DETECTING AND MEASURING INVASION IN CERVICAL BIOPSIES AND LOOP EXCISIONS

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Belfast

The British Association of Gynaecological Pathologists

Speaker disclosures

- I have no financial conflicts of interest to disclose

TO DISCUSS

- New FIGO 2018 staging system issues
- Why is accurate measuring necessary
- Do not use term “microinvasive carcinoma”
- Identifying early invasion in cervical squamous and glandular lesions
- CIN III-like squamous cell carcinoma (SCC); aggressive CIN III; pseudoinvasion following biopsy
- Specific problems with glandular lesions
- Exophytic carcinomas
- Measurement of multifocal tumours
- How to deal with multiple specimens

FIGO 2018 STAGING SYSTEM FOR CERVICAL CANCERS- MAJOR CHANGES

- **Removal of 7mm horizontal extent for stage IA**
- Dividing stage IB into IB1, IB2, IB3
- Including lymph node involvement (IC1, IC2)
- Allowing use of imaging to assess lymph nodes
- Denoting “p” (pathologic) or “r” (radiologic) to indicate method used to stage

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FIGO CANCER REPORT 2018

WILEY GYNECOLOGY OBSTETRICS FIGO

Cancer of the cervix uteri

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Abstract

Since the publication of the last FIGO Cancer Report there have been giant strides in the global effort to reduce the burden of cervical cancer, with WHO announcing a call for elimination. In over 80 countries, including LMICs, HPV vaccination is now included in the national program. Screening has also seen major advances with implementation of HPV testing on a larger scale. However, these interventions will take a few years to show their impact. Meanwhile, over half a million new cases are added each year. Recent developments in imaging and increased use of minimally invasive surgery have changed the paradigm for management of these cases. The FIGO Gynecologic Oncology Committee has revised the staging system based on these advances. This chapter discusses the management of cervical cancer based on the stage of disease, including attention to palliation and quality of life issues.

KEYWORDS
Cervix; FIGO Cancer Report; Gynecologic cancer; HPV vaccination; Radiation; Screening; Staging; Surgery

FIGO COMMITTEE REPORT

WILEY GYNECOLOGY OBSTETRICS FIGO

Revised FIGO staging for carcinoma of the cervix uteri☆

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[9]Division of Gynecologic Oncology, Department of Obstetrics, Gynecology

Abstract

Objective: To revise FIGO staging of carcinoma of the cervix uteri, allowing incorporation of imaging and/or pathological findings, and clinical assessment of tumor size and disease extent.

Methods: Review of literature and consensus view of the FIGO Gynecologic Oncology Committee and related societies and organizations.

Results: In stage I, revision of the definition of microinvasion and lesion size as follows. Stage IA: lateral extension measurement is removed; stage IB has three subgroups—stage IB1: invasive carcinomas ≥5 mm and <2 cm in greatest diameter; stage IB2: tumors 2–4 cm; stage IB3: tumors ≥4 cm. Imaging or pathology findings may be used to assess retroperitoneal lymph nodes; if metastatic, the case is assigned stage IIIC; if only pelvic lymph nodes, the case is assigned stage IIIC1; if para-aortic nodes are involved, the case is assigned stage IIIC2. Notations 'r' and 'p' will indicate the method used to derive the stage—i.e., imaging or pathology, respectively—and should be recorded. Routine investigations and other methods (e.g., examination under anesthesia, cystoscopy, proctoscopy, etc.) are not mandatory and are to be recommended based on clinical findings and standard of care.

Conclusion: The revised cervical cancer staging is applicable to all resource levels. Data collection and publication will inform future revisions.

CORRIGENDUM

DOI: 10.1002/ijgo.12969

Check for updates

CORRIGENDUM

WILEY GYNECOLOGY OBSTETRICS FIGO

Corrigendum to "Revised FIGO staging for carcinoma of the cervix uteri" [Int J Gynecol Obstet 145(2019) 129–135]

The authors regret to note a number of errors in Box 1. The '–' in measurement cut-offs was erroneously placed in 12 instances in Stages I and II. The corrected version of Box 1 is given below; corrected notations of measurement are shown in bold type. Micrometastases have been included in Stage IIIC.

ICCR QUESTIONS TO FIGO

- QUESTION- The committee would be interested to know if there is any published evidence for the inclusion of shallow invasive carcinomas with a width of greater than 7mm in the IA category.
- ANSWER- There is not adequate information on prognostic implications of a wide shallow lesion. In cases with multifocal lesions also, there is limited information regarding the impact. Depth correlates best with lymphovascular space invasion and blood vessel invasion because of tumor dislodgement and proximity to blood vessels. Hence depth of invasion is the most important to be noted.

PMID- 32471646

Gynecologic Oncology 158 (2020) 266–272

Contents lists available at ScienceDirect

Gynecologic Oncology

journal homepage: www.elsevier.com/locate/ygyno

The prognostic role of horizontal and circumferential tumor extent in cervical cancer: Implications for the 2019 FIGO staging system

Roman E. Zyla [a,b], Lilian T. Gien [c,d], Danielle Vicus [c,d], Ekaterina Olkhov-Mitsel [a], Jelena Mirkovic [a,b], Sharon Nofech-Mozes [a,b], Bojana Djordjevic [a,b], Carlos Parra-Herran [a,b,*]

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HIGHLIGHTS

- Horizontal extent is an independent predictor of survival in cervical carcinoma.
- In stage IA cancer horizontal extent does not add prognostication, thus can be obviated as per FIGO recommendations.
- In larger tumors (depth ≥ 5 mm) horizontal tumor extent can help stratify patients in stage categories based on tumor size.
- Circumferential extent is not an independent predictor of survival in cervical carcinoma.

PMID- 32471646

- 285 patients with stage I cervical cancer
- None of 168 stage IA patients exhibited tumour recurrence or death, including 42 with ≥7mm horizontal extent
- No patient with horizontal extent <7mm (regardless of depth) exhibited tumour recurrence or death
- Horizontal extent is independent prognostic factor but not in stage IA carcinomas
- Results support new FIGO measurements for stage IA

TUMOUR DIMENSIONS

WHEN/ WHERE IT IS IMPORTANT?

- Important for staging, management and prognostication
- Small carcinomas (IA1, IA2, IB1)- accurate staging, critical for patient management
- Radical hysterectomy versus trachelectomy- cut-off of 2cm sometimes used
- 2cm and 4cm cut-off (IB1/IB2/IB3); 4cm cut-off (IIA1/ IIA2)
- 2cm size may be of prognostic value in IB1 tumours
- 4cm cut off sometimes used in IB tumours to decide whether radical hysterectomy or chemoradiation or whether adjuvant therapy is given following radical hysterectomy (one parameter of Sedlis criteria)

AVOID TERM “MICROINVASIVE” CARCINOMA

- Does not appear in FIGO staging system
- Do not use for any morphological subtype of cervical carcinoma
- Means different things in different institutions (IA1/ IA2; some exclude if LVSI present)
- Provide accurate measurements and use specific FIGO (or TNM) stage
- LAST- use term superficially invasive squamous cell carcinoma (SISCCA) for IA1 with negative margins (I would recommend not to use)

ICCR CERVICAL CANCER DATASET BEING UPDATED- LOT OF USEFUL INFORMATION ON MEASURING TUMOURS

International Journal of Gynecological Pathology
00:1–24, Lippincott Williams & Wilkins, Baltimore
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Original Article

Data Set for the Reporting of Carcinomas of the Cervix: Recommendations From the International Collaboration on Cancer Reporting (ICCR)

W. Glenn McCluggage, F.R.C.Path., Meagan J. Judge, M.D., Isabel Alvarado-Cabrero, M.D., Máire A. Duggan, M.D., Lars-Christian Horn, M.D., Pei Hui, M.D., Jaume Ordi, M.D., Christopher N. Otis, M.D., Kay J. Park, M.D., Marie Plante, M.D., Colin J.R. Stewart, M.D., Edwin K. Wiredu, M.D., Brian Rous, F.R.C.Path., and Lynn Hirschowitz, F.R.C.Path.

Virchows Archiv
https://doi.org/10.1007/s00428-018-2372-7

REVIEW AND PERSPECTIVES

The central role of the pathologist in the management of patients with cervical cancer: ESGO/ESTRO/ESP guidelines

Maria Rosaria Raspollini[1] · Sigurd F. Lax[2] · W Glenn McCluggage[3]

ISGyP RECOMMENDATIONS- SPECIAL EDITION ON CERVICAL ADENOCARCINOMAS- PMID 33570866

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Article

Tumor Staging of Endocervical Adenocarcinoma: Recommendations From the International Society of Gynecological Pathologists

Kay J. Park, M.D., Andres Roma, M.D., Naveena Singh, M.D., C. Blake Gilks, M.D., Esther Oliva, M.D., Nadeem Abu-Rustum, M.D., Pedro T. Ramirez, M.D., and W. Glenn McCluggage, M.D.

TABLE 1. *Required Data Items for Pathologic Reporting of Carcinomas of the Cervix*

Clinical	Macroscopic	Microscopic
Specimen/s submitted	Specimen dimensions	Tumor dimensions
	Number of tissue pieces	Horizontal extent (2 measurements)
	Tissue piece dimensions	Depth of invasion or thickness
	Cervix	Histologic tumor type
	a. Diameter of ectocervix	Lymphovascular space invasion
	b. Depth of specimen	Coexistent pathology
	Vaginal cuff	Squamous intraepithelial lesion (CIN)
	a. Minimum length	Adenocarcinoma *in situ*/high-grade cervical glandular
	b. Maximum length	intraepithelial neoplasia
	Macroscopic tumor site(s)	Stratified mucin-producing intraepithelial lesion
		Extent of invasion
		Margin status
		Lymph node status
		Pathologically confirmed distant metastases
		Provisional pathologic staging pre-multidisciplinary team meeting
		FIGO 2009
		TNM pN category (UICC 8th edition 2016)

CIN indicates cervical intraepithelial neoplasia; FIGO, International Federation of Obstetricians and Gynaecologists; UICC, Union for International Cancer Control.

ICCR 2018

ESGO 2018

Table 1 Data items to be included on pathology report of carcinomas of the cervix

Clinical/surgical:	Specimen/s submitted
Macroscopic	Specimen dimensions
	Number of tissue pieces (for loops/cones)
	Tissue piece dimensions (for loops/cones)
	▪ Diameter of ectocervix (two measurements)
	▪ Depth of specimen
	Vaginal cuff
	▪ Minimum length
	▪ Maximum length
	Size of parametria in two dimensions (vertical and horizontal)
	Macroscopic tumour site(s)
MICROSCOPIC:	Tumour dimensions[a]
	▪ Horizontal extent (two measurements)
	▪ Depth of invasion or thickness
	Histological tumour type
	Histological tumour grade
	Lymphovascular space invasion
	Coexistent pathology
	▪ Squamous intraepithelial lesion (SIL)/ cervical intraepithelial neoplasia (CIN)
	▪ Adenocarcinoma in situ (AIS)
	▪ Stratified mucin-producing intraepithelial lesion (SMILE)
	Tissues involved by tumour
	Minimum distance of uninvolved cervical stroma
	Margin status (invasive and preinvasive disease)
	Lymph node status (number involved/number retrieved and presence of extra-nodal extension)
	Pathologically confirmed distant metastases
	Pathological Staging Pre-tumour board/ multidisciplinary team meeting
	▪ TNM category (AJCC 8th edition 2016)

[a] Tumour dimension should be based on a correlation of the gross and histological features

TUMOUR MEASUREMENT

- **CAN BE EXTREMELY DIFFICULT AND IN MANY CASES NOT TERRIBLY ACCURATE**
- ICCR provides detailed recommendations
- ICCR update- measure in 2 dimensions in mm (horizontal extent and depth of invasion); prior ICCR 3 dimensions (allows calculation of volume but not much used); still provide horizontal dimension even though no longer used to distinguish between IA and IB
- **Measurements should be combinations of gross and microscopic** (do not give 2 separate measurements- gross and microscopic)- **MOST CURRENT DATASETS ASK FOR GROSS AND MICROSCOPIC MEASUREMENTS- results in confusion**
- Measurements in any prior specimens (loops/cones should be taken into account)
- Multifocal tumours (ICCR recommendations); with multifocal tumours, stage according to largest

ICCR- ISSUES WITH REGARD TO TUMOUR SIZE

- Fragmented specimens- may be impossible to give accurate tumour measurements
- Where tumour extends to resection margins- qualify by term “at least”
- Some tumours (especially larger) may be best measured grossly (especially if large blocks not available); others (especially smaller) are best or can only be measured microscopically
- Cancers which are treated by biopsy and chemoradiation- tumour dimensions (for staging) derived from clinical examination and radiology
- Resections following chemoradiation- may be no or minimal residual tumour- tumour dimensions (for staging) derived from clinical examination and radiology
- Beware “opening-up” circumferential tumours and overestimating tumour size by adding together dimensions on each slide

ICCR UPDATE

- In the cases where no grossly visible tumour is present, yet there is extensive stromal invasion (e.g., so called ‘barrel cervix’), if tumour is present in multiple sections, the pathologist should attempt to give the most representative measurement based on the size of the cervix, the number of sections involved and possibly the quadrants that are involved. If a circumferential tumour without a grossly visible and measurable mass has full thickness stromal invasion of the cervical wall involving all quadrants, the diameter of the cervix can be used as a reasonable approximation of tumour size.

ISGyP CERVICAL ADENOCARCINOMA SURVEY- PMID 33687170

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Article

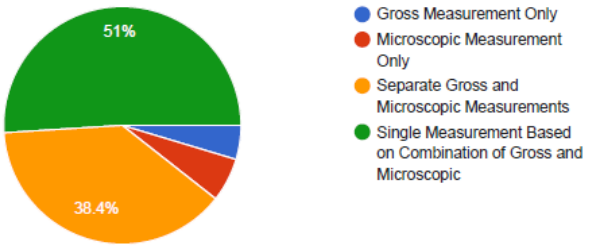
Survey Results on Pathologic Aspects of Endocervical Adenocarcinoma by the International Society of Gynecological Pathologists

W. Glenn McCluggage, F.R.C.Path., Joseph T. Rabban, M.D., Naveena Singh, F.R.C.Path., and Esther Oliva, M.D.

ISGyP CERVICAL ADENOCARCINOMA SURVEY- PMID 33687170

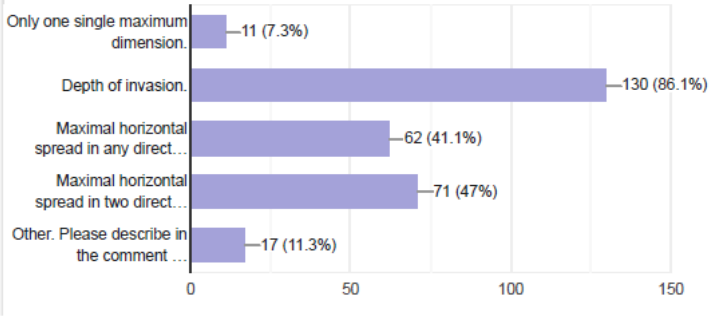
41. How do you report the tumor dimensions?

151 responses



42. What tumor measurements do you report? (check all that apply)

151 responses



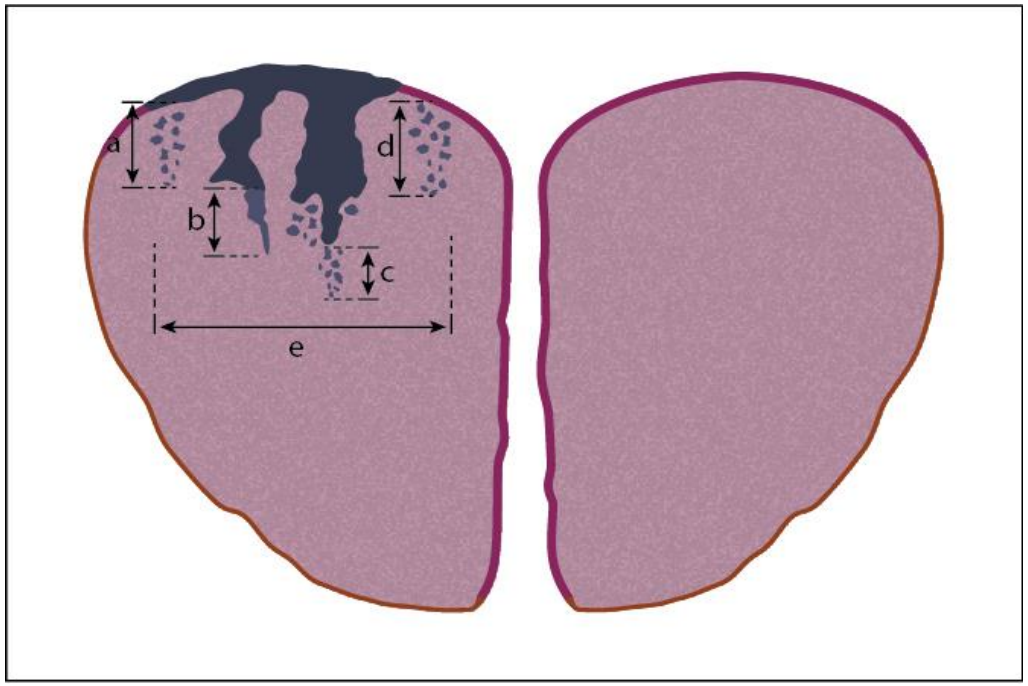
MEASUREMENT OF SMALLER TUMOURS

- 1 horizontal dimension is maximum dimension on a single slide (if invasion only represented in 1 block, should level and other horizontal dimension estimated this way (may be thickness of block- 2.5-3mm)
- If invasion present in more than 1 block, second horizontal dimension calculated by correlation of number of blocks and thickness of blocks (if not multifocal tumour)

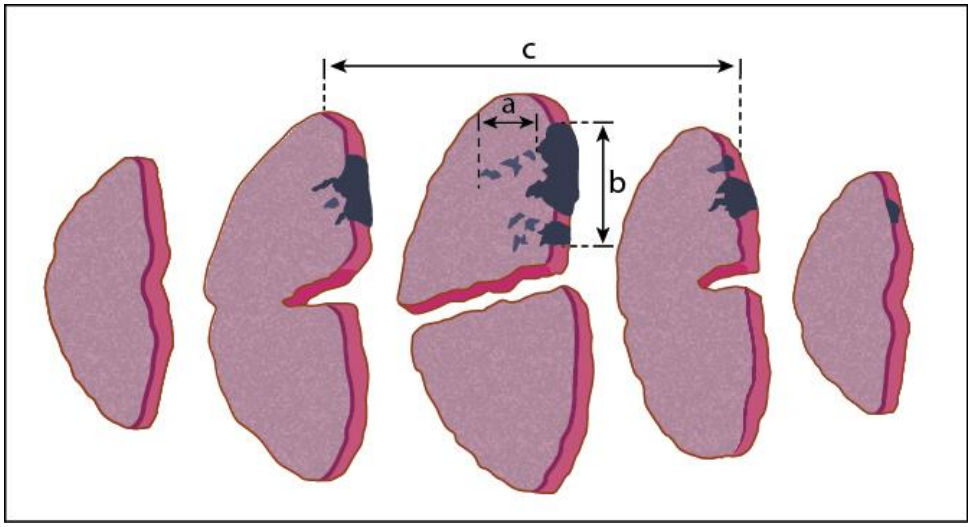
MEASUREMENT OF DEPTH OF INVASION (FIGO)

- Measure from base of epithelium from which tumour arises (surface or crypt) to deepest point of invasion
- If no obvious epithelial origin despite multiple levels, measure from tumour base to base of nearest surface epithelium

MEASURING- ICCR DIAGRAMS



MEASURING - ICCR DIAGRAMS



IDENTIFYING EARLY INVASION IN CERVICAL SQUAMOUS LESIONS

- Often (not always) associated with aggressive/ expansile CIN III
- Look for disruption of basement membrane and small buds of cells with more abundant eosinophilic cytoplasm and sometimes with prominent nucleoli and individual cell keratinisation (squamoid appearance)
- need to see more than just “blurring” of interface (I don’t use the term “incipient” invasion)
- Sometimes get stromal reaction (inflammatory or desmoplastic) but relatively uncommon in early invasion

AGGRESSIVE/ EXPANSILE CIN III

J Clin Pathol 1994;47:799–804

Histological features of CIN3 and their value in predicting invasive microinvasive squamous carcinoma

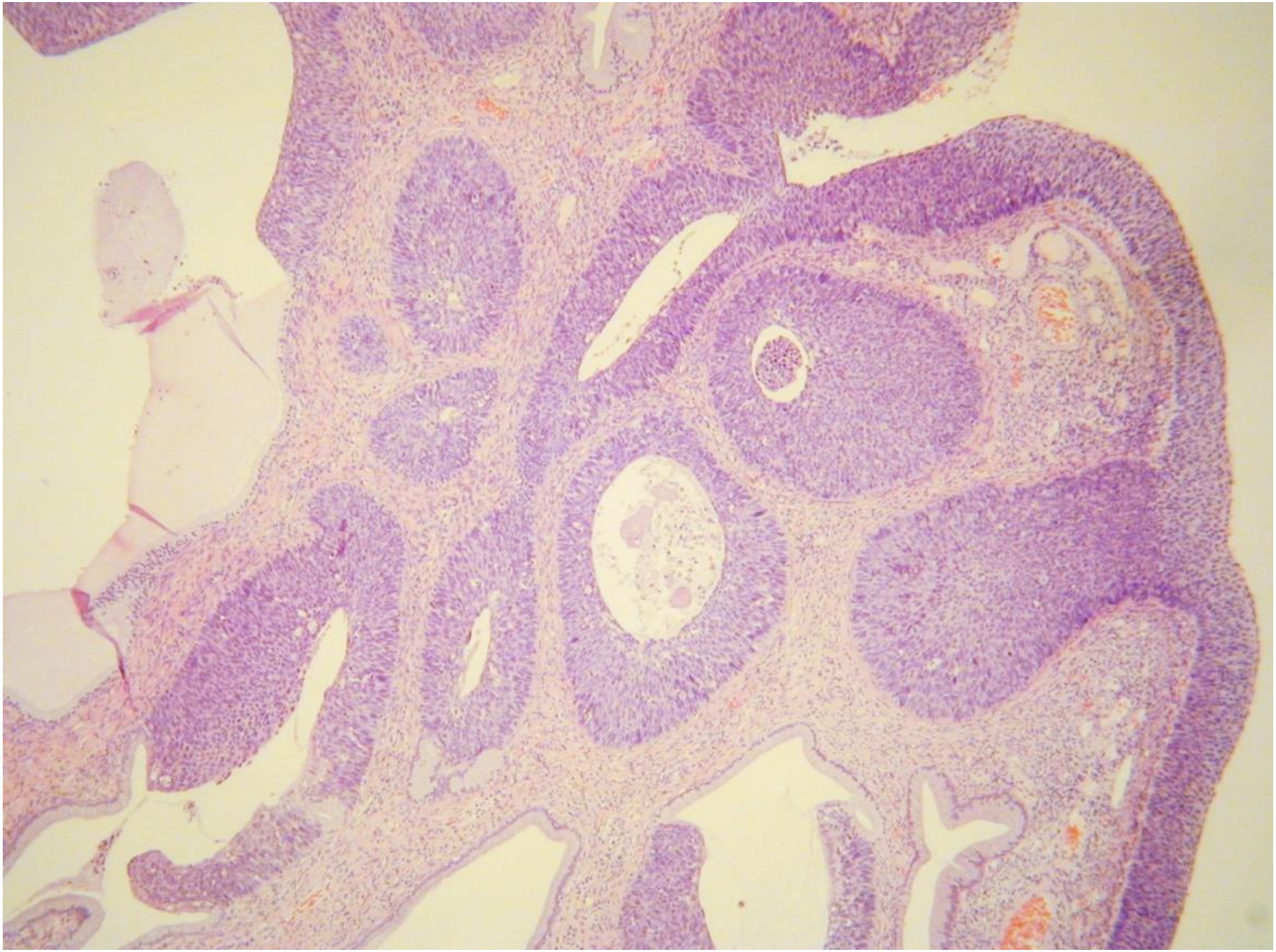
A I Al-Nafussi, D E Hughes

AGGRESSIVE/ EXPANSILE CIN III

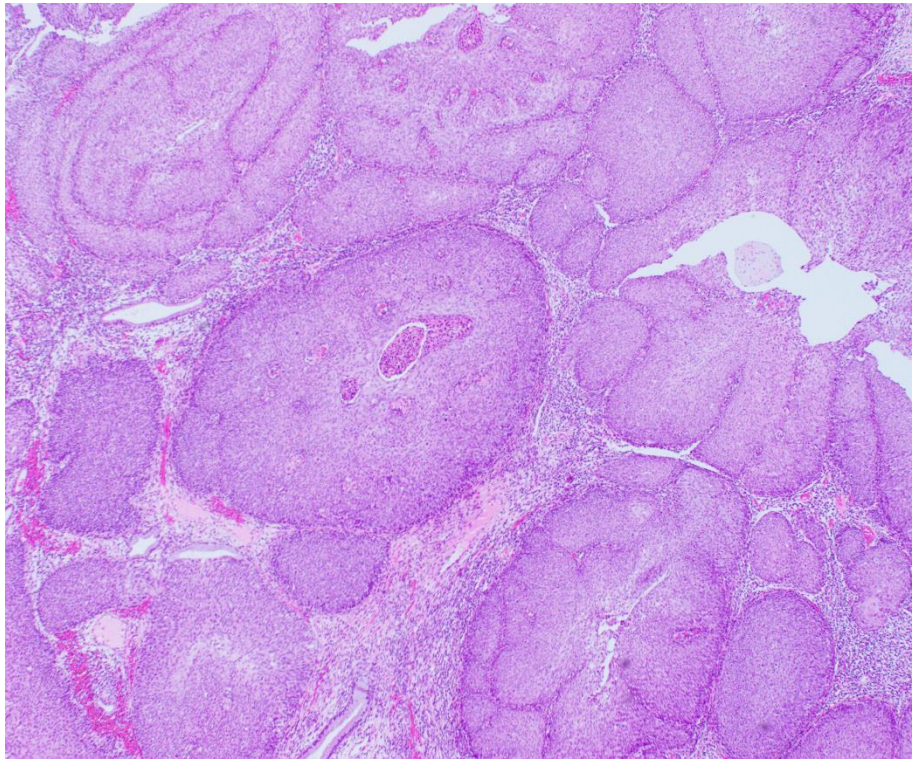
- PMID 7962647 ; not called AGGRESSIVE/ EXPANSILE CIN III
- Looked at histological features of CIN III (120 cases) associated with early invasion
- **Major features:- extensive involvement of surface epithelium and crypts, luminal necrosis with keratinous debris, intraepithelial squamous maturation**
- Minor features:- frequent mitoses and apoptosis, pericrytal fibroplasia and inflammation, marked nuclear atypia, streams of spindle shaped cells
- Perform levels if these features identified
- If at margin of loop excision, some clinicians perform a repeat loop

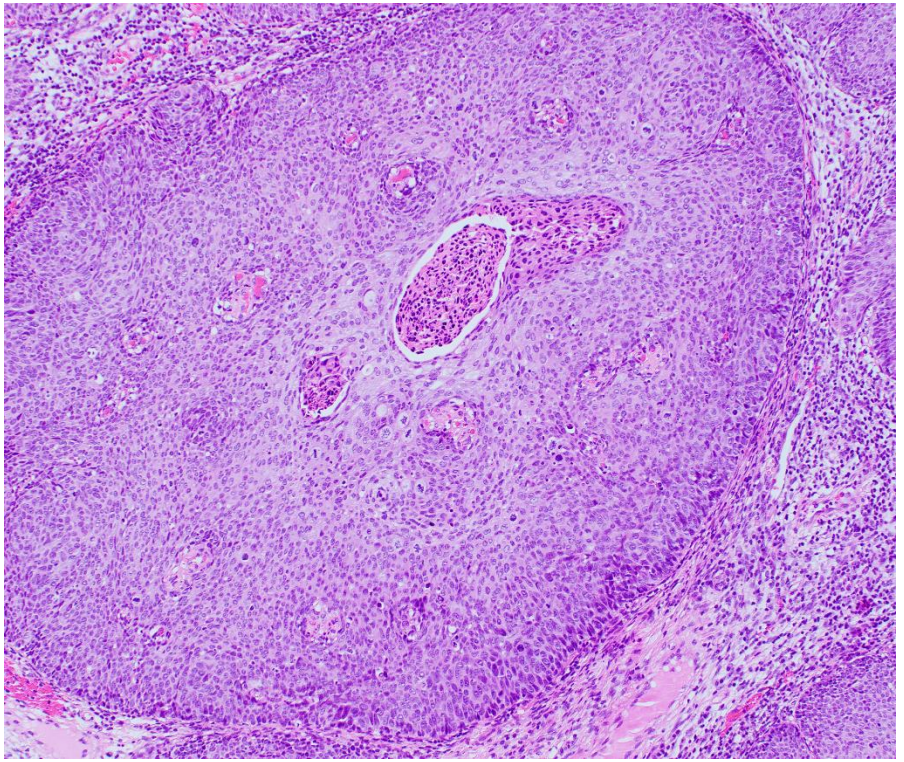
AGGRESSIVE/ EXPANSILE CIN III

- How I report “The CIN III is of aggressive/ expansile type with marked involvement of and expansion of the underlying endocervical glands. This is a type of CIN III which may be associated with early invasion but, in the multiple levels examined, no invasion is seen”

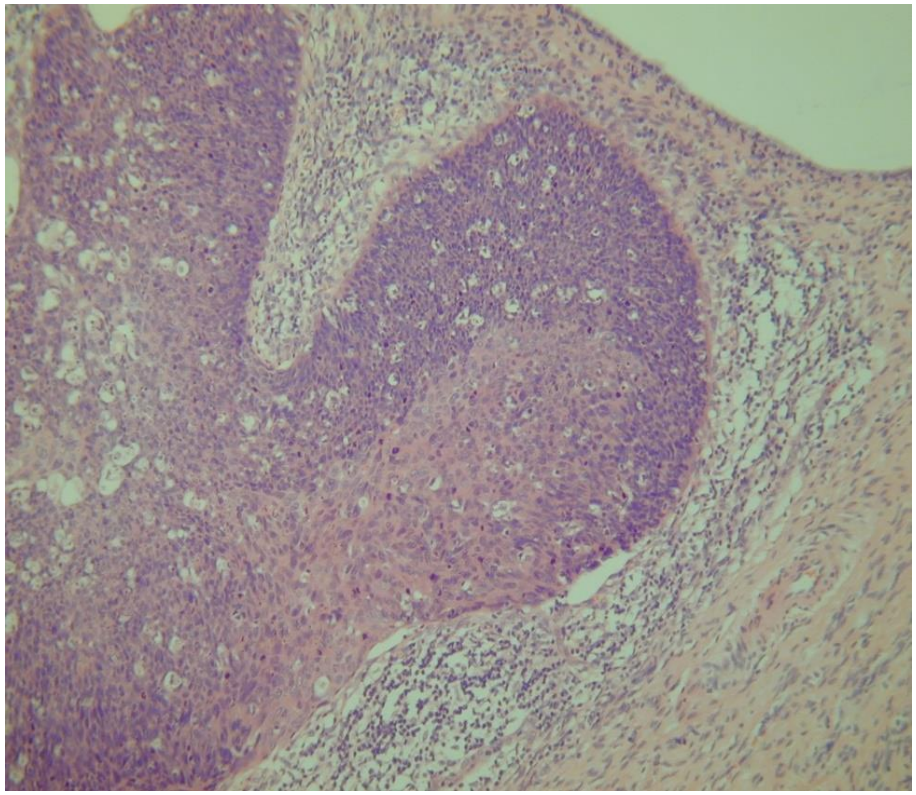


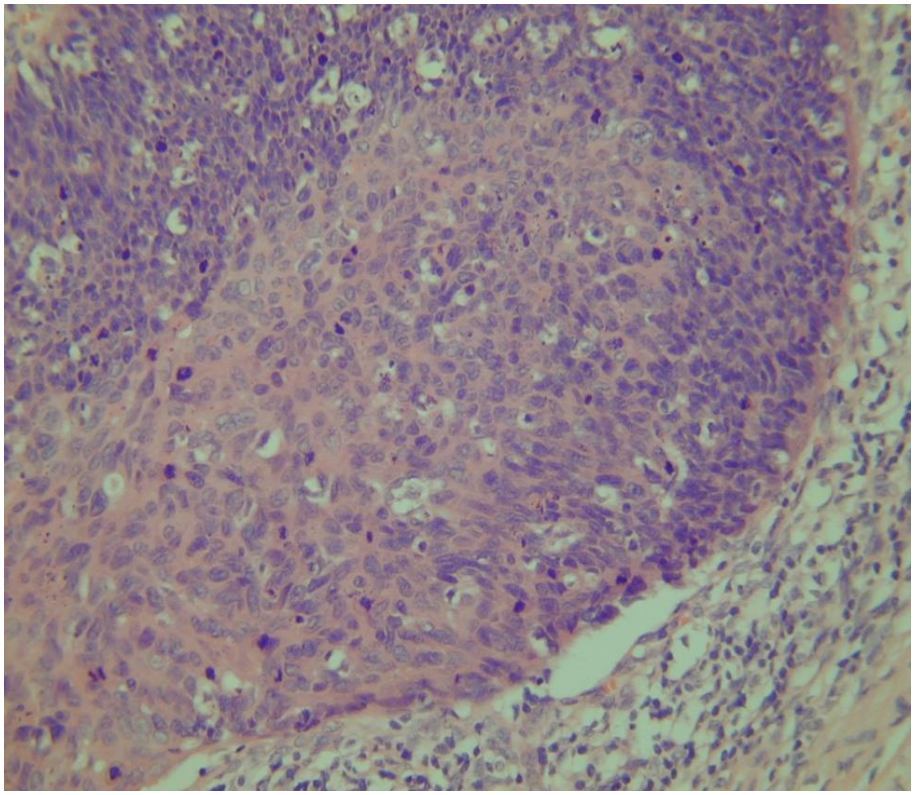
AGGRESSIVE/ EXPANSILE CIN III

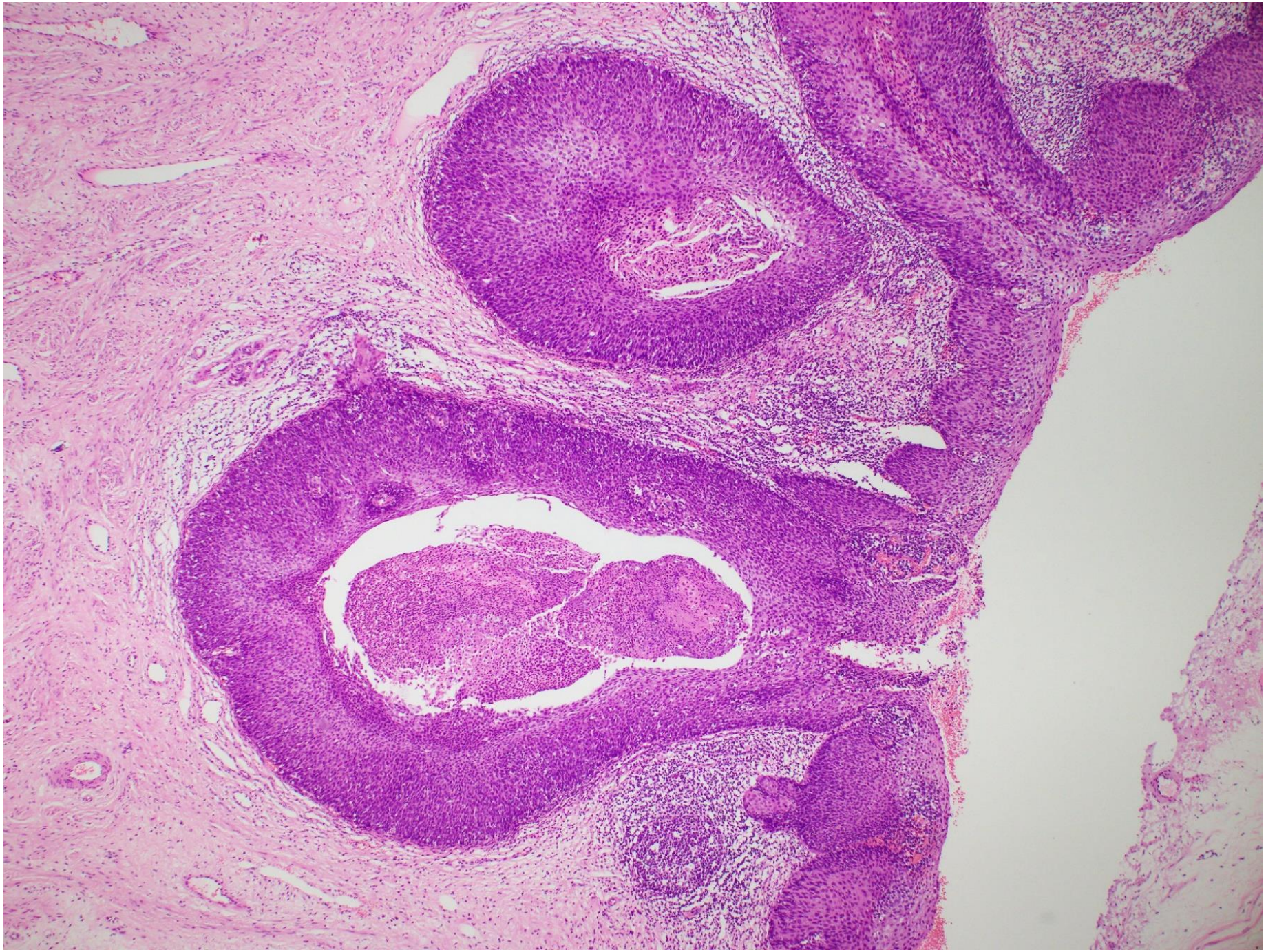


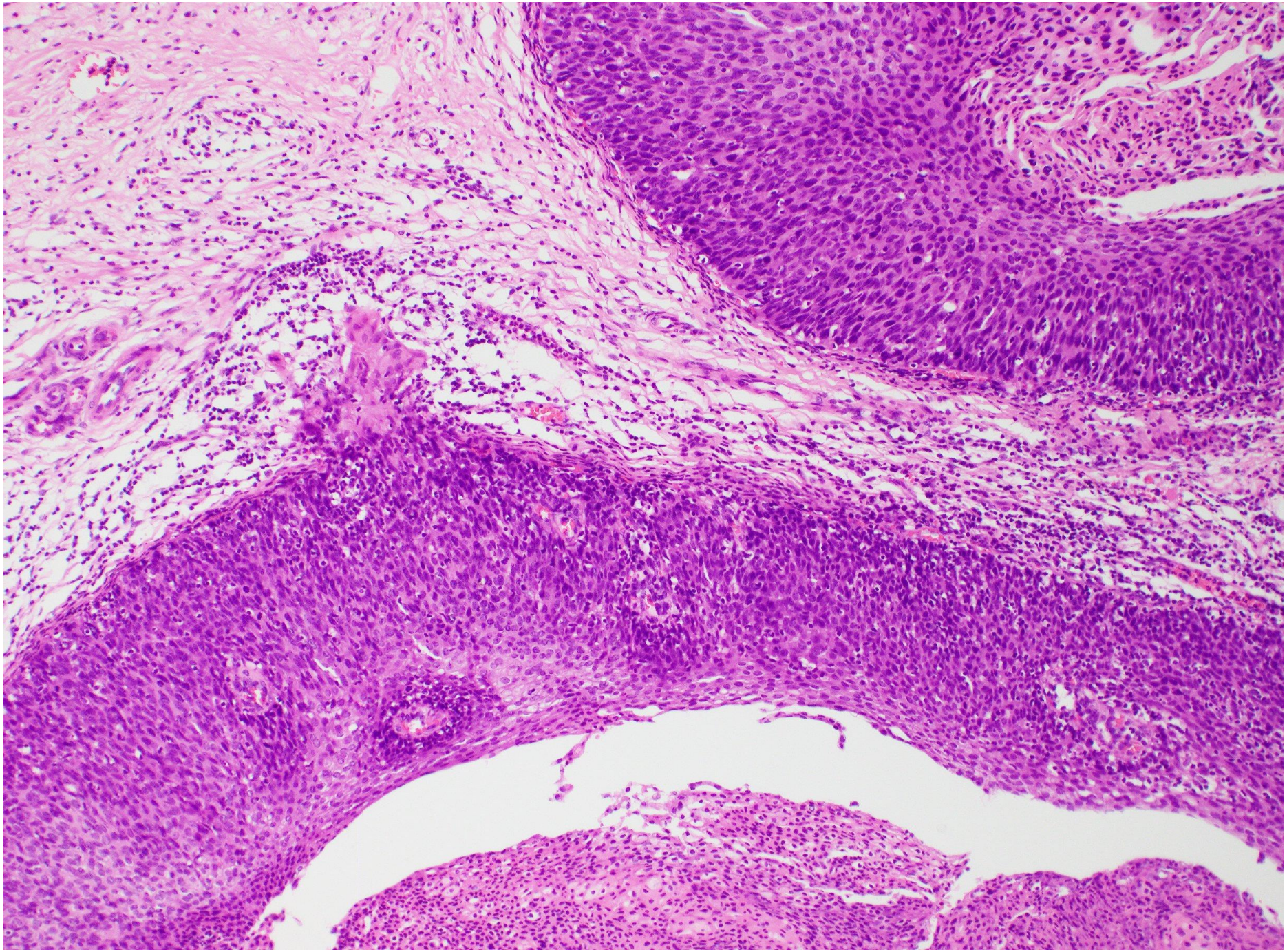


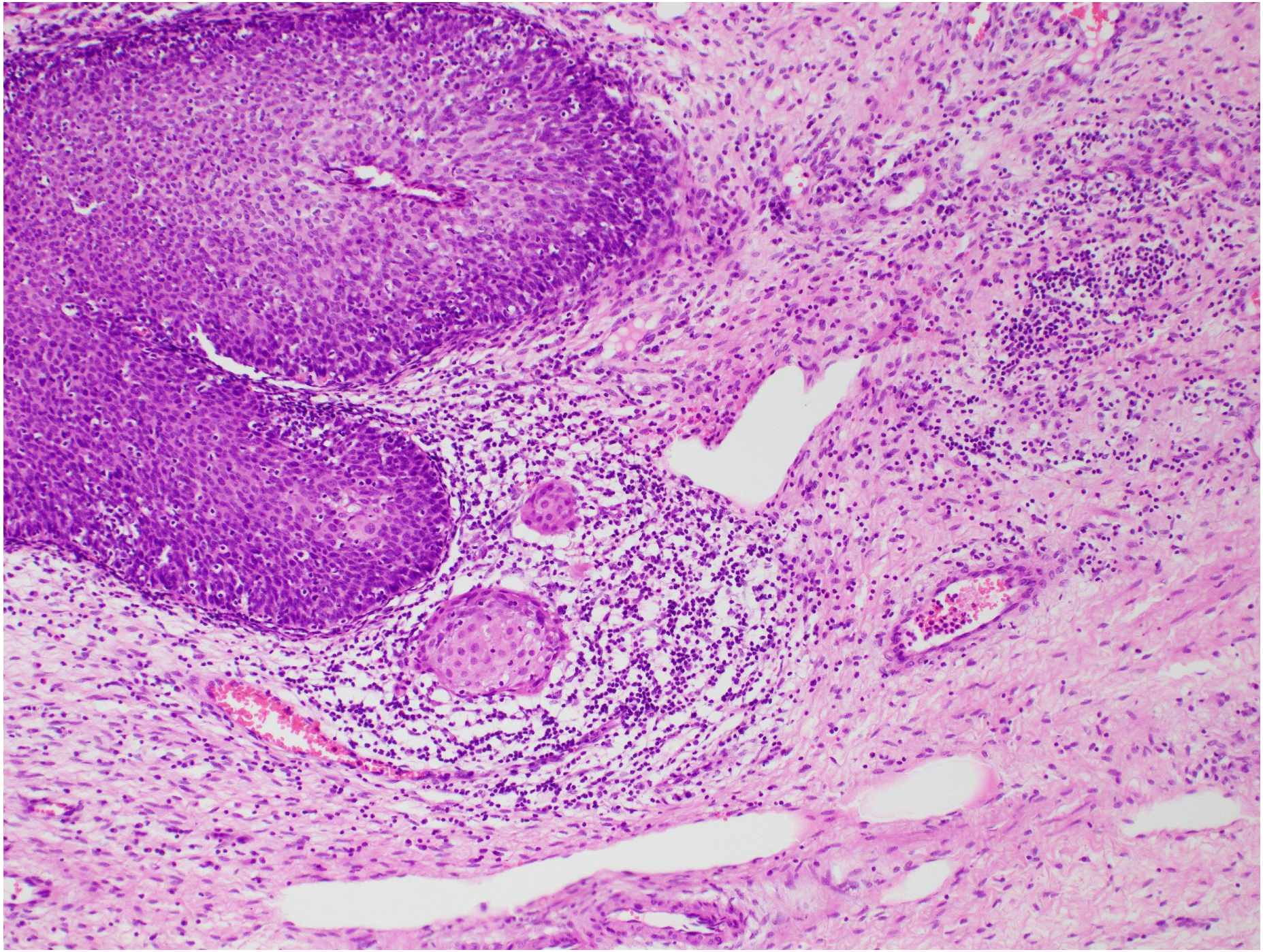
MATURATION- AGGRSSIVE/ EXPANSILE
CIN III



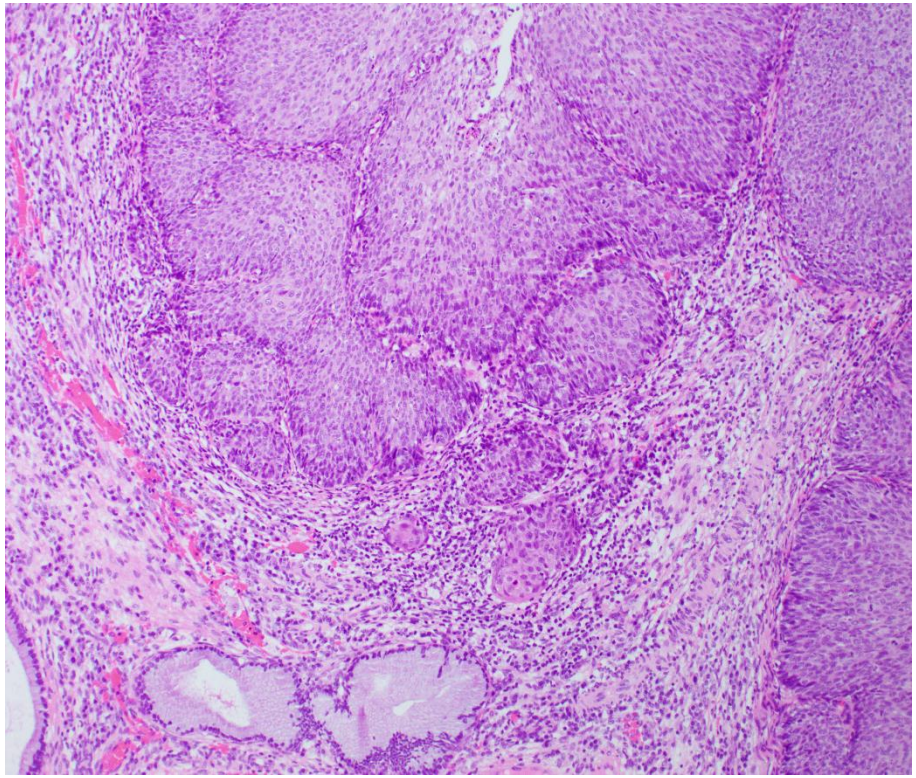


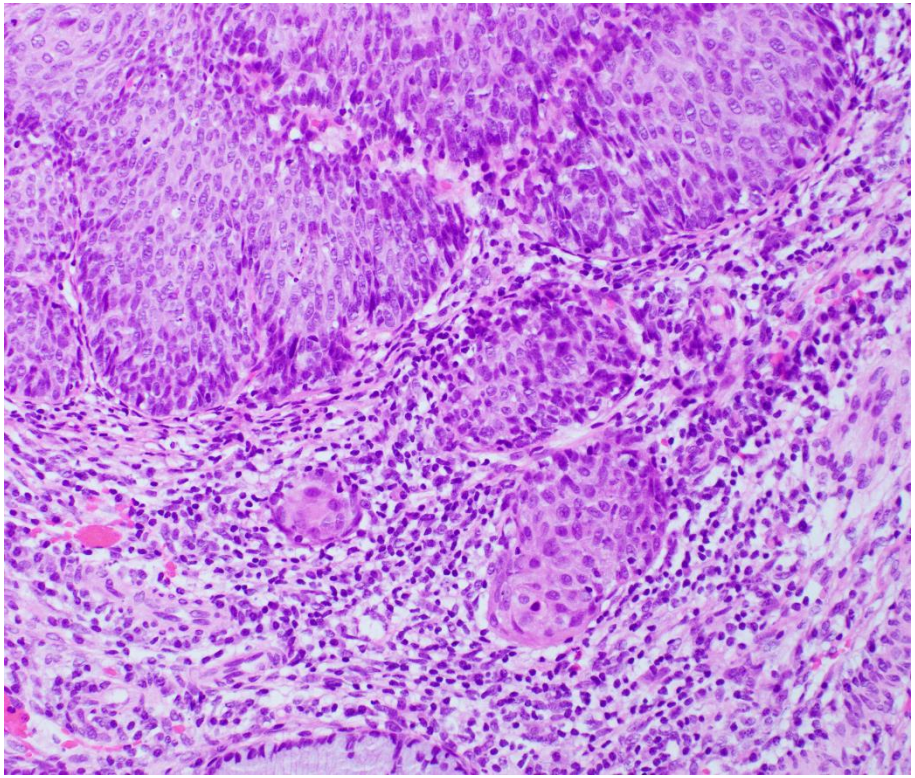


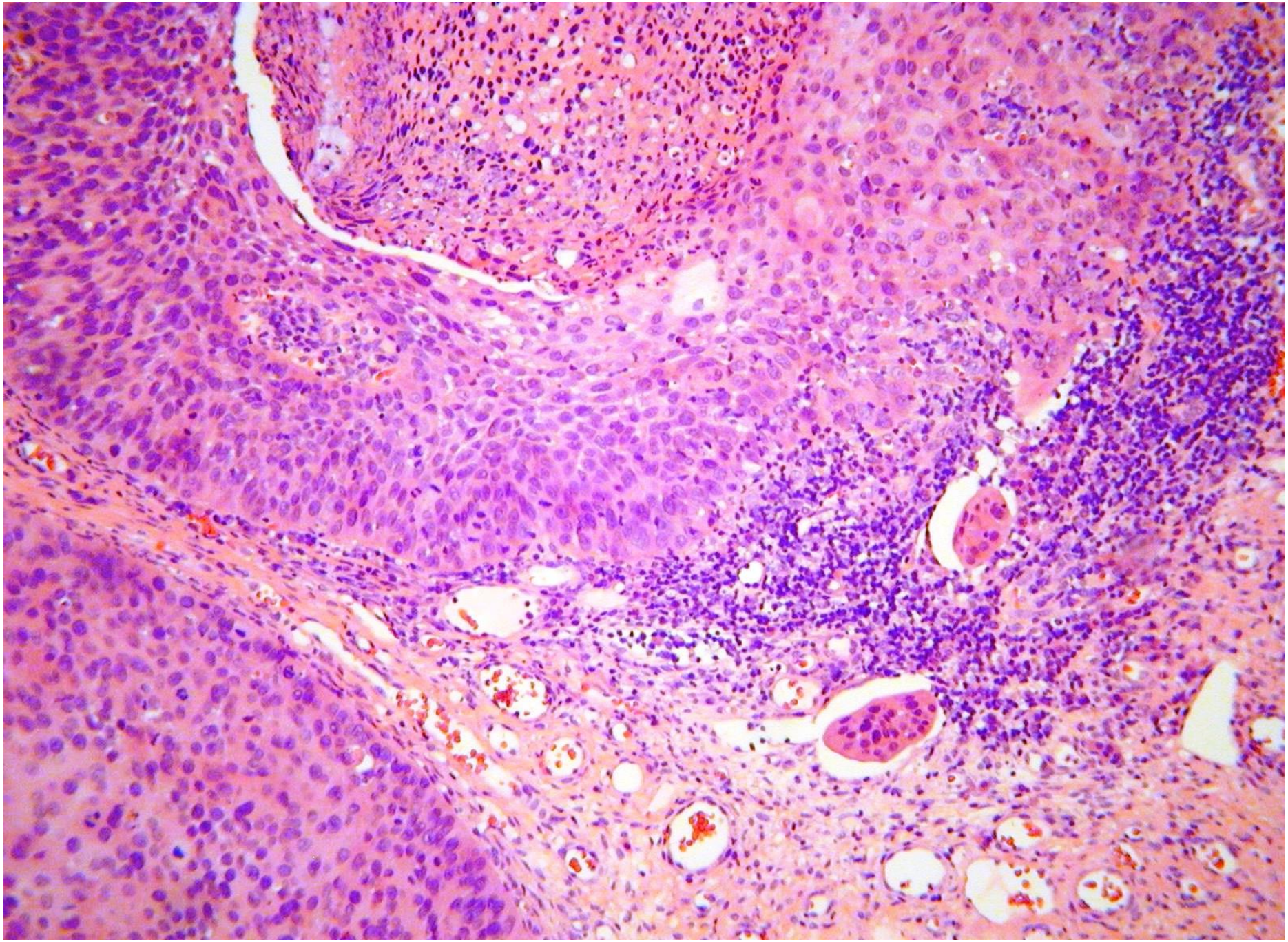


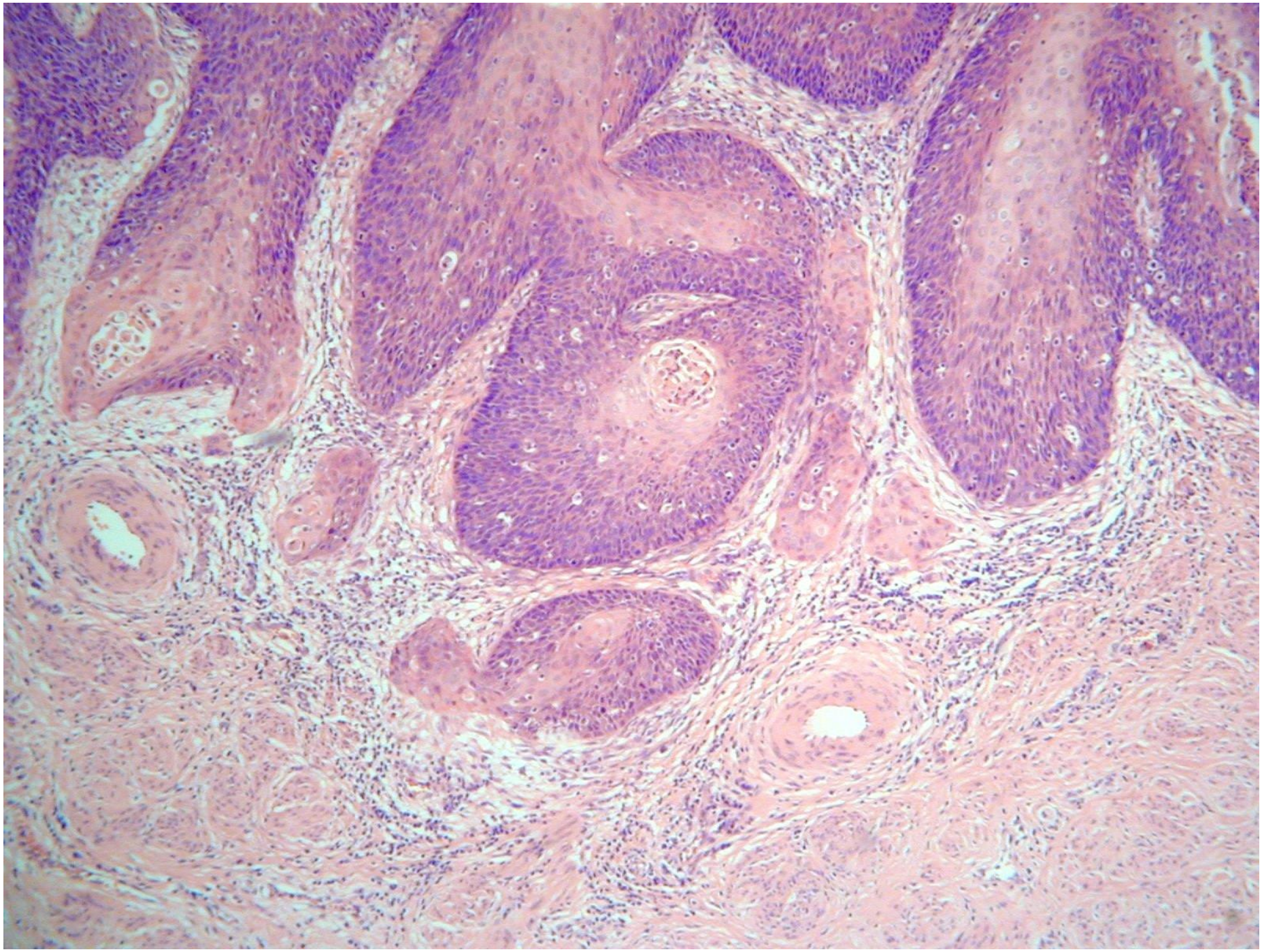


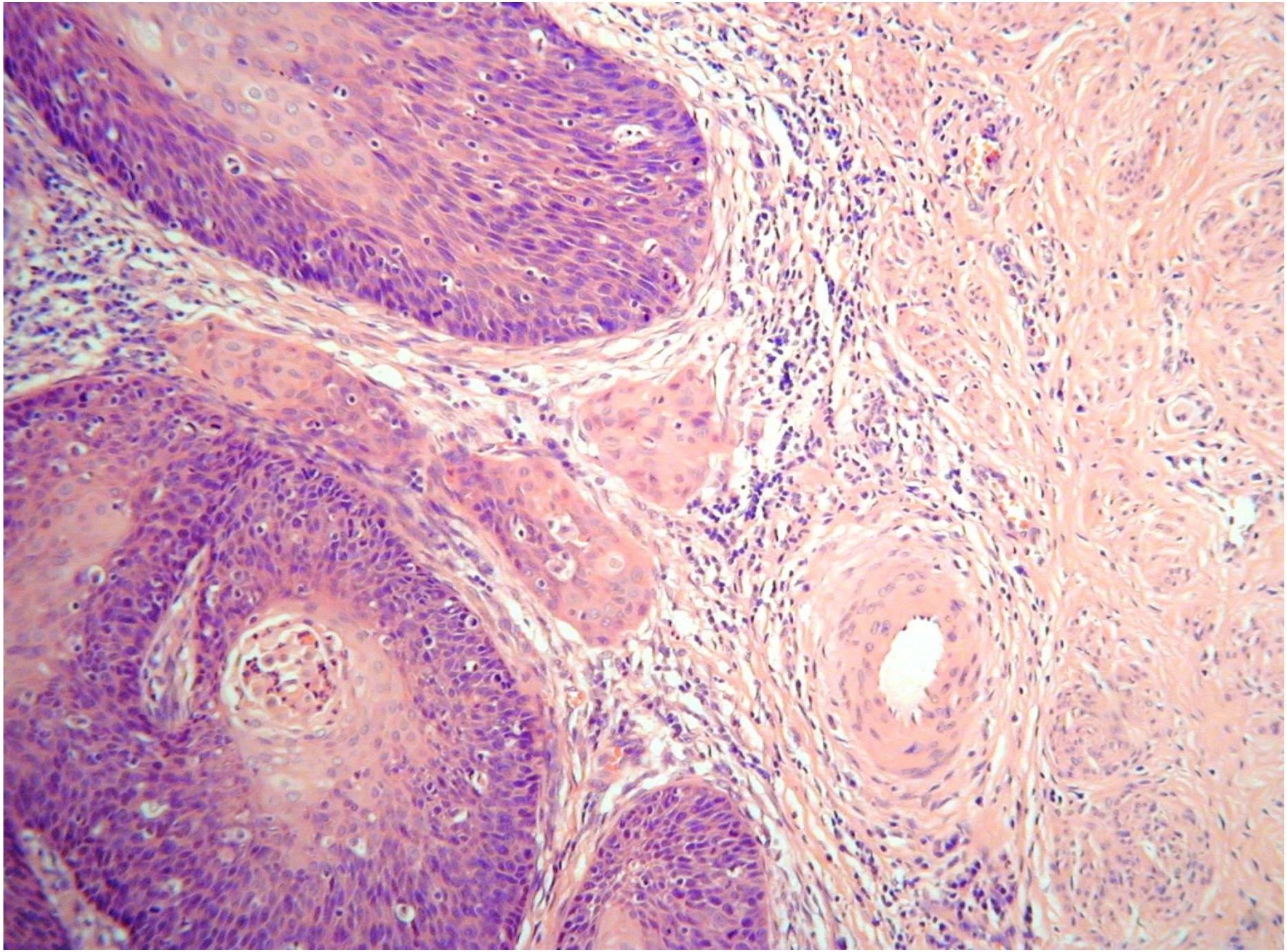
AGGRESSIVE/ EXPANSILE CIN III- EARLY INVASION









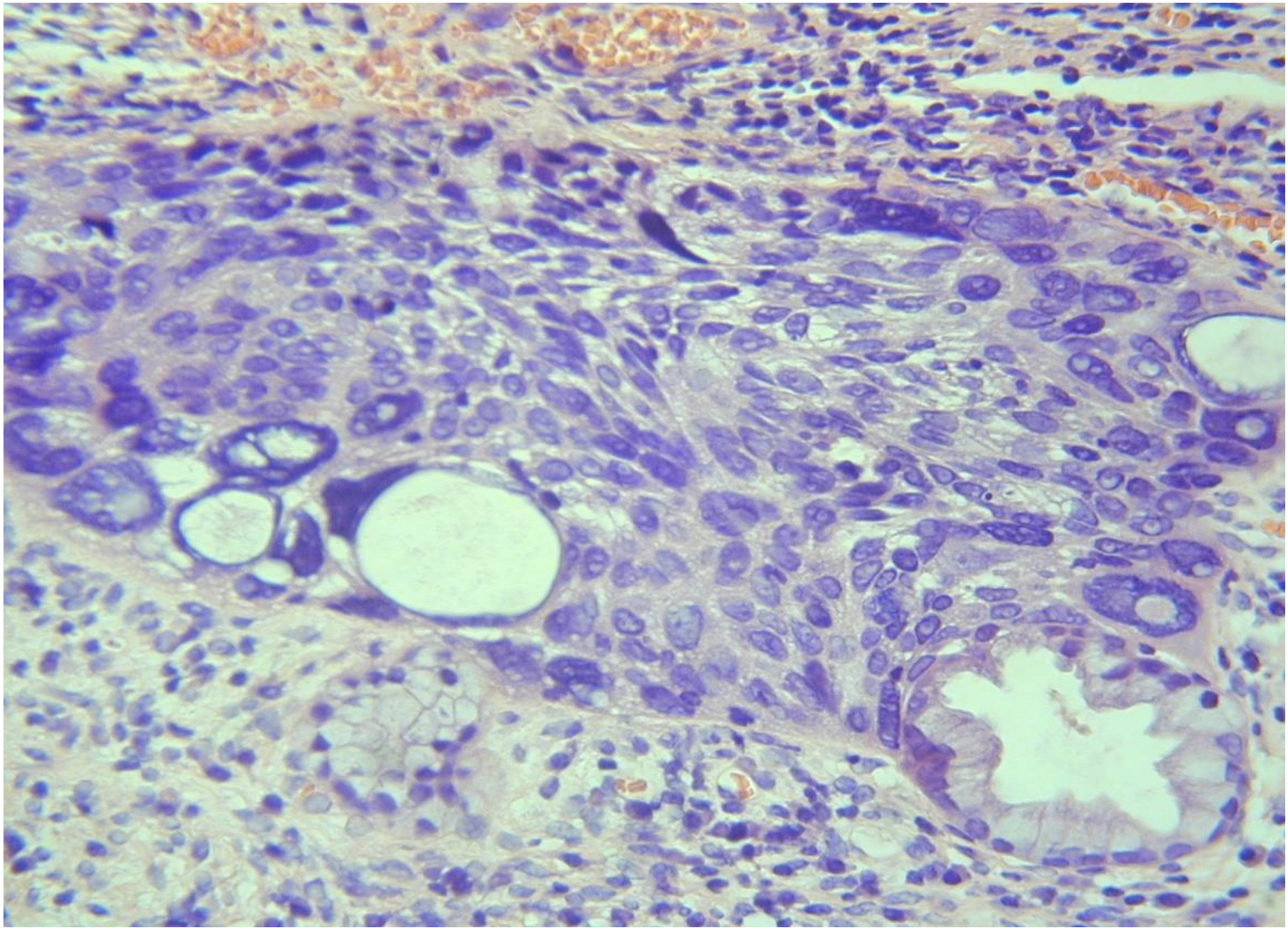


IS IMMUNOHISTOCHEMISTRY USEFUL IN DIAGNOSING EARLY INVASION?

- Basement membrane markers- laminin and type IV collagen
- Limited value in squamous and glandular lesions- basement membrane may be incomplete in CIN III and HCGIN/AIS and may be “produced” in invasive lesions

HSIL WITH BIZARRE CYTOLOGY (PLEOMORPHIC HSIL)

- PMID 28666641. Pathology 2017;49;465-470
- 19 cases of HSIL with marked nuclear atypia; mainly involves basal epithelium in crypts
- Slightly increased likelihood of invasion but not statistically more significant than usual HSIL
- Invasive foci arose from aggressive HSIL rather than pleomorphic HSIL
- Bizarre cells- less mitotic activity and lower Ki67
- May result in possible invasion being suggested on cervical smear



CIN III-LIKE INVASIVE SCC

Histopathology

Histopathology 2017, **70**, 367–374. DOI: 10.1111/his.13094

Cervical intraepithelial neoplasia (CIN) 3-like squamous cell carcinoma of the cervix: a review of 14 cases with comparison of E-cadherin and cyclin D1 expression in the CIN 3-like and infiltrative tumour elements

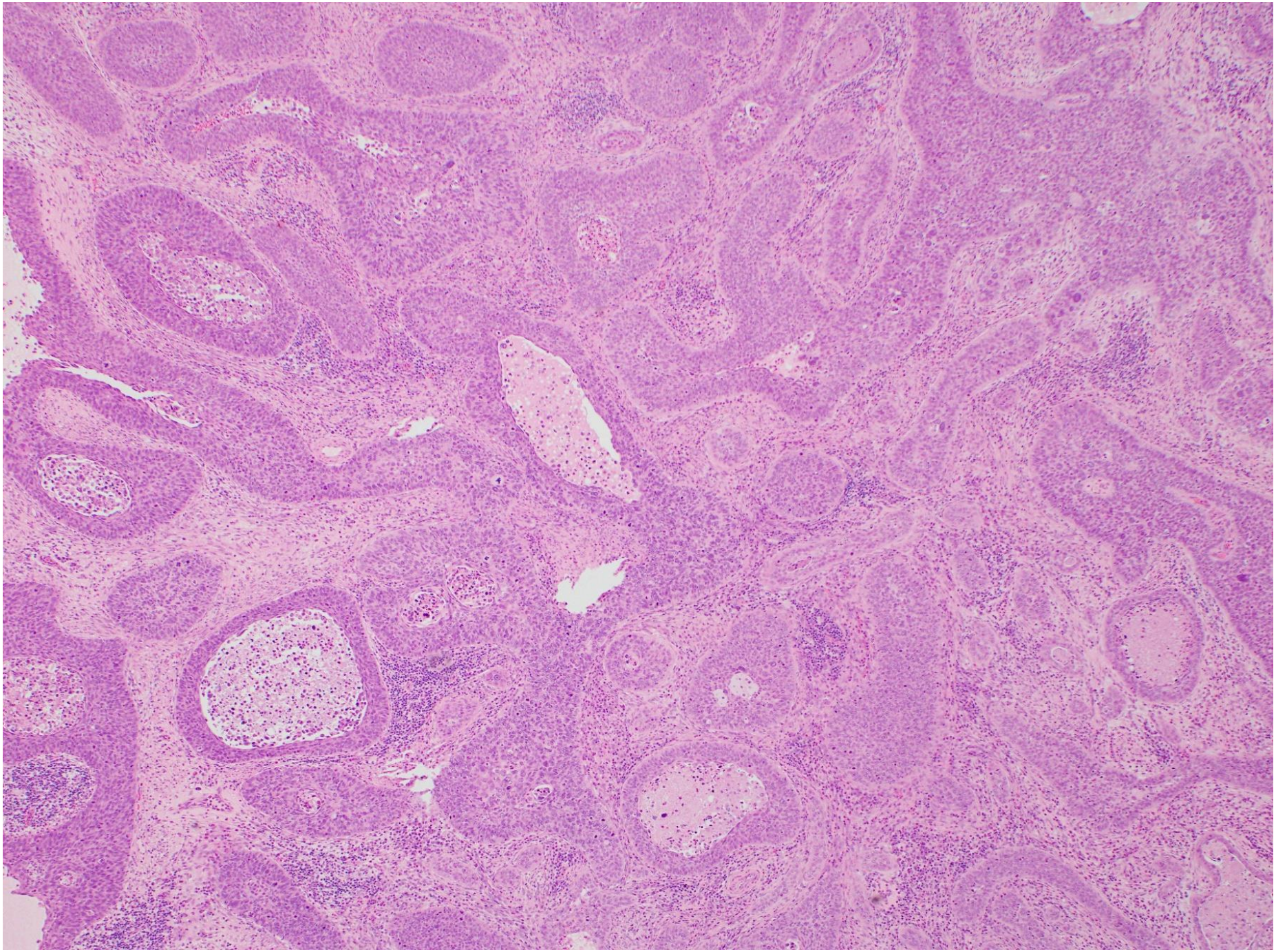
Colin J R Stewart[1,2] & Maxine L Crook[1]

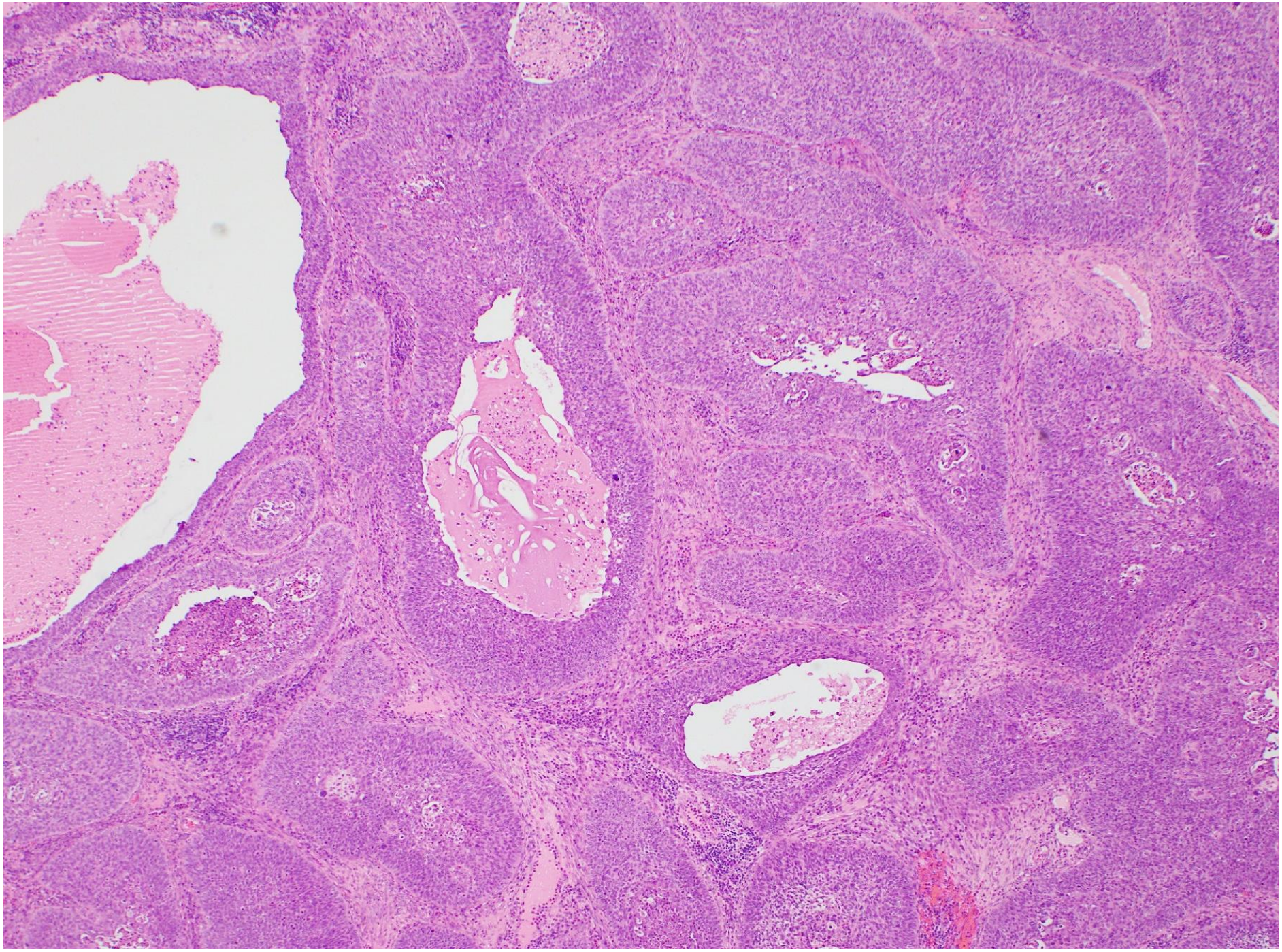
[1]*Department of Pathology, King Edward Memorial Hospital, Perth, Western Australia, Australia, and* [2]*School of Womens' and Infant's Health, University of Western Australia, Perth, Western Australia, Australia*

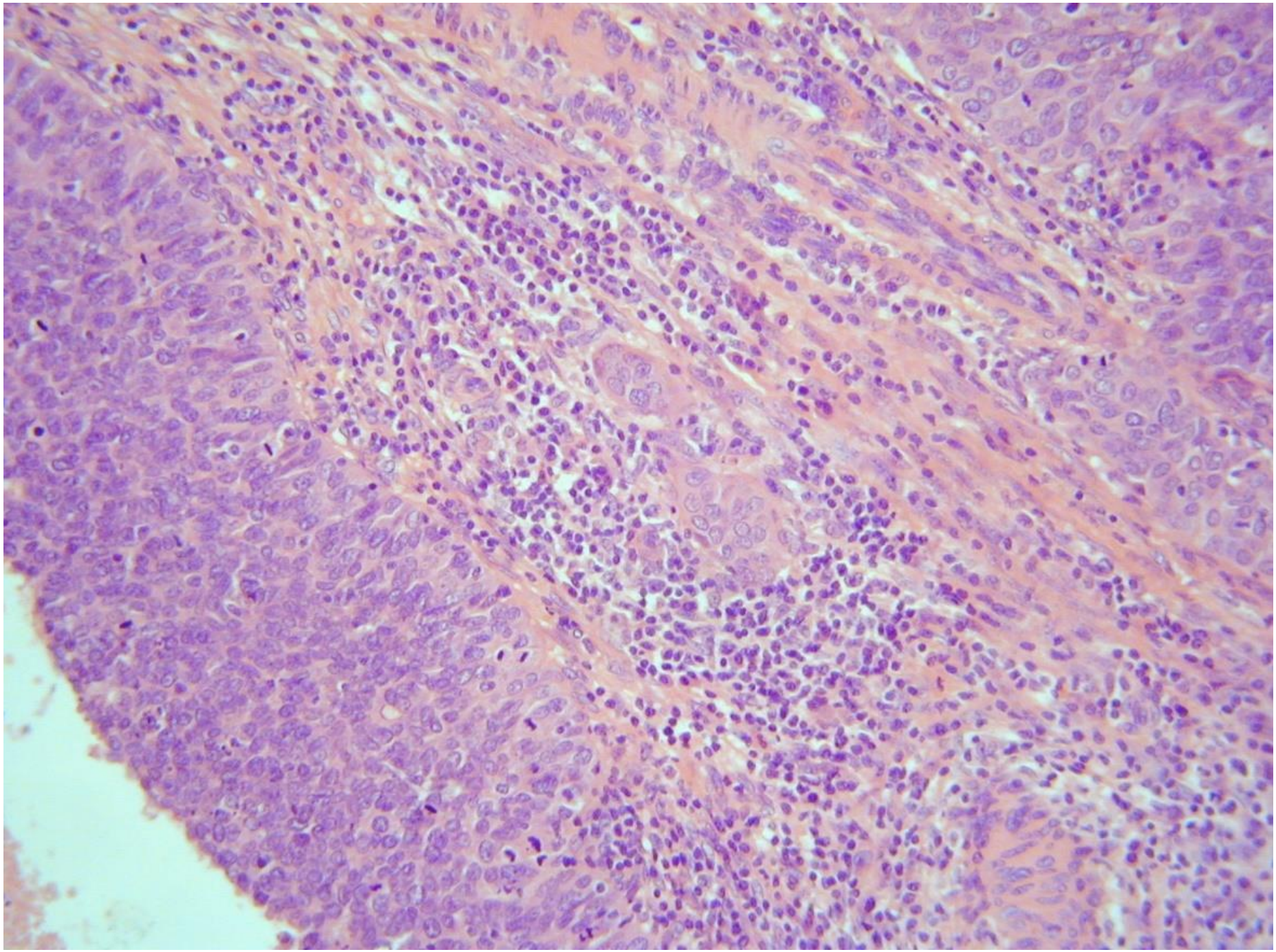
Date of submission 15 August 2016
Accepted for publication 23 September 2016
Published online *Article Accepted* 28 September 2016

CIN III-LIKE INVASIVE SCC

- PMID 27681166
- 14 cases (all stage IB or II)
- Can be misdiagnosed as CIN III especially on small biopsy specimen but even on loop or hysterectomy
- May also be misdiagnosed as “early stromal invasion/ early SCC”
- Most underwent multiple biopsies prior to achieving diagnosis
- May be associated with conventional SCC
- “Low-power” diagnosis
- More E-cadherin and less cyclin D1 than conventional SCC (less evidence of epithelial-mesenchymal transition)







PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582

Downloaded from jcp.bmj.com on November 17, 2011 - Published by group.bmj.com

Original article

Pseudoinvasion of benign squamous epithelium following cervical biopsy: a pseudoneoplastic phenomenon mimicking invasive squamous carcinoma

David P Boyle, W Glenn McCluggage

PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582

- Pseudoneoplastic lesion following biopsy or loop excision which may mimic squamous cell carcinoma
- Typically hypereosinophilic appearance
- May be associated granulation-type reaction and/ or haemosiderin and or histiocytes and multinucleate giant cells
- Sometimes in spaces which may mimic LVSI
- p16 may be useful

PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582

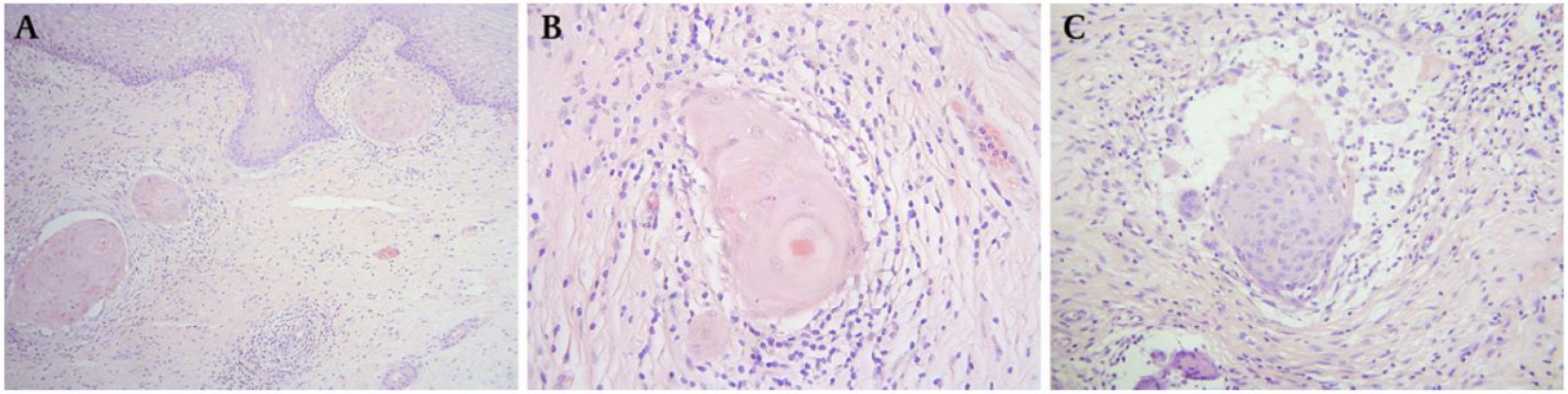
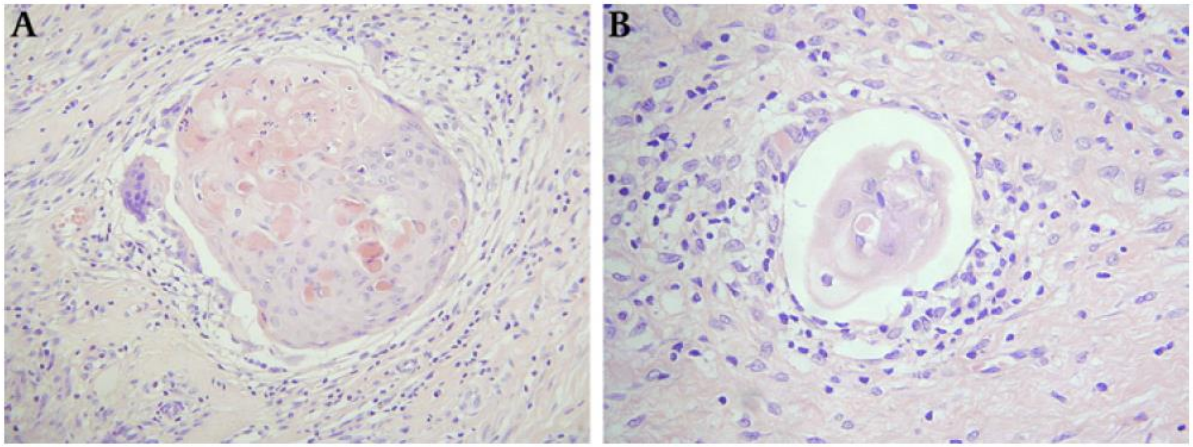


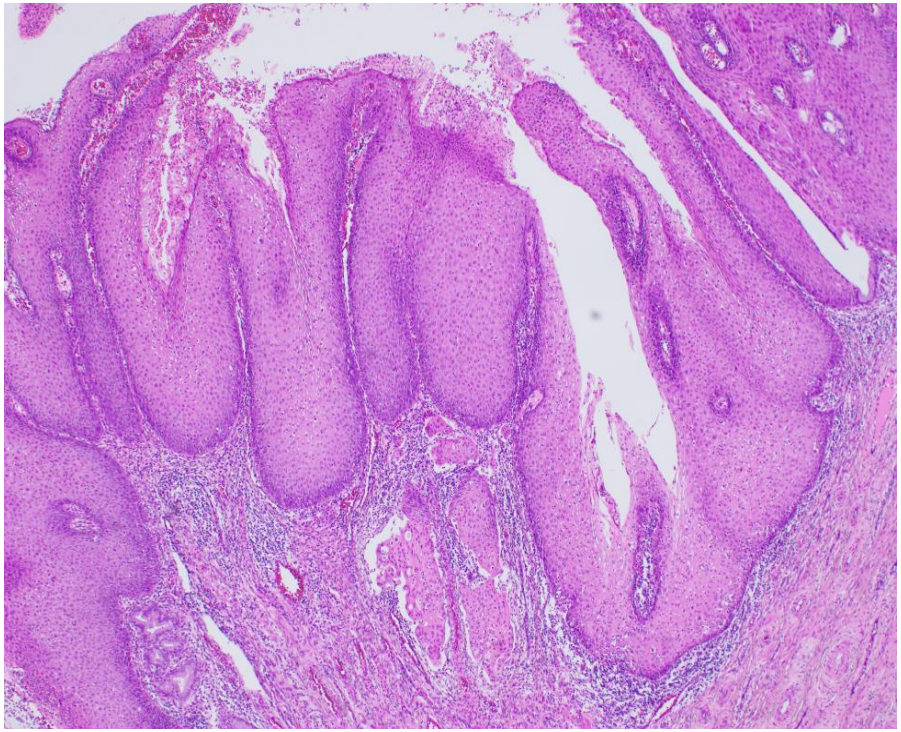
Figure 1 (A) Nest of squamous cells present deep to normal surface squamous epithelium. (B) The nests of squamous cells have a hypereosinophilic appearance. (C) The surrounding stroma is oedematous and inflamed and has a granulation tissue-like appearance.

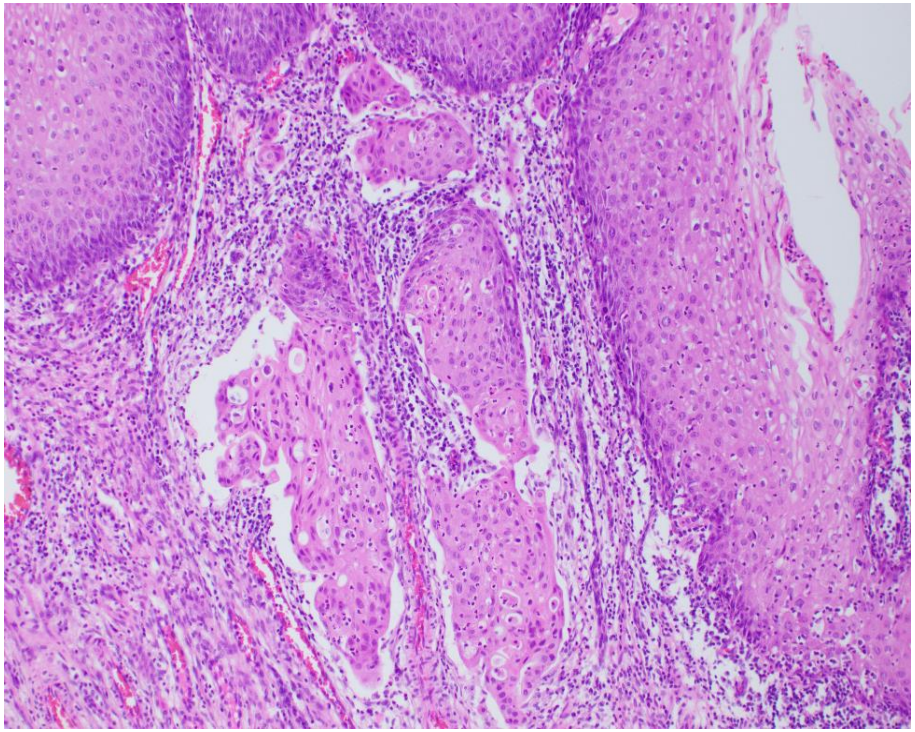
PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582

Figure 2 (A) The nests of squamous cells are surrounded by inflammatory cells, including multinucleate giant cells. (B) Some of the nests of squamous epithelium are surrounded by clefts representing retraction artefact but simulating lymphovascular invasion.

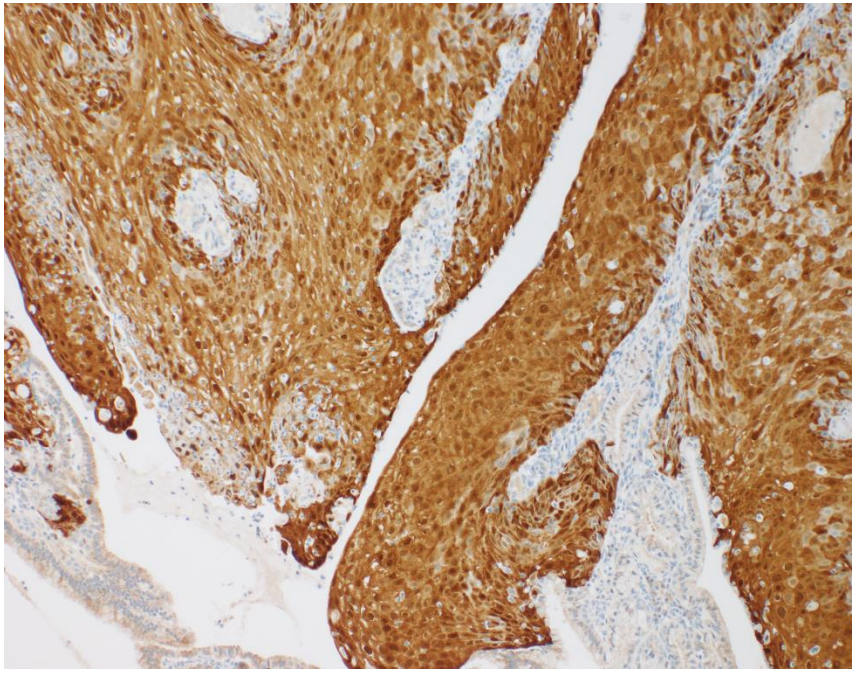


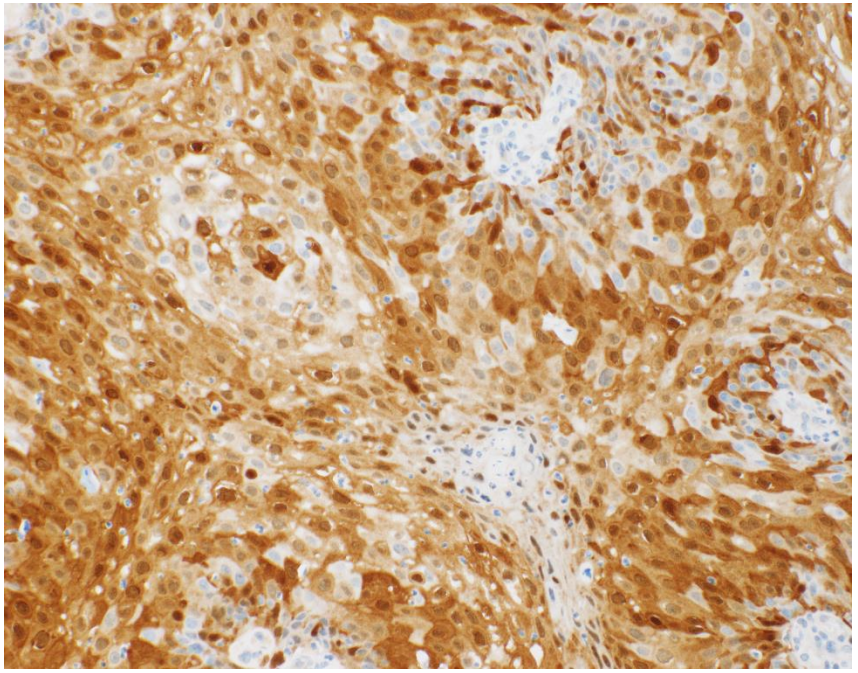
PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582





PSEUDOINVASION FOLLOWING CERVICAL BIOPSY- PMID 21896582





p16

EARLY INVASION IN ADENOCARCINOMAS

- Different problems than squamous cell carcinomas
- Most of literature does not distinguish between adenocarcinoma types (no in situ lesions recognised for clear cell carcinoma and mesonephric adenocarcinoma; gastric-type AIS described)
- Particular difficulties in distinguishing between florid HPV-associated AIS/ HCGIN and adenocarcinoma; difficulties in measuring such cases; where does AIS end and adenocarcinoma begin

DISTINCTION BETWEEN HPV-ASSOCIATED AIS AND ADENOCARCINOMA

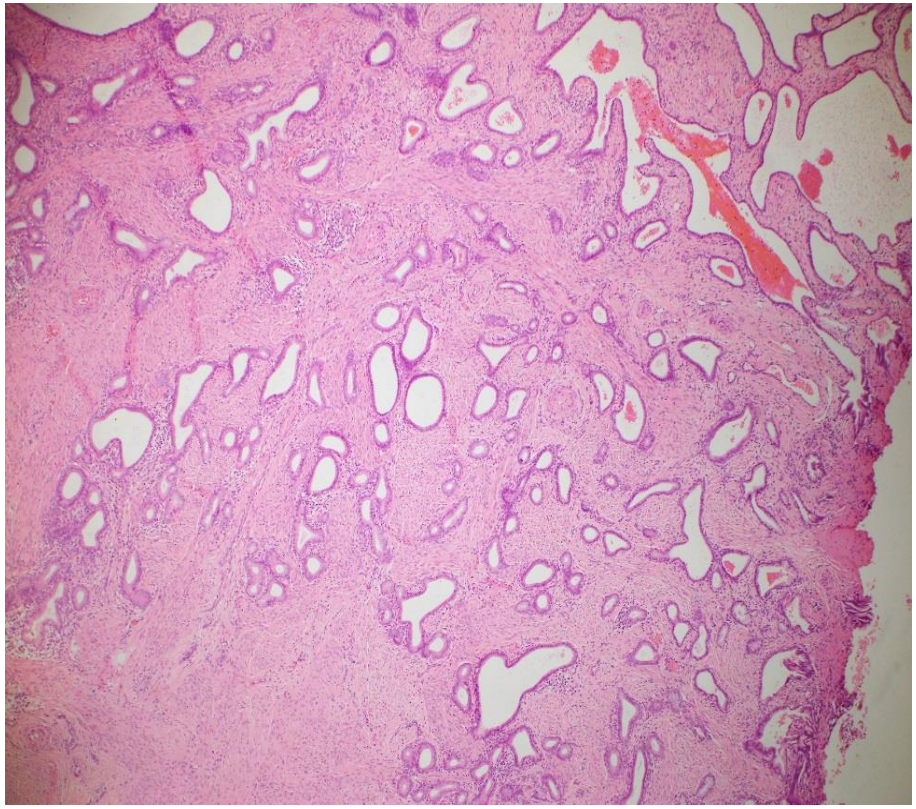
- Often admixture and not clear where AIS ends and adenocarcinoma begins; obvious problems in measuring invasive component
- Cases often get referred for specialist opinion
- Simplistically, the distinction is based on the glandular architecture being too complex in adenocarcinoma to conform to the normal endocervical glandular field
- "Naked" pattern of invasion may be misdiagnosed as AIS or benign glandular lesion; surface papillary adenocarcinomas may be diagnosed as AIS
- Different patterns of "early" adenocarcinoma

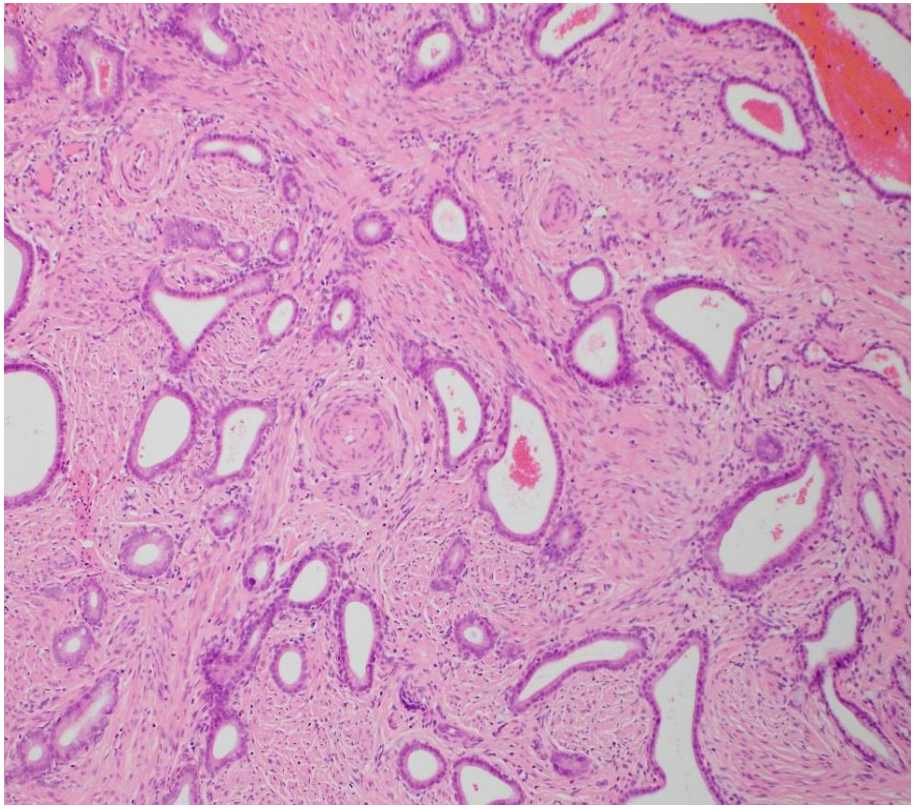
  obvious small adenocarcinoma

  too architecturally complex (cribriform/ papillary/ confluent)

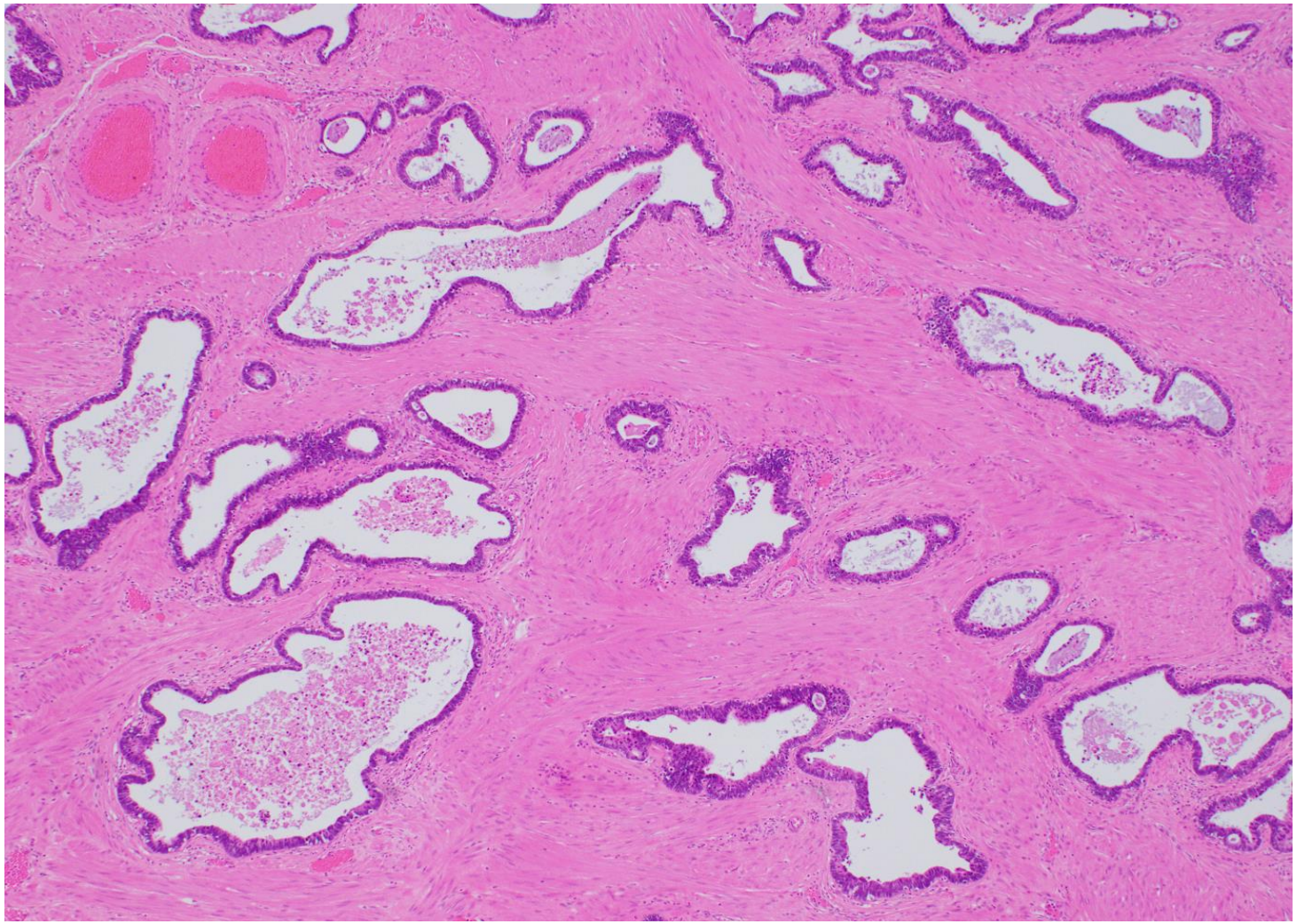
  small buds of cells with more abundant eosinophilic cytoplasm (squamoid appearance)

USUAL-TYPE HPV-ASSOCIATED CERVICAL ADENOCARCINOMA – “NAKED” INVASION

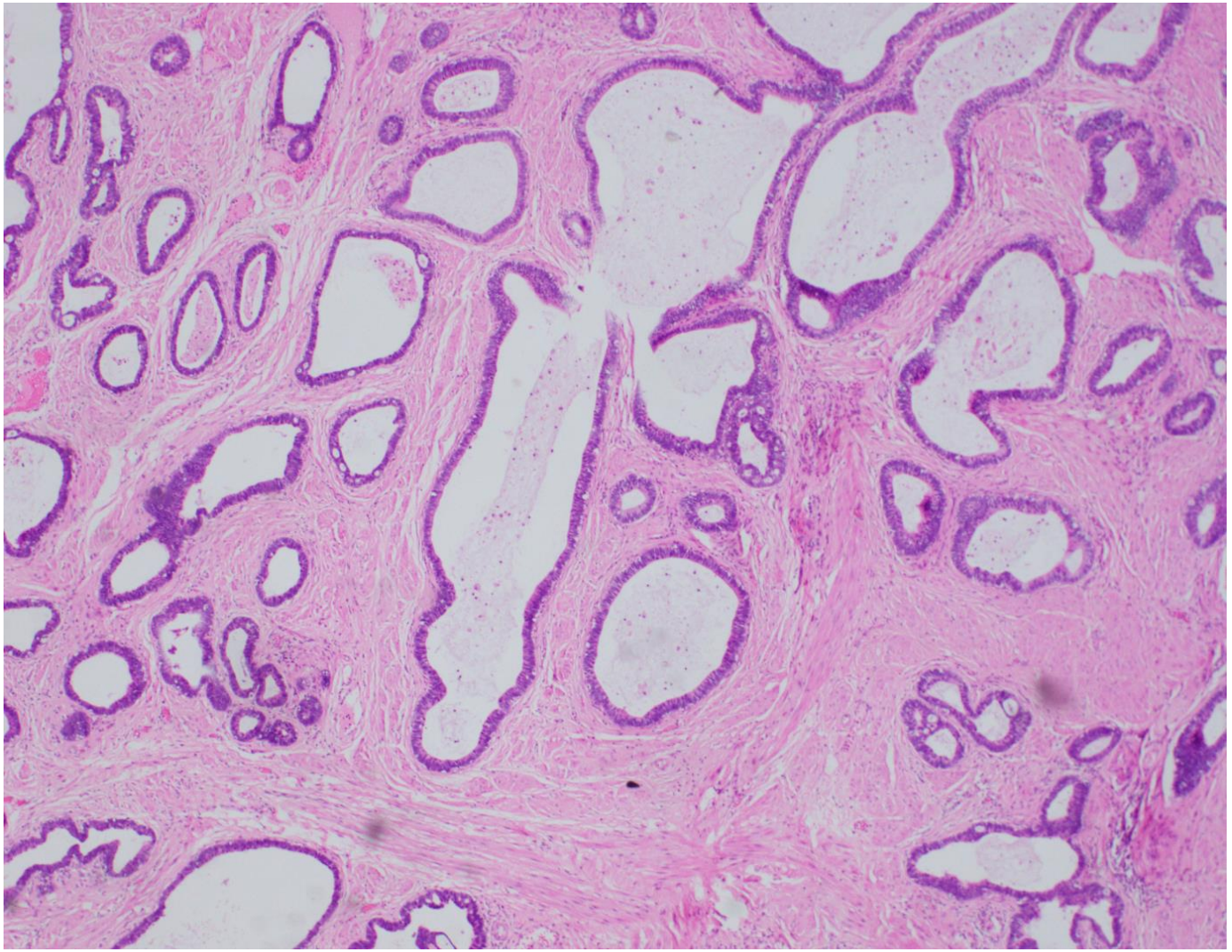




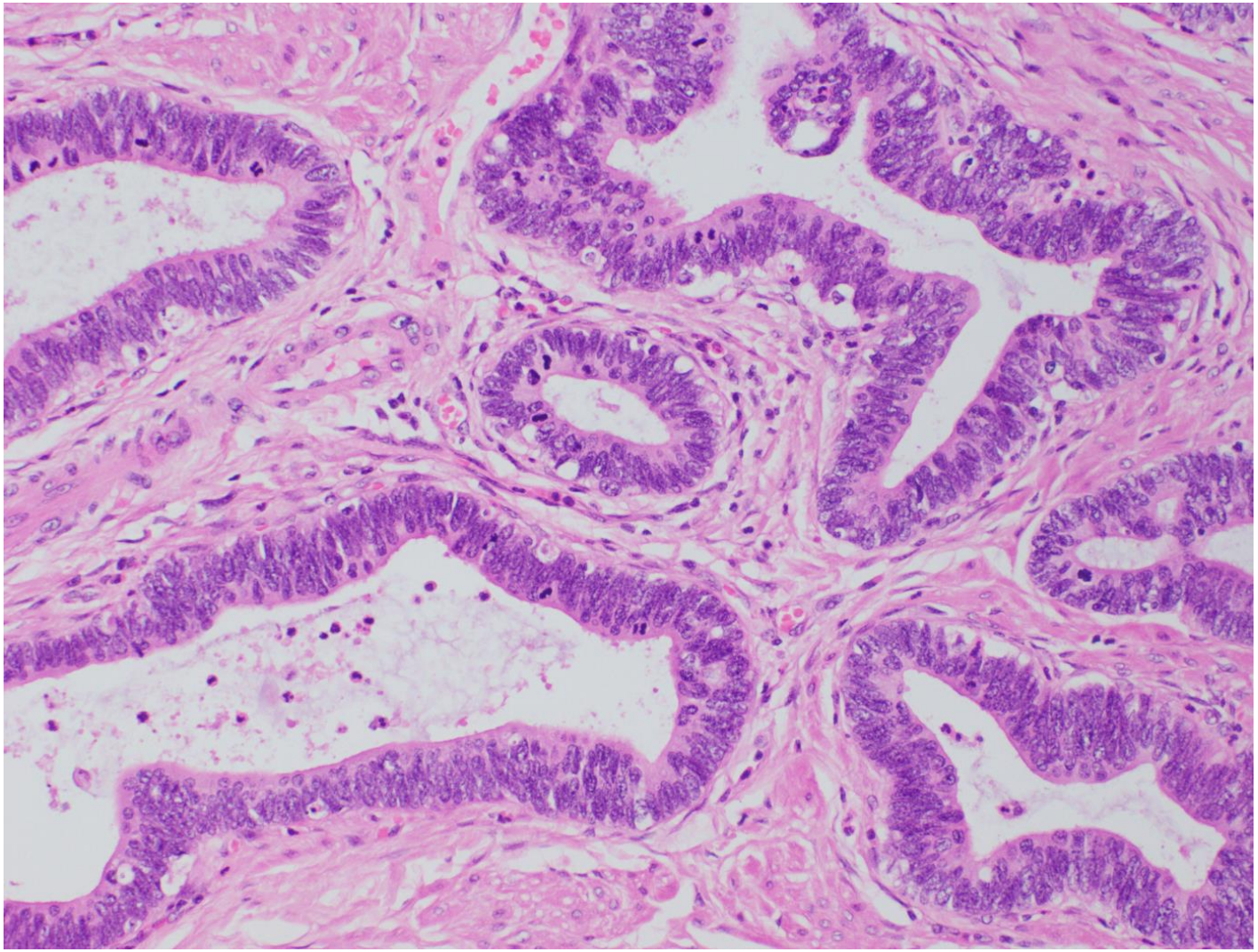
USUAL-TYPE HPV-ASSOCIATED CERVICAL ADENOCARCINOMA – “NAKED” INVASION



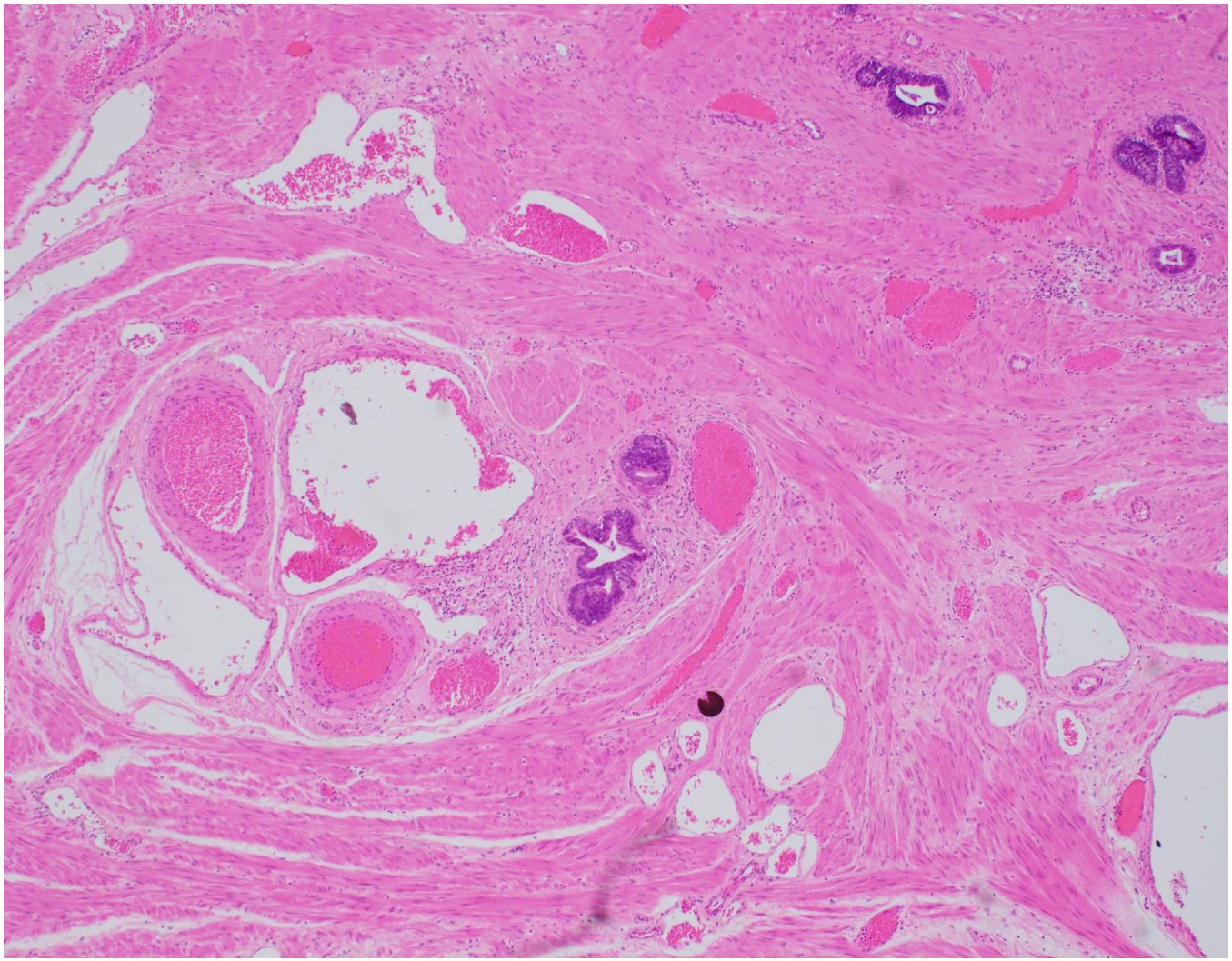
USUAL-TYPE HPV-ASSOCIATED CERVICAL ADENOCARCINOMA – “NAKED” INVASION



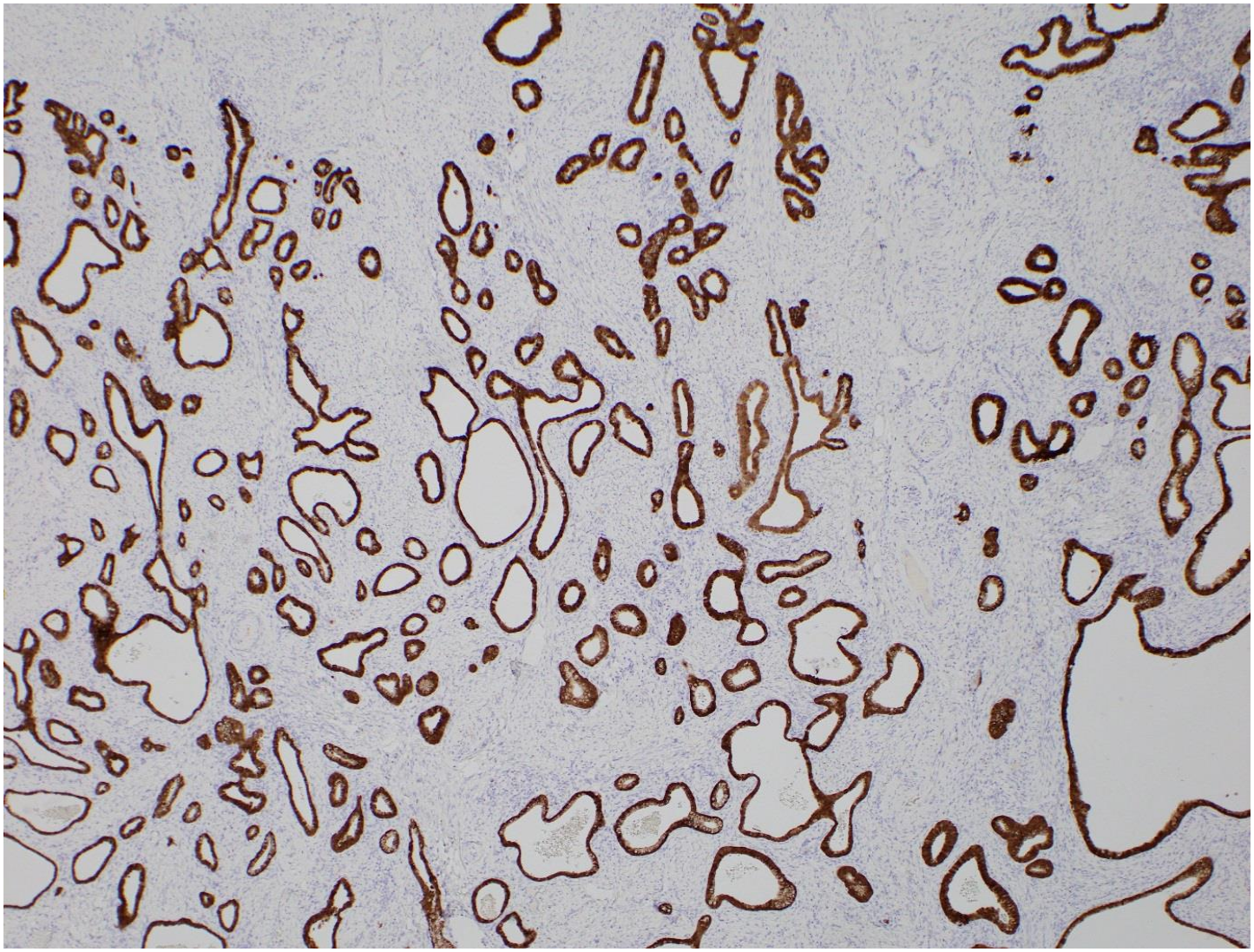
USUAL-TYPE HPV-ASSOCIATED CERVICAL ADENOCARCINOMA – “NAKED” INVASION



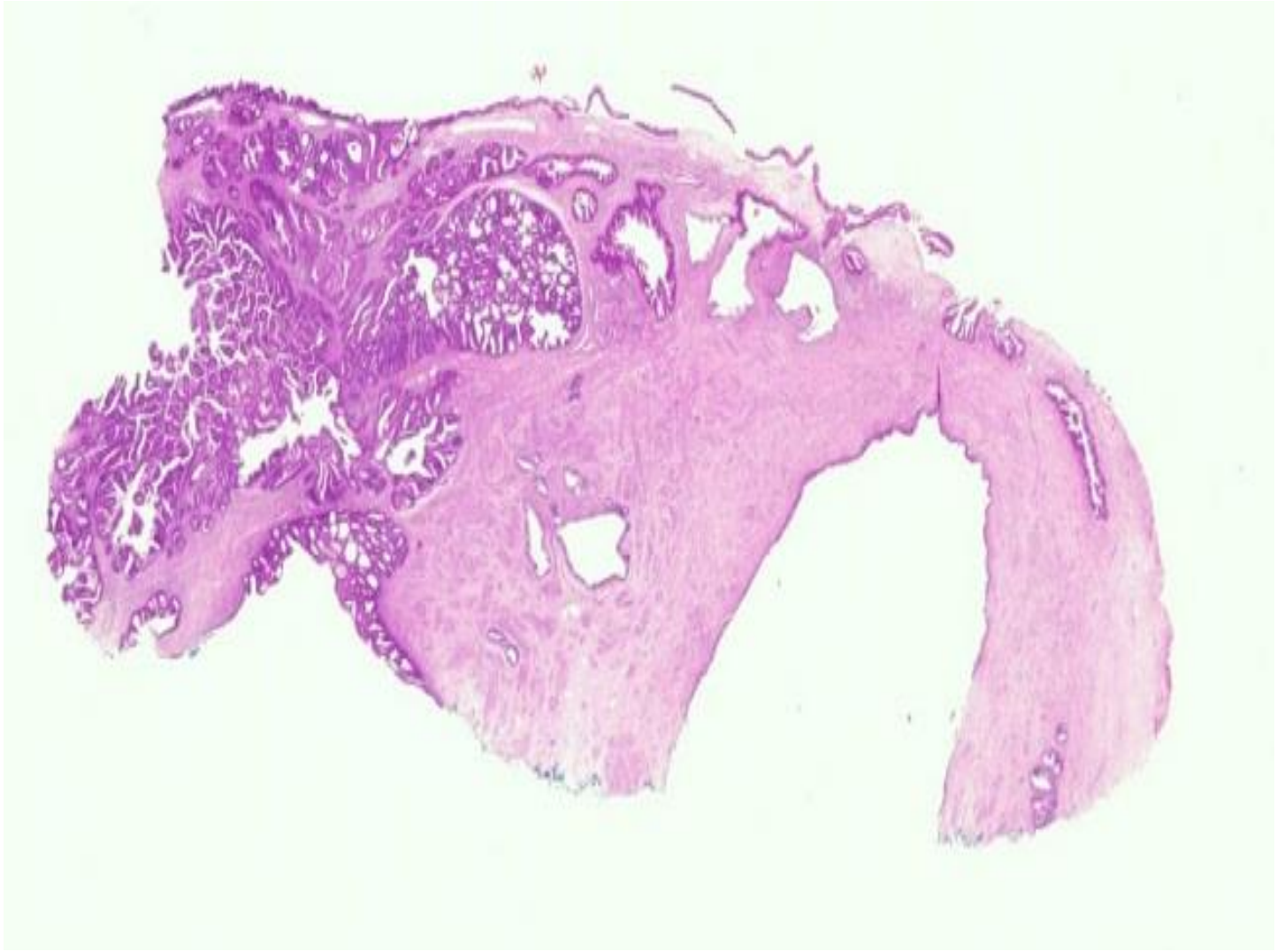
USUAL-TYPE HPV-ASSOCIATED CERVICAL ADENOCARCINOMA – “NAKED” INVASION



p16- MAY “ACCENTUATE” INVASIVE APPEARANCE

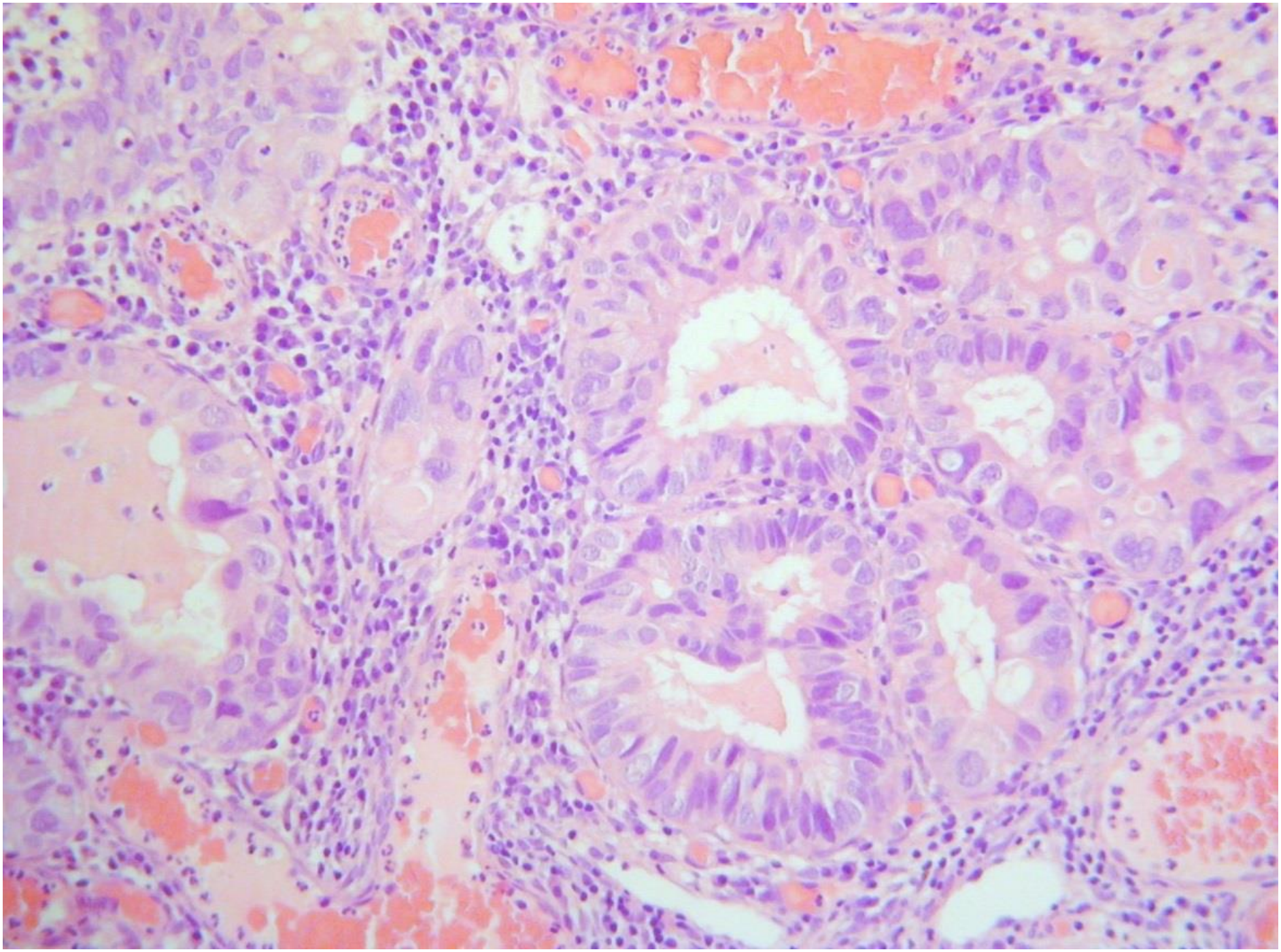


DIAGNOSIS OF INVASION MADE ON ARCHITECTURAL COMPLEXITY



EARLY INVASION IN ADENOCARCINOMAS- PMID 33570866

- The assessment of tumors that are a combination of AIS and adenocarcinoma where it is difficult to delineate the 2 components should follow the guidance in another review in the series (Alvarado-Cabrero). Measurement of these lesions is somewhat analogous to that of exophytic tumors and should incorporate maximum horizontal tumor dimension and an assessment of invasive depth as accurately as possible, with these measurements forming the basis of staging. Where necessary this may be accompanied by a comment detailing the diagnostic problems; the distinction of in situ from invasive disease in such cases can be extremely subjective and problematic and this is an area where referral for a specialist opinion may be useful





POSSIBLE PRECURSOR LESION OF CERVICAL CLEAR CELL CARCINOMA- PMID 33770055

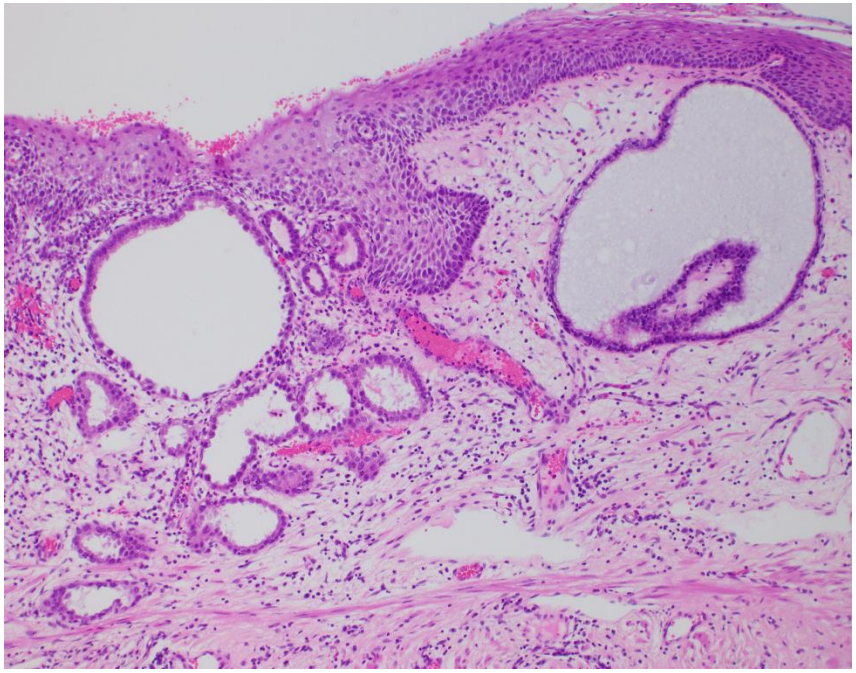
International Journal of Gynecological Pathology
00:1–9, Lippincott Williams & Wilkins, Baltimore
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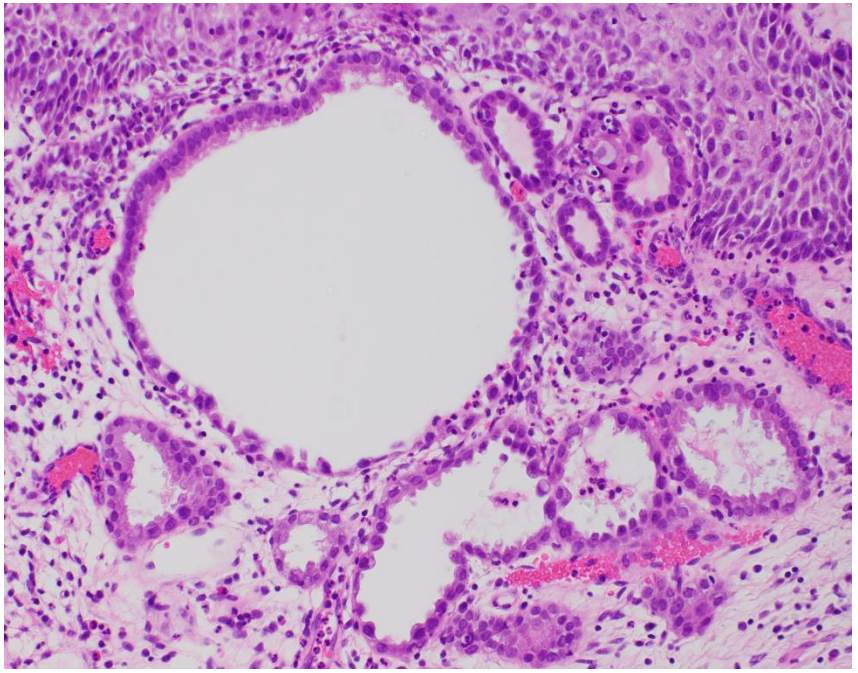
Original Article

Precursor Lesions of Cervical Clear Cell Carcinoma: Evidence For Origin From Tubo-Endometrial Metaplasia

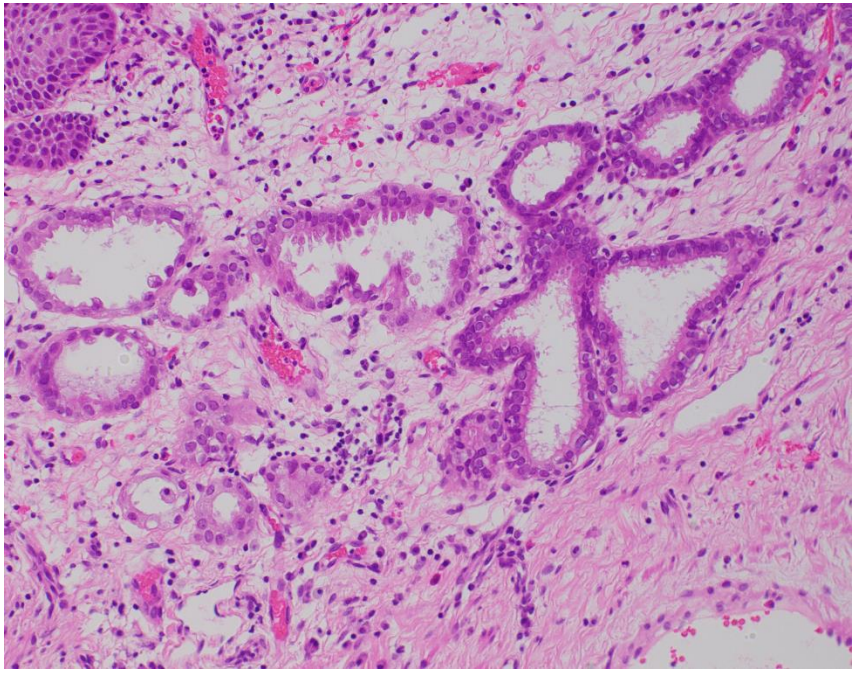
Karen L. Talia, M.B.B.S., F.R.C.P.A., Rupali Arora, F.R.C.Path, and W. Glenn McCluggage, F.R.C.Path.

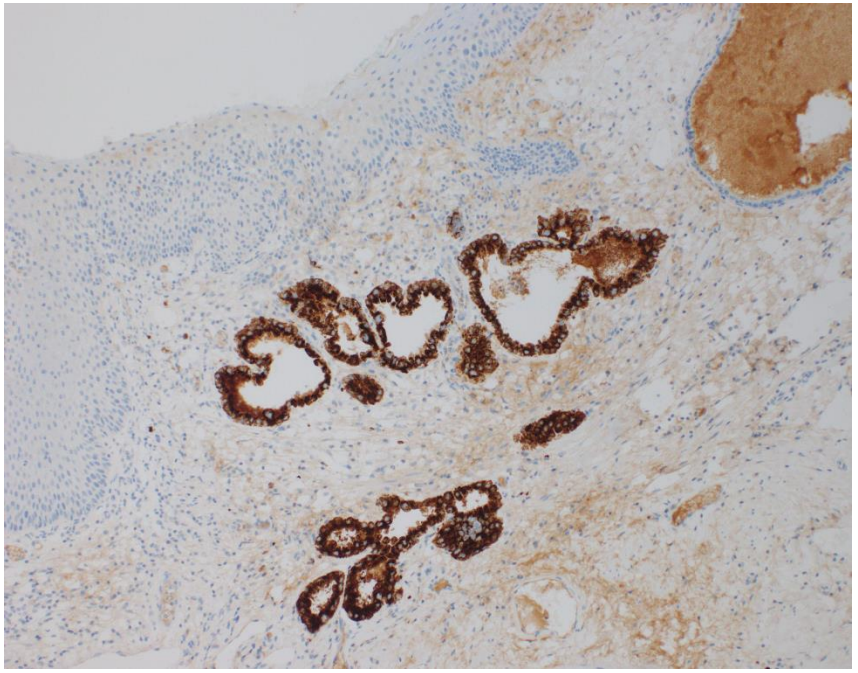
POSSIBLE PRECURSOR LESION OF CERVICAL CLEAR CELL CARCINOMA- PMID 33770055





POSSIBLE PRECURSOR LESION OF CERVICAL CLEAR CELL CARCINOMA- PMID 33770055





Napsin A

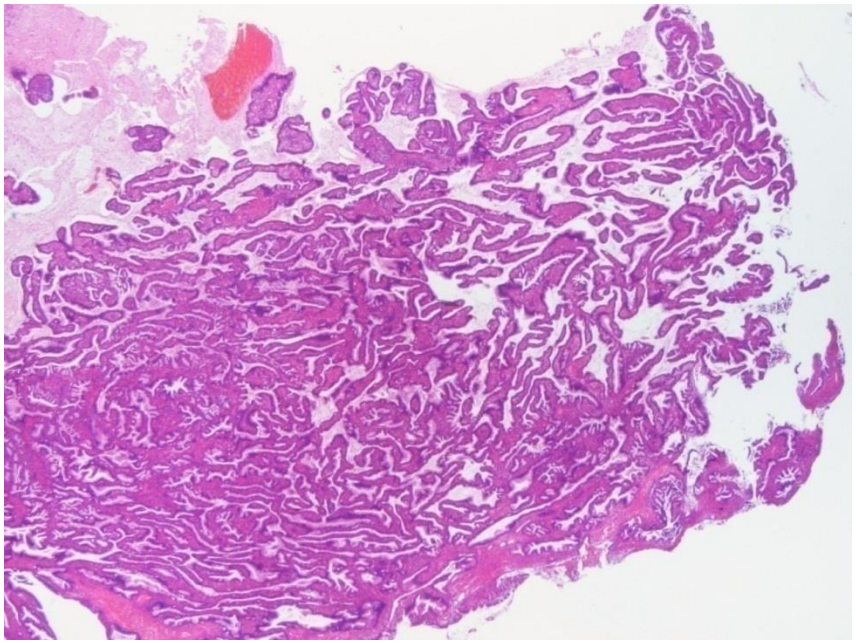
SPECIFIC PROBLEMS WITH MEASURING TUMOURS

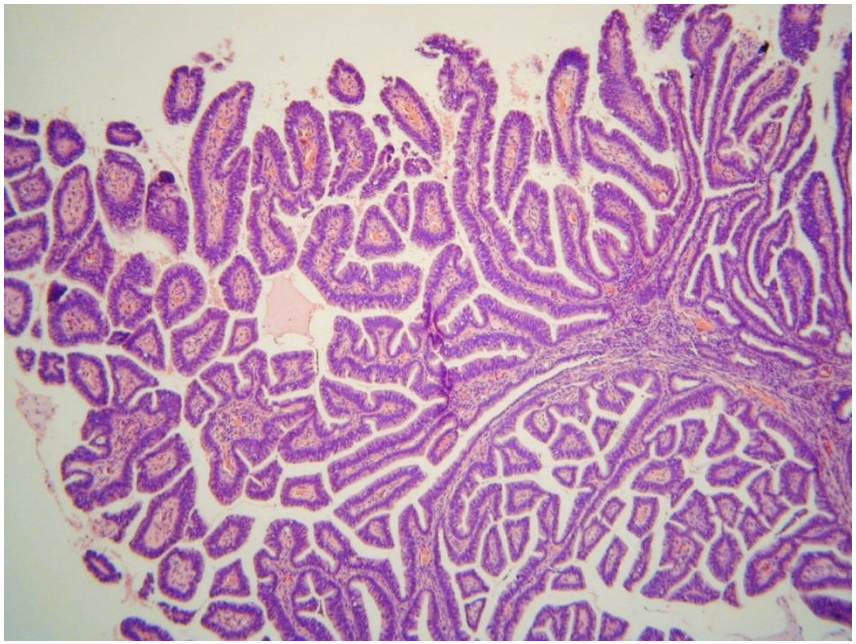
- Exophytic tumours with little or no invasion of underlying stroma
- Multifocal tumours
- Multiple specimens

EXOPHYTIC TUMOURS

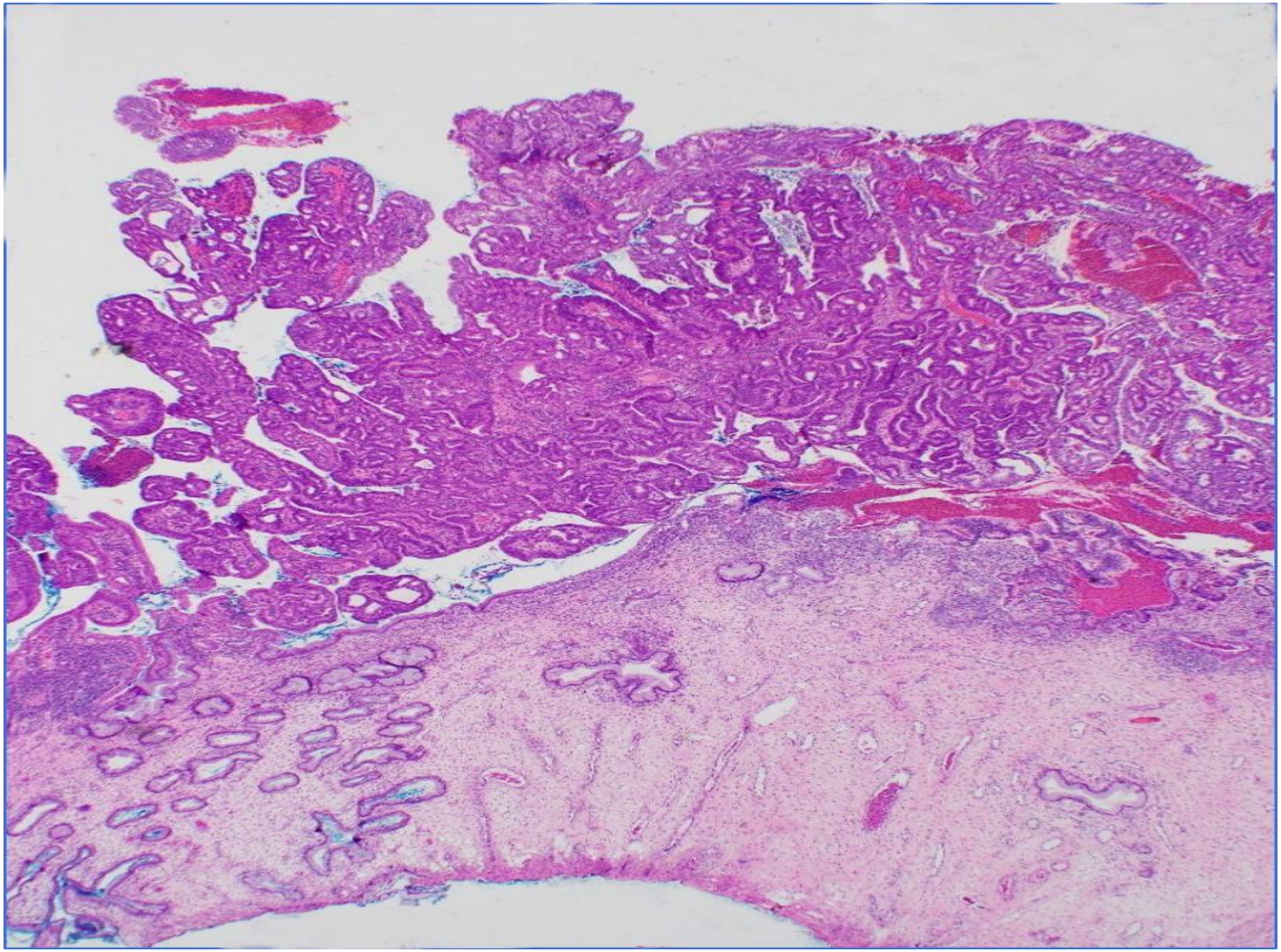
- Exophytic tumours with little/ no stromal invasion (do not diagnose as in-situ carcinomas)
- Especially with adenocarcinomas; rarely with squamous cell carcinomas
- CONTROVERSIAL AREA- Measure thickness (equates with depth of stromal invasion)
- Probably no real evidence that can be safely treated conservatively, although likely to have better prognosis than similar size tumours with deep stromal invasion

PAPILLARY VARIANTS OF USUAL-TYPE CERVICAL ADENOCARCINOMA

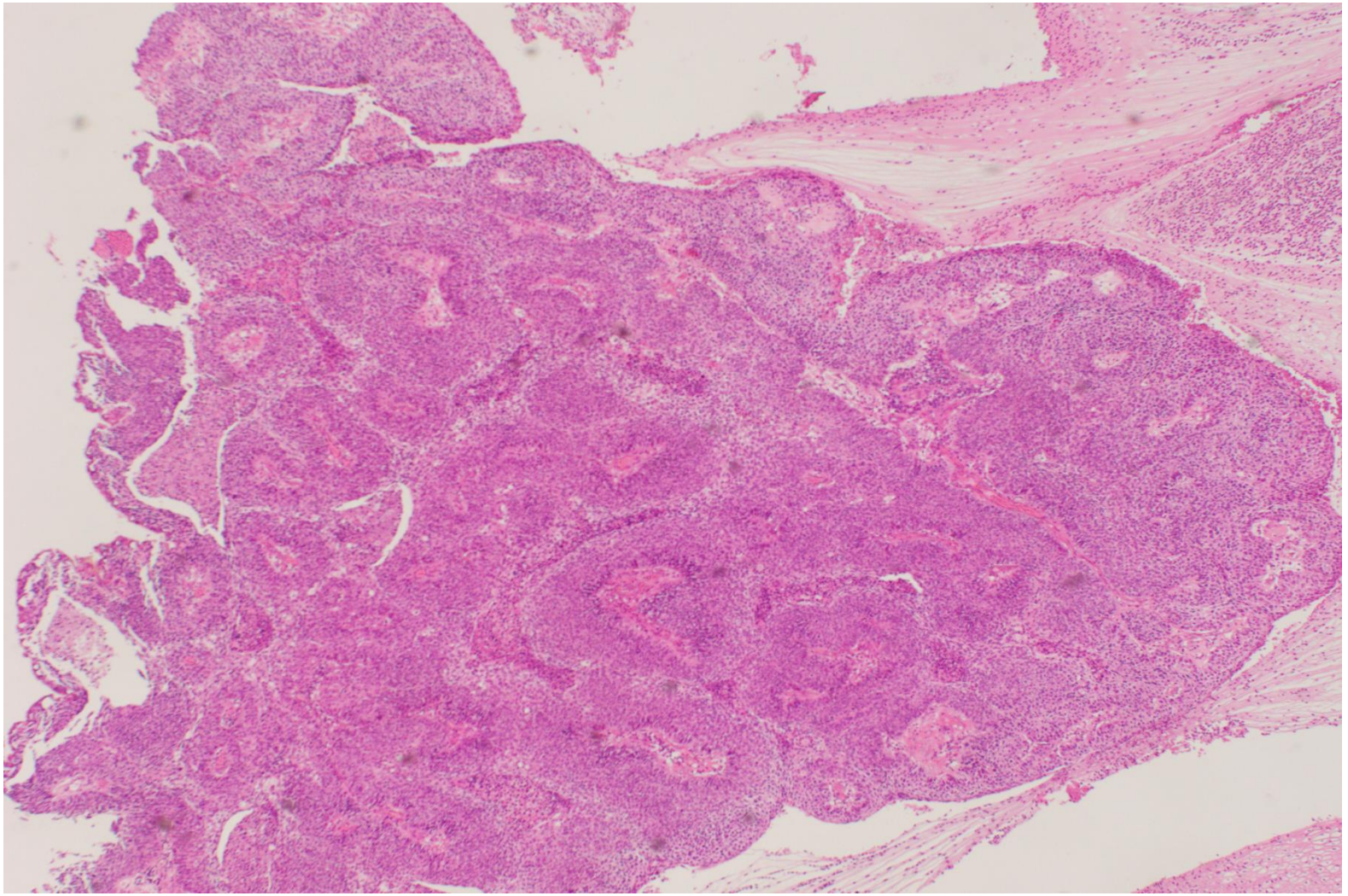




EXOPHYTIC HPV-ASSOCIATED ADENOCARCINOMA



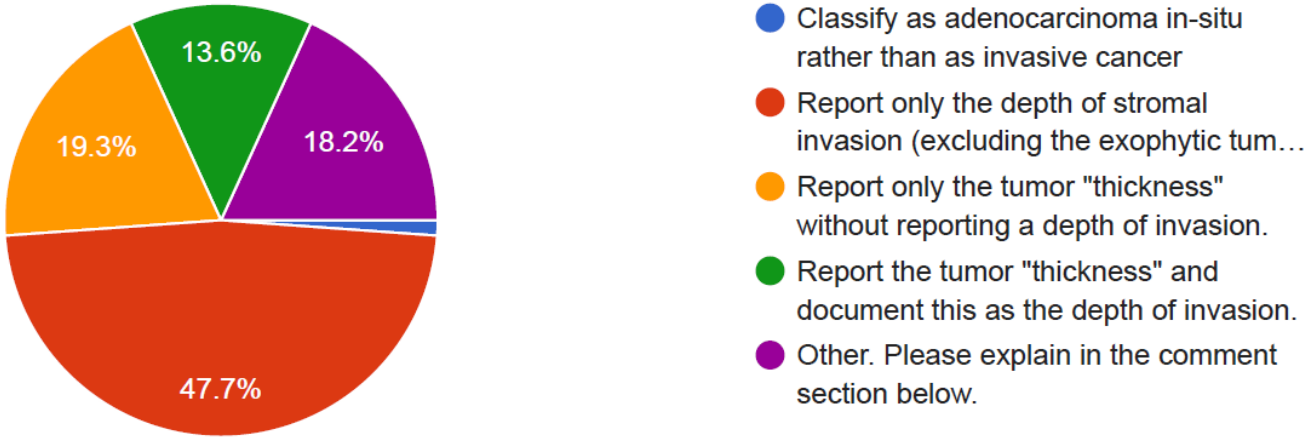
EXOPHYTIC SQUAMOUS CELL CARCINOMA



ISGyP CERVICAL ADENOCARCINOMA SURVEY

46. For an exophytic tumor that does not invade the underlying cervical stroma or only minimally invades the stroma, how do you report the depth of invasion?

176 responses



MEASUREMENT OF TUMOUR THICKNESS RATHER THAN DEPTH OF INVASION

IN THESE CASES (UNCOMMON), THICKNESS IS TAKEN AS A SURROGATE OF DEPTH OF INVASION AND MAY OVERESTIMATE DEPTH OF INVASION

- Some glandular lesions where impossible to say where AIS ends and adenocarcinoma begins (some cases diagnose adenocarcinoma on basis of complexity); personally I often measure dimensions (horizontal and depth) and stage on basis of whole lesion
- Ulcerated tumours (may underestimate depth of invasion)
- **Polypoid exophytic tumours (adenocarcinomas and squamous cell carcinomas)**

ICCR CERVIX REVISION- MEASURING EXOPHYTIC TUMOURS- EXAMPLES PROVIDED

POLYPOID/EXOPHYTIC TUMOUR, ≤20 MM IN LARGEST DIMENSION

- with a total thickness of 15 mm (top of tumour to deepest invasion). The portion of the tumour with true destructive stromal invasion into the cervical wall (non-exophytic component) measures 4 mm in depth – Stage IB1.
- with total thickness of 15 mm (top of tumour to deepest invasion). The portion of the tumour with true destructive stromal invasion into cervical wall (non-exophytic component) measures 8 mm in depth – Stage IB1.
- with total thickness 4 mm (top of tumour to deepest invasion) (shallow wide tumour). The portion of the tumour with true destructive stromal invasion into cervical wall (non-exophytic component) measures 1 mm in depth – Stage IA2.
- with total thickness 2.5 mm (top of tumour to deepest invasion) (shallow wide tumour). The portion of the tumour with true destructive stromal invasion into cervical wall (non-exophytic component) measures 1 mm in depth – Stage IA1.

POLYPOID/EXOPHYTIC TUMOUR, >20 MM, ≤40 MM IN LARGEST DIMENSION – STAGE IB2 REGARDLESS OF THICKNESS OR DEPTH OF INVASION.

POLYPOID/EXOPHYTIC TUMOUR >40 MM IN LARGEST DIMENSION – STAGE IB3 REGARDLESS OF THICKNESS OR DEPTH OF INVASION.

MULTIFOCAL CARCINOMAS

- Little published literature
- Few recommendations on how to deal with
- Can result in totally different staging, especially pre-FIGO 2018
- ICCR recommendations

MULTIFOCAL STAGE IA1 SQUAMOUS CARCINOMAS

- FIGO- no real guidelines (measure from one edge to the other)
- International Journal of Gynecological Pathology 2014;33;213-217 and 2016;35;467-474.
- 46 cases treated by local excision with clear margins; no recurrences (median follow up of 45 months and 7 years in 2 studies)
- Includes many cases which would have been FIGO IB1 if measured from one edge to other as suggested by FIGO
- PAPERS USED ARBITRARY DISTANCE OF 2 mm APART; must level blocks to make sure separate foci do not “join up”
- Criteria noted by ICCR and suggest can use (also suggest that may be used for adenocarcinomas; multifocality probably less common in adenocarcinomas) and cases should be discussed at tumour board meeting
- Potential to avoid unnecessary radical surgery in young women
- Measure each individually and stage on largest
- New FIGO staging negates some of these problems

PAPERS

International Journal of Gynecological Pathology
33:213–217, Lippincott Williams & Wilkins, Baltimore
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Original Article

Multifocal FIGO Stage 1A1 Cervical Squamous Carcinomas have an Extremely Good Prognosis Equivalent to Unifocal Lesions

Patrick McIlwaine, M.D., Hans Nagar, F.R.C.O.G., and W. Glenn McCluggage, F.R.C.Path.

International Journal of Gynecological Pathology
00:1–8, Lippincott Williams & Wilkins, Baltimore
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Original Article

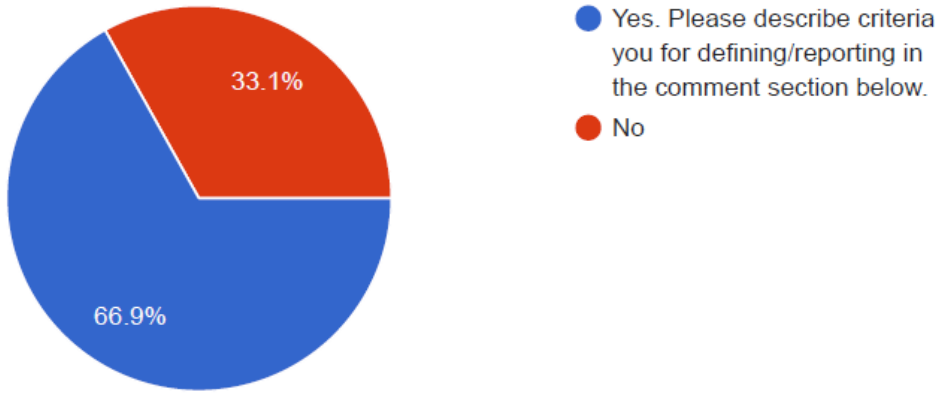
Multifocal FIGO Stage IA1 Squamous Carcinoma of the Cervix: Criteria for Identification, Staging, and its Good Clinical Outcome

Elizabeth Day, M.B., B.Chir., Ph.D., Siobhan Duffy, B.Sc., M.B.Ch.B., Gareth Bryson, B.Sc., M.B.Ch.B., F.R.C.Path., Sheeba Syed, M.B.B.S., M.D., M.R.C.Path., Smruta Shanbhag, M.B.B.S., M.R.C.O.G., Kevin Burton, M.B.C.H.B., M.D., M.R.C.O.G., Rhona Lindsay, B.Sc., M.B.Ch.B., M.R.C.O.G., Nadeem Siddiqui, F.R.C.O.G., Ph.D., and David Millan, B.Sc., M.B., Ch.B., F.R.C.Path.

Survey Results

47. Do you report if the tumor has multiple foci of invasion ?

151 responses



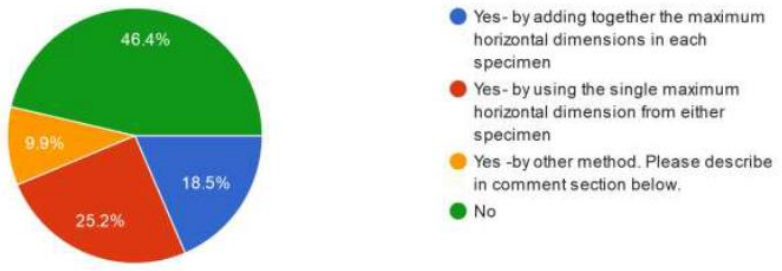
COMMENTS
2 mm apart
5 mm apart
No standard cut off
Only if superficially invasive
Indicate quadrants
If on different cervical lips
If there is normal intervening stroma

PRIOR CONE/ LOOP- ICCR RECOMMENDATIONS

- Add maximum horizontal dimension of tumour in initial cone/ loop and maximum horizontal dimension of tumour in final cone/ loop/ hysterectomy/ trachelectomy together; WILL LIKELY OVERESTIMATE MAXIMUM HORIZONTAL DIMENSION
- Maximum depth of invasion in cone/ loop or hysterectomy/ trachelectomy is taken as maximum depth of invasion; do not add together

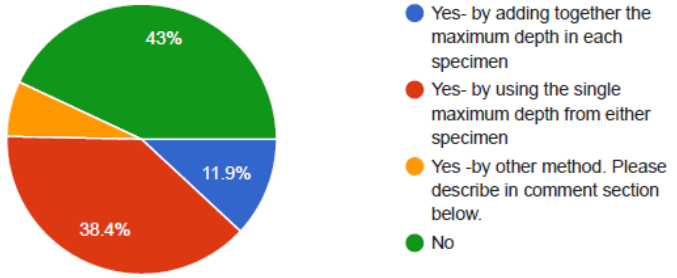
ISGyP CERVICAL ADENOCARCINOMA SURVEY

44. For reporting the horizontal dimension of tumor, do you include the measurements from prior cervical resections ?



45. For reporting the depth of invasion, do you include the measurements from prior cervical resections ?

151 responses



ICCR REVISION

- In providing the final tumour dimensions, the measurements in any prior specimens, for example loop/cone excisions, will need to be taken into account. Although it may overestimate the maximum horizontal extent, it is recommended to add together the maximum horizontal measurement in different specimens when calculating the final horizontal extent. **However, adding the measurements of multiple specimens is sometimes challenging and may not always be possible.** The depth of invasion can be taken as the maximum depth of invasion in any one specimen. Similar comments pertain if loop/cone excisions are received in more than one piece and where multifocal tumour can be excluded.

ICCR UPDATE- MORE NUANCED

- **However, adding the measurements of multiple specimens is sometimes challenging and may not always be possible**
- Difficult as may not have prior tumour to review or may not have been measured
- “Common-sense” approach
- Discuss at MDT/ tumour board meeting
- Stress to gynaecologists to not undertake large “resection” of obvious cervical malignancy