
			  • Cervical stenosis in a subsequent pregnancy; OR = 3.0

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Questions from the Field: Annual Screening in Primary Care

DR JOAN MURPHY
CLINICAL LEAD, OCSP

Ontario
Cancer Care Ontario

Questions from the Field: Annual Screening in Primary Care

- Questions from the Field:
  - For women discharged to annual screening in primary care - how long should this go on?

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Concluding Remarks

DR JOAN MURPHY
CLINICAL LEAD, OCSP

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Accreditation

Royal College of Physicians and Surgeons of Canada – Section 1:

This event is an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada, approved by Continuing Professional Development, Faculty of Medicine, University of Toronto. You may claim up to a maximum of 1.5 hours (credits are automatically calculated).

In order for you to obtain your certificate of participation, you must fill out our survey that will be sent to your email address that you registered with.

What's Next?

- Next meeting of the CoP will take place in **Fall 2019**
- Want to see something discussed? Let us know at ColposcopyCoP@cancercare.on.ca or speak to your CSCL or Regional Pathology Lead
- Your regional lead will be in contact with you for local events and the next CoP meeting

We welcome your feedback!
Please fill out the online evaluation at the end of this webinar.

You can always reach us through email at ColposcopyCoP@cancercare.on.ca

Thank you!