Cases from My Referral Practice

Teaching Files & Dermpathpro Spot Diagnosis

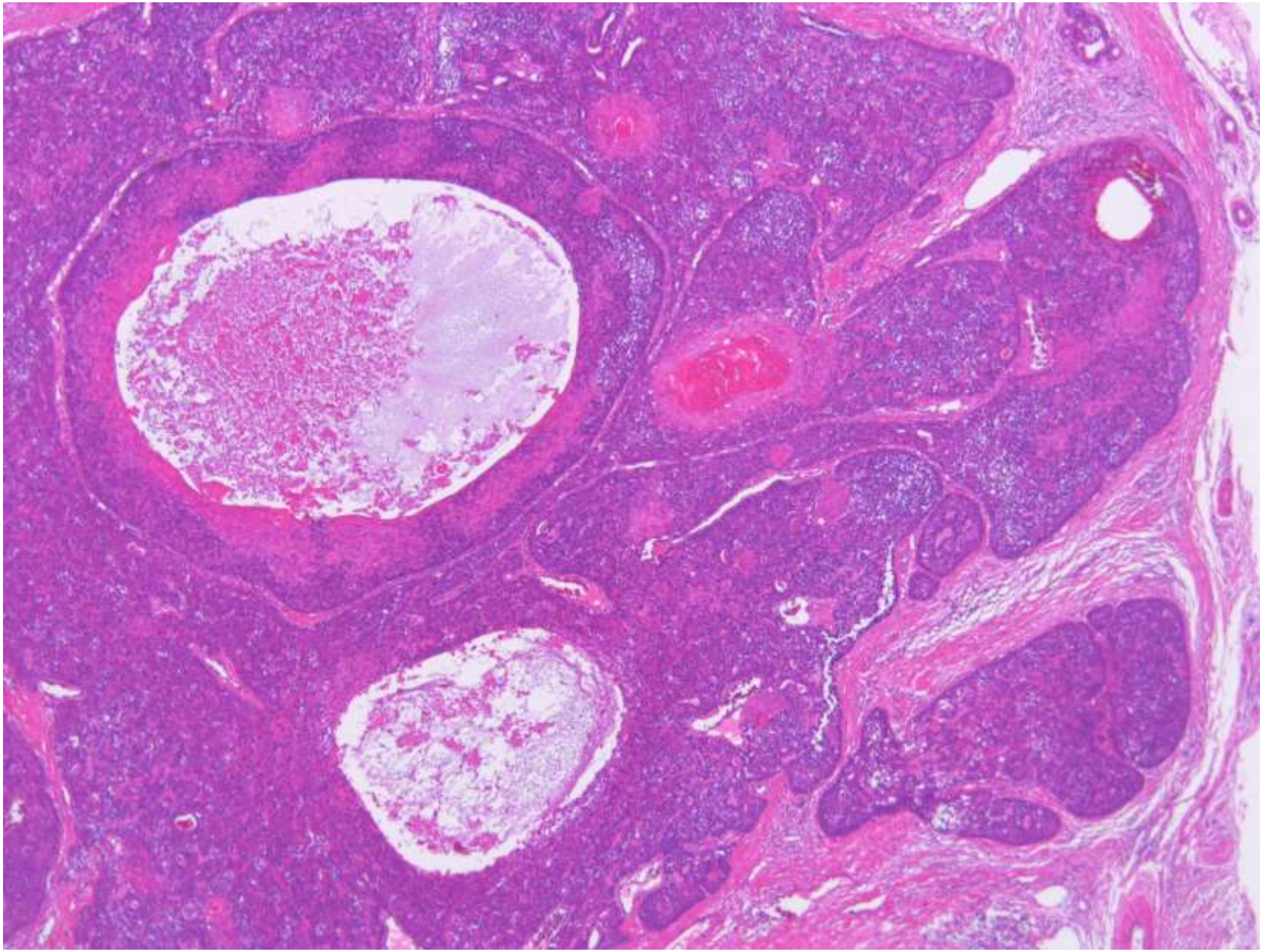
Theme : Adnexal Lesions

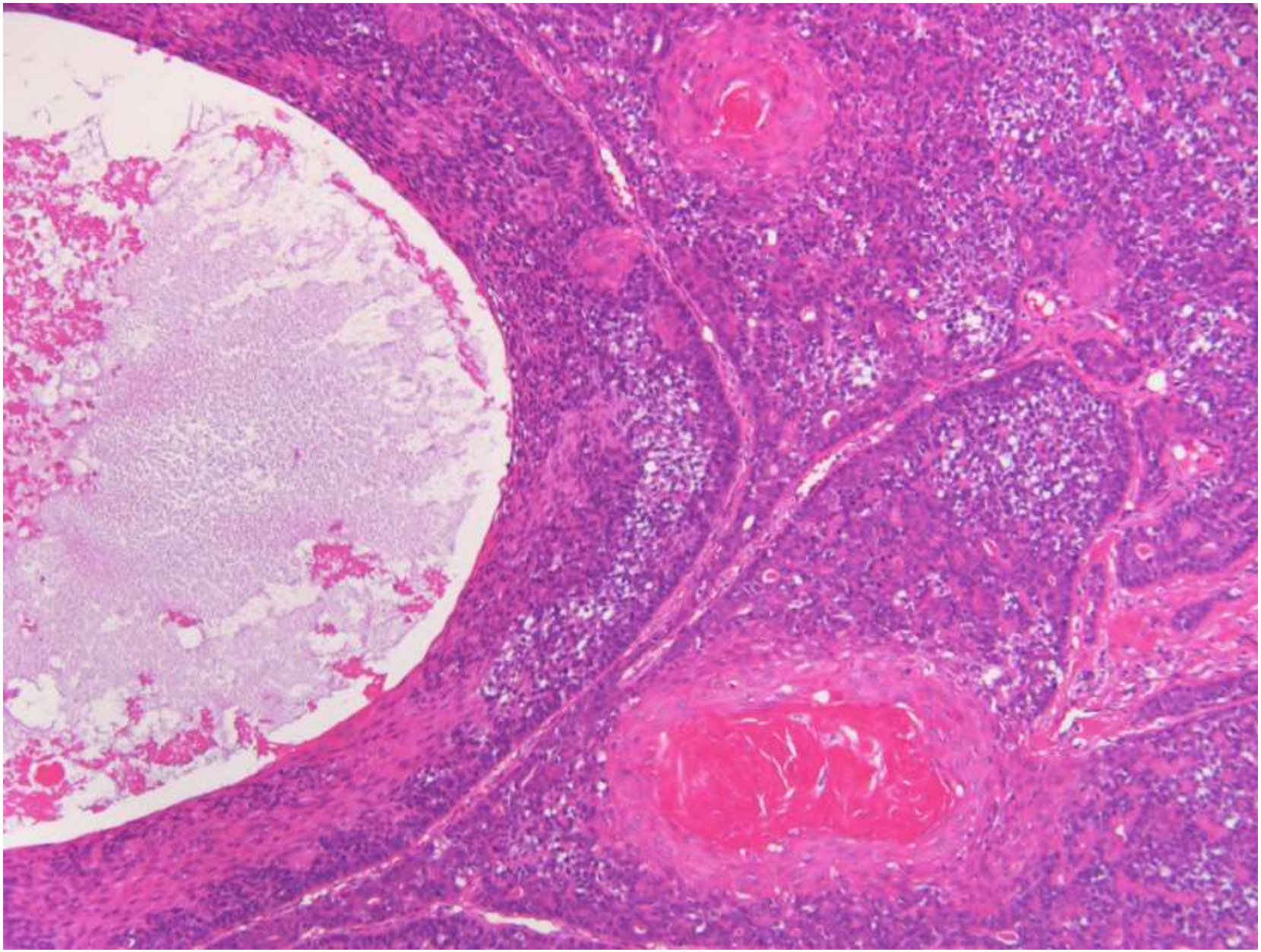
Self-Assessment / Spot Diagnosis Challenge

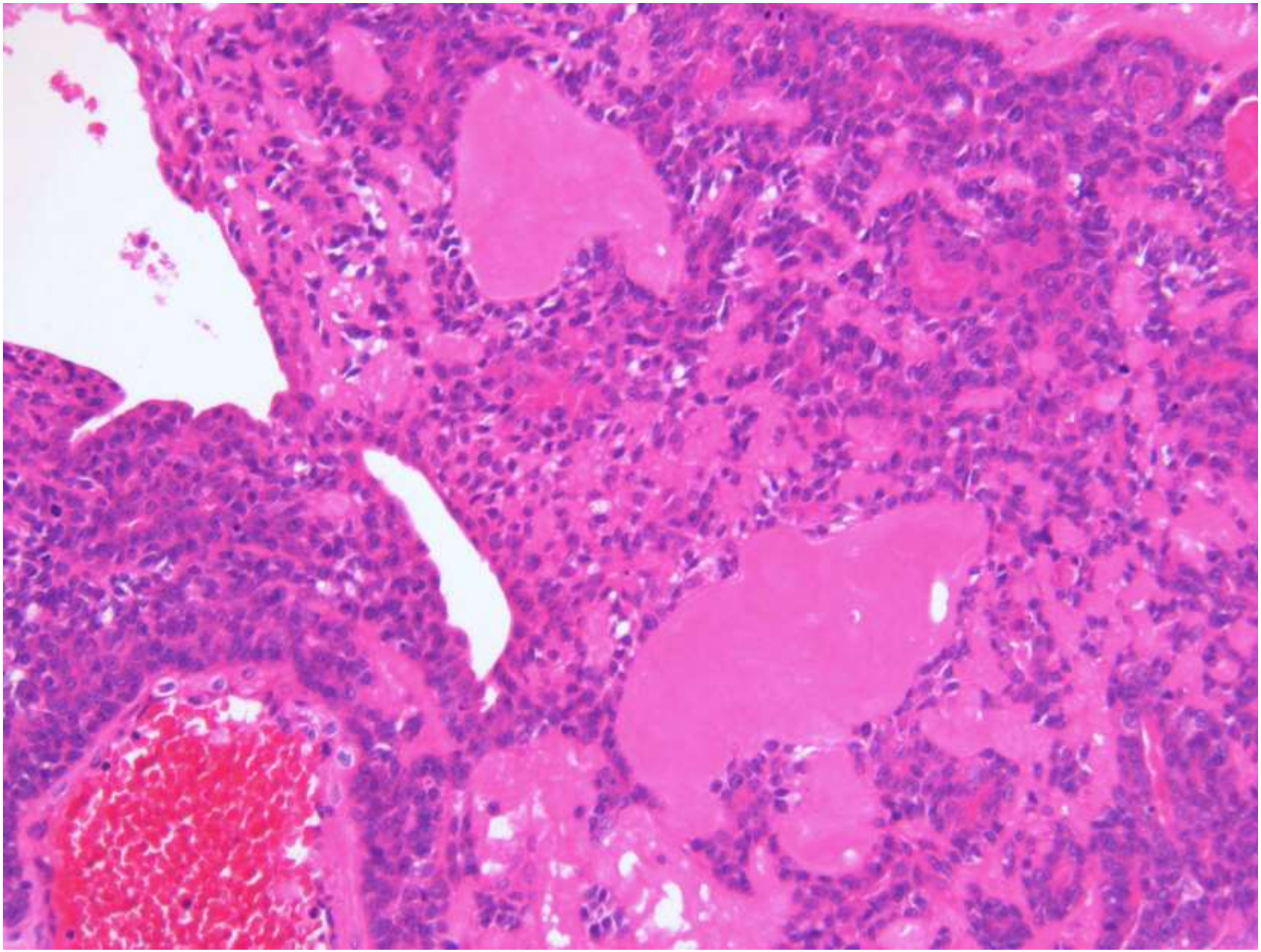
Cases 1 to 3

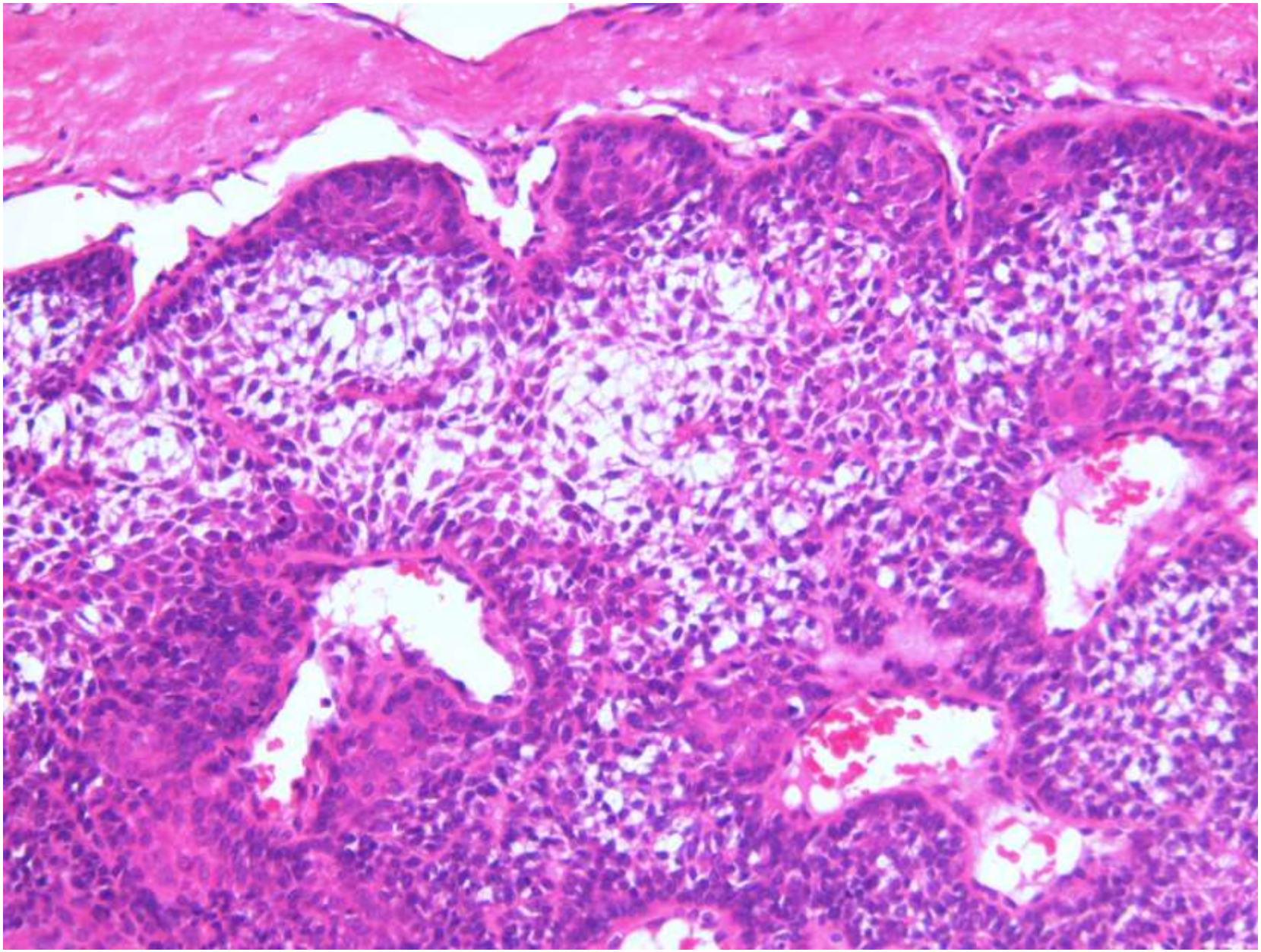
Benign v's Malignant	**Subtype (bonus 1 point)**
A. Adenoma (**1 point**)	Papillary adenoma Hidradenoma Spiradenoma Other
B. Adnexal Ca (**1 point**)	Digital papillary AdenoCa Spiradenocarcinoma Hidradenocarcinoma Adenoid cystic carcinoma Other

Spot Diagnosis: Case 1









Case 1

Benign v's Malignant

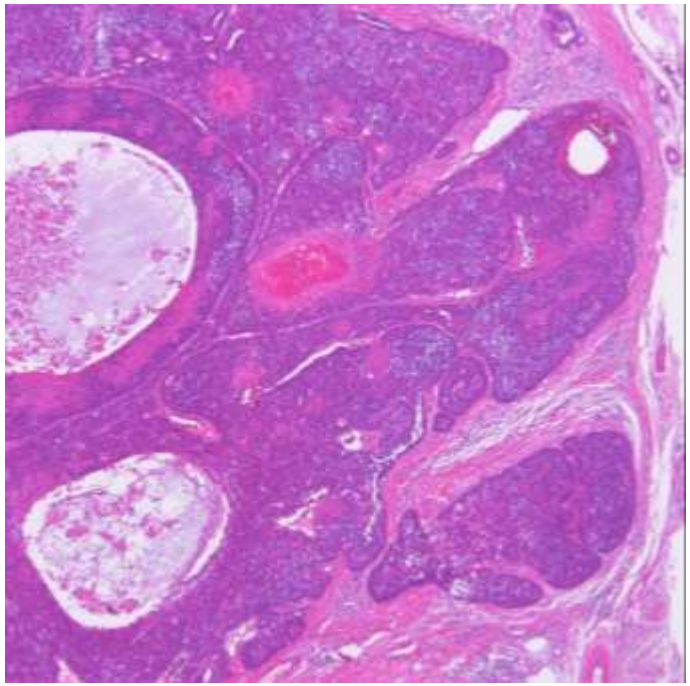
A. Adenoma (**1 point**)

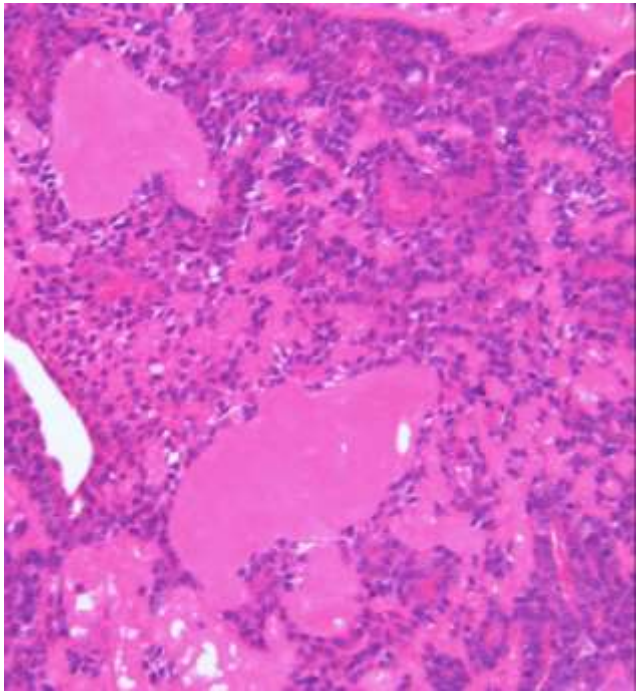
Subtype (bonus 1 point)

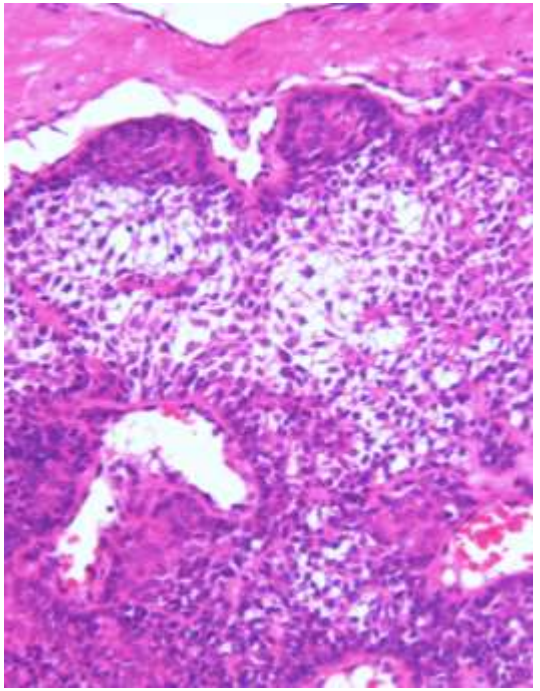
Papillary adenoma
Hidradenoma
Spiradenoma
Other

B. Adnexal Ca (**1 point**)

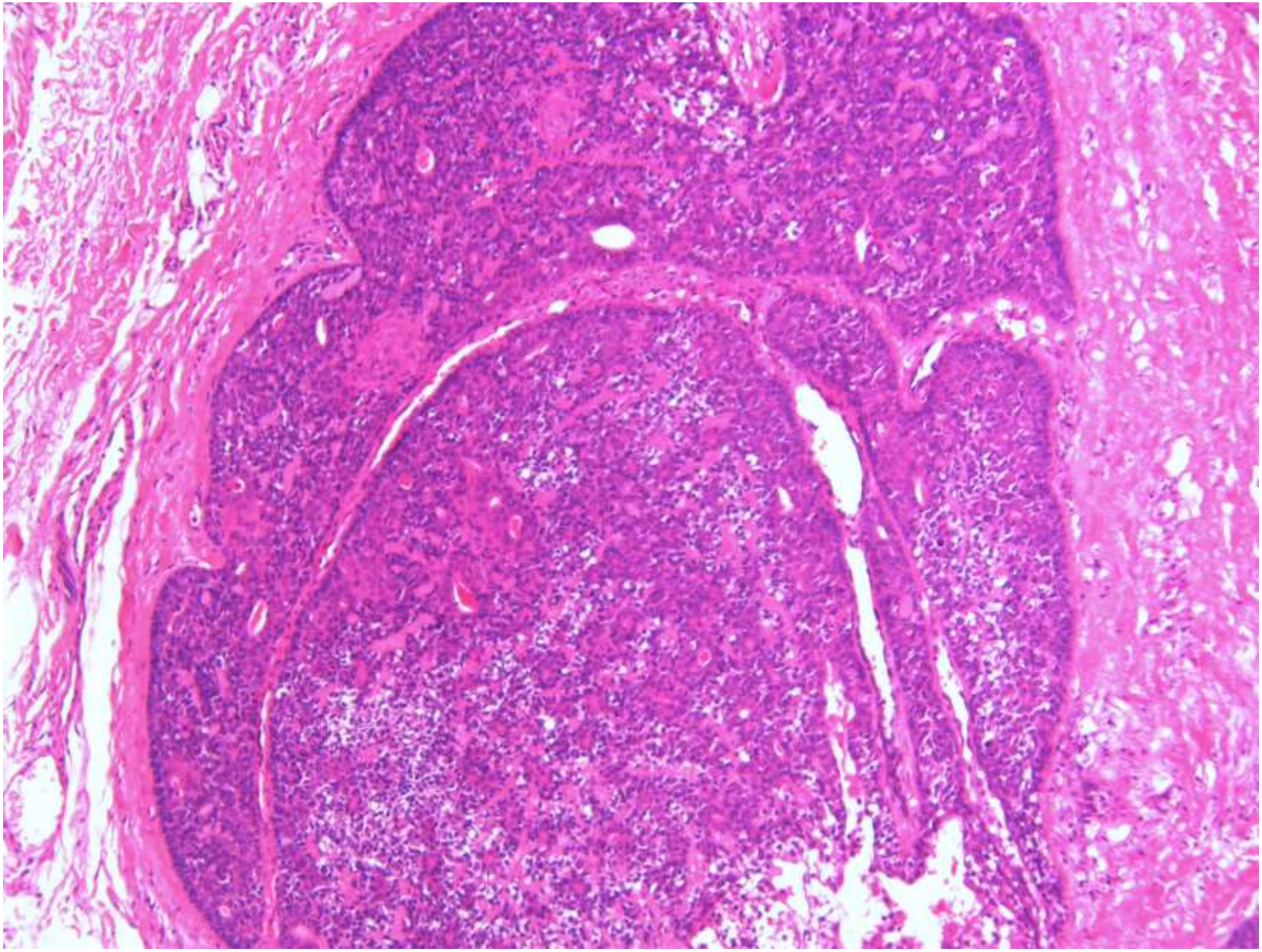
Digital papillary AdenoCa
Spiradenocarcinoma
Hidradenocarcinoma
Adenoid cystic carcinoma
Other

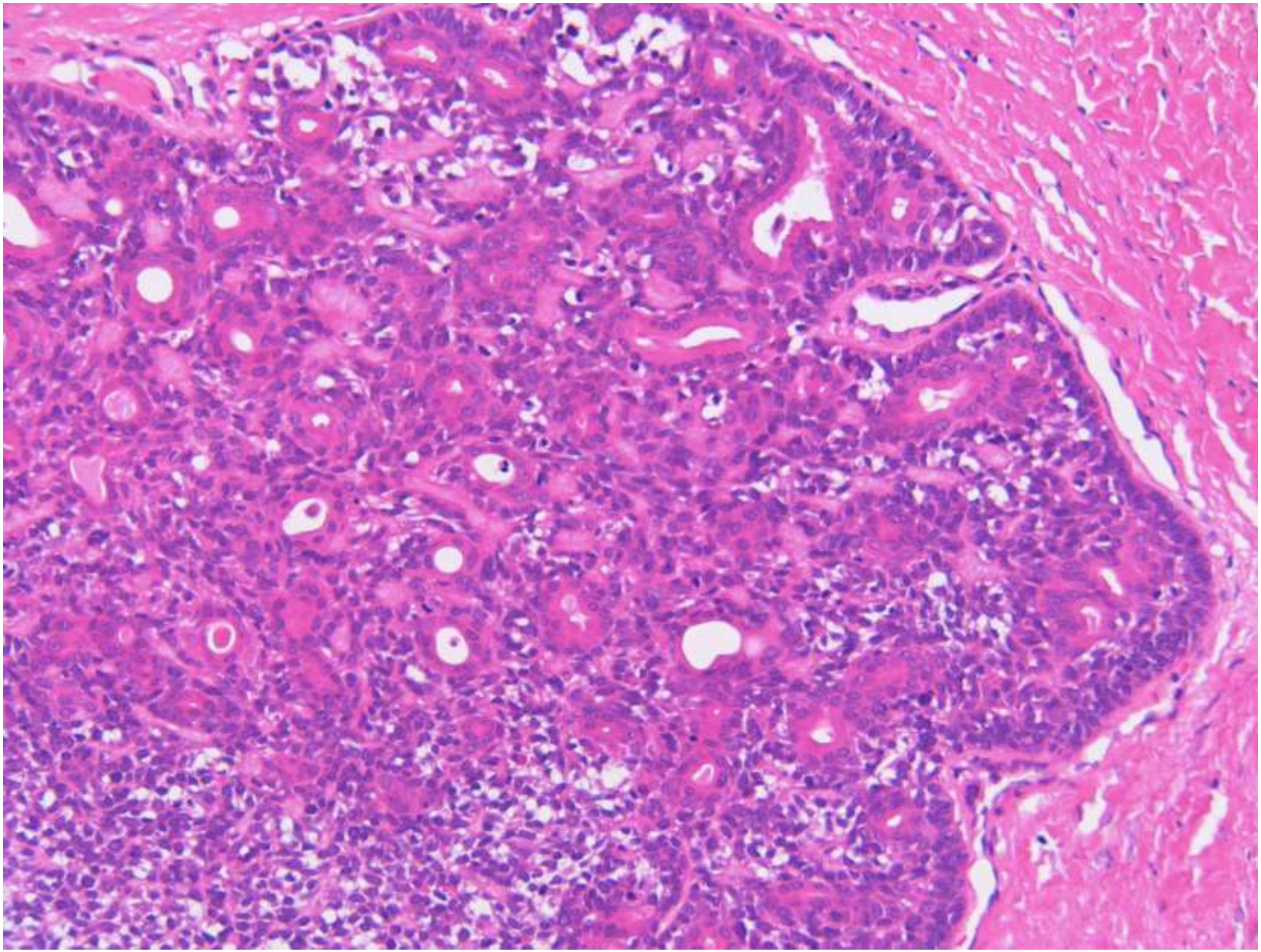


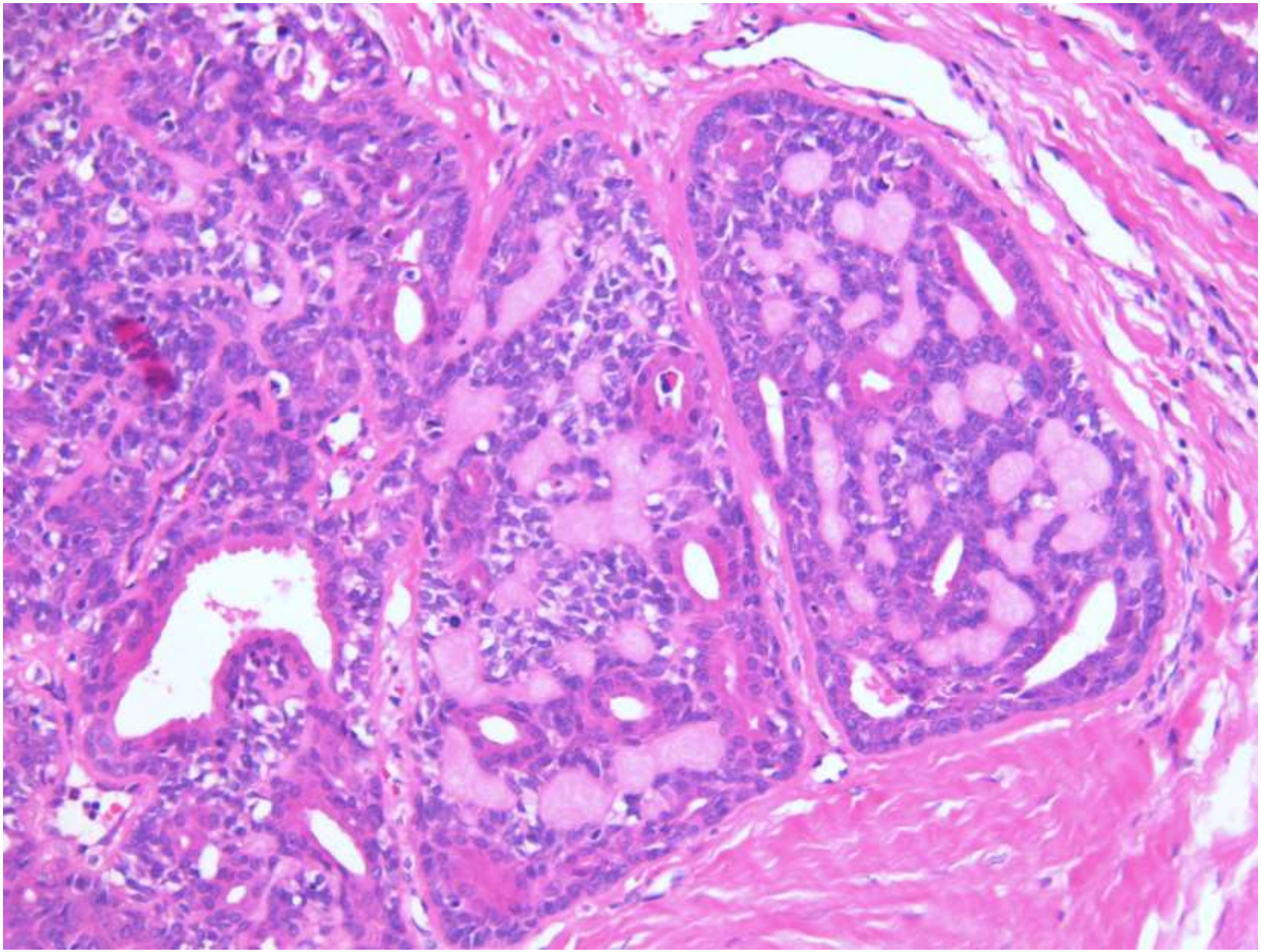




Spot Diagnosis: Case 2







Case 2

Benign v's Malignant

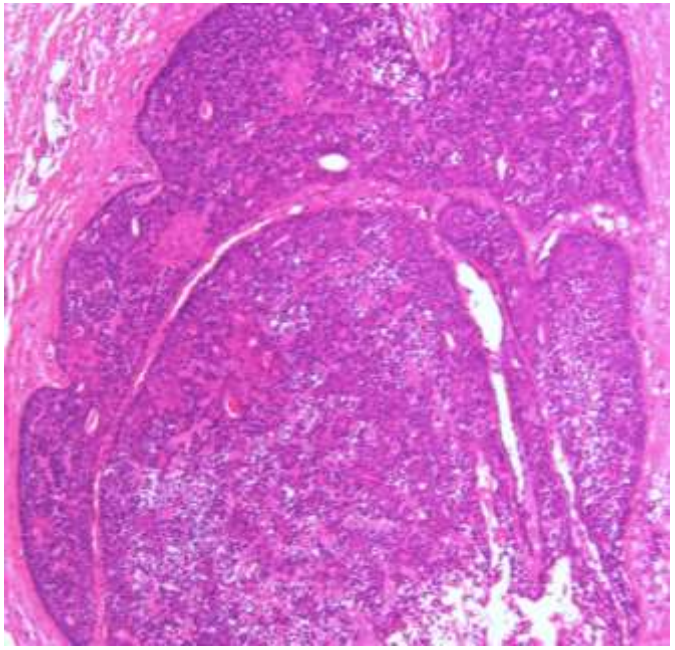
A. Adenoma (**1 point**)

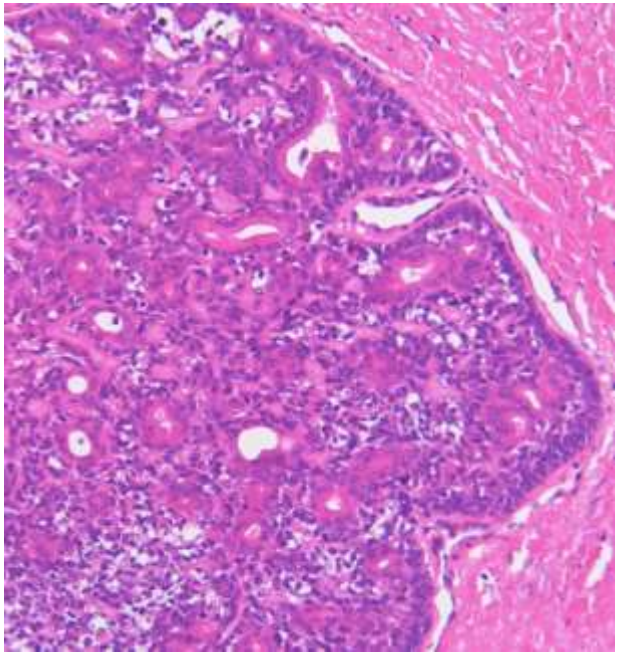
Subtype (bonus 1 point)

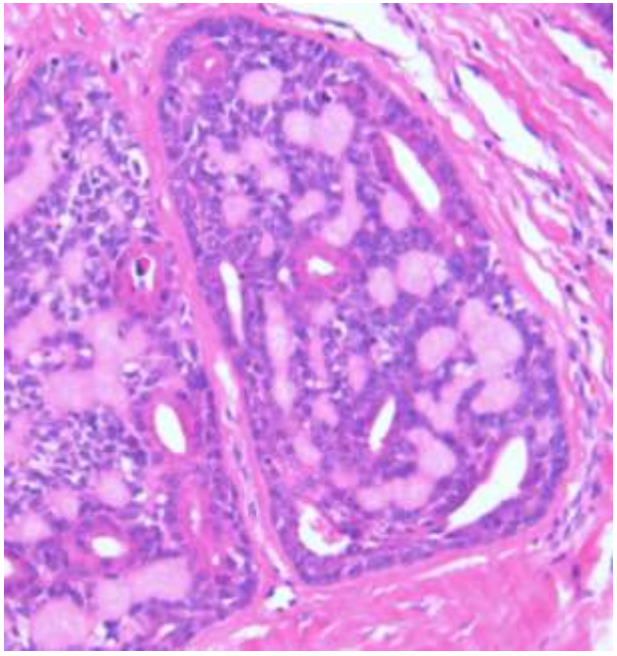
Papillary adenoma
Hidradenoma
Spiradenoma
Other

B. Adnexal Ca (**1 point**)

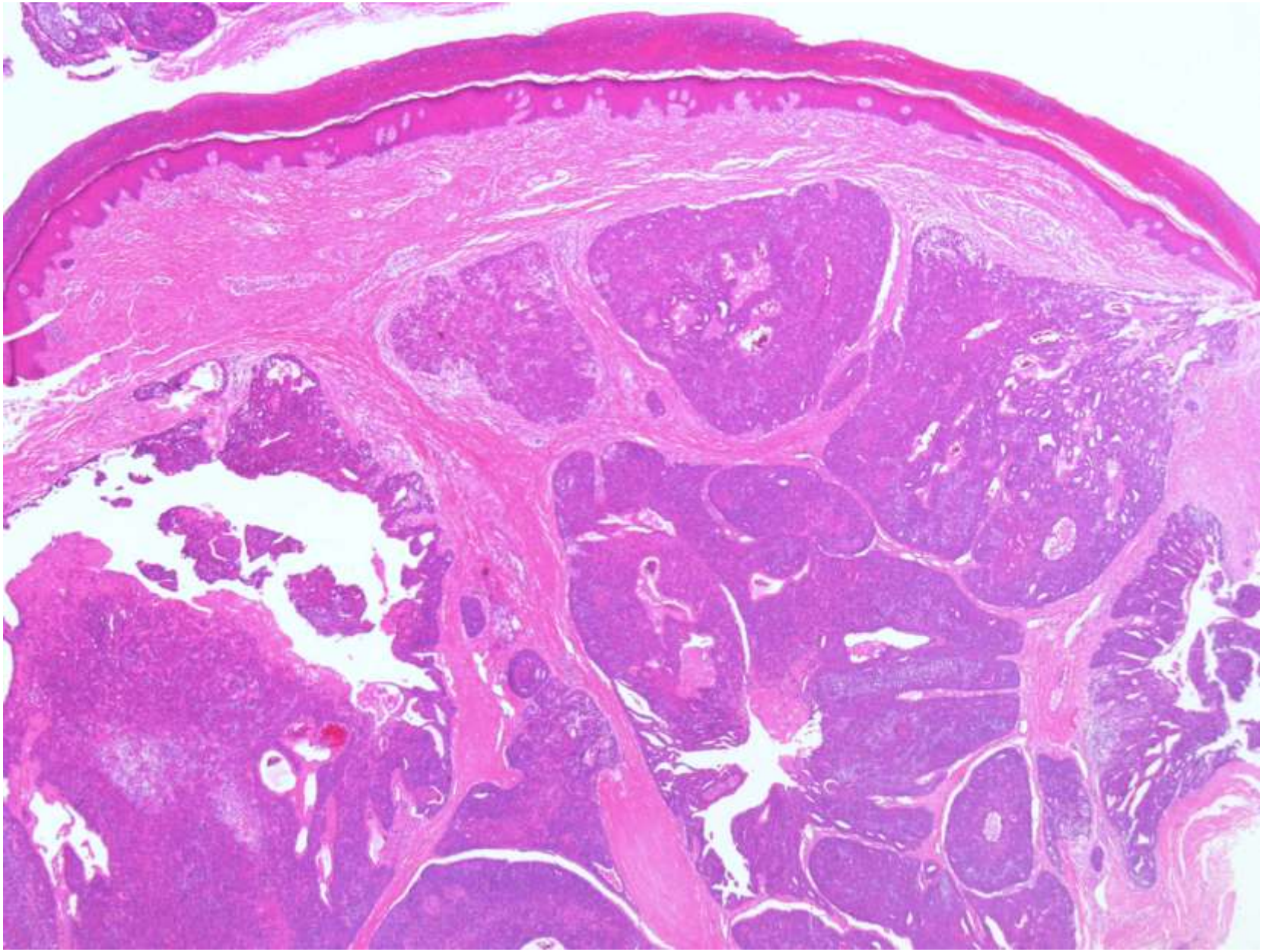
Digital papillary AdenoCa
Spiradenocarcinoma
Hidradenocarcinoma
Adenoid cystic carcinoma
Other

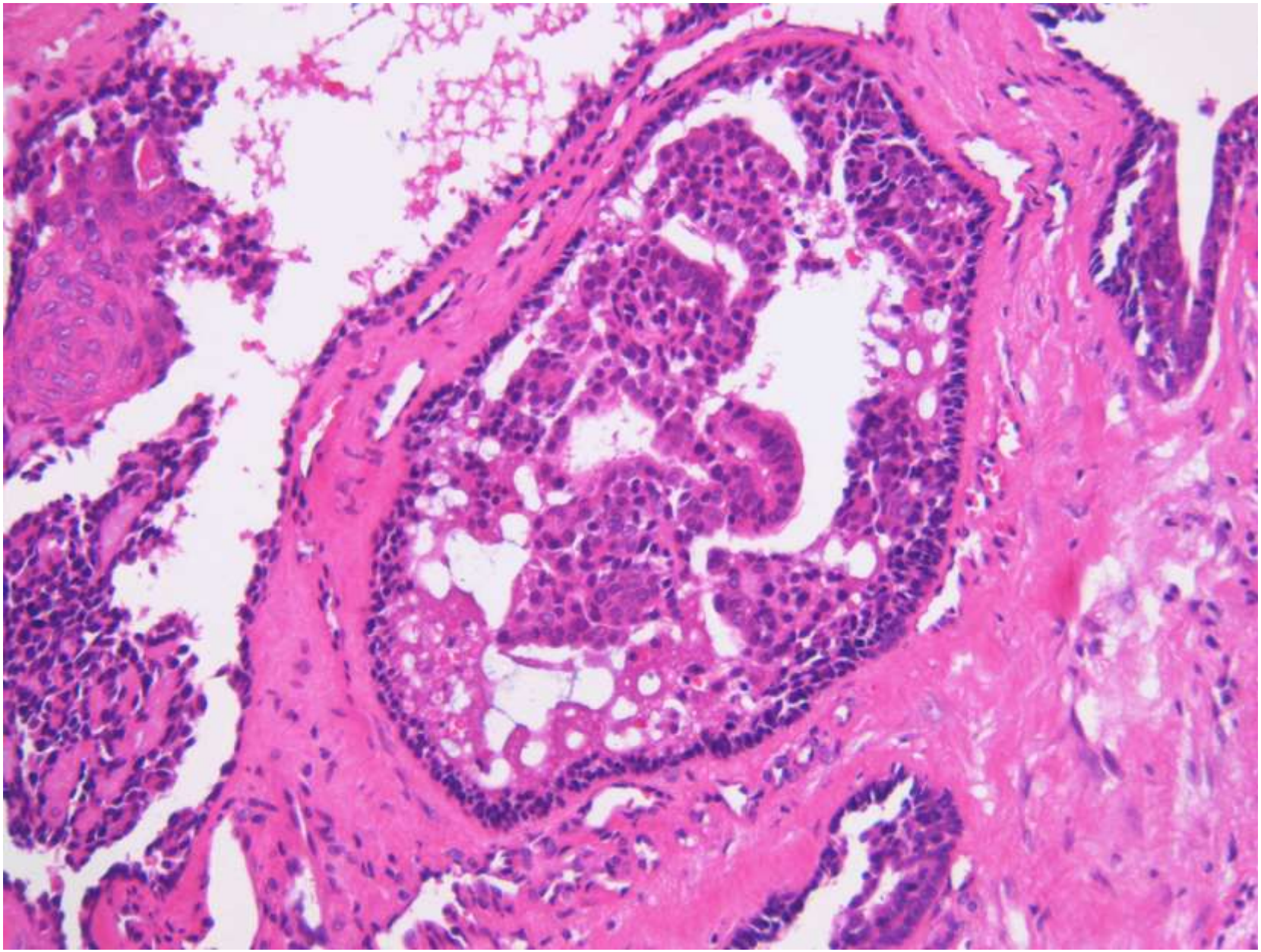


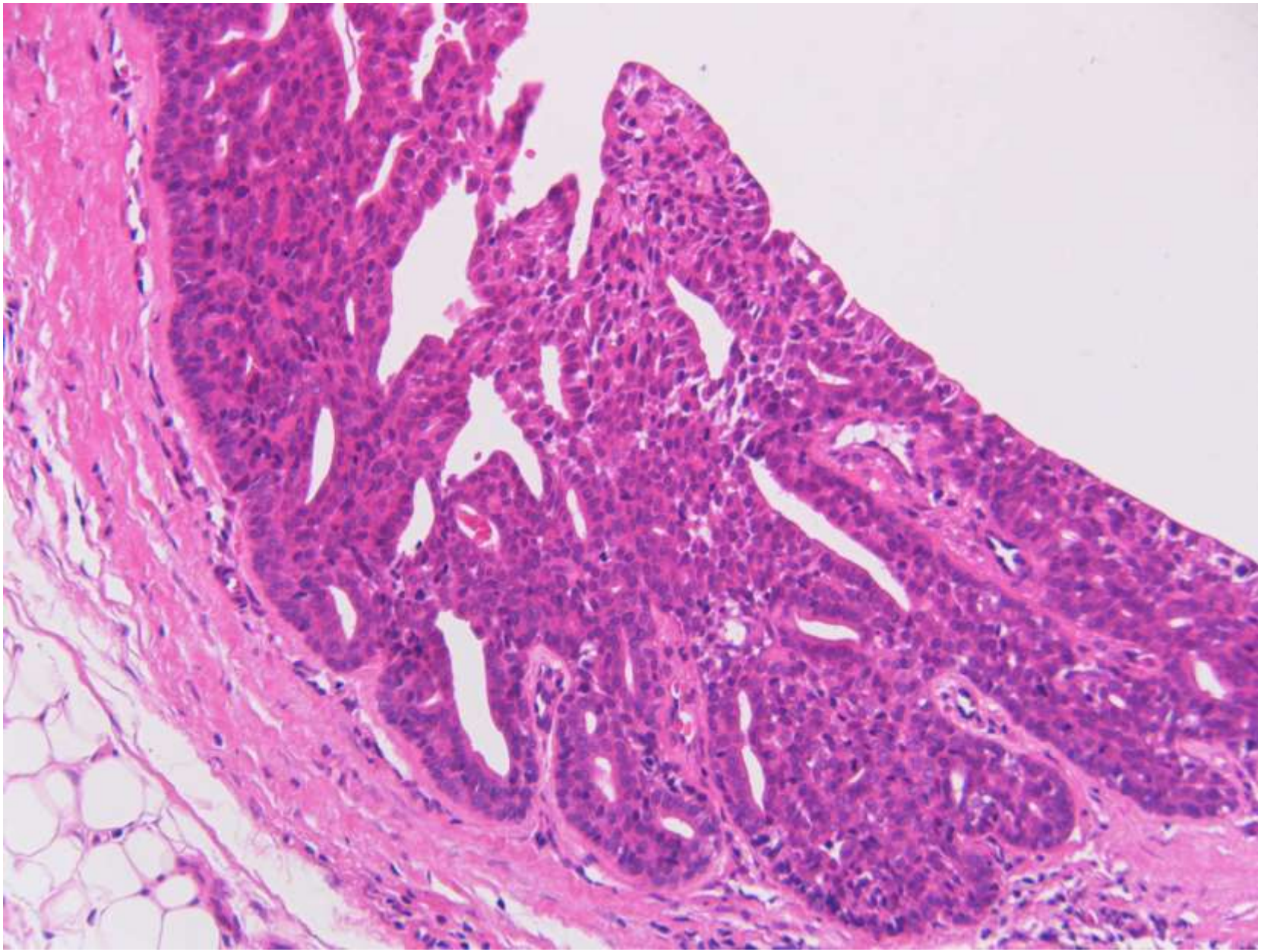


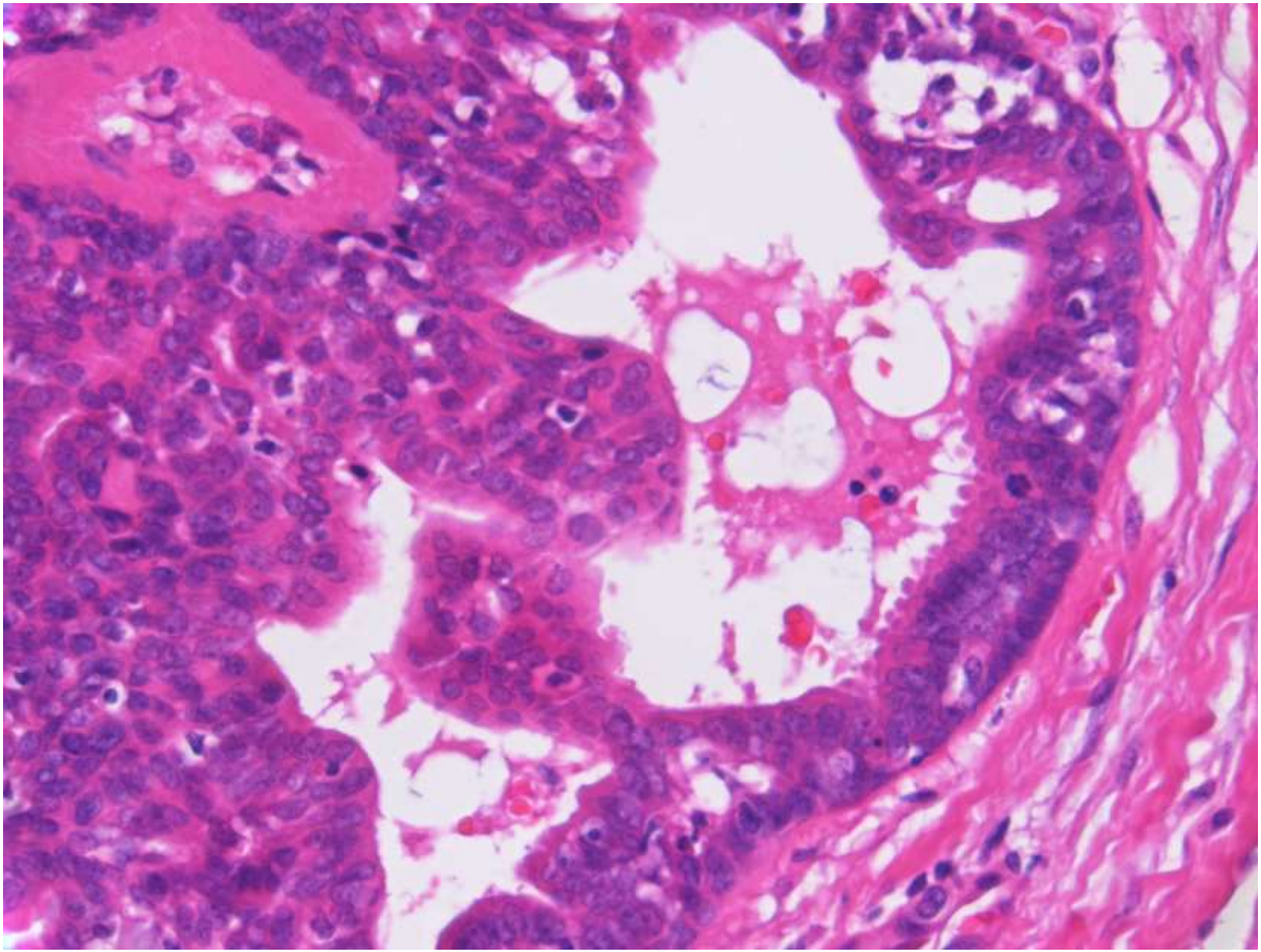


Spot Diagnosis: Case 3









Case 3

Benign v's Malignant

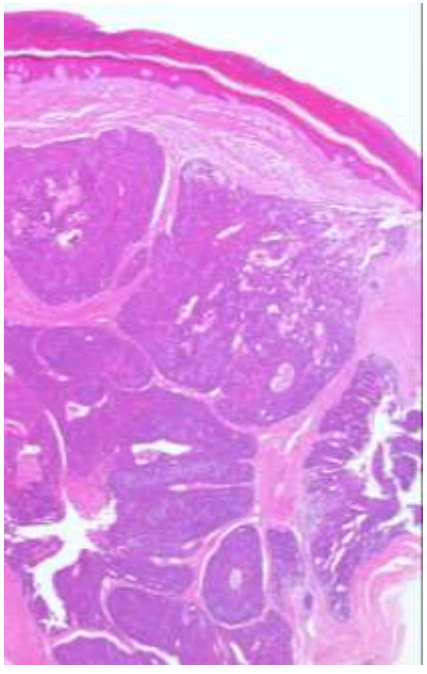
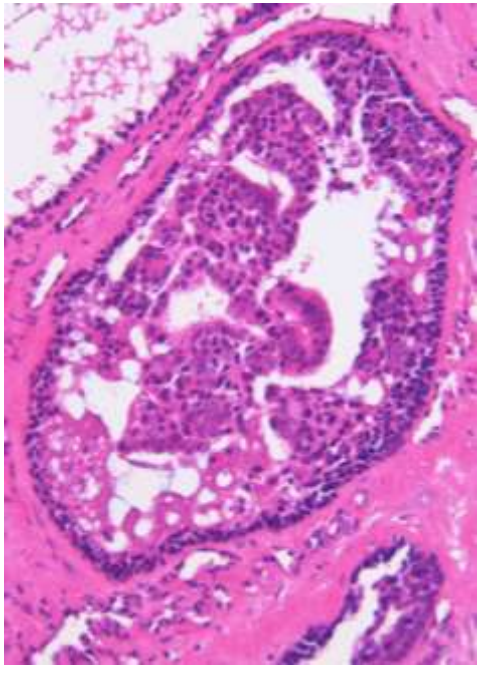
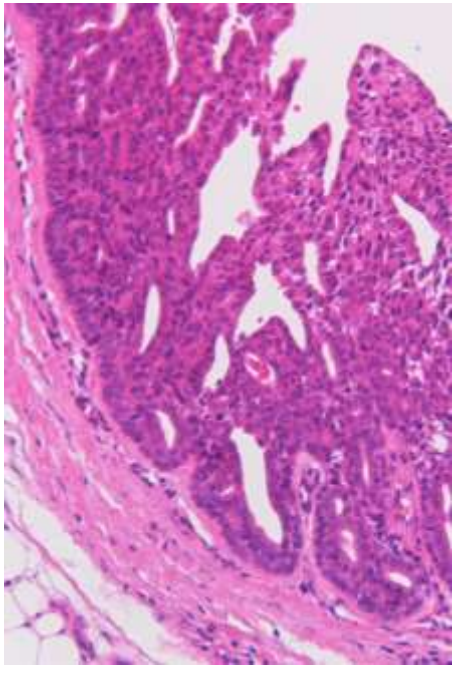
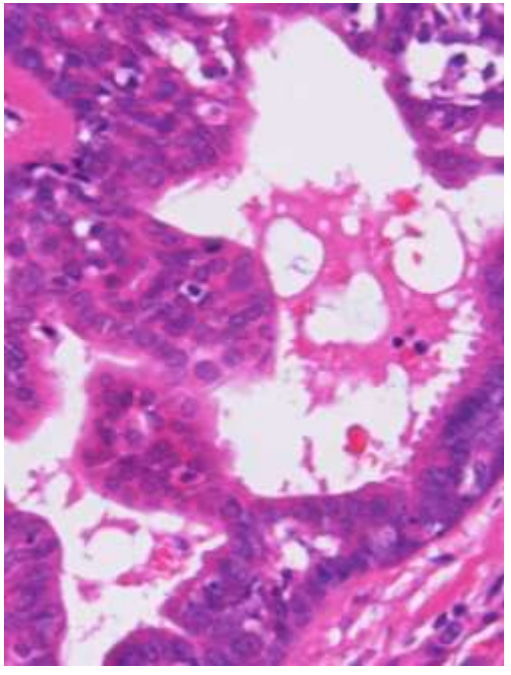
A. Adenoma (**1 point**)

B. Adnexal Ca (**1 point**)

Subtype (bonus 1 point)

Papillary adenoma
Hidradenoma
Spiradenoma
Other

Digital papillary AdenoCa
Spiradenocarcinoma
Hidradenocarcinoma
Adenoid cystic carcinoma
Other

Theme : Adnexal Lesions

Answers

Self-Assessment / Spot Diagnosis Challenge

Cases 1 to 3

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Benign v's Malignant

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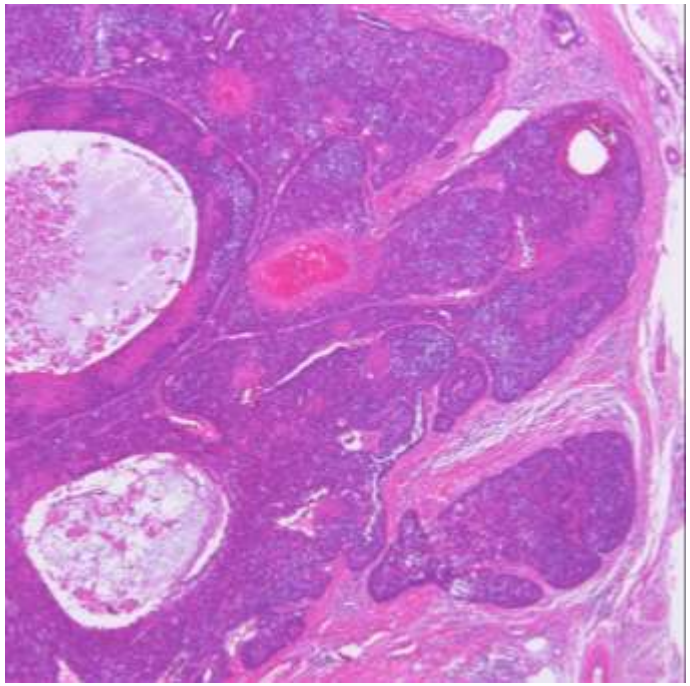
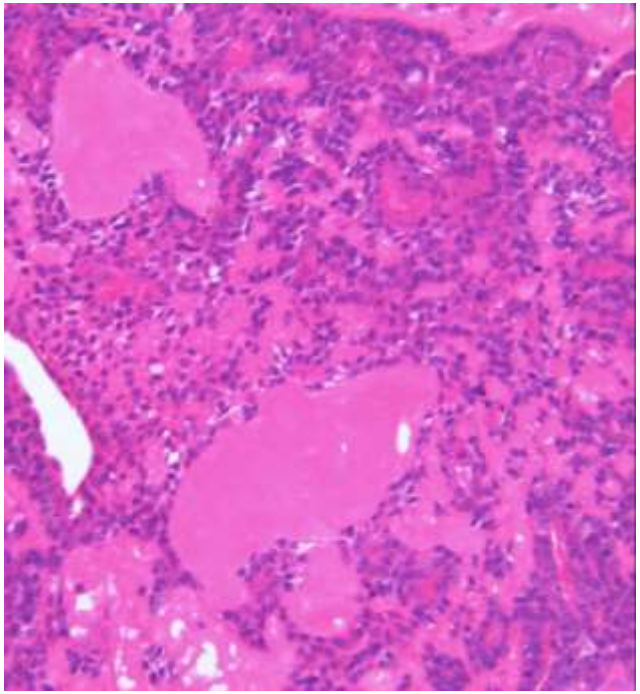
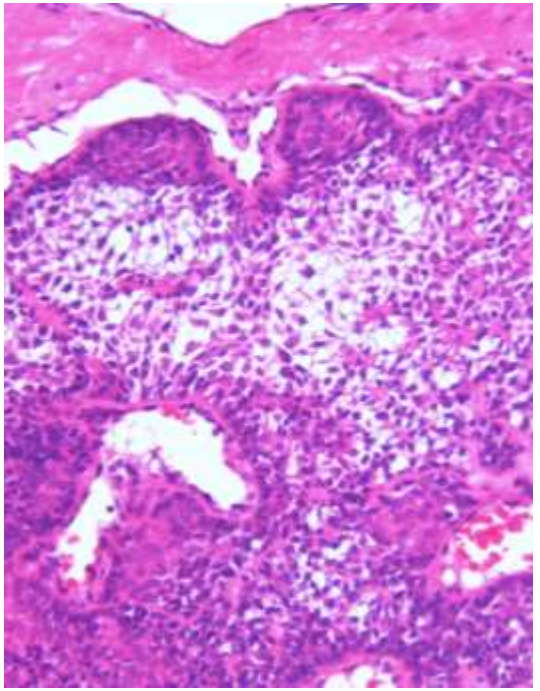
Answers







Case 1

Answers

Benign v's Malignant

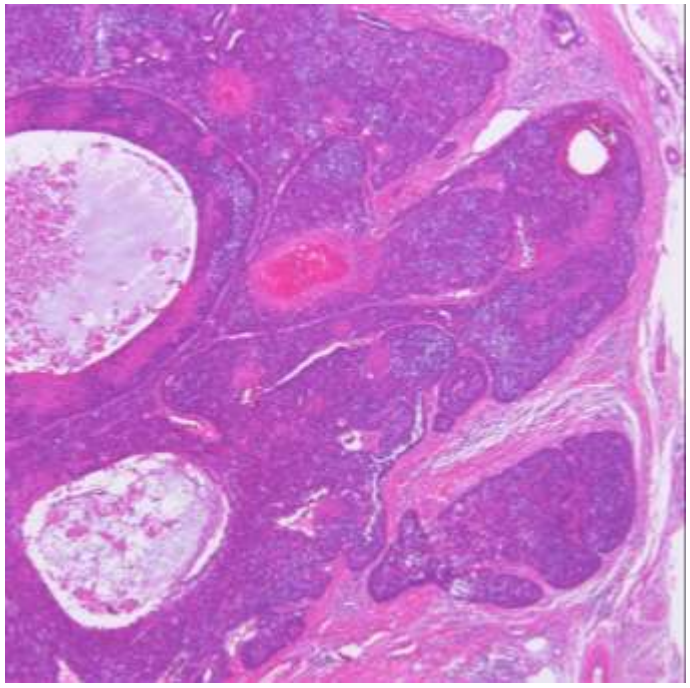
Adnexal Carcinoma

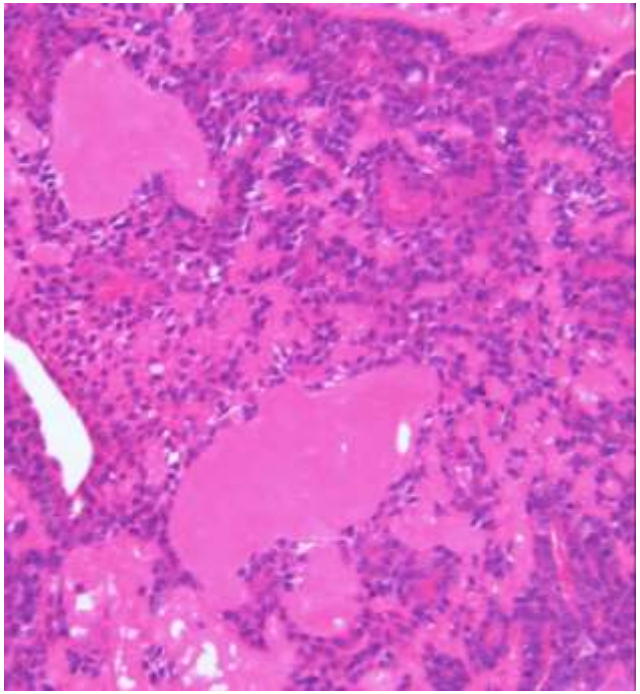
(1 point)

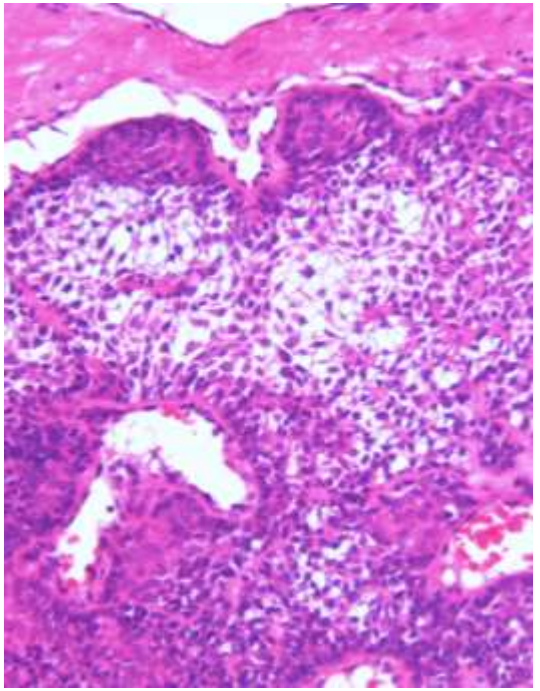
Subtype

Digital Papillary Adenocarcinoma

(1 point)







Answers

Case 2

Benign v's Malignant

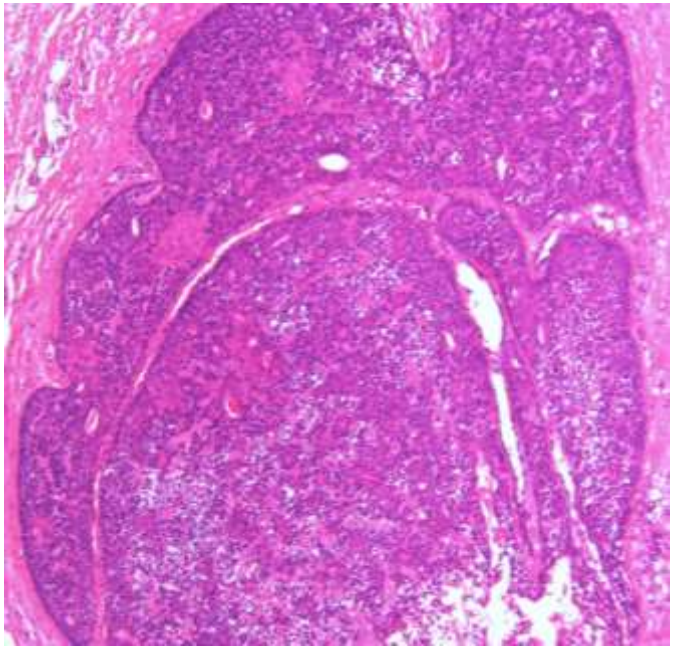
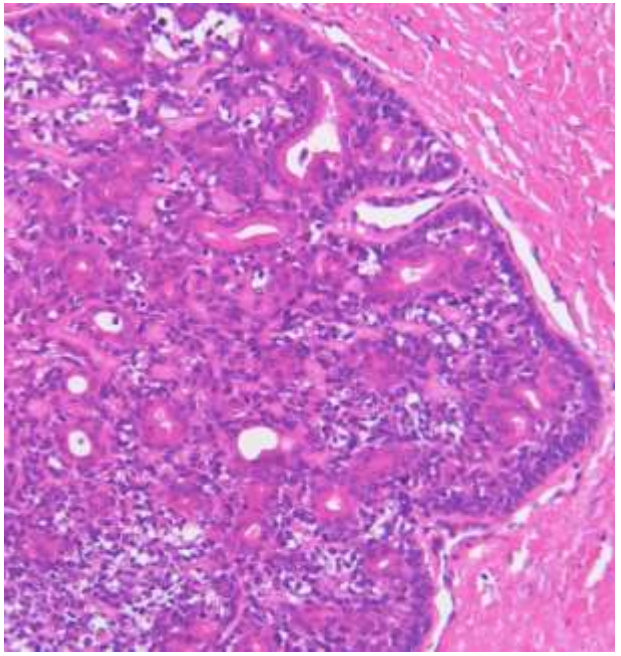
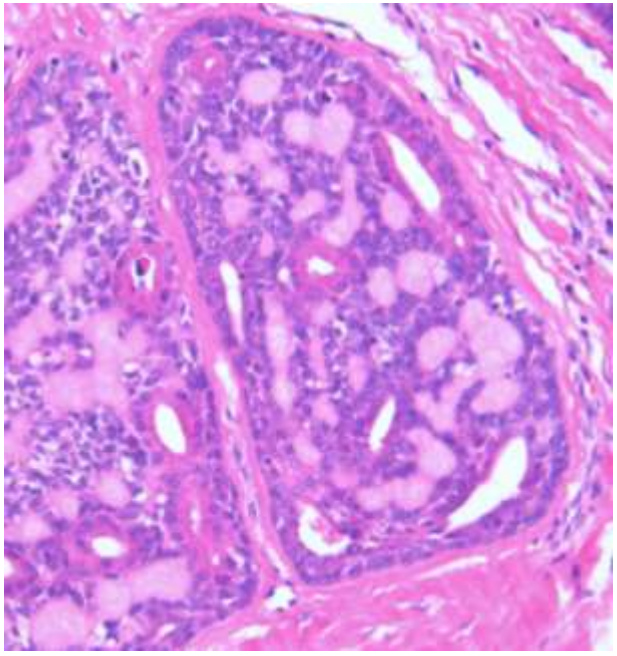
Adnexal Carcinoma

(**1 point**)

Subtype

Digital Papillary Adenocarcinoma

(**1 point**)

Case 3

Answers

Benign v's Malignant

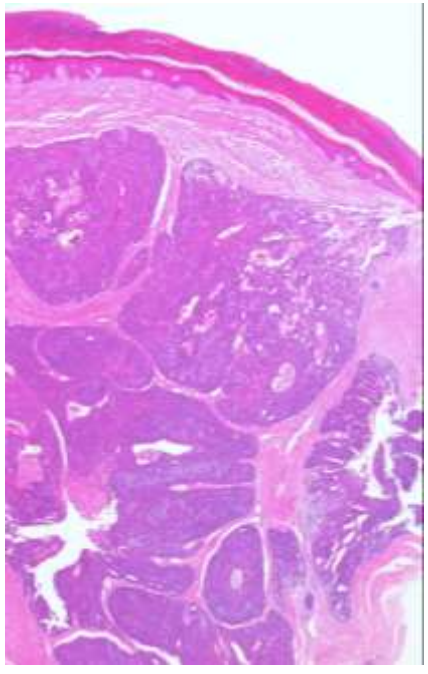
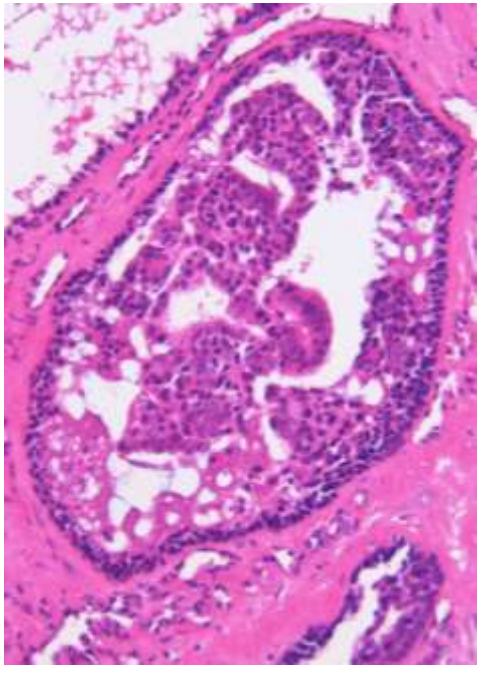
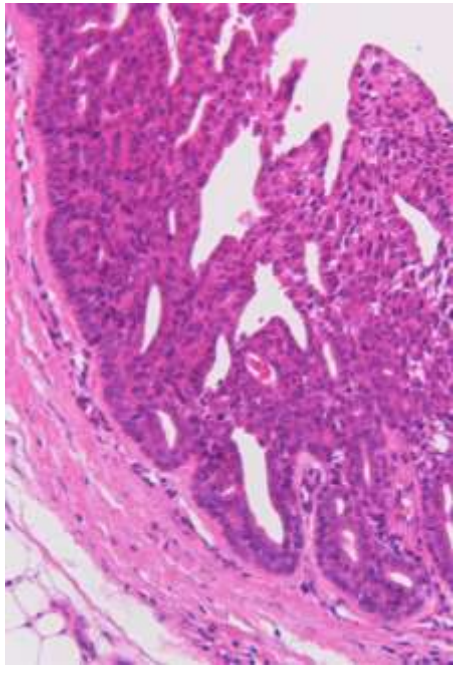
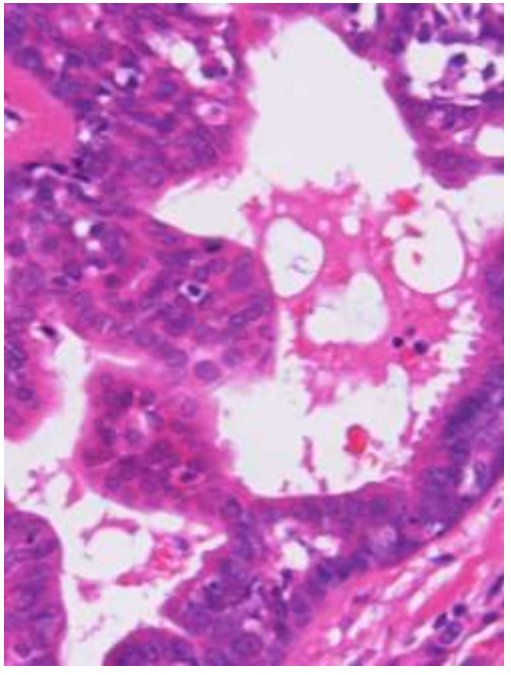
Adnexal Carcinoma

(1 point)

Subtype

Digital Papillary Adenocarcinoma

(1 point)

Case 1-3: Digital papillary adenocarcinoma

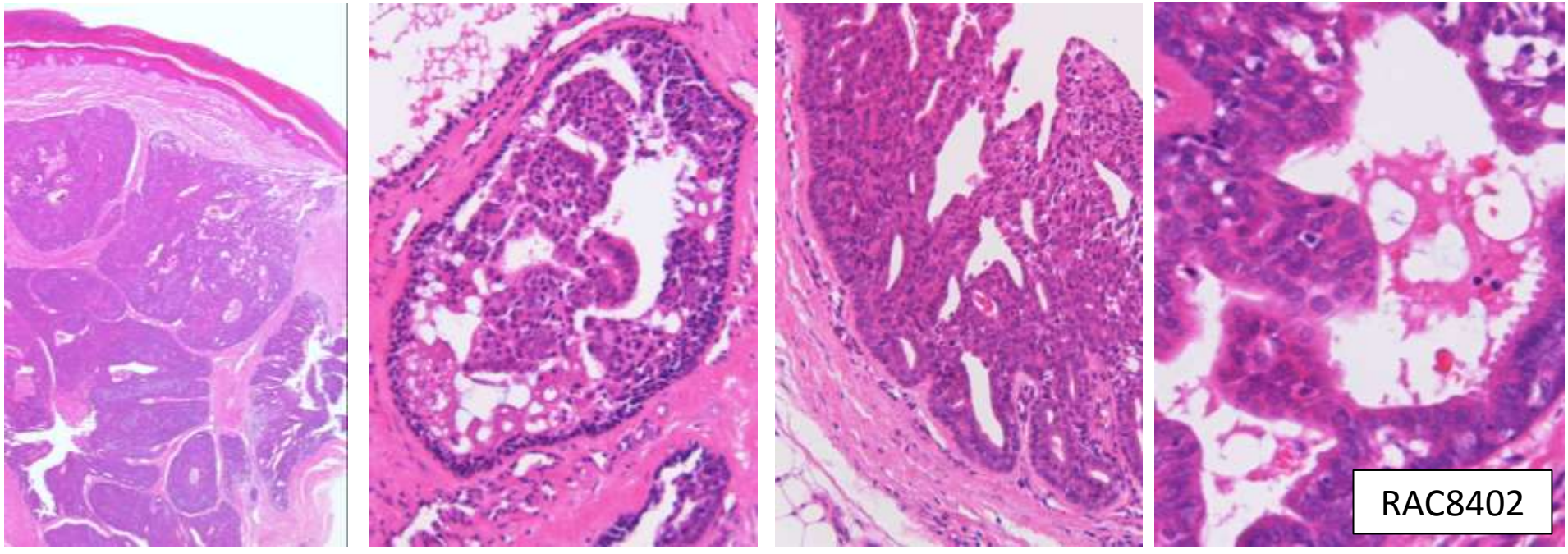
2005: M47. Right Thumb. "Lesion" excised by Orthopaedic surgeon

Macro: White fibrous nodule 15 x 14 x 10mm

Micro: *"…consistent with a hidradenoma (acrospiroma), best considered atypical in view of mitotic activity. The lesion is incompletely excised…Suggest complete excision."*

SUPPLEMENTARY REPORT

"I have discussed this case also with my colleagues. …the behaviour is uncertain. Metastatic deposits may occur with atypical hidradenomas. This case should be discussed at MDM.



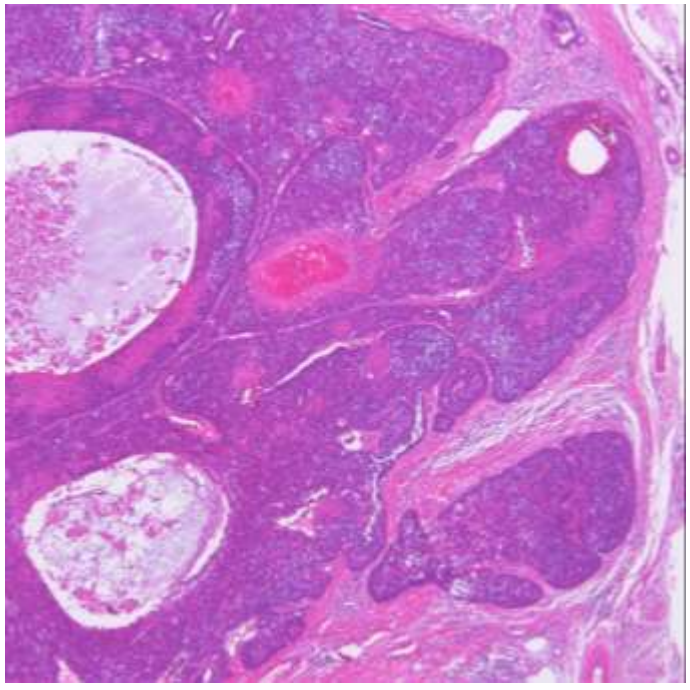
Case 1-3: Digital papillary adenocarcinoma

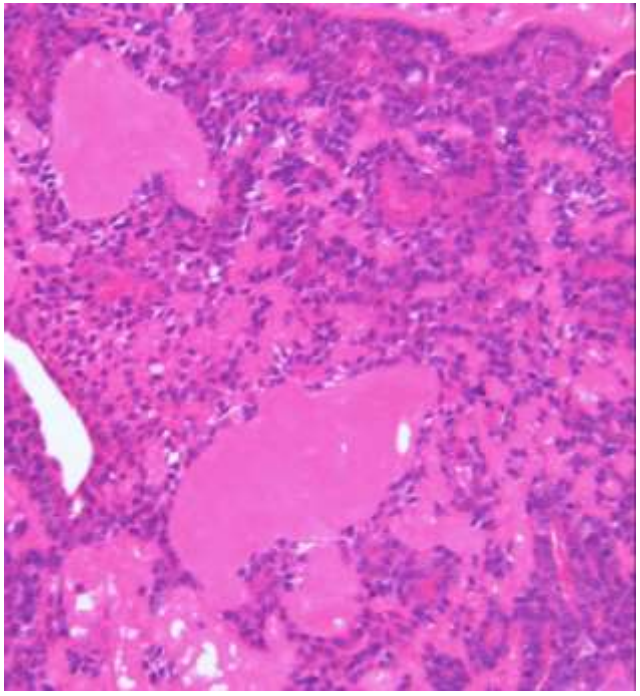
REVIEW AT EXTERNAL BONE / SOFT TISSUE CENTRE

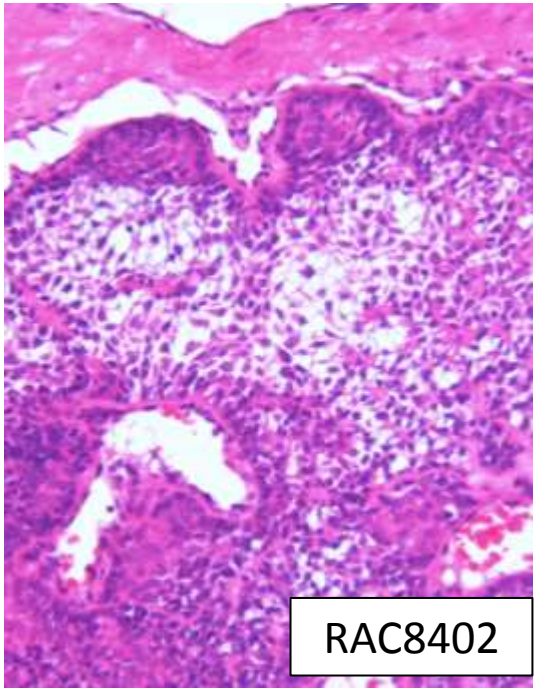
"…eccrine differentiation…cystic spaces…tubular formation…clear cells…focal squamous differentiation…as small focus of increased mitotic activity (>10/10 hpf)…no necrosis…NPVI…

…features c/w atypical nodular hidradenoma.

…it should be noted the criteria for malignant nodular hidradenoma are not clearly defined"

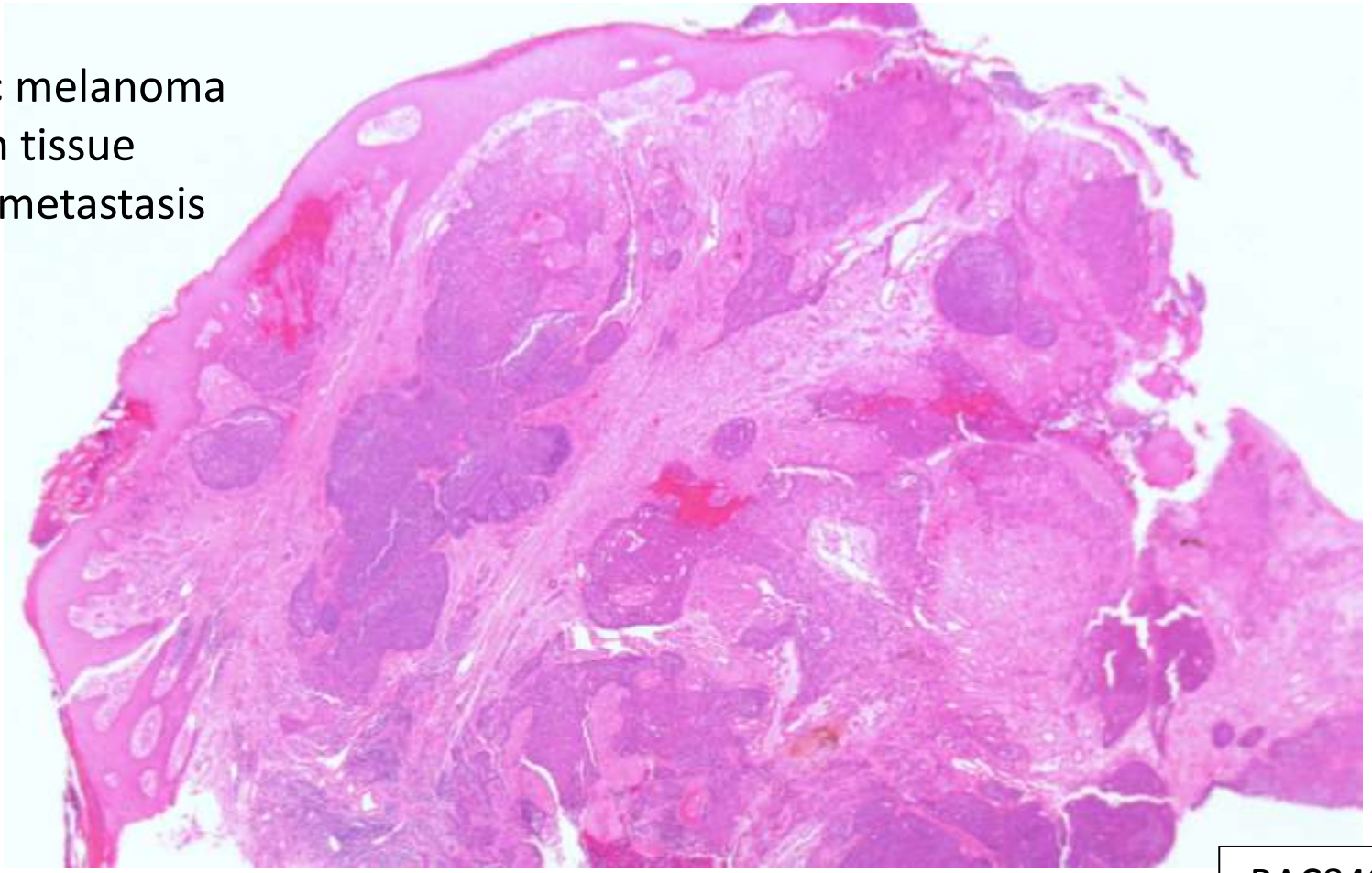






Case 1-3: Digital papillary adenocarcinoma

2019: M60. Known Stage 4 non small cell lung cancer Feb 2018.
Cut toenail & inflamed right big toe developed growing vascular lesion, bleeding lesion. **[No mention of "atypical hidradenoma Rt Thumb"]**
DDx:
?PG,
?amelanotic melanoma
?granulation tissue
?secondary metastasis



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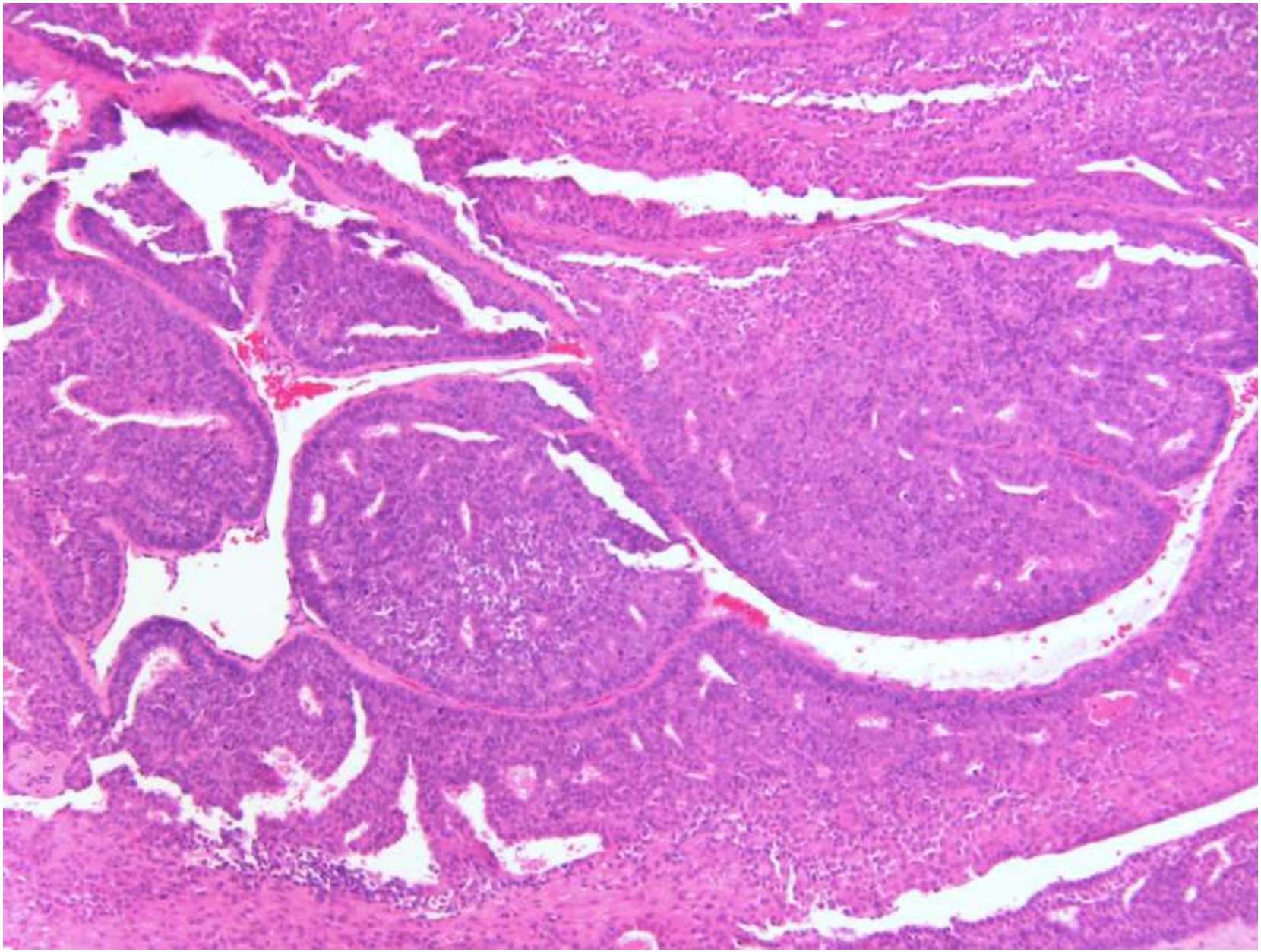
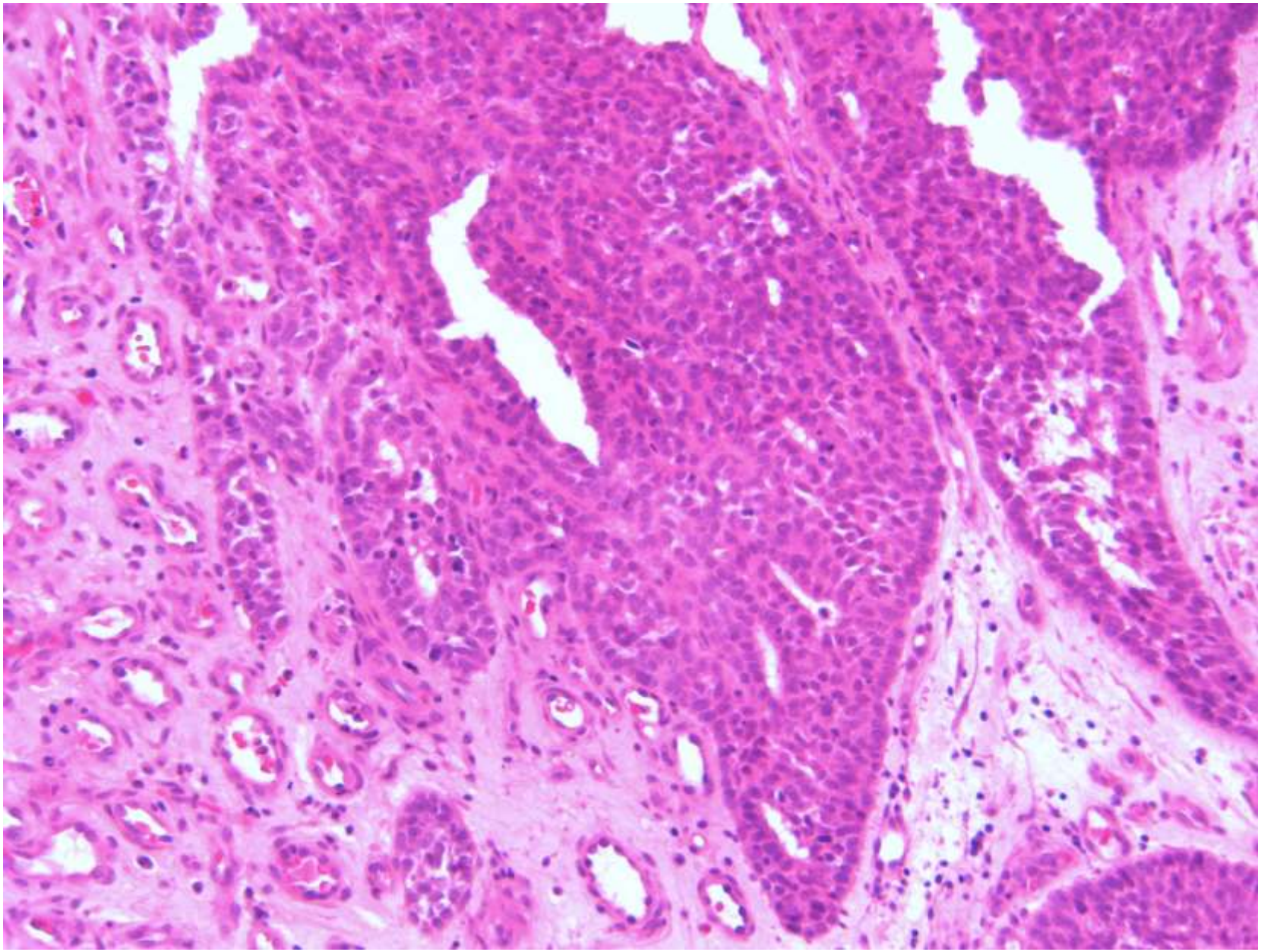
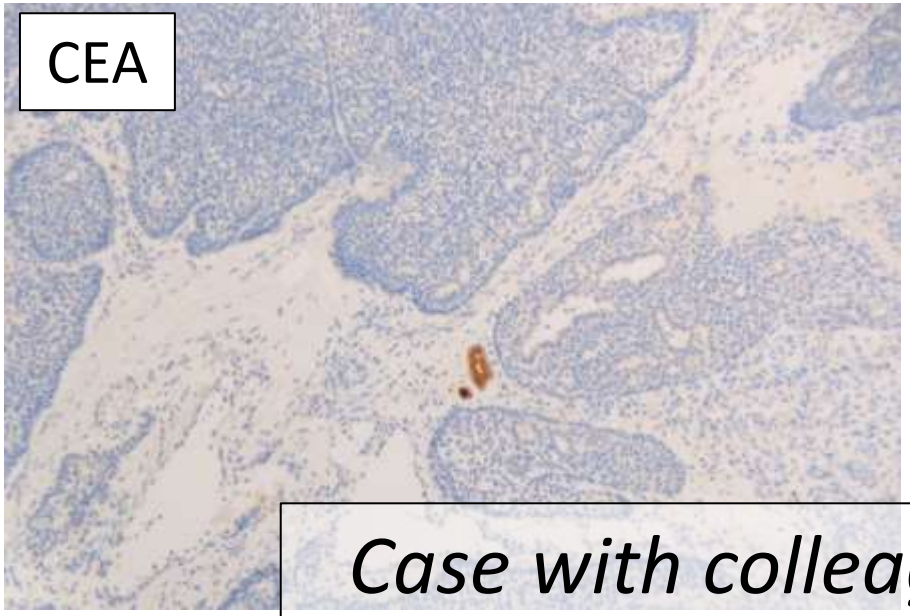
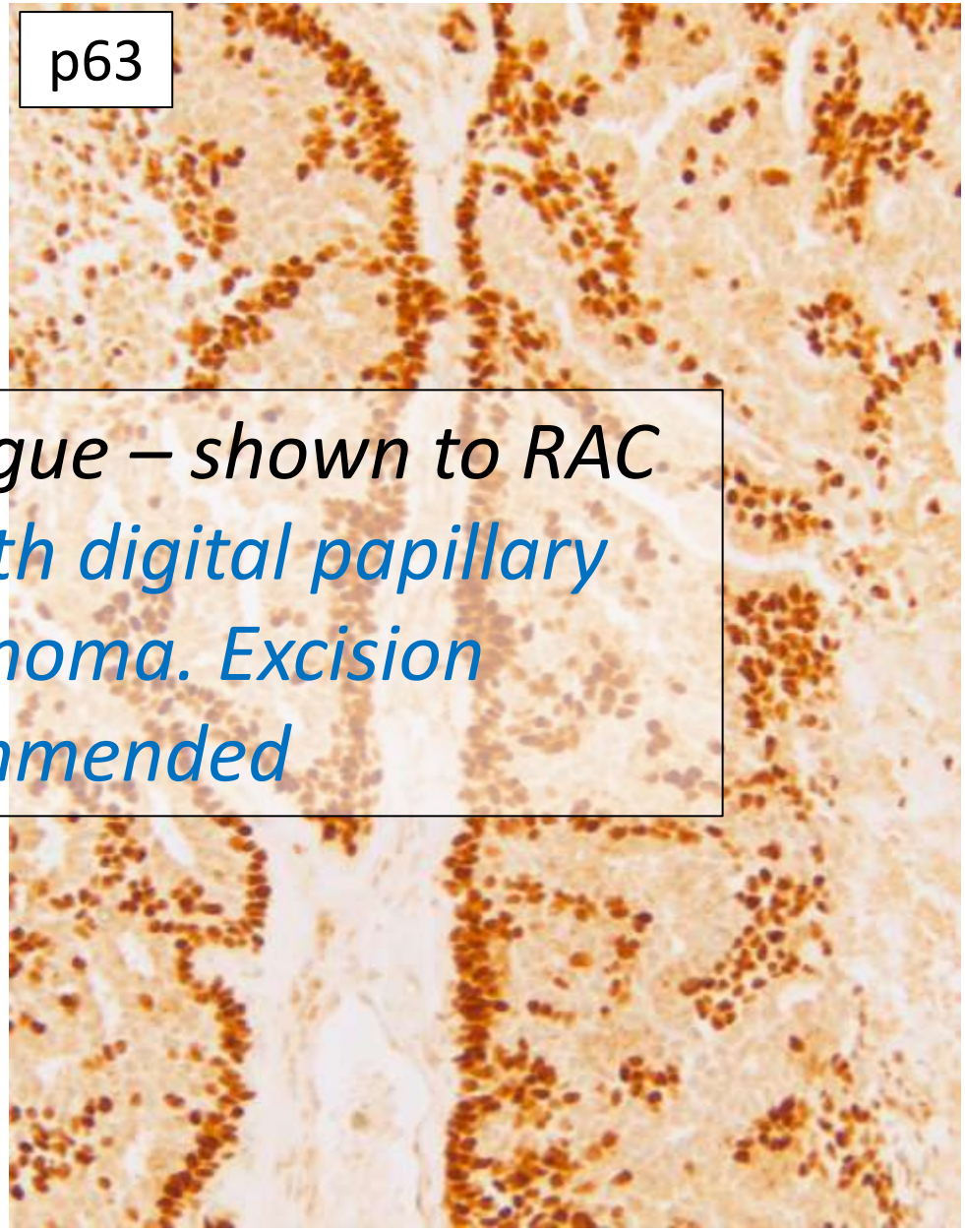
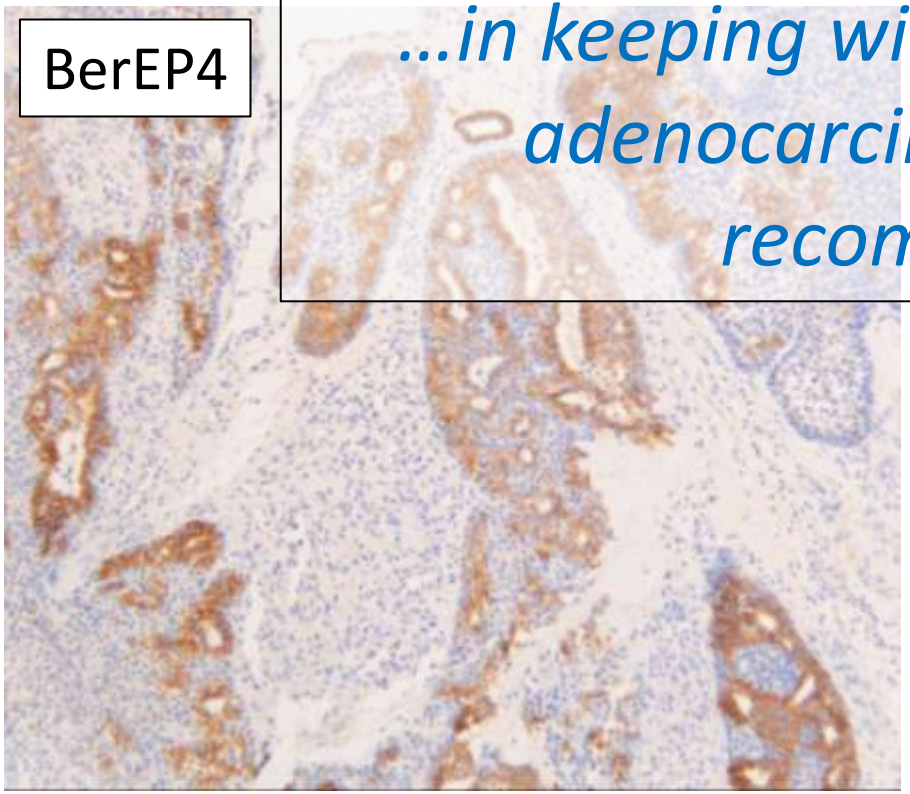








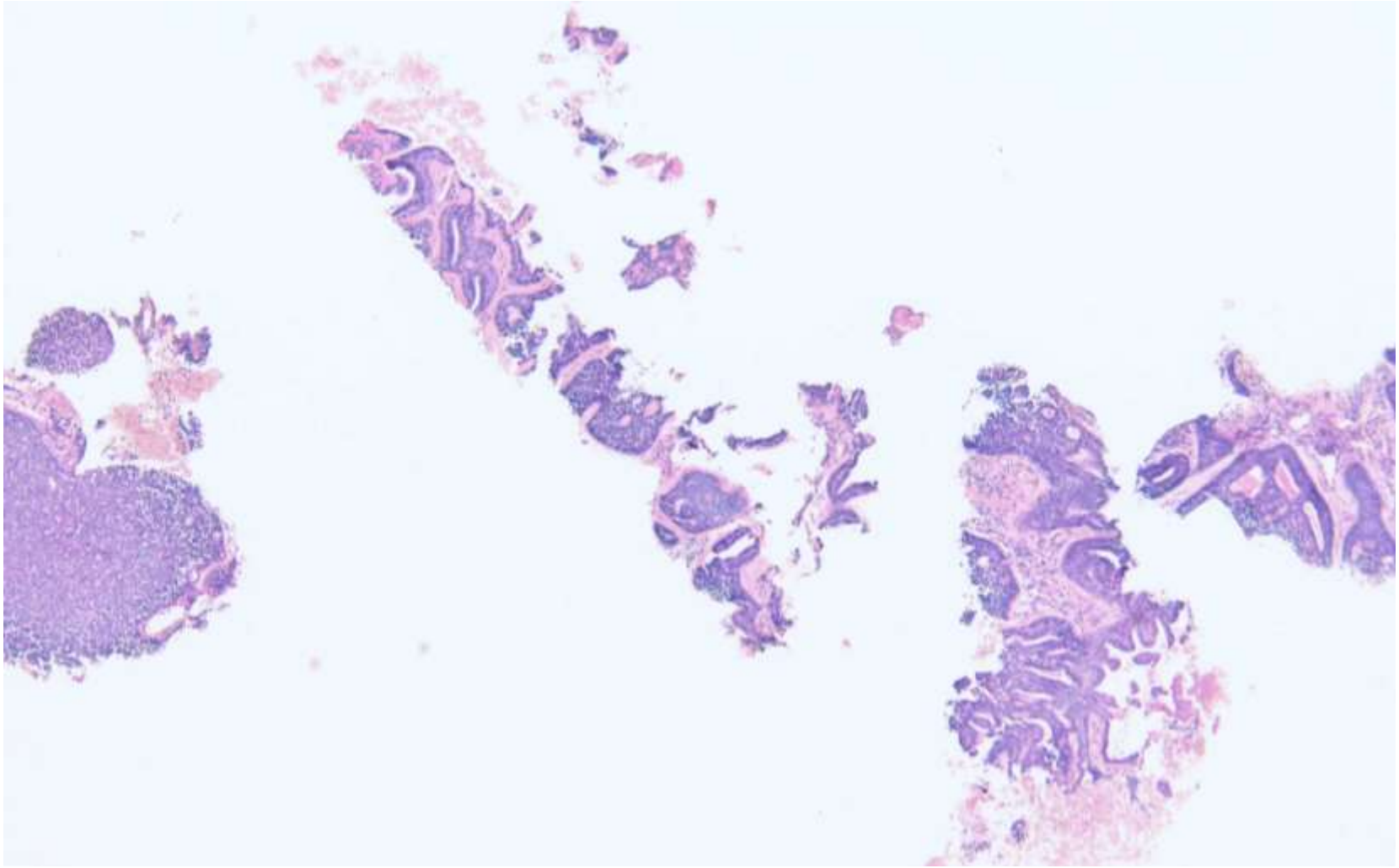


Case with colleague – shown to RAC

…in keeping with digital papillary adenocarcinoma. Excision recommended

Case 1-3: Digital papillary adenocarcinoma

2019: MDM Discussion – Known stage 4 lung adenocarcinoma
2017: 4 “coin” lesions ?hamartomas of lung



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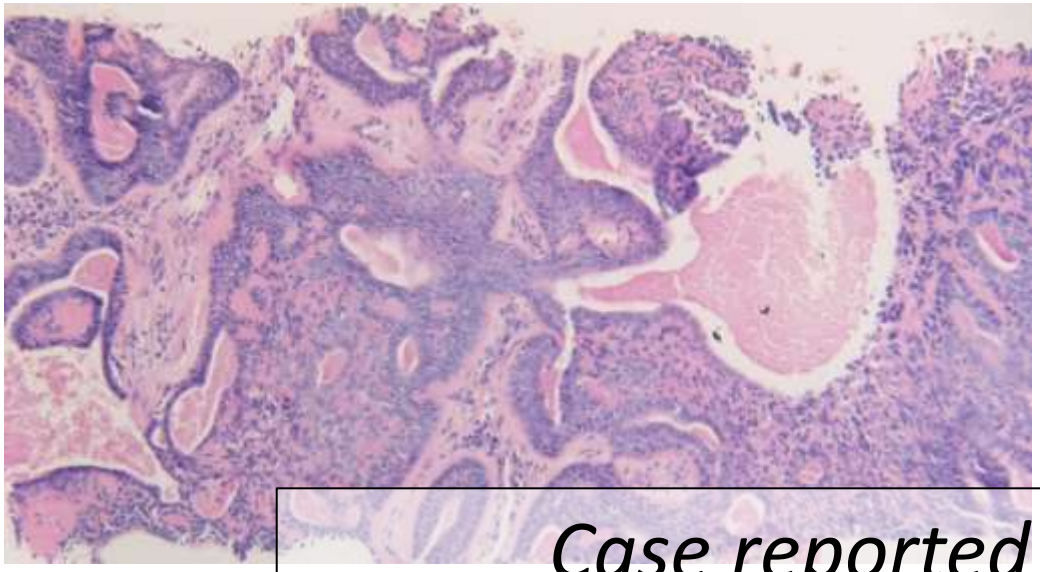
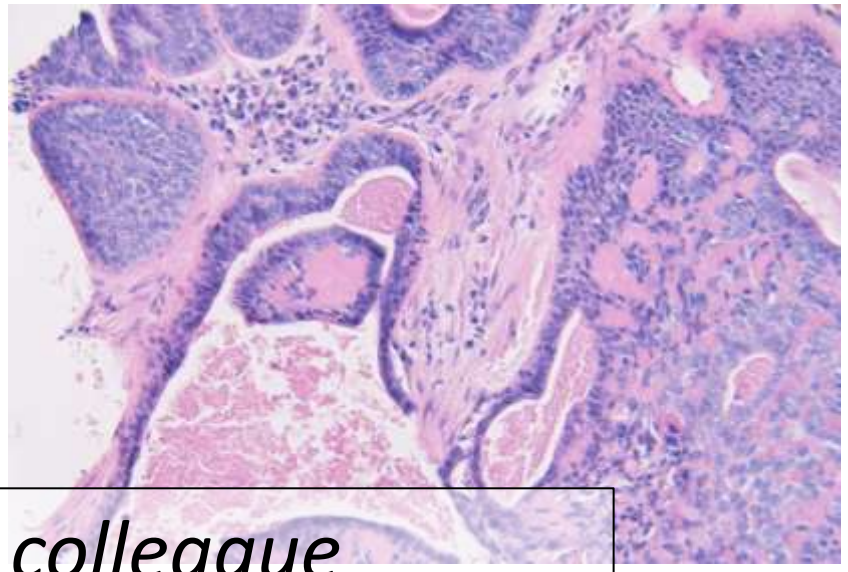
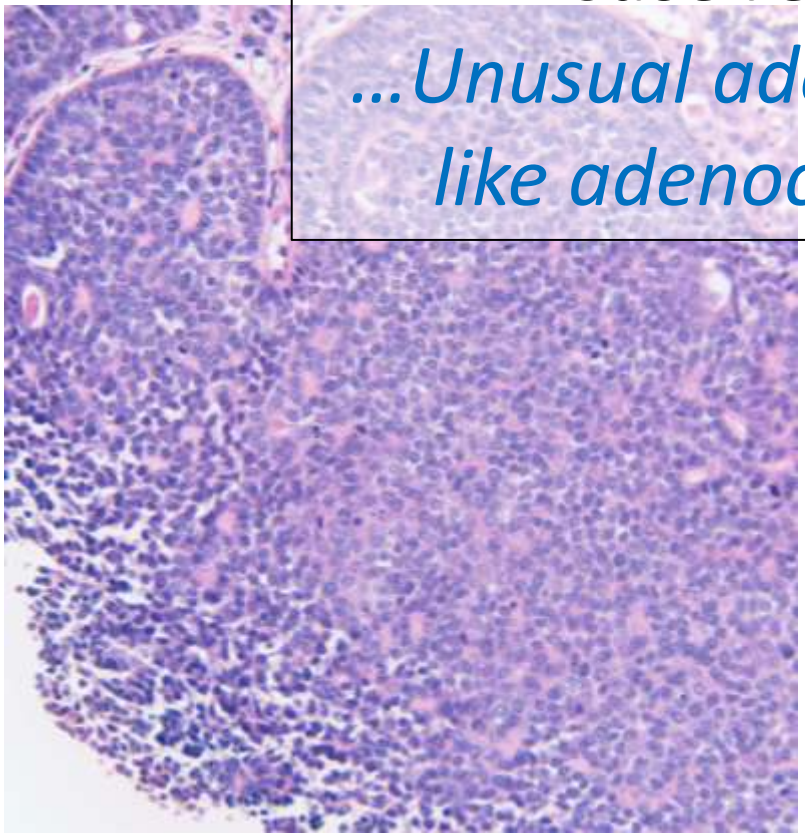
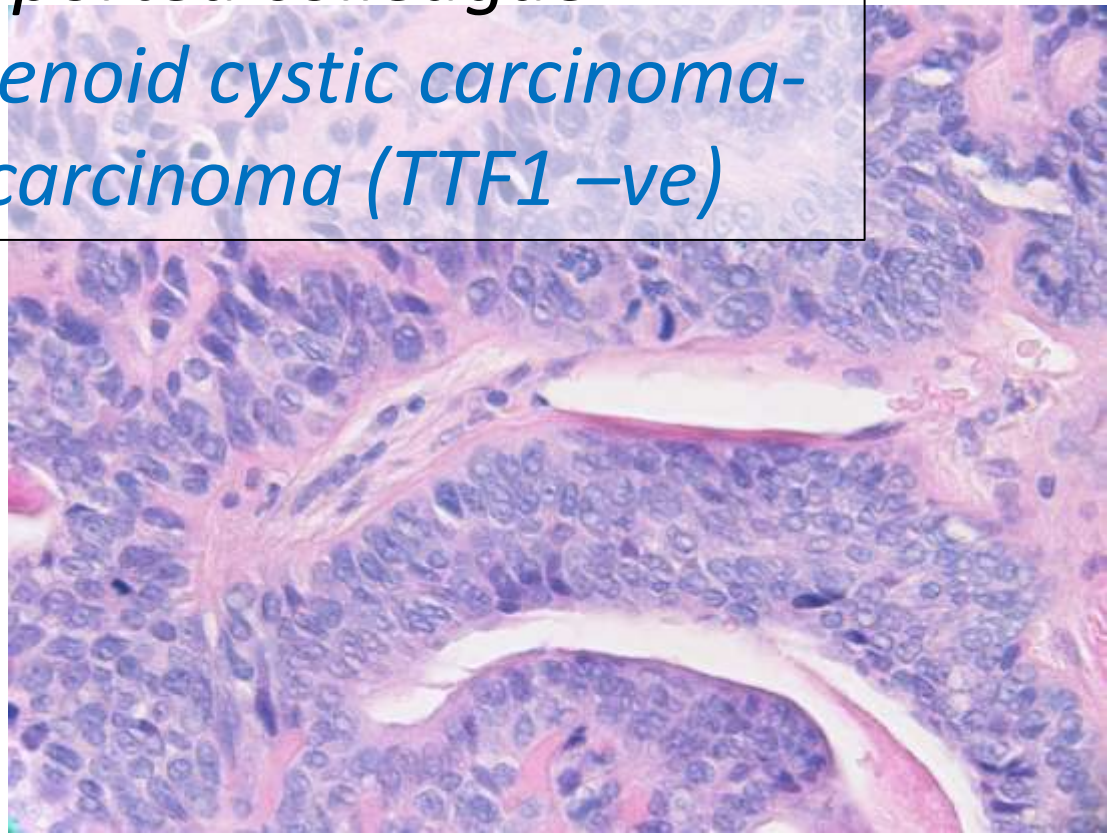




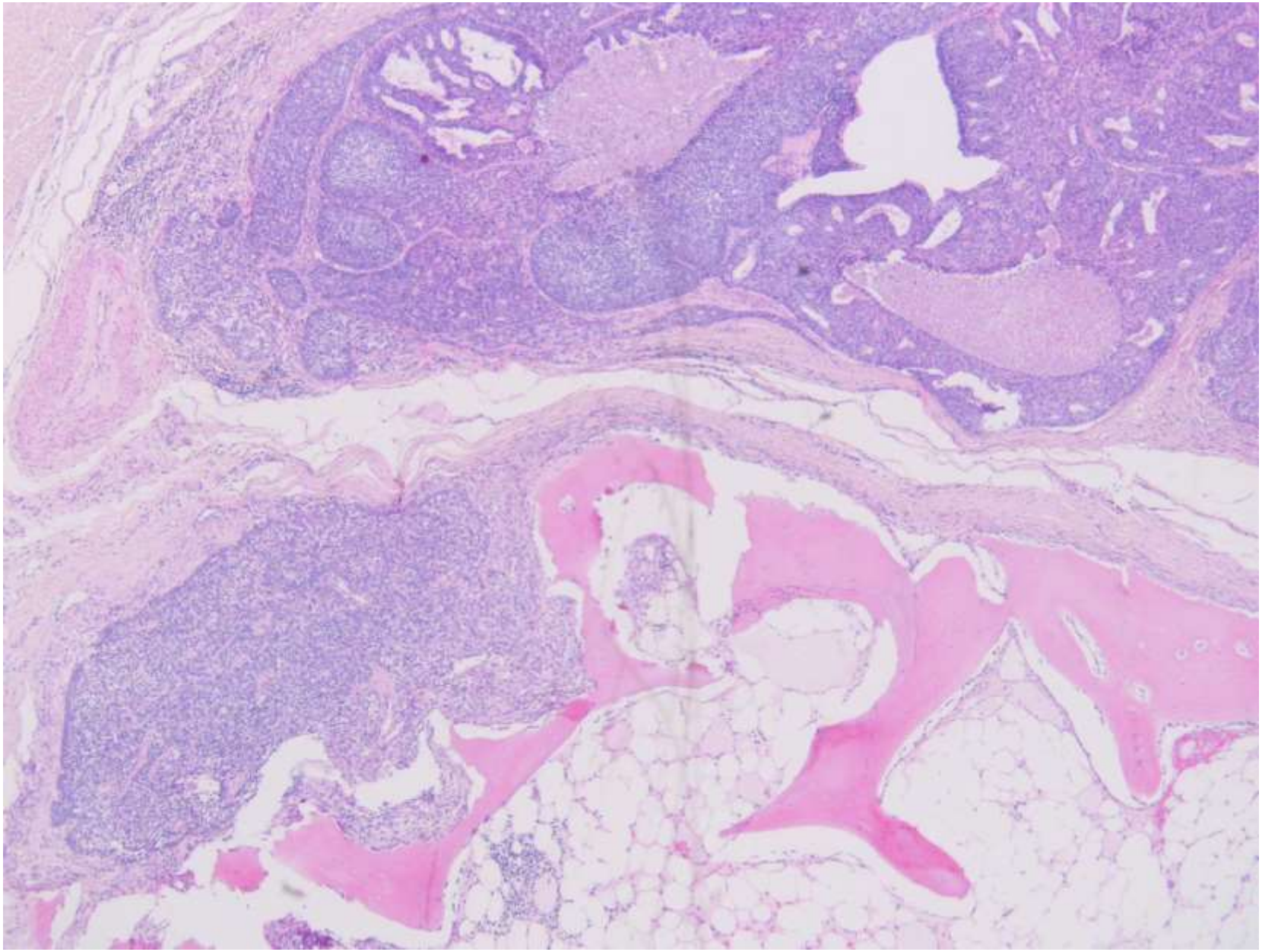
Case reported colleague

…Unusual adenoid cystic carcinoma-like adenocarcinoma (TTF1 –ve)

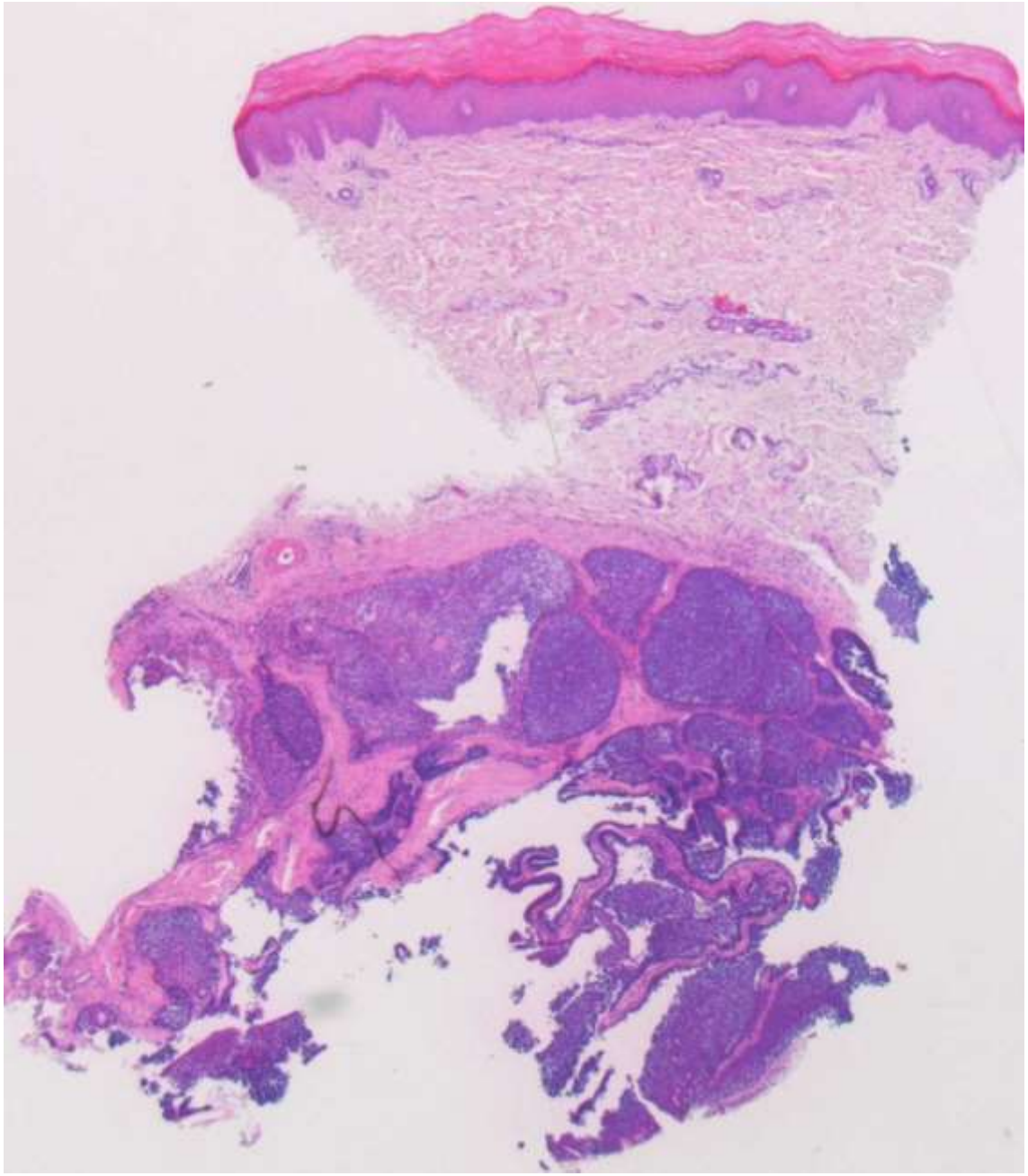




2019: Metastatic DPA: Bone invasion right great toe



2019: Metastasis to right 2nd toe



Case 1-3: Digital papillary adenocarcinoma

2005: “Atypical Hidradenoma Rt Thumb”

2017: “… Unusual adenoid cystic carcinoma-like tumour lung

Treated for lung adenocarcinoma Stage 4

2019: Digital papillary adenocarcinoma Right big toe

2019: Digital papillary adenocarcinoma Right 2nd toe

Review of the whole case: Digital papillary adenocarcinoma of the Right thumb (2005) with late lung (2017) and subsequent aggressive toe metastases (2019)

2020: 2005 & 2019 representative blocks sent to Thomas Weisner for HPV42 testing (pending)

Highly sensitive assay developed for virus detection in FFPE tissue

HPV42 contributes to pathogenesis of DPA and might be a therapeutic target

HPV42 can be re-classified as a high risk based on intergration of 7 crucial aminoacids of the E6 / E6AP / p53 complex

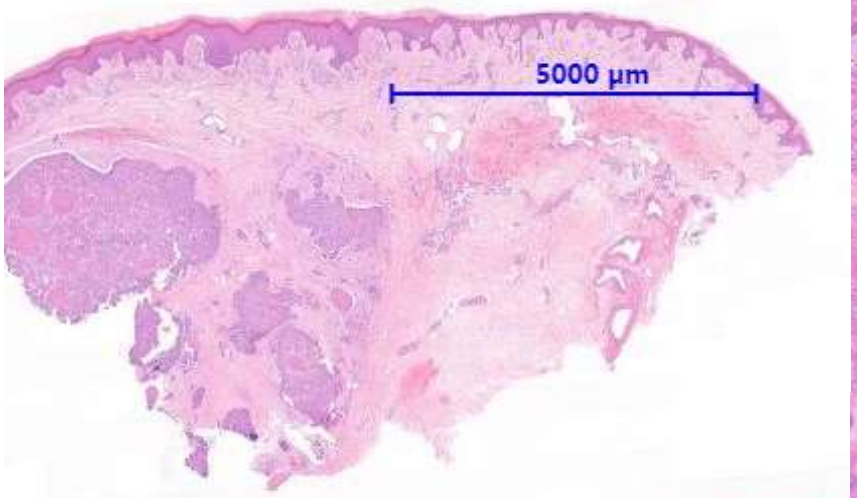
Case 1-3: Digital papillary adenocarcinoma (DPA)

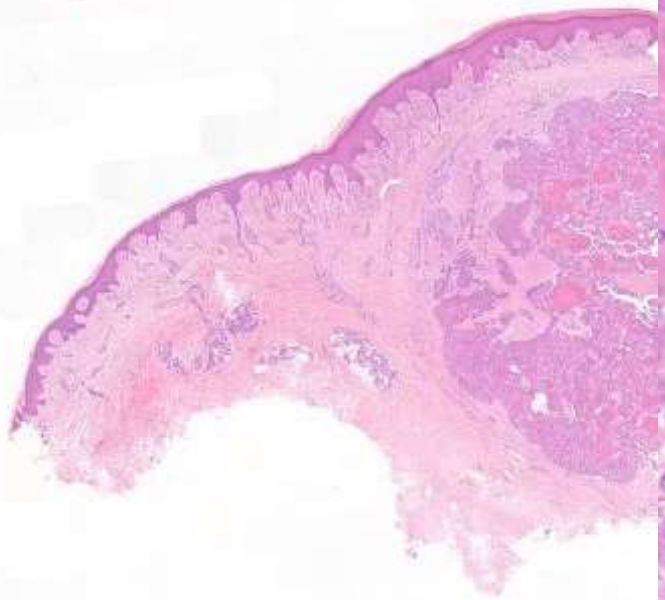
Learning Points

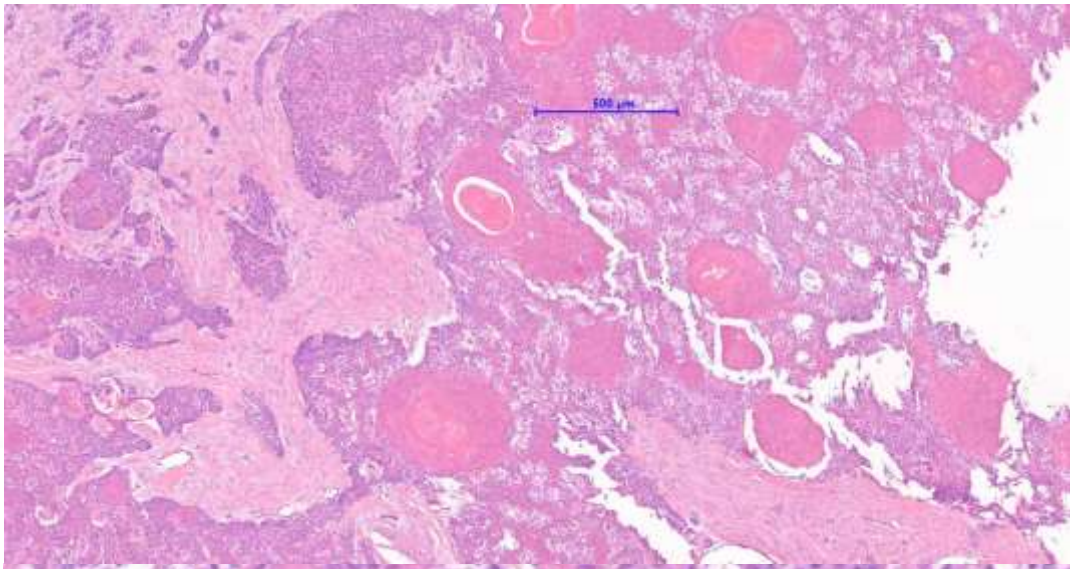
1. *Beware the "adenoma" of the digit*
2. *Show case to dermatopathologist for second opinion*
3. *Actively ask about past medical history at MDM discussion and act on the findings*
4. *DPA have protean histological features perhaps better named "polymorphous" adenocarcinoma of the digit*
5. *These are generally "indolent" lesions and quite unpredictable but the term "aggressive" should not be applied*
6. *Recent finding: HPV42 (low risk in the setting of squamous epithelium) is high risk in the setting of the sweat duct/gland and may be specific for DPA*

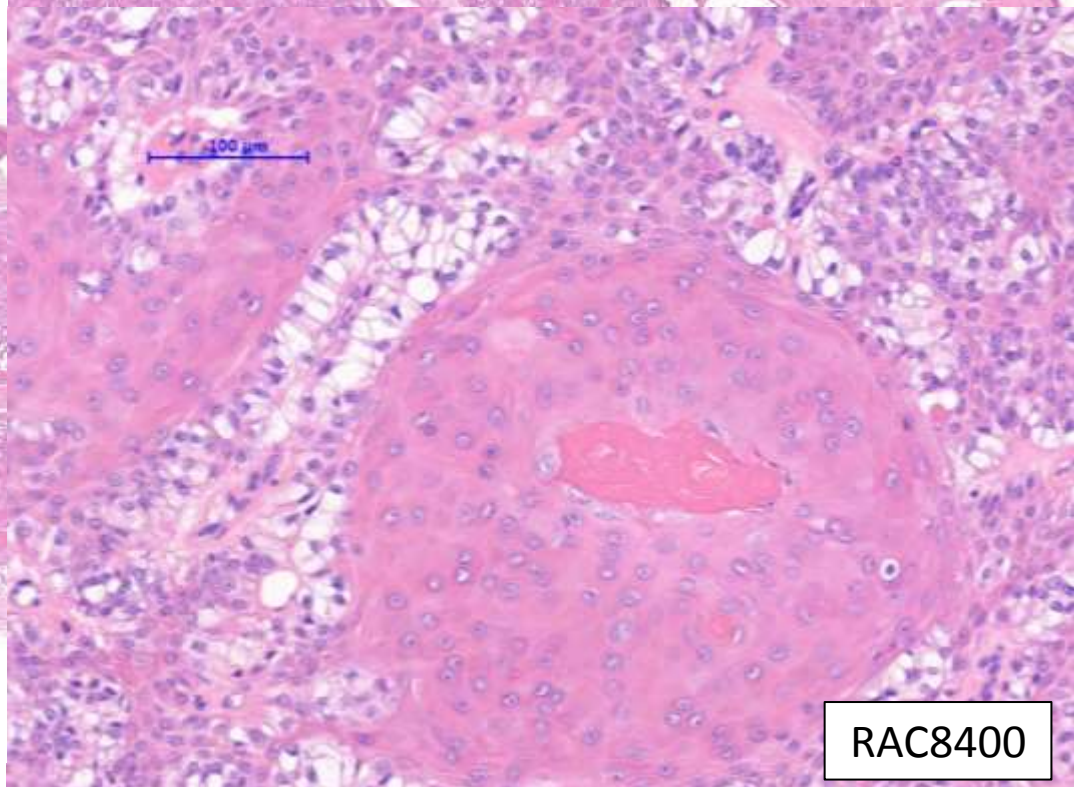
Next Case

F82. Left Ankle ?SCC (Digital referral c/o Dr Saleem Taibjee)

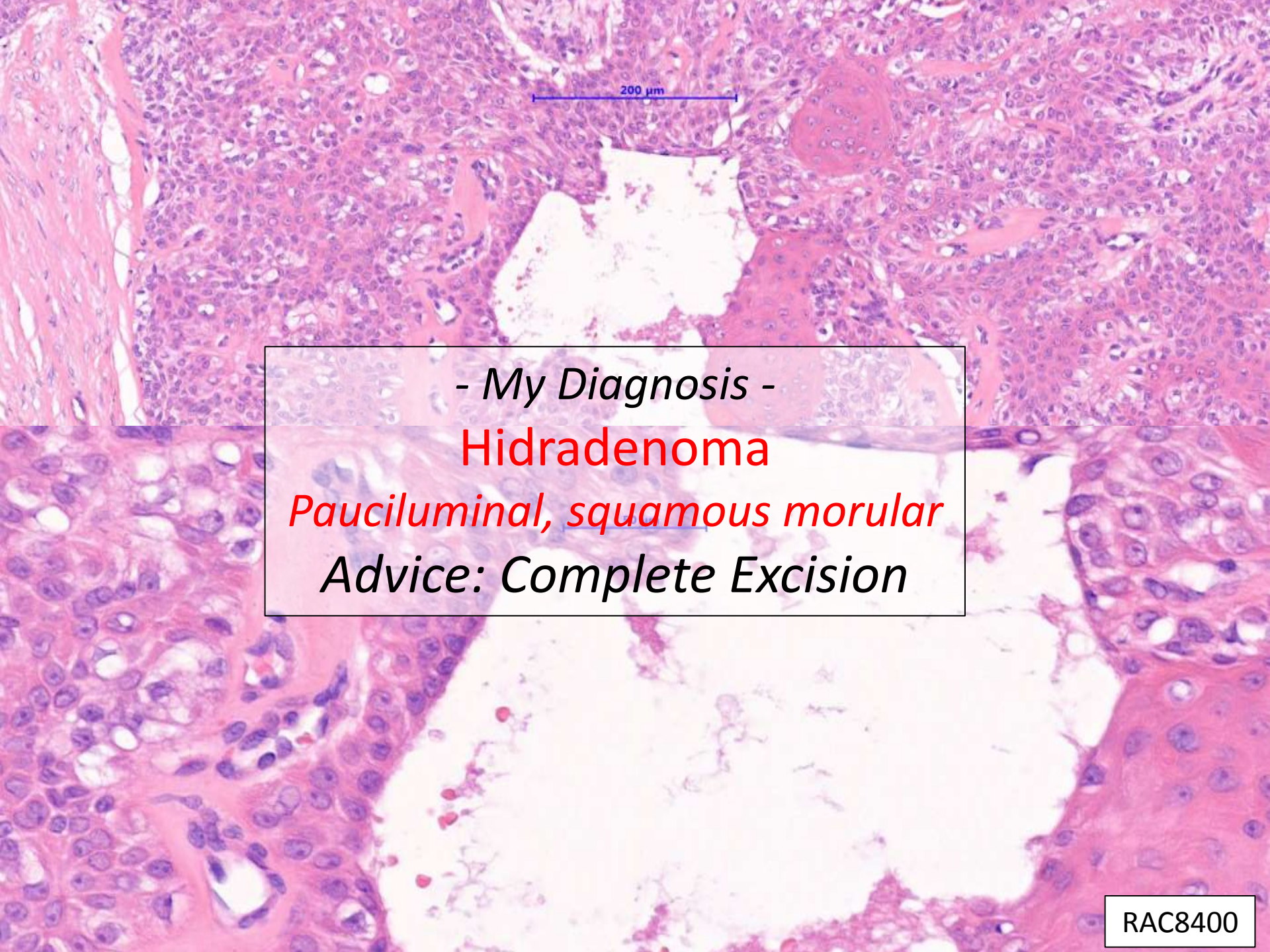








RAC8400



- My Diagnosis -

Hidradenoma

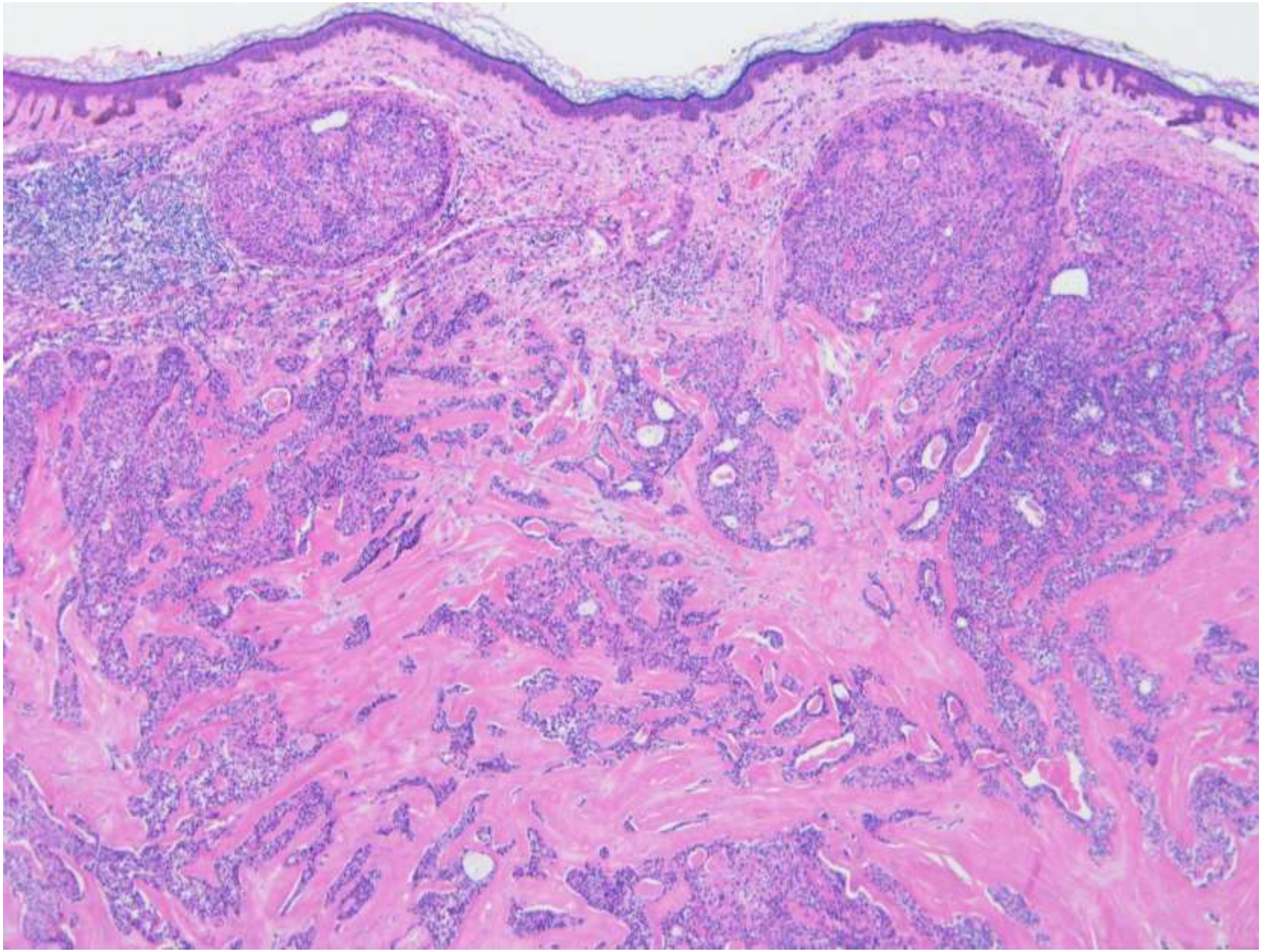
Pauciluminal, squamous morular

Advice: Complete Excision

RAC8400

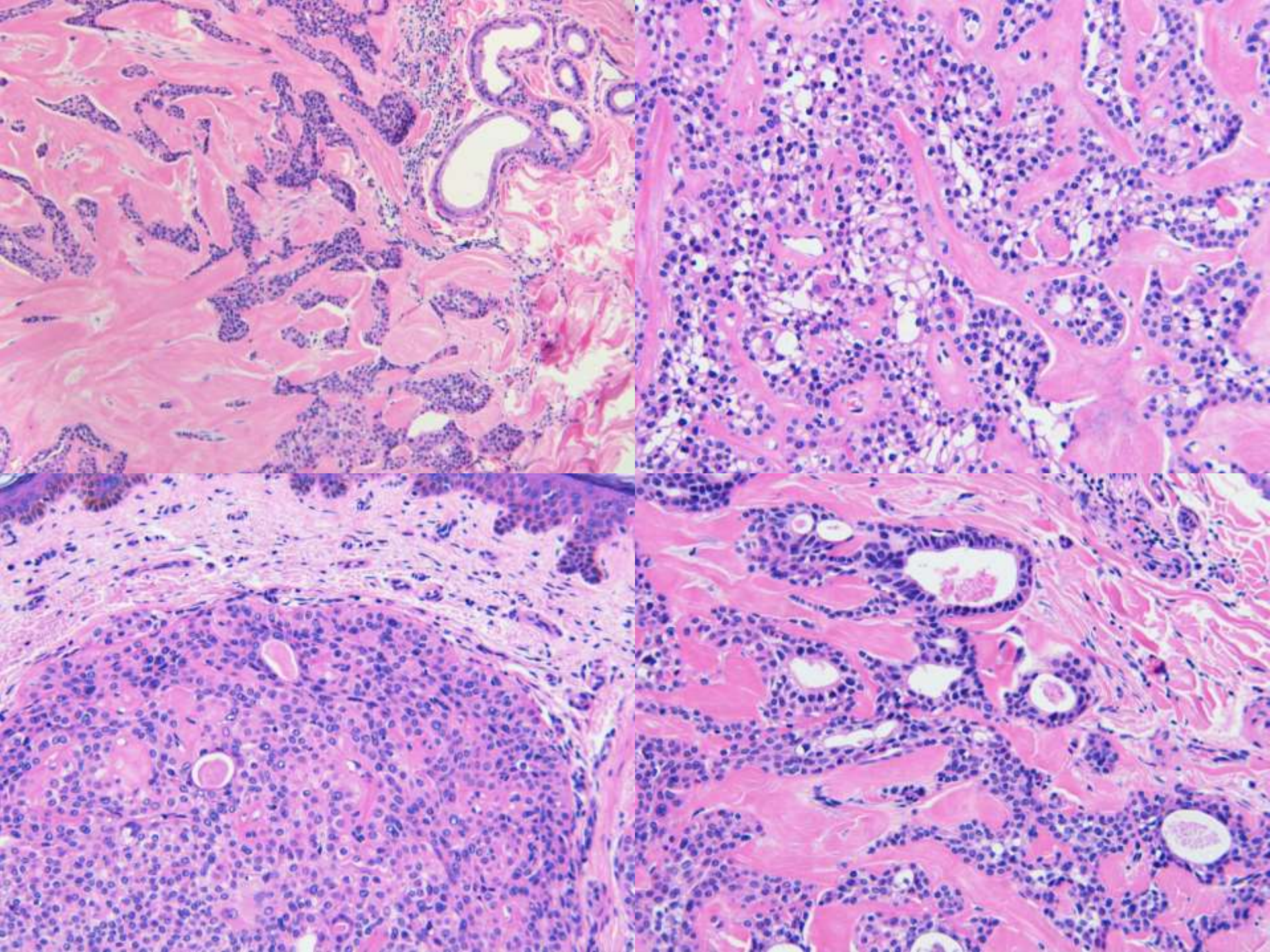
Next Case

F67. Left foot. 6/12, increased in size

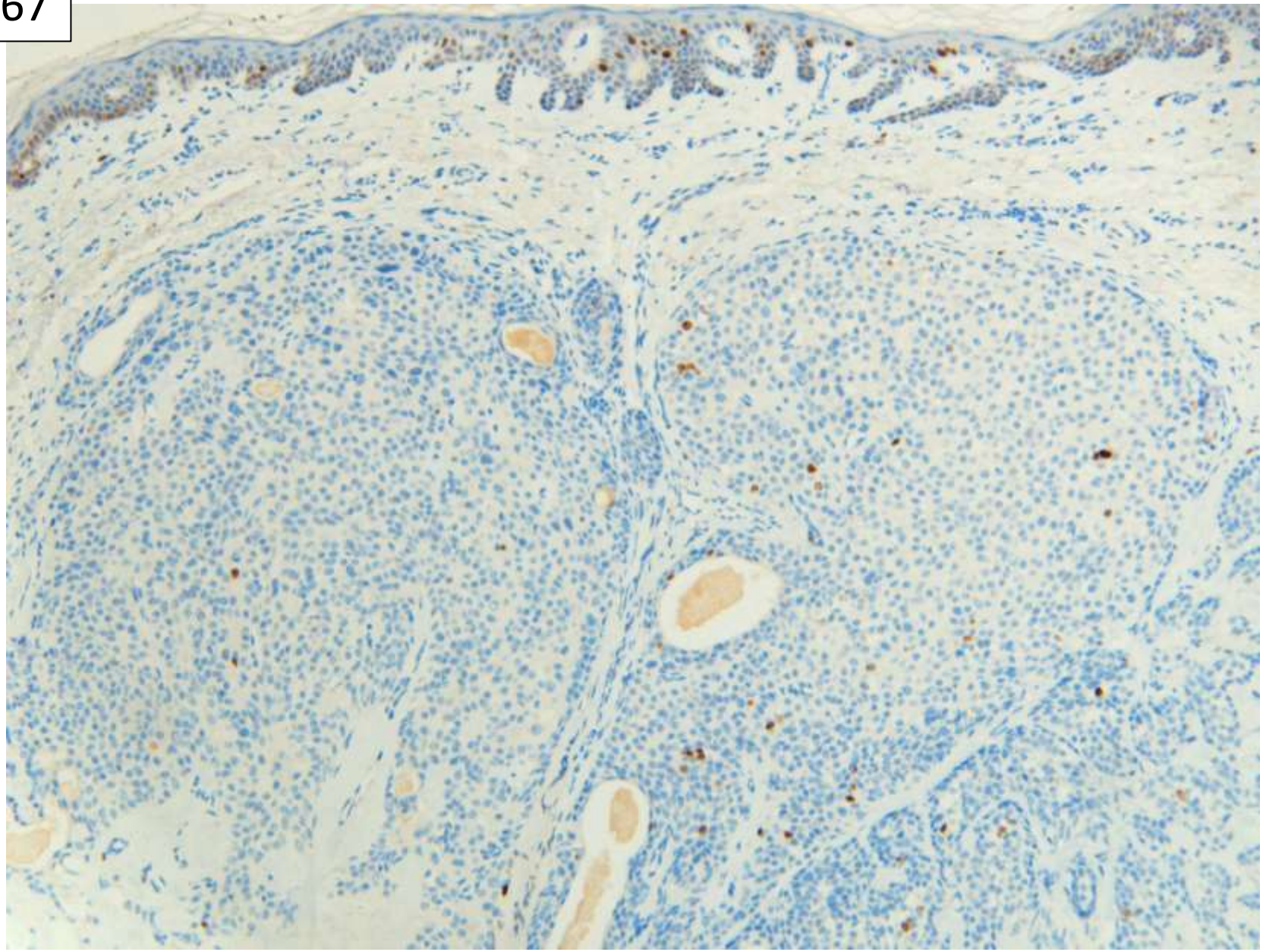


Referred Case c/o Saleem Taibjee

RAC7105



Ki67



s/b National Expert: Hybrid follicular, glandular elements, very bland, concerning feature is the "infiltrative" growth pattern with extension on to margin. On this basis **low grade malignancy cannot entirely be excluded**, and despite the lack of likely metastatic potential, local recurrence is a possibility as indicated in the original report. Conservative re-excision may be advisable.

RAC: Rounded pushing overall profile. Rather infiltrative appearing pale and clear cells central squamous morular / squamous cuticular ductal differentiation but lumina sparse (strongly by CEA and to a lesser extent EMA) with amorphous secretions strongly +ve for PAS and EMA). BerEP4 patchy moderate ++50%, CK5 diffuse, Ki67 5-10%. Amorphous stroma typical of hidradenoma and lesion extensively sclerotic centrally. Sparse calcicification some rounded psammoma like but larger. Focally myofibroblastic spindle cells stroma slightly myxoid but not typically chondroid. In my opinion **a typical example of a sclerosing variant of hidradenoma**. No worrying features for malignancy but local recurrence is a possibility.

No mitoses. No cellular pleomorphism.

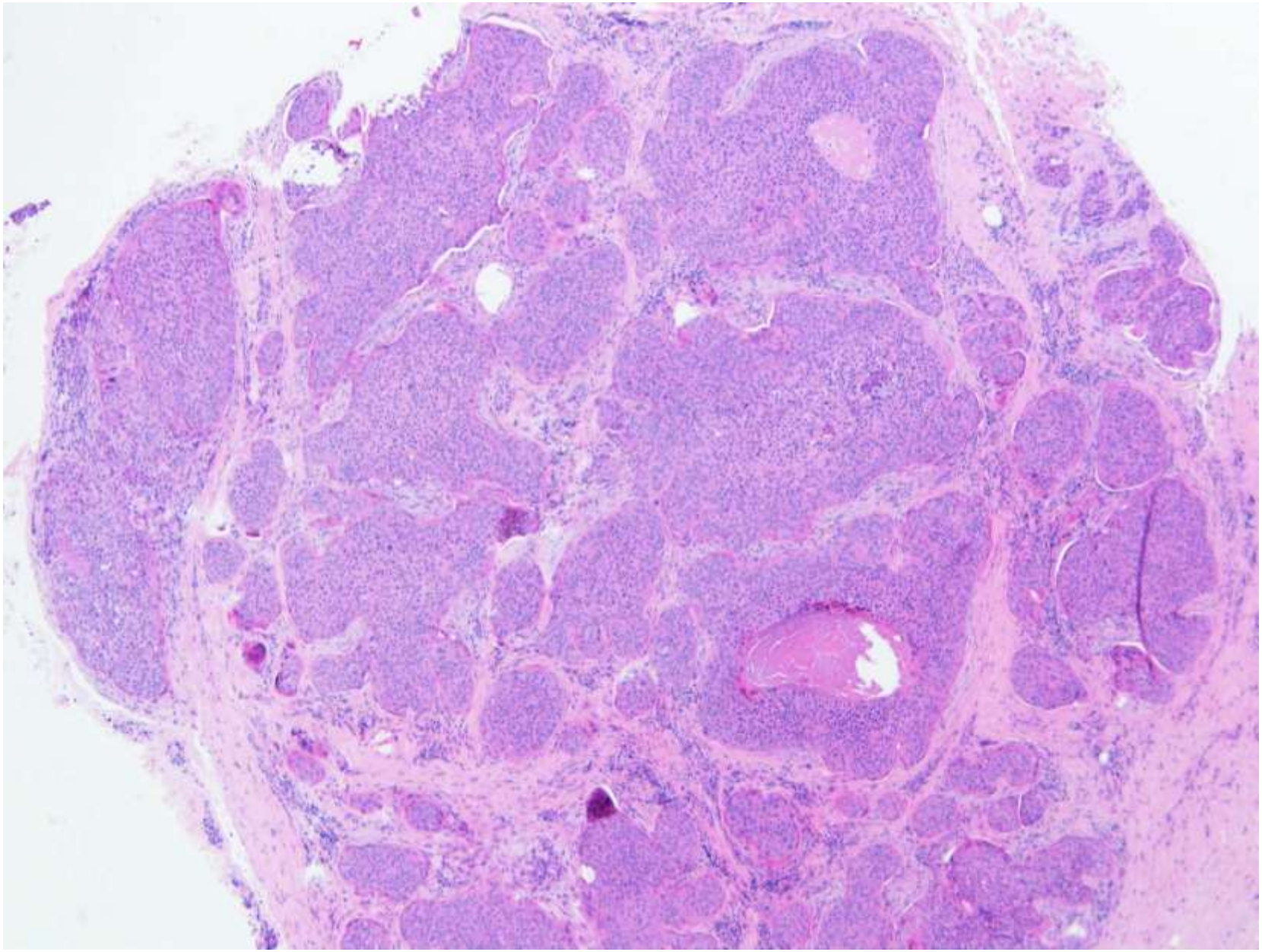
Dear Richard,

Thank you for sending me this interesting case. I completely agree with you that this is a **hidradenoma**. The sclerotic appearances are likely due to the location/ chronic repeated trauma. ***I think it is a benign lesion but after having seen cases of benign metastatic hidradenoma, I would recommend complete excision.***

Best regards, Dmitry Kazakov

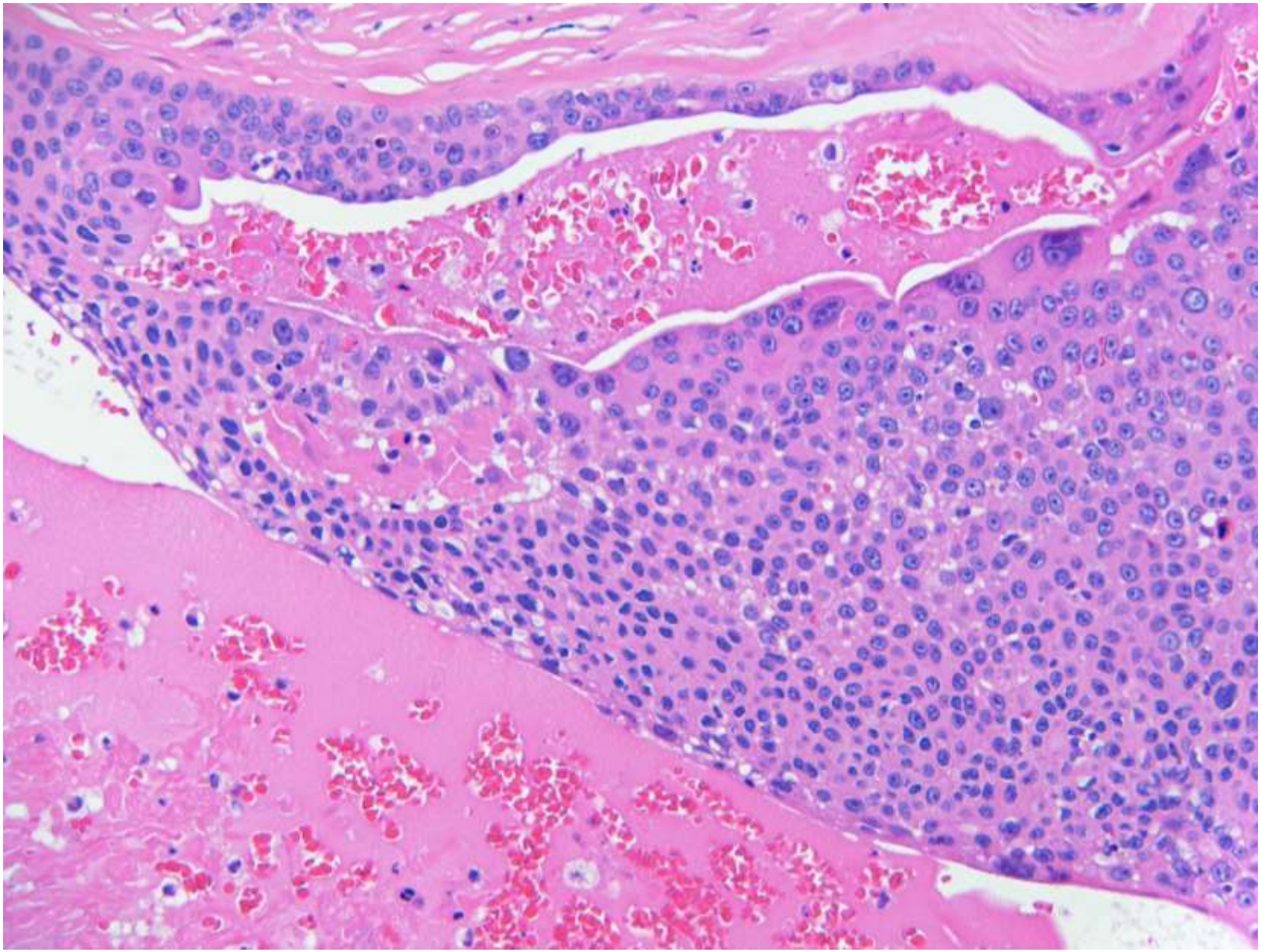
Next Case

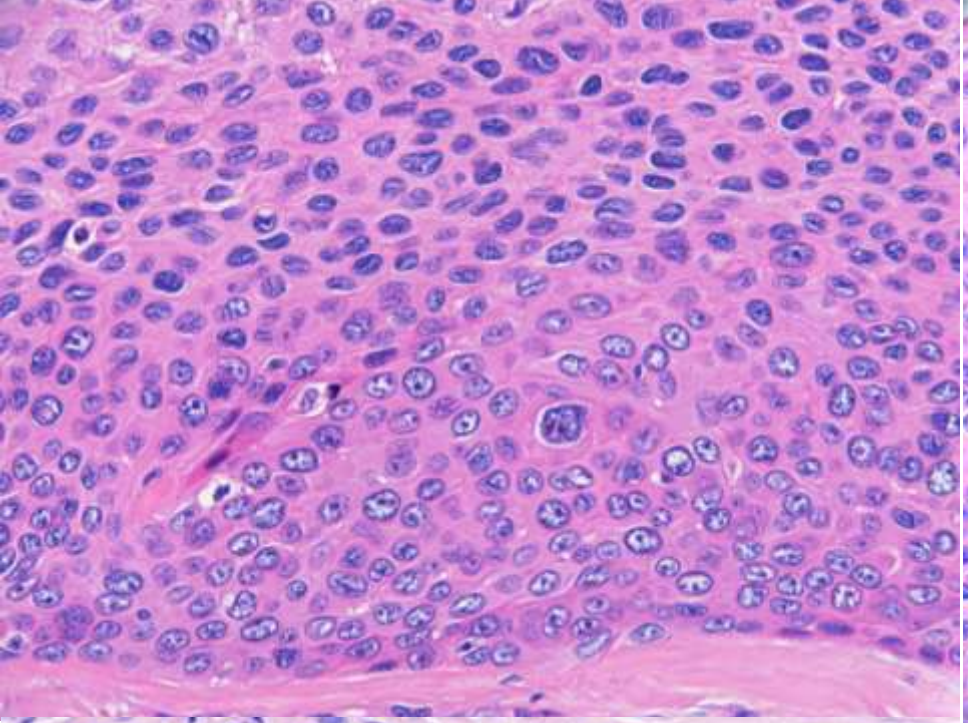
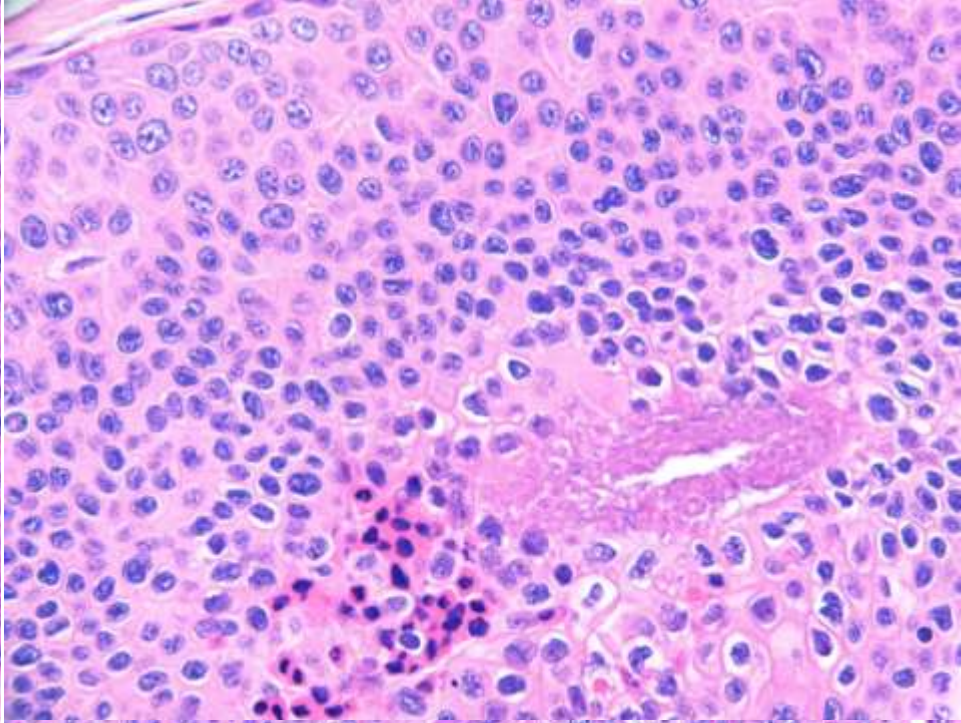
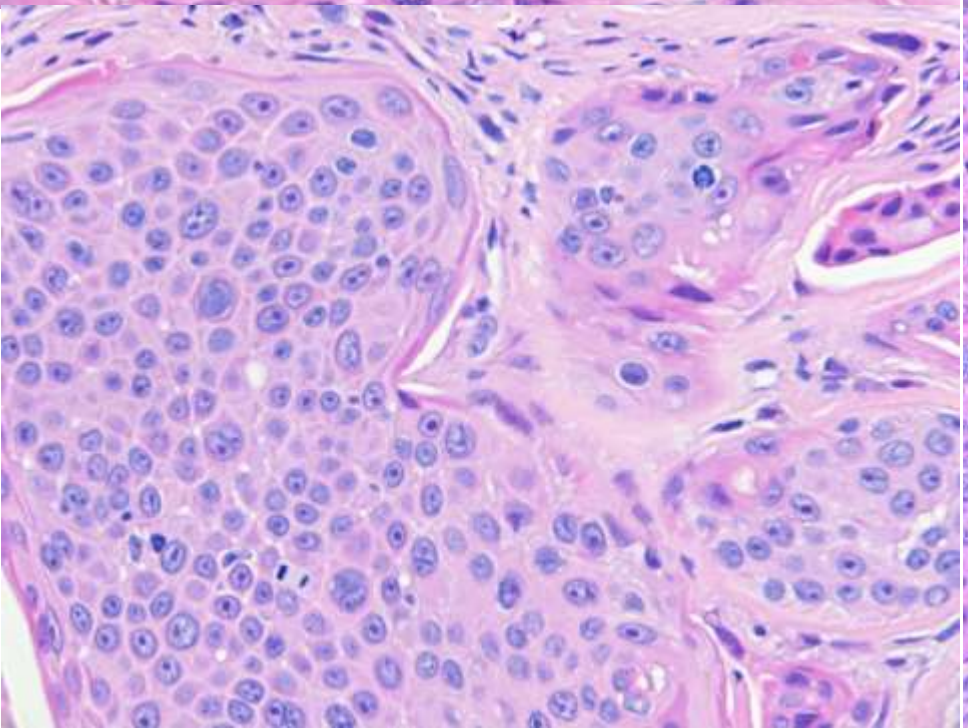
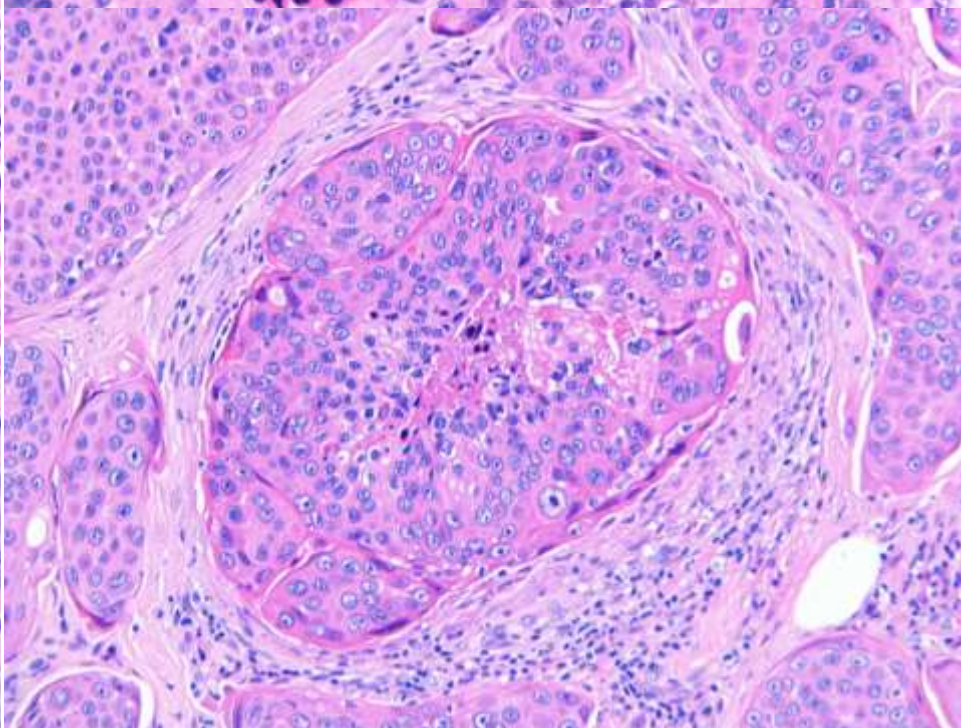
M54. Left middle finger. Soft tissue swelling ?Giant cell PVNS

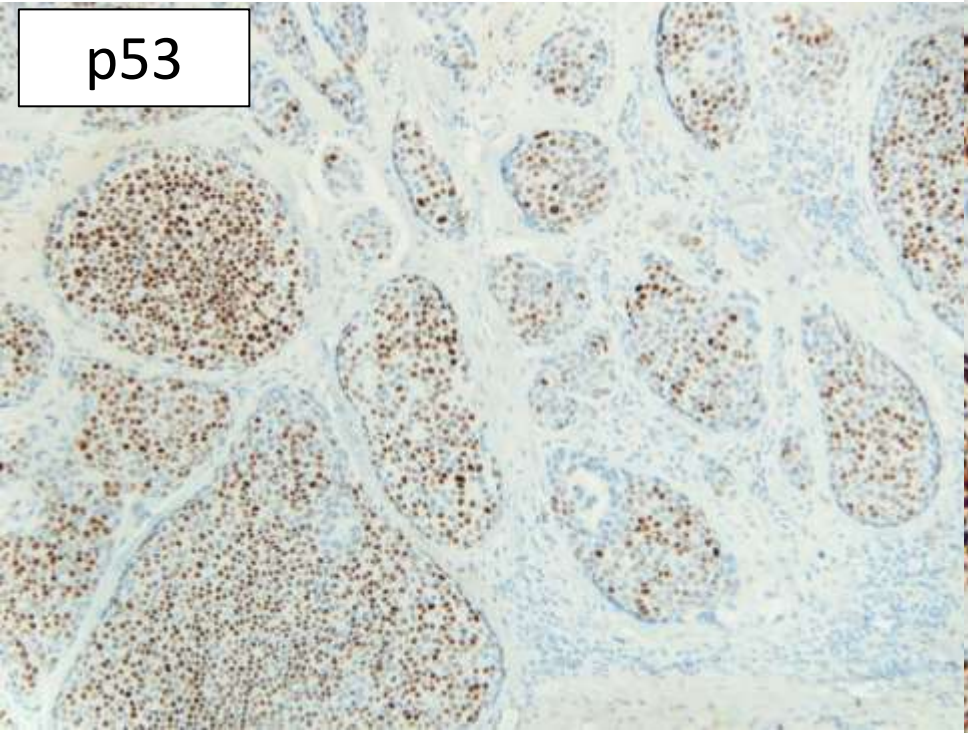


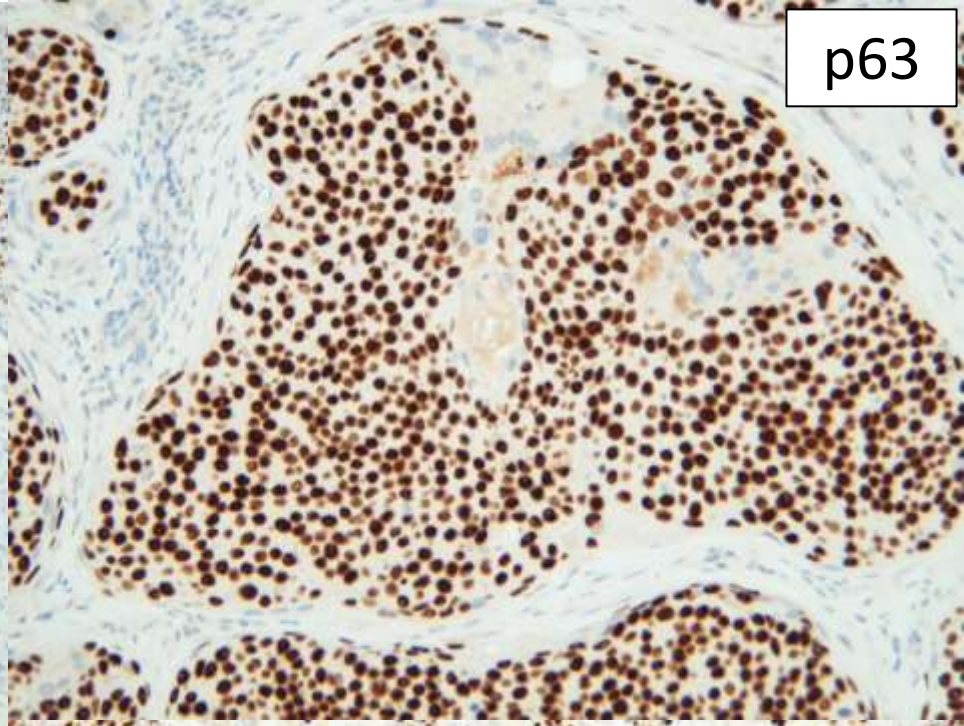
Referral Case c/o Dr Saleem Taibjee

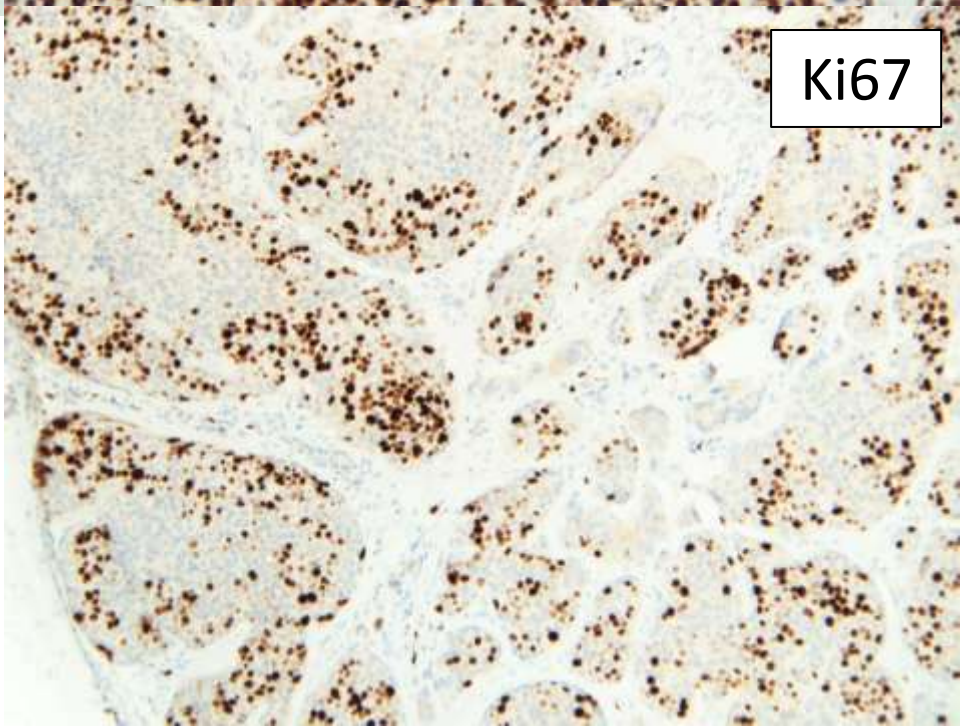
RAC6914









- My Diagnosis -

Atypical Hidradenoma

Advice: Ensure complete excision

Atypical / Malignant Hidradenoma

[Nazarian RM et al Modern Pathology 2009; 22: 600-610]

Atypical

Frequent:

- Loss of circumscription

Occasional:

- Infiltrative growth
- Necrosis (focal)
- Nuclear pleomorphism

Malignant

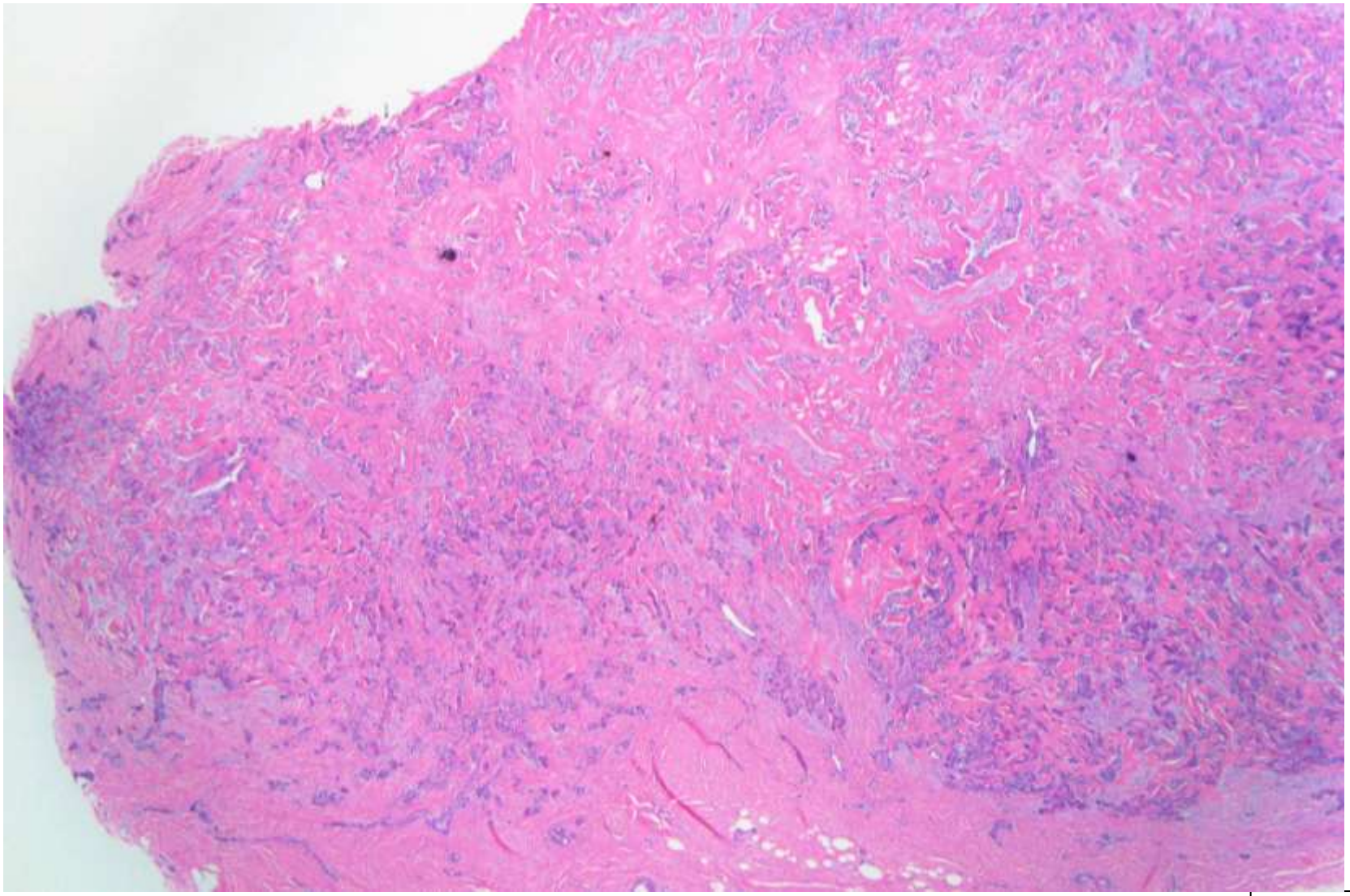
Frequent:

- Loss of circumscription
- Infiltrative growth
- Nuclear pleomorphism
- >4 mitoses/10HPF
- Necrosis (comedo)
- Deep extension

Occasional: PNI/LVI

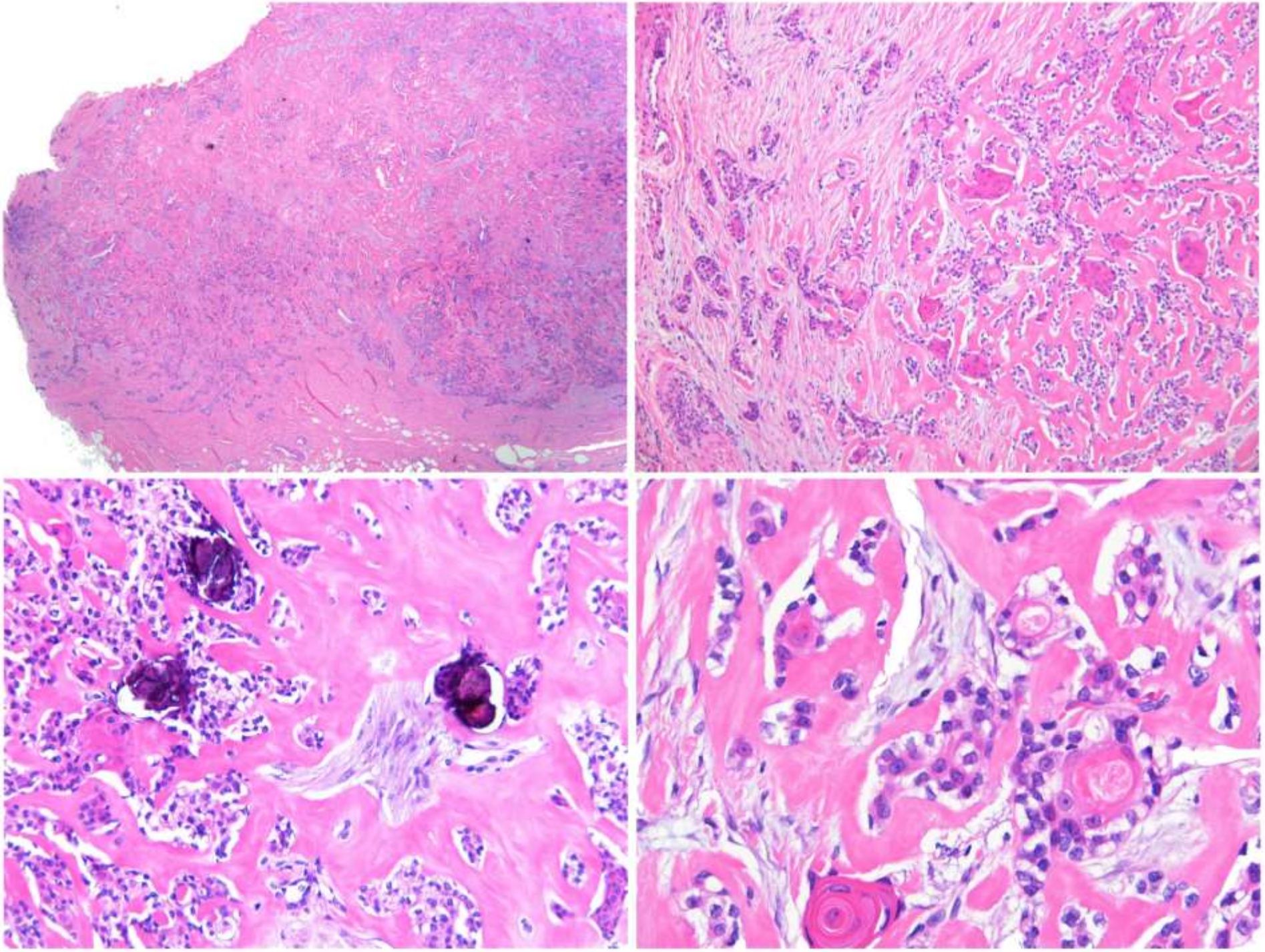
Next Case

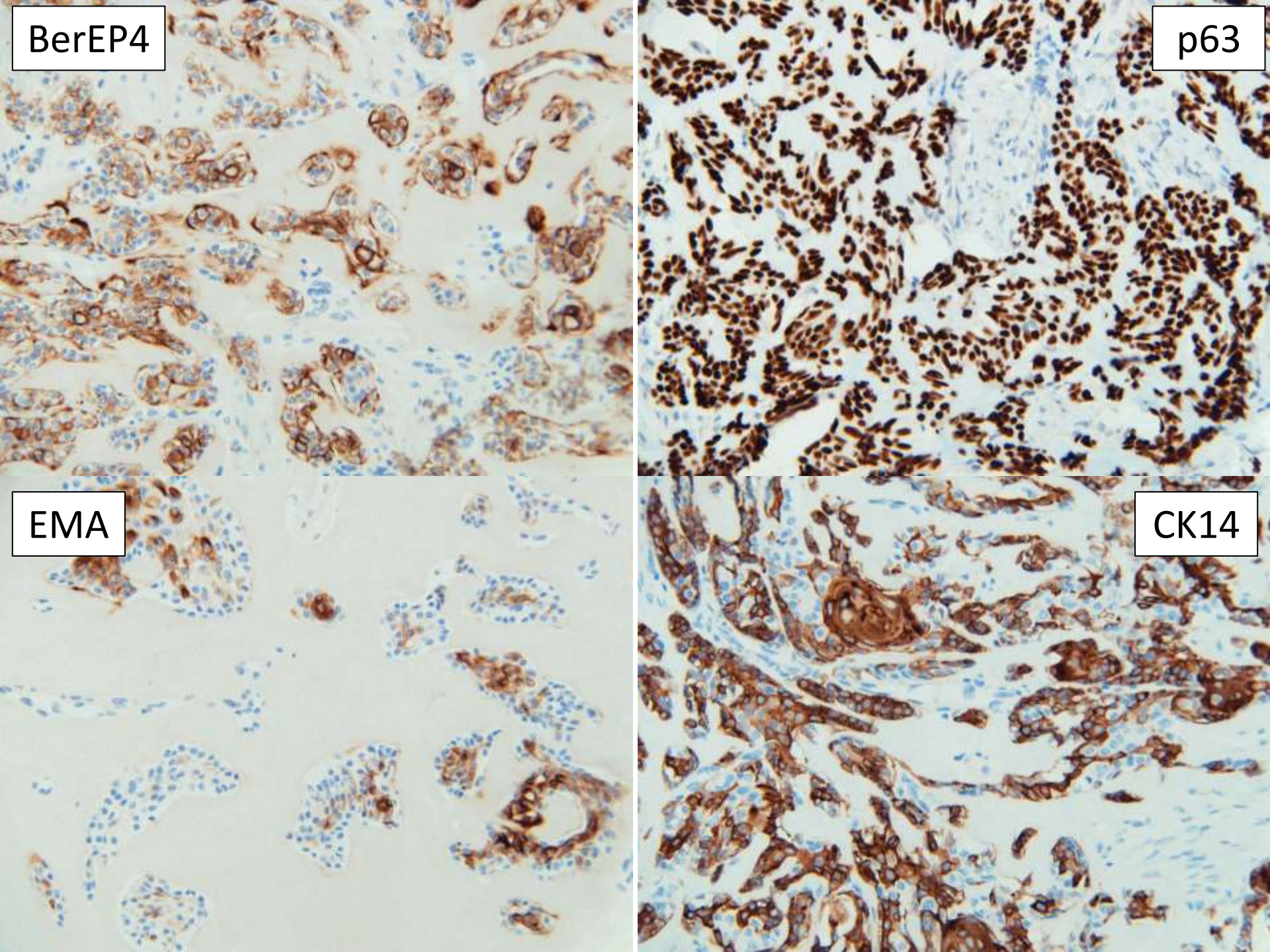
(2015) F63. Medial big toe (Rt). Previous cylindroma ear. “Benign” eccrine tumour left foot (2001) - Slides n/a. Recurrent swelling medial aspect Right big toe ? MTPJ area ? Nature of swelling.

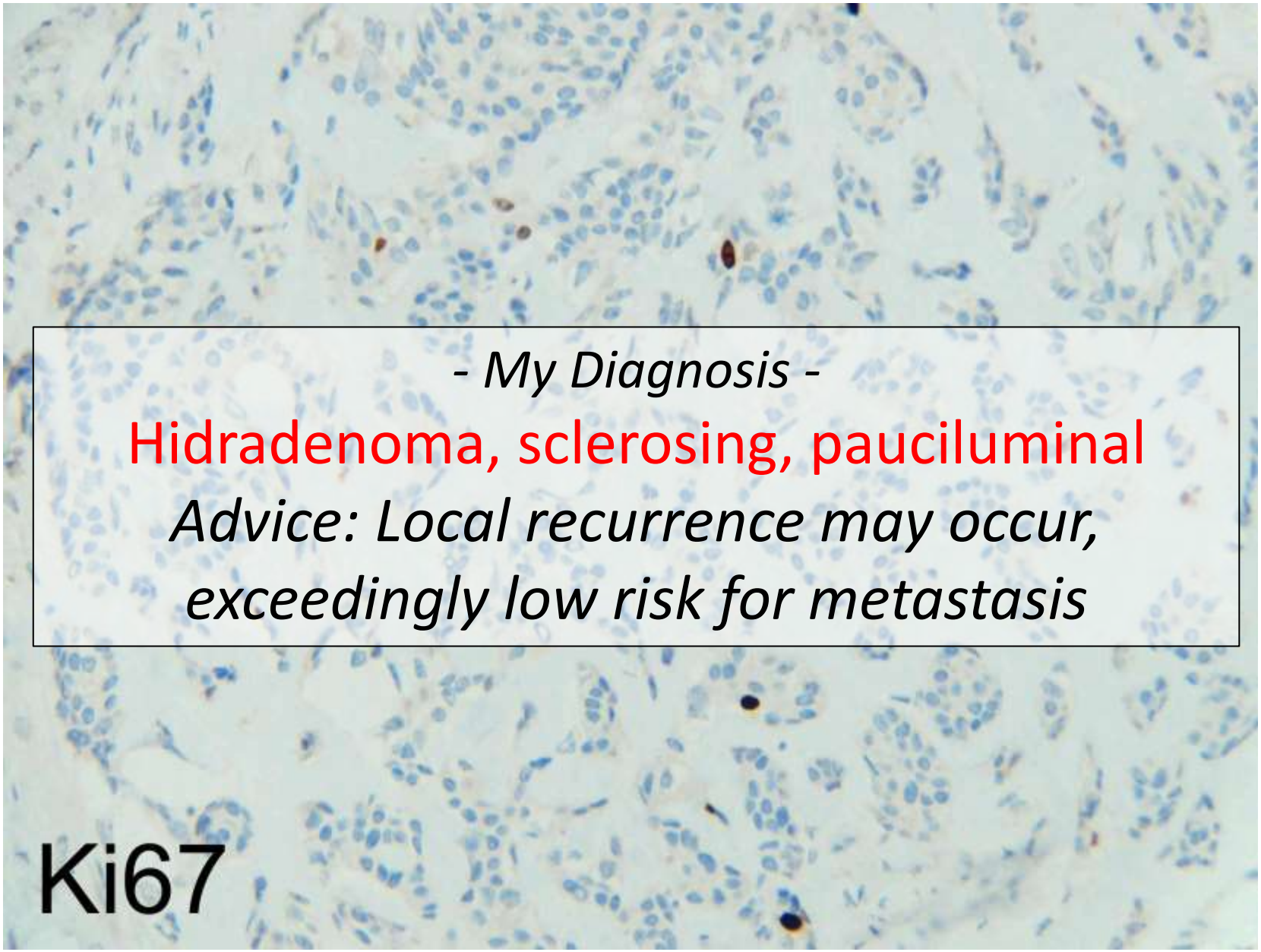


Referral Case c/o Rand Hawari

RAC7077

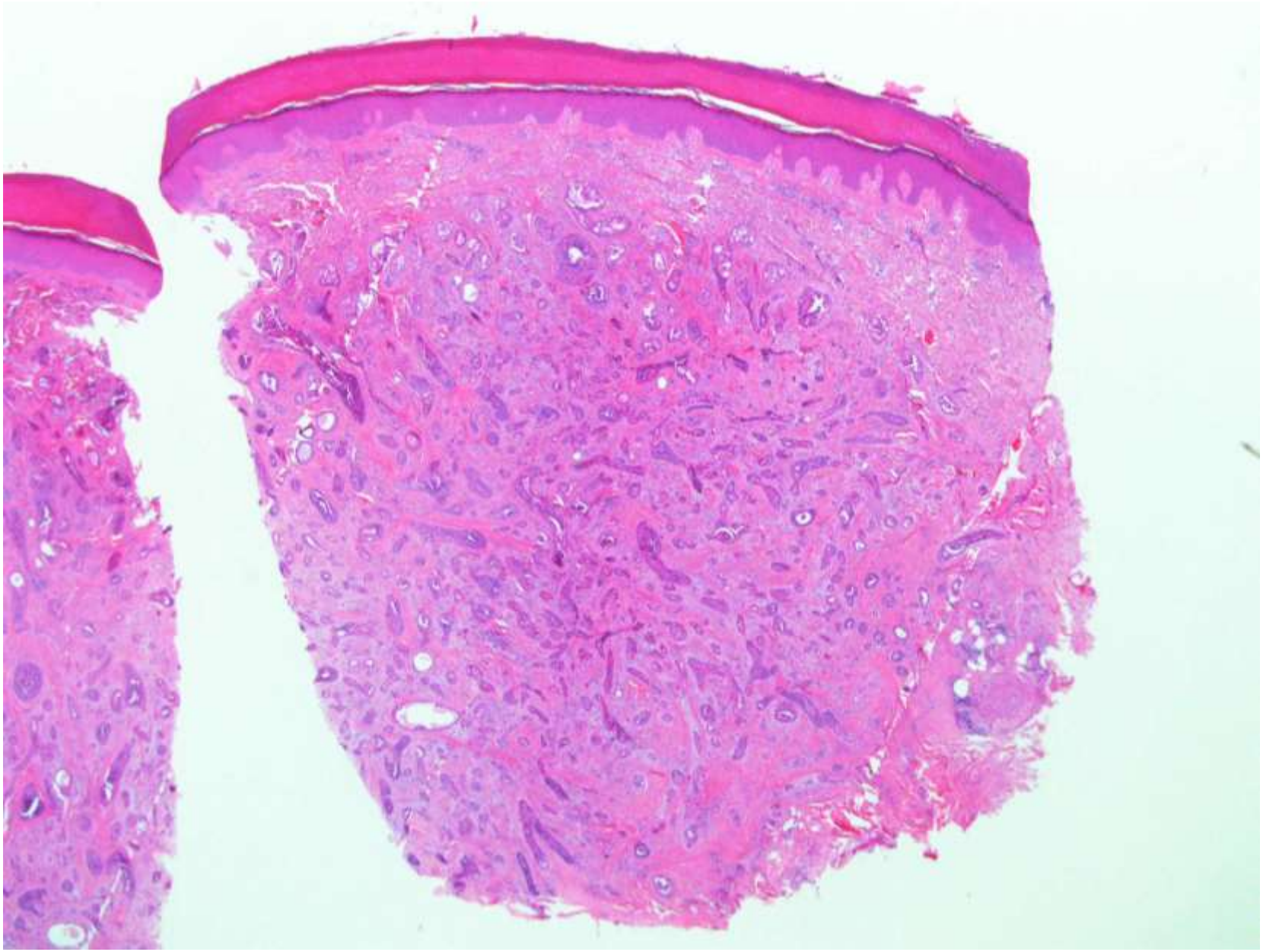


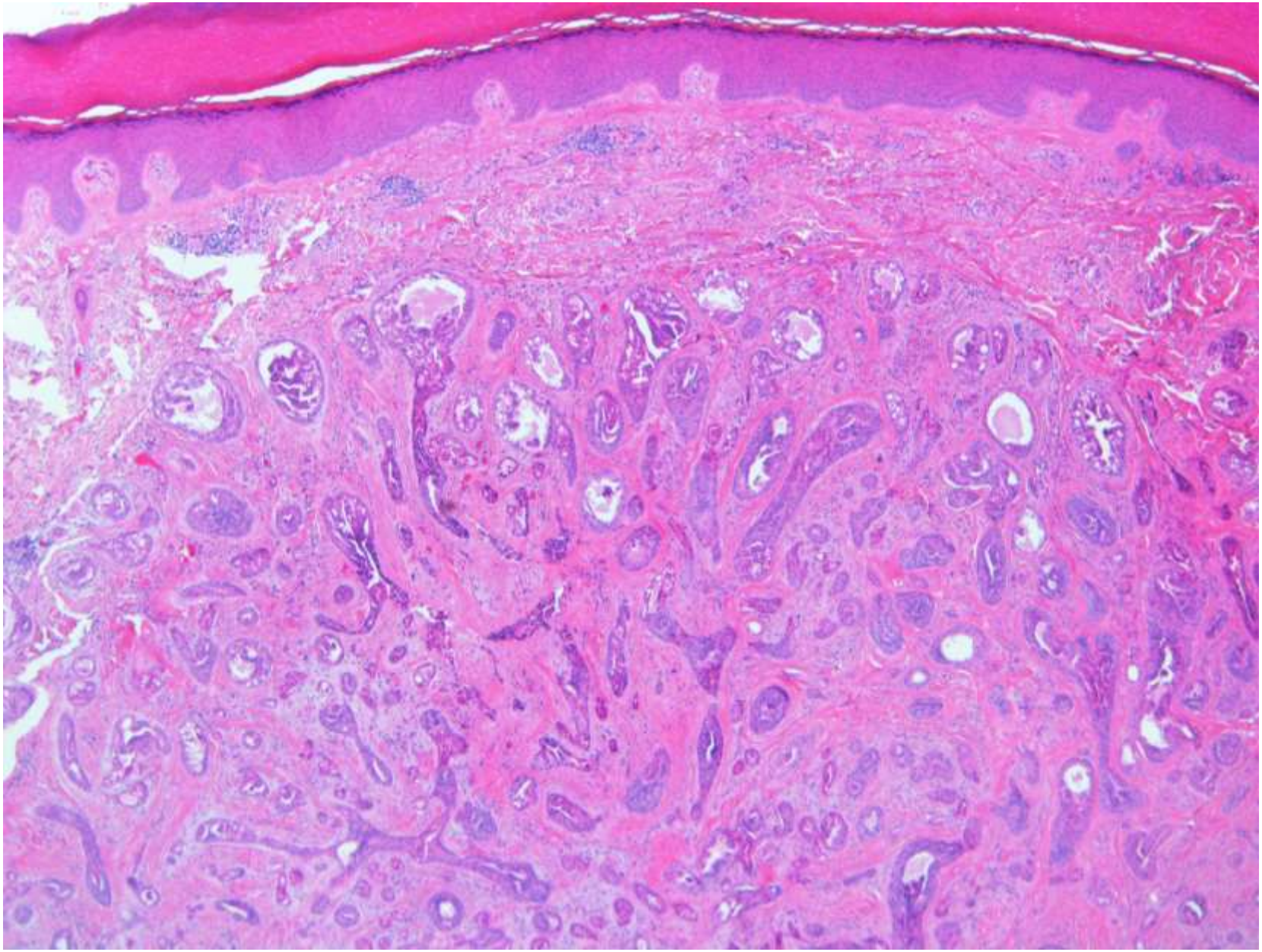

BerEP4
p63
EMA
CK14

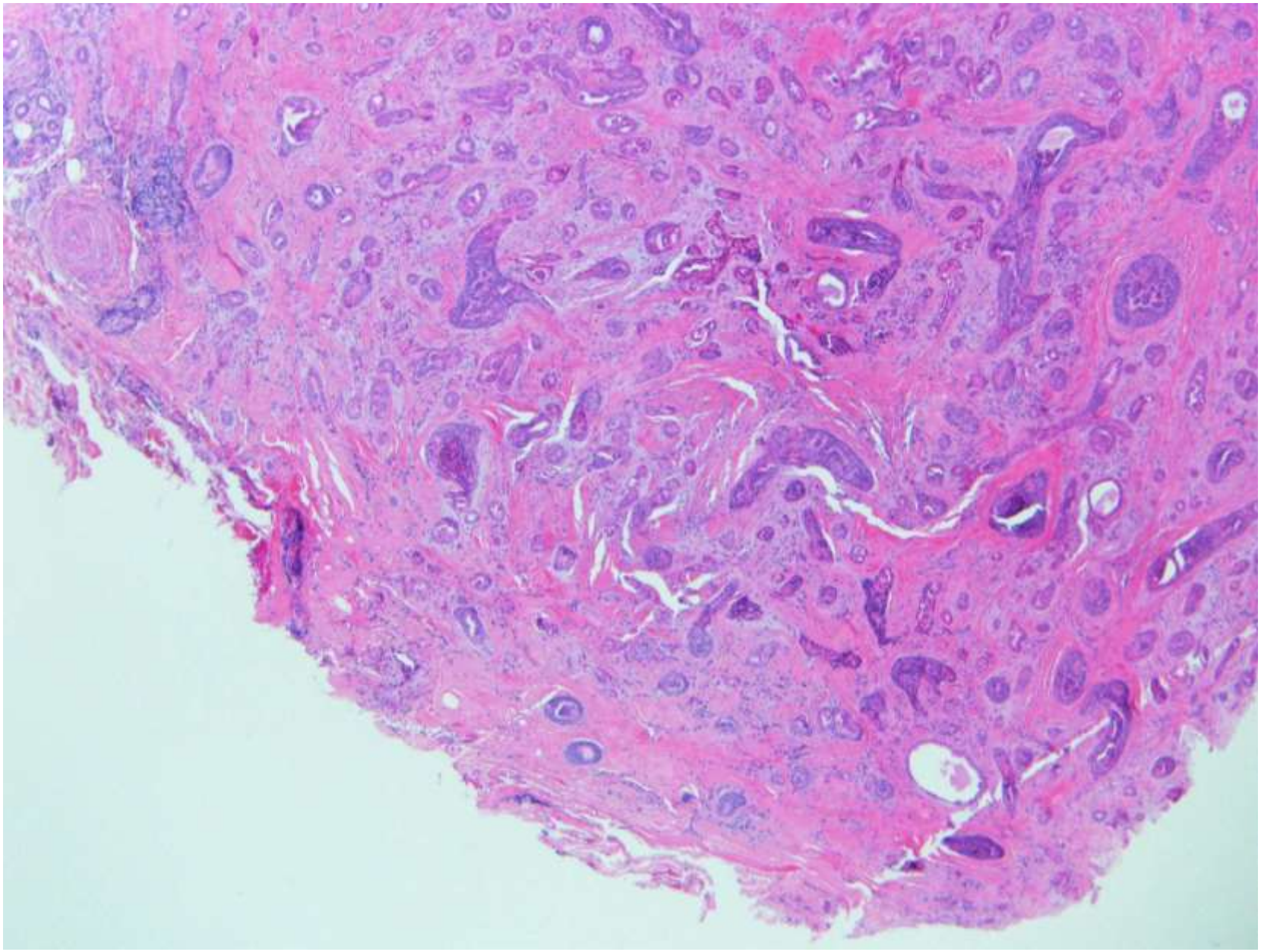

- My Diagnosis -
Hidradenoma, sclerosing, pauciluminal
Advice: Local recurrence may occur,
exceedingly low risk for metastasis
Ki67

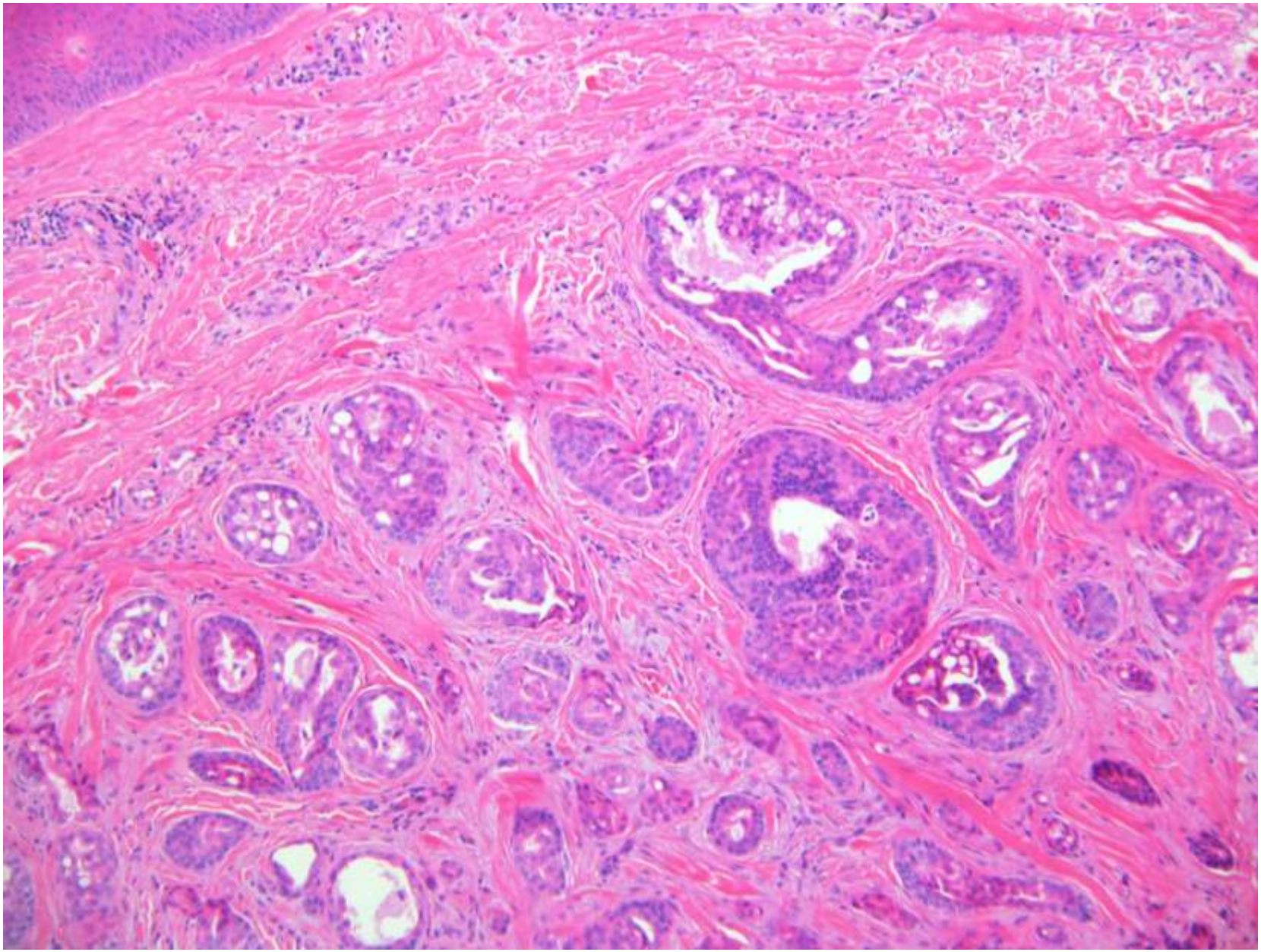
Next Case

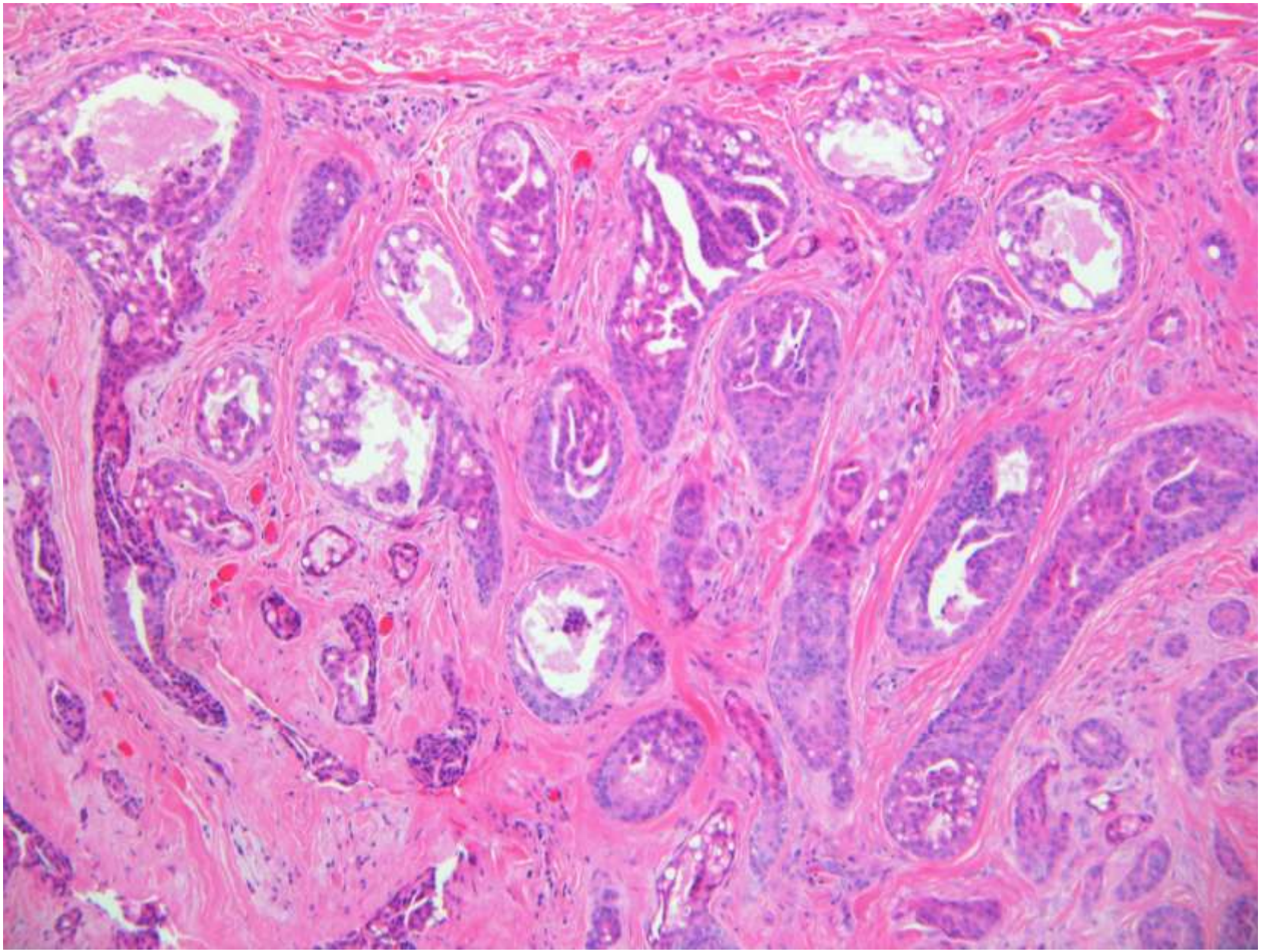
M59. 6/12 months, 13 x 11 pink nodule. ?Lymphoma. To exclude Merkel

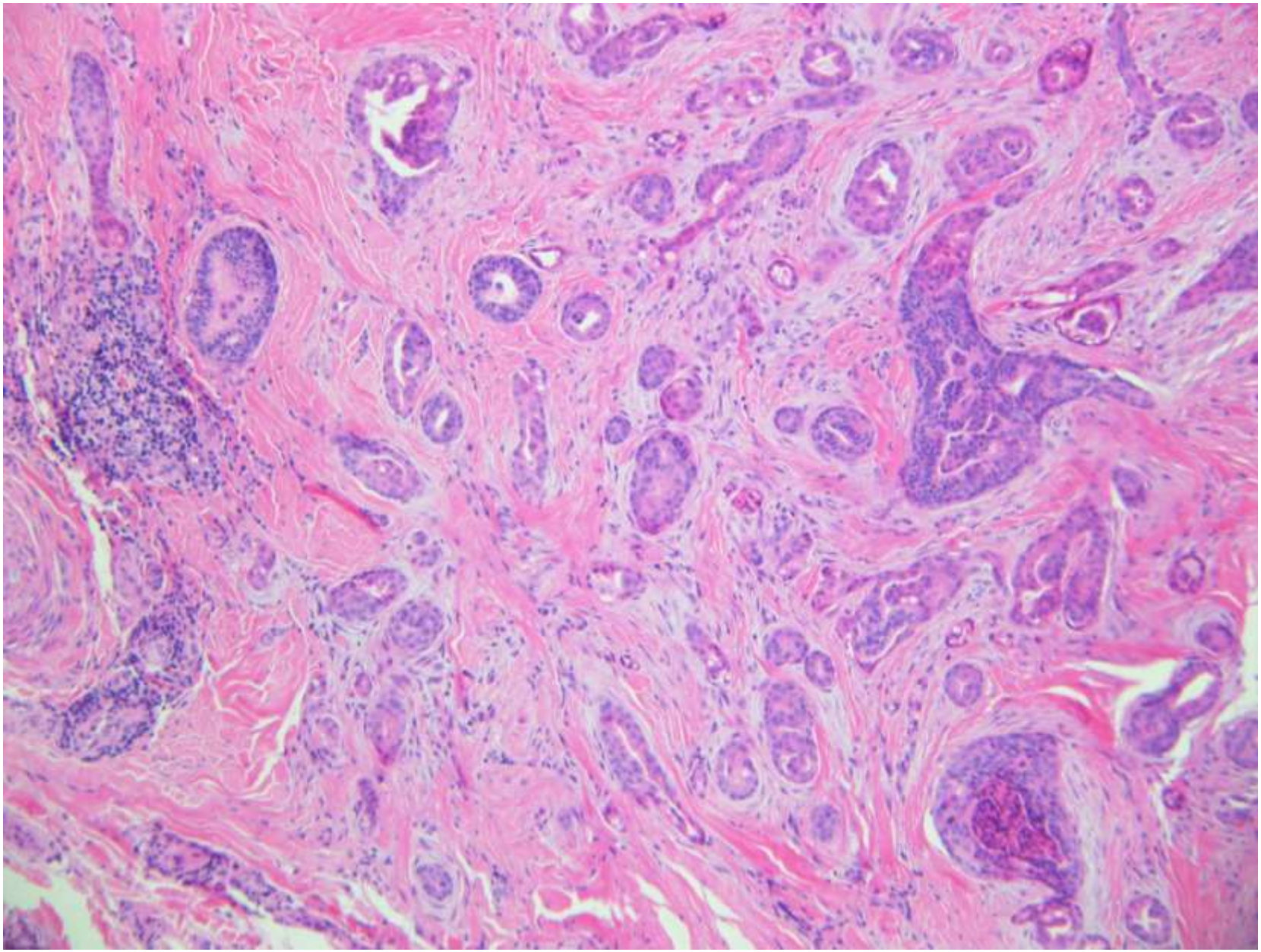


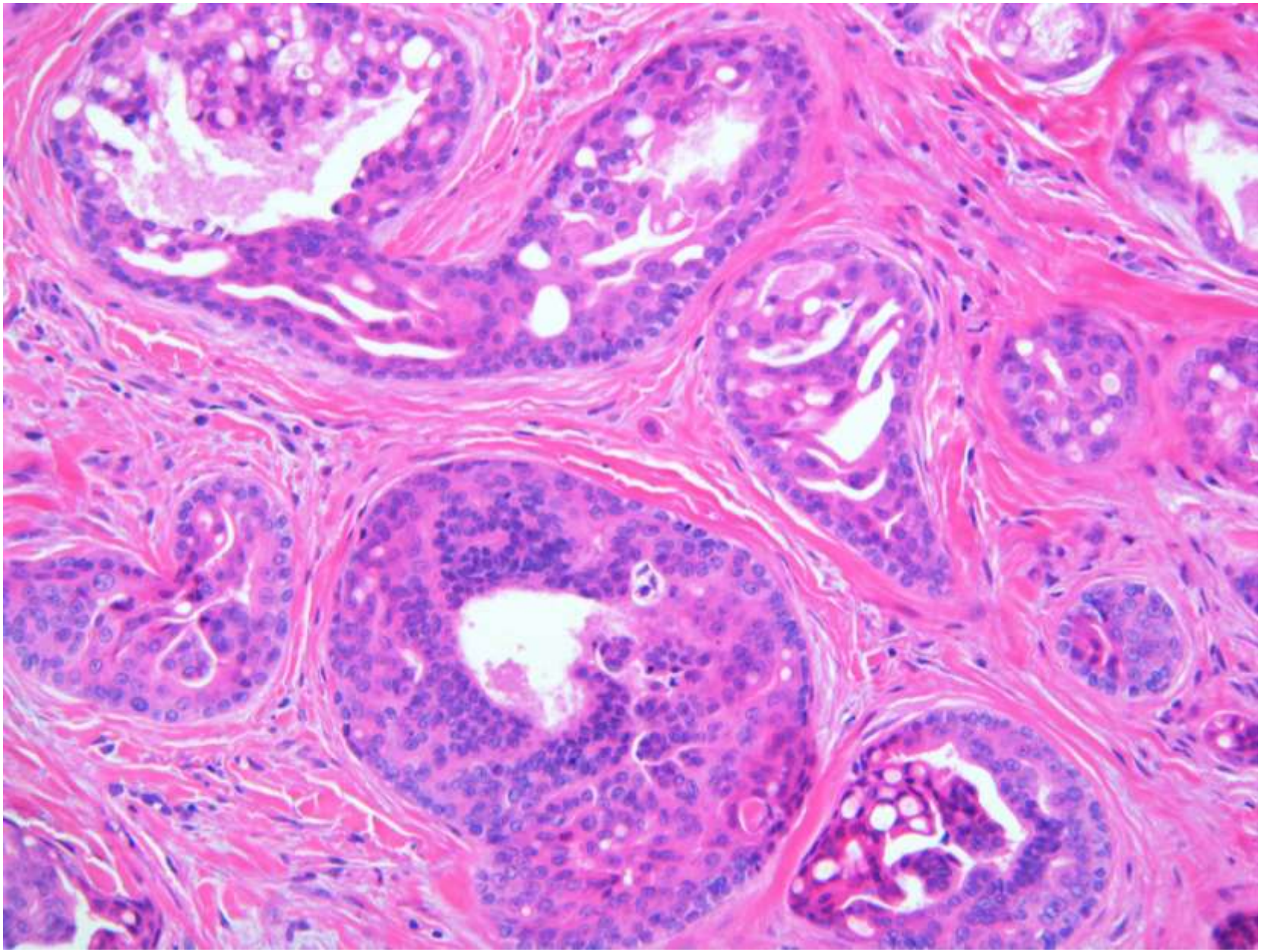


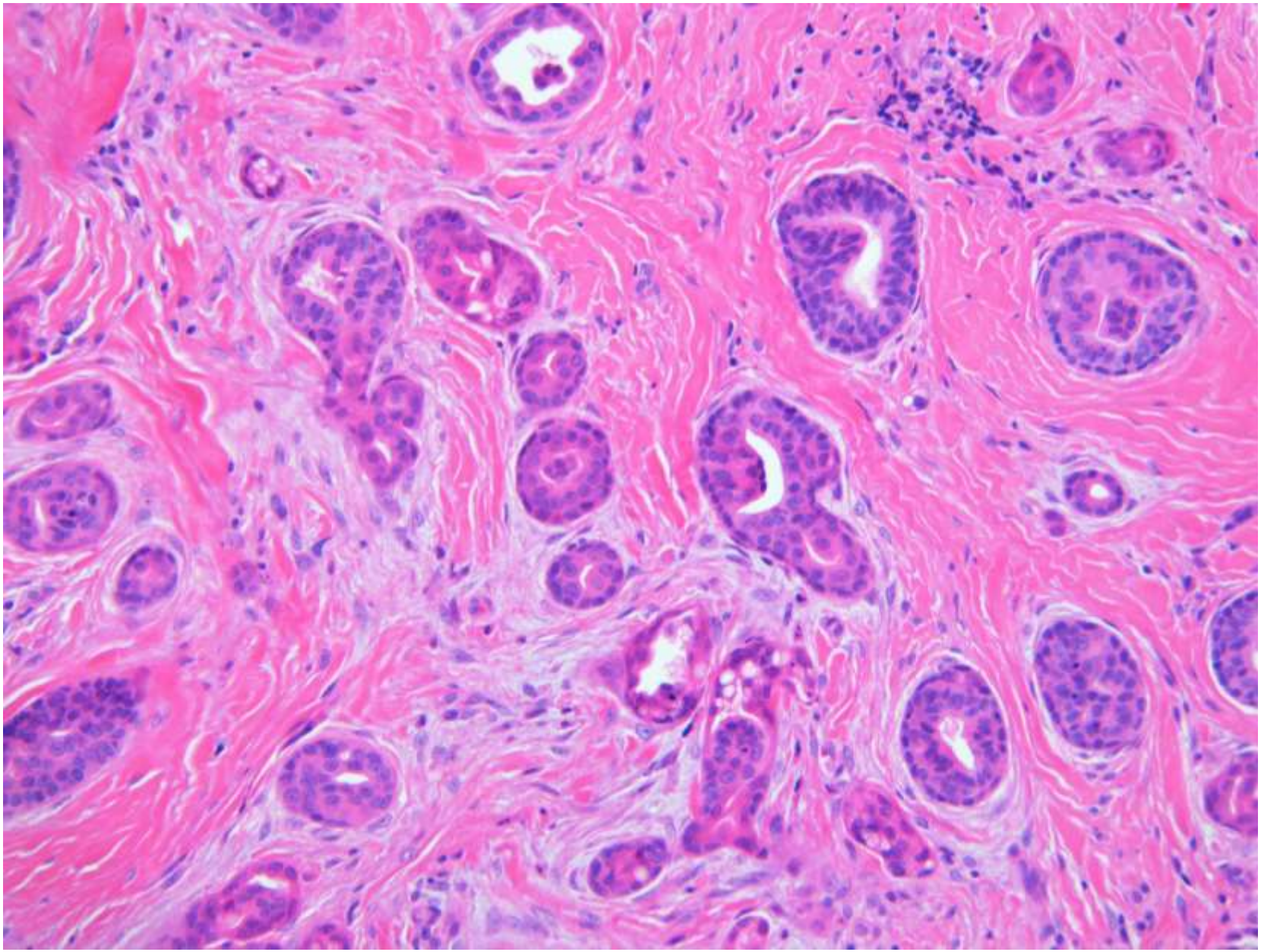


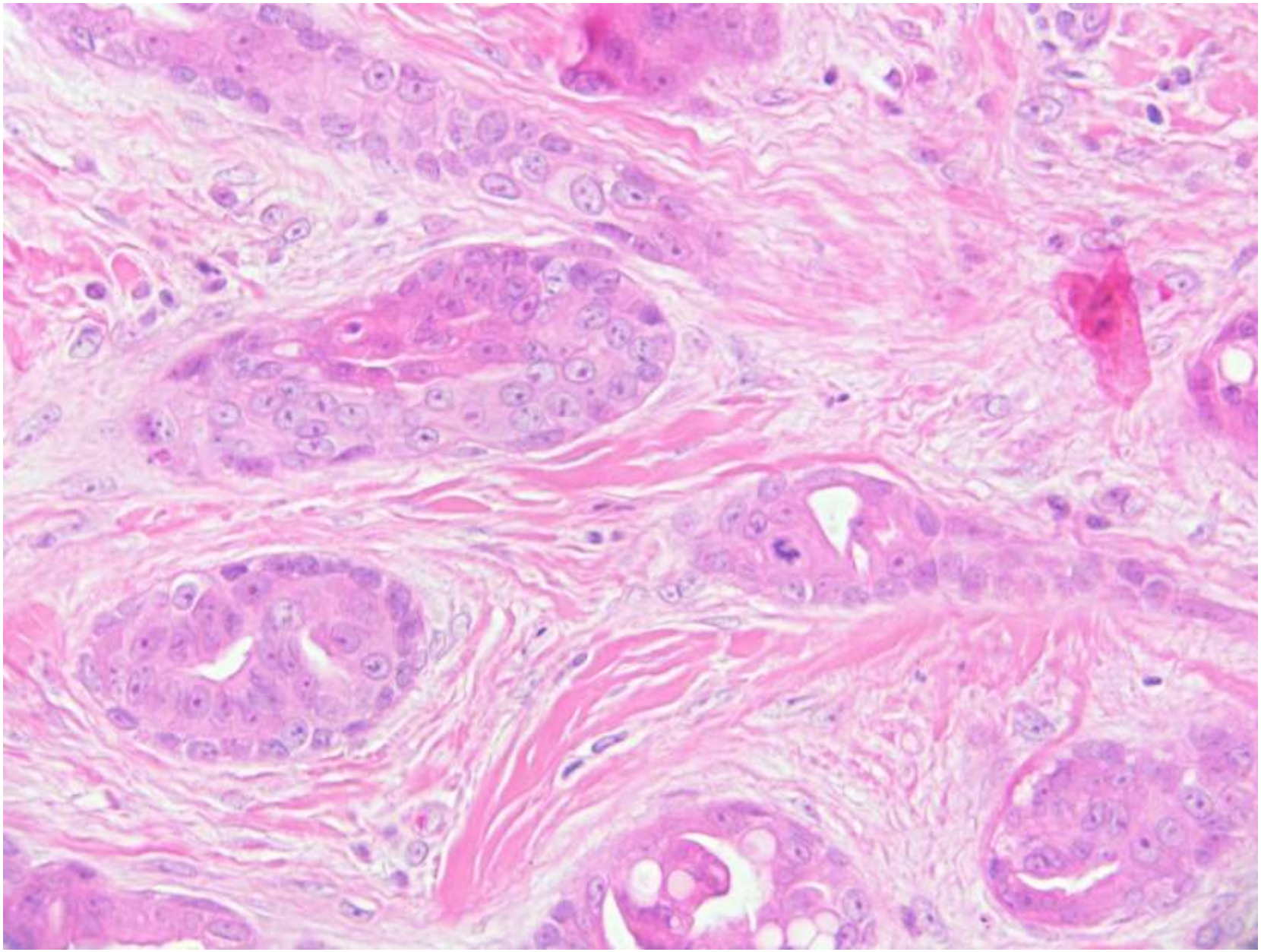


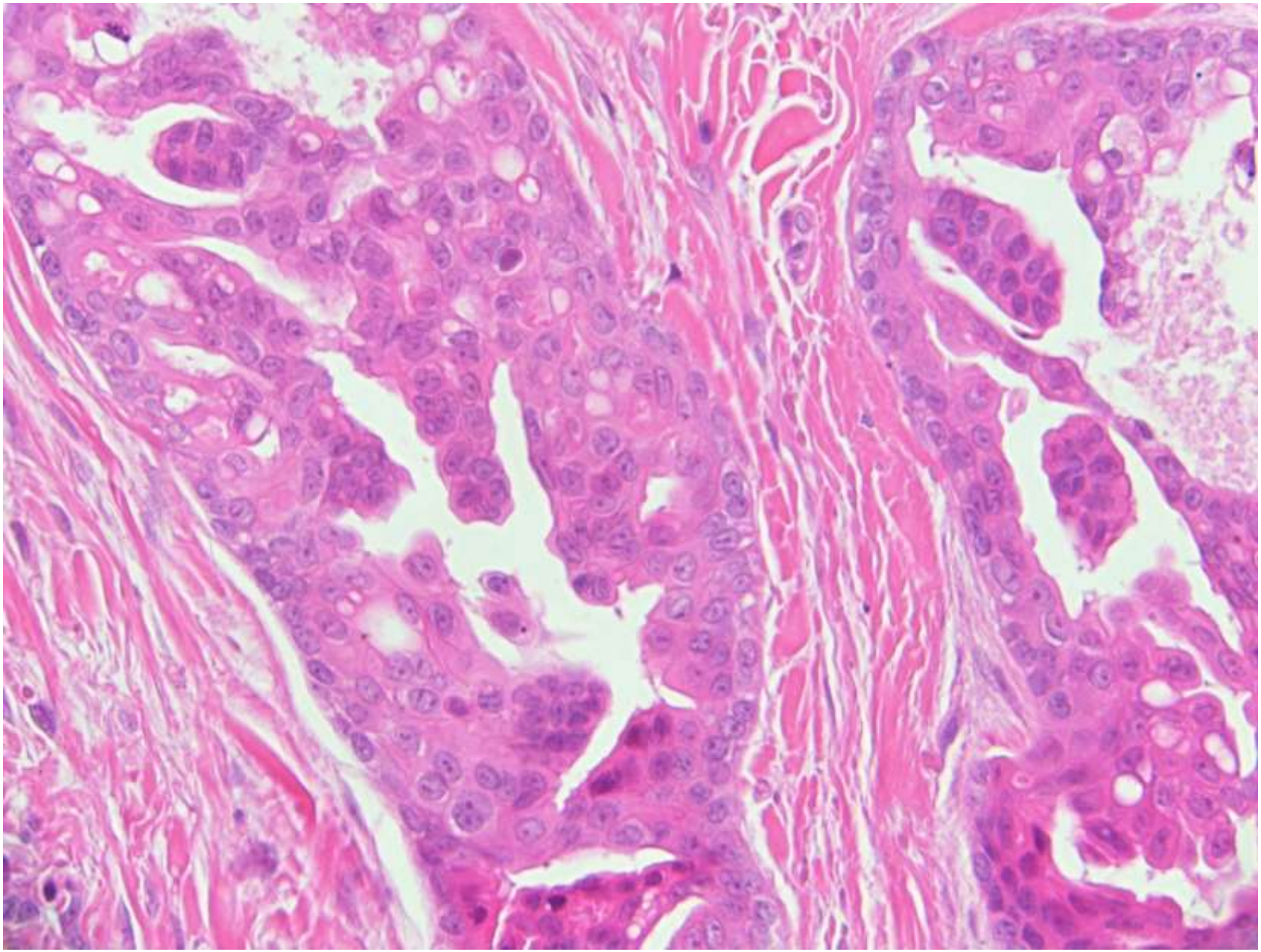


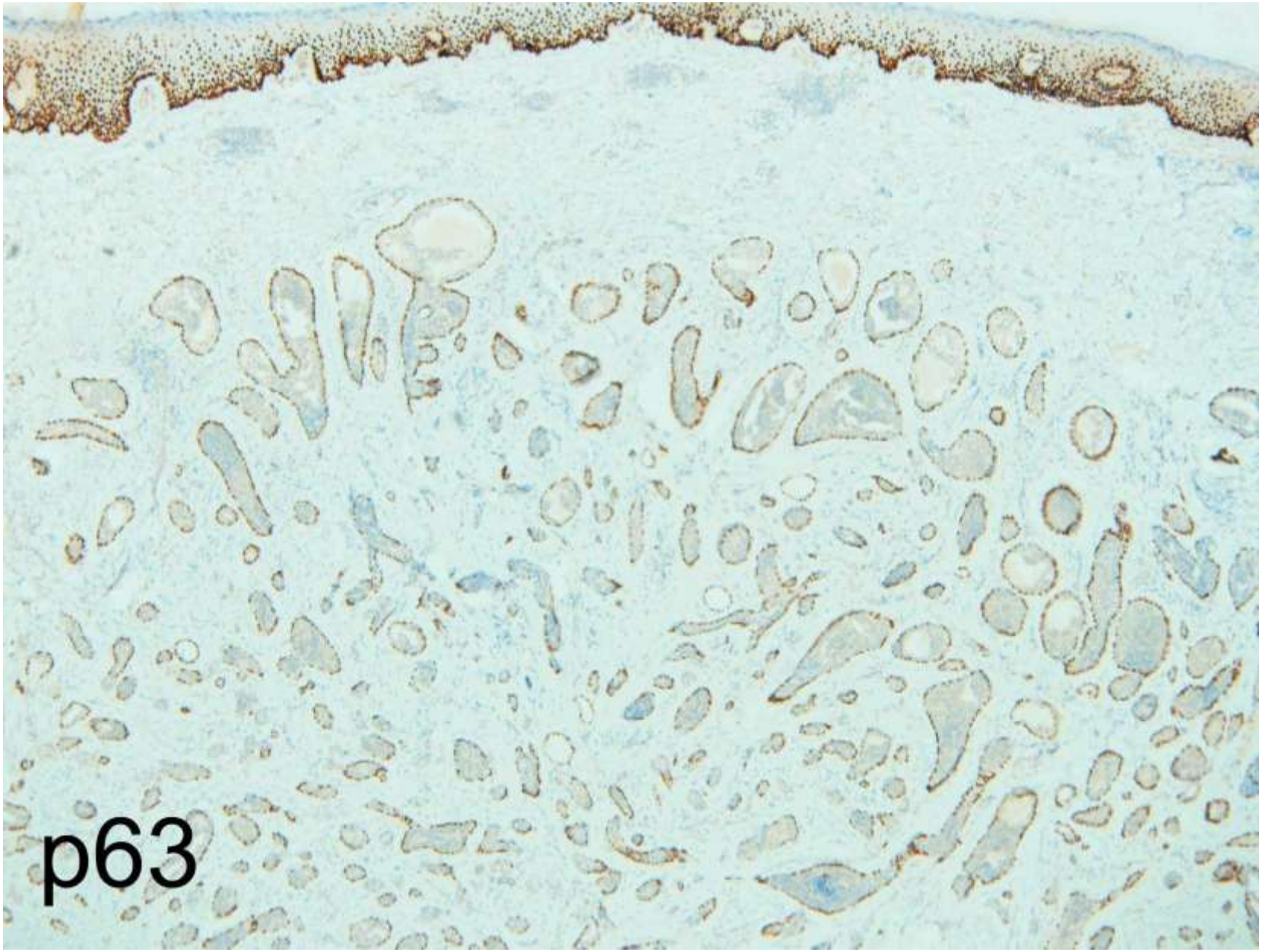


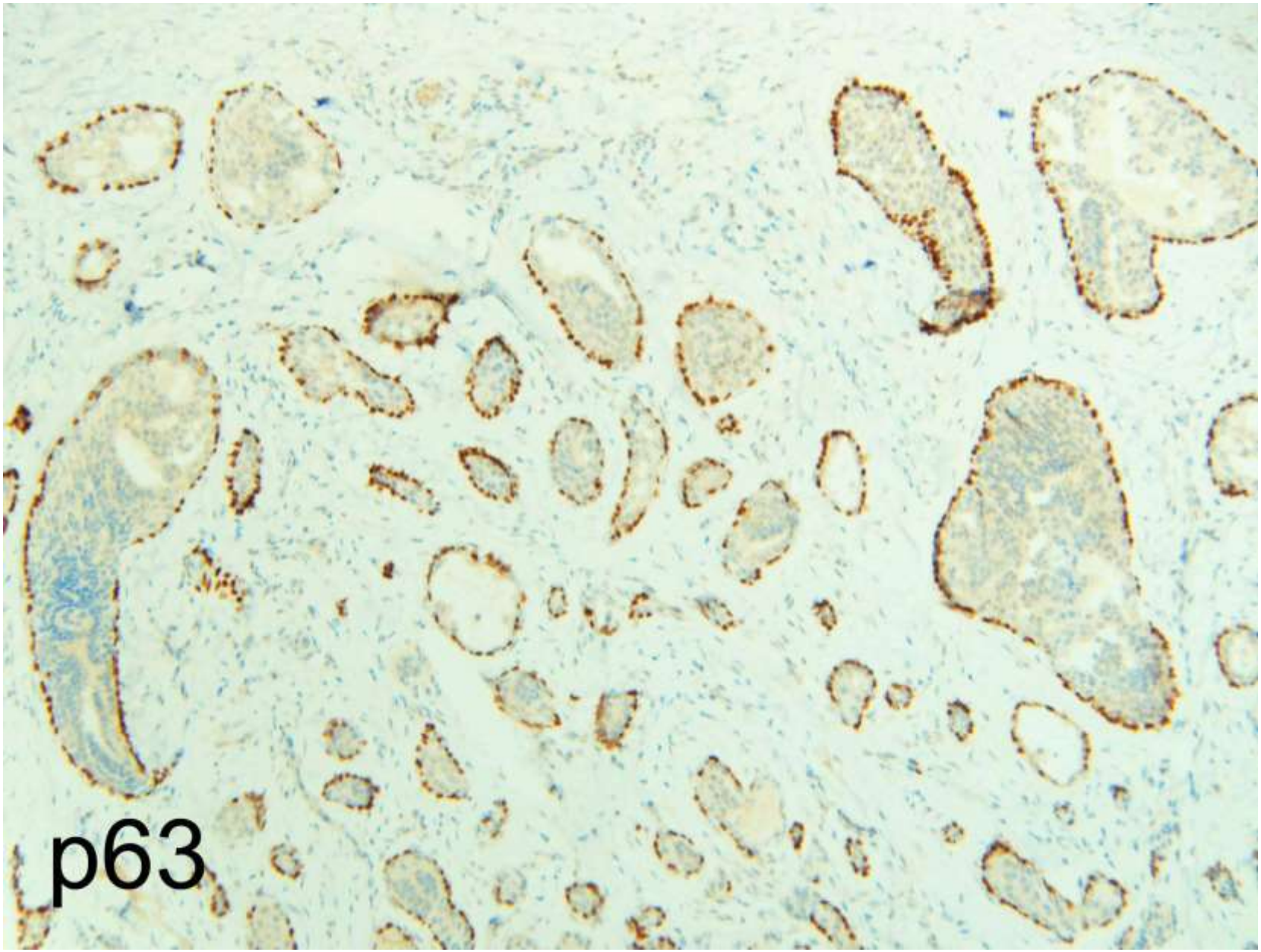









p63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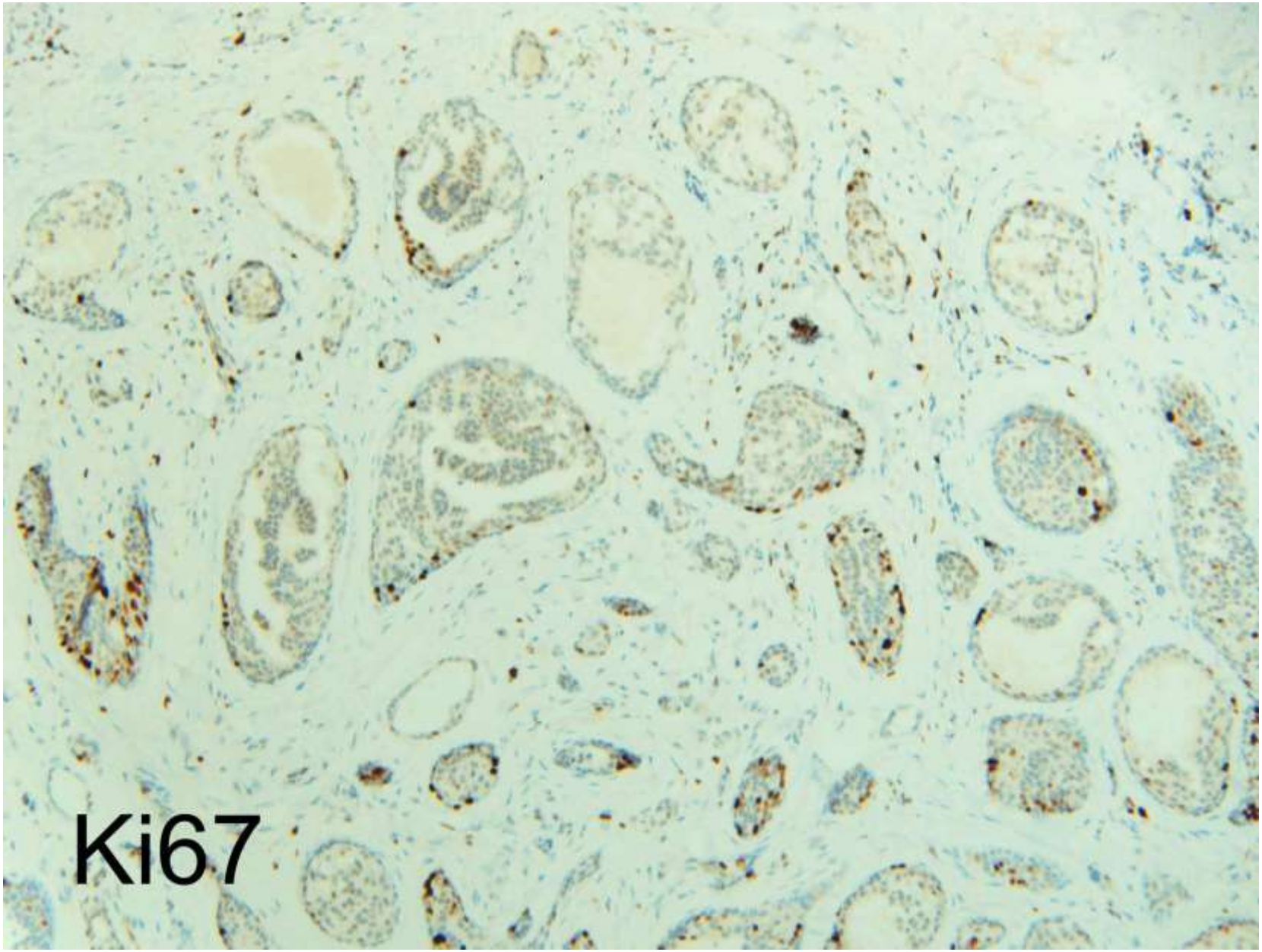

Ki67

My report:

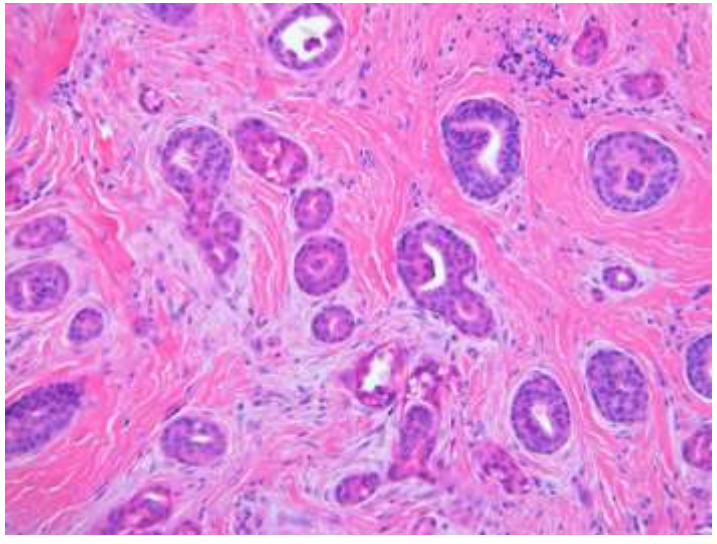
Part of a difficult low grade tubular adenomatous lesion with circumscript upper border (lower border slightly infiltrative but not fully sampled), sparse mitotic activity only and only mild cellular atypia

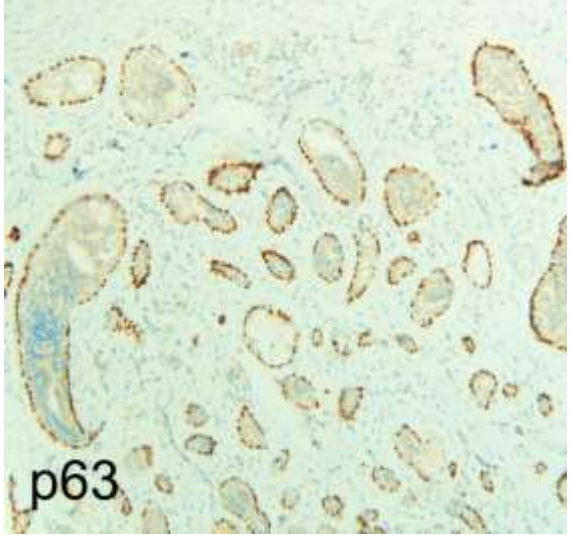
Favouring tubular (papillary) adenoma

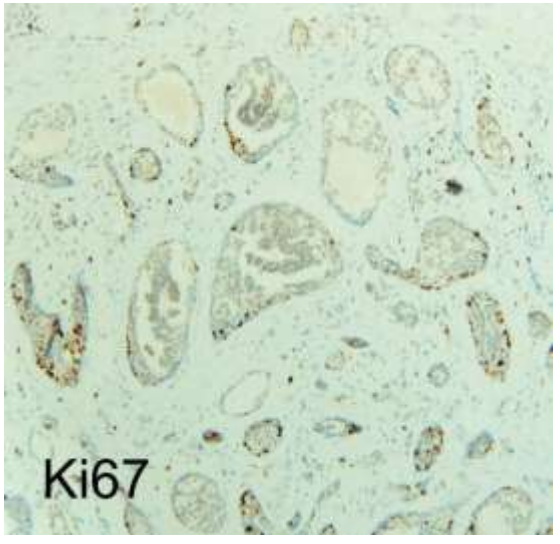
Complete excision with clear margins is recommended.

Comments from my slide database

DDx: Digital papillary adenocarcinoma







Kazakov's Book: Tubular apocrine adenoma (papillary eccrine adenoma)

Micropapillary or rarely true papillary projections

Well circumscribed, and composed of ductal structures with a distinct two cell layer

Solid areas and back-to-back glands not present.

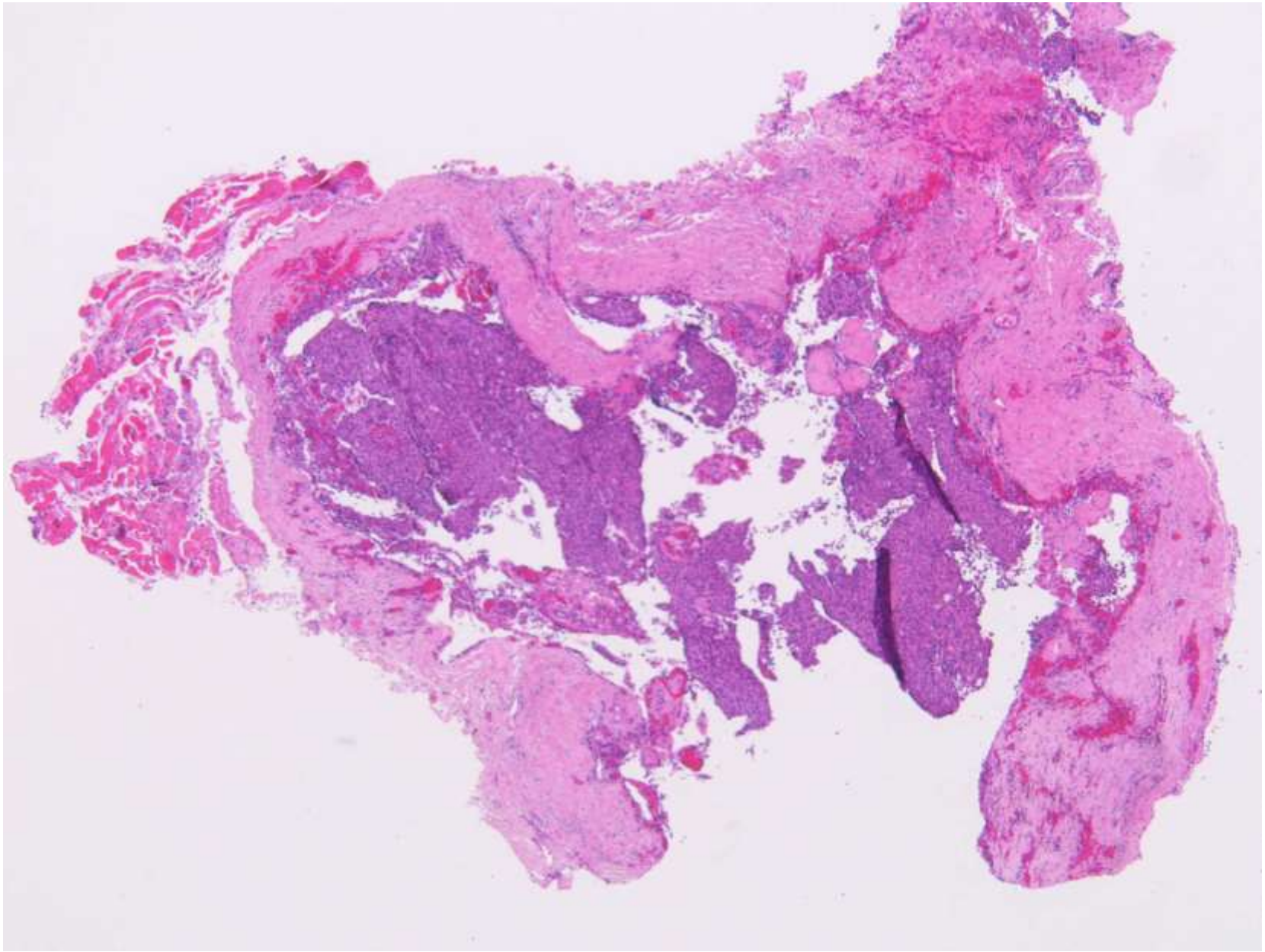
The cystic ductal structures in DPA are usually larger and more dilated than those in tubular adenoma

Not so polymorphous

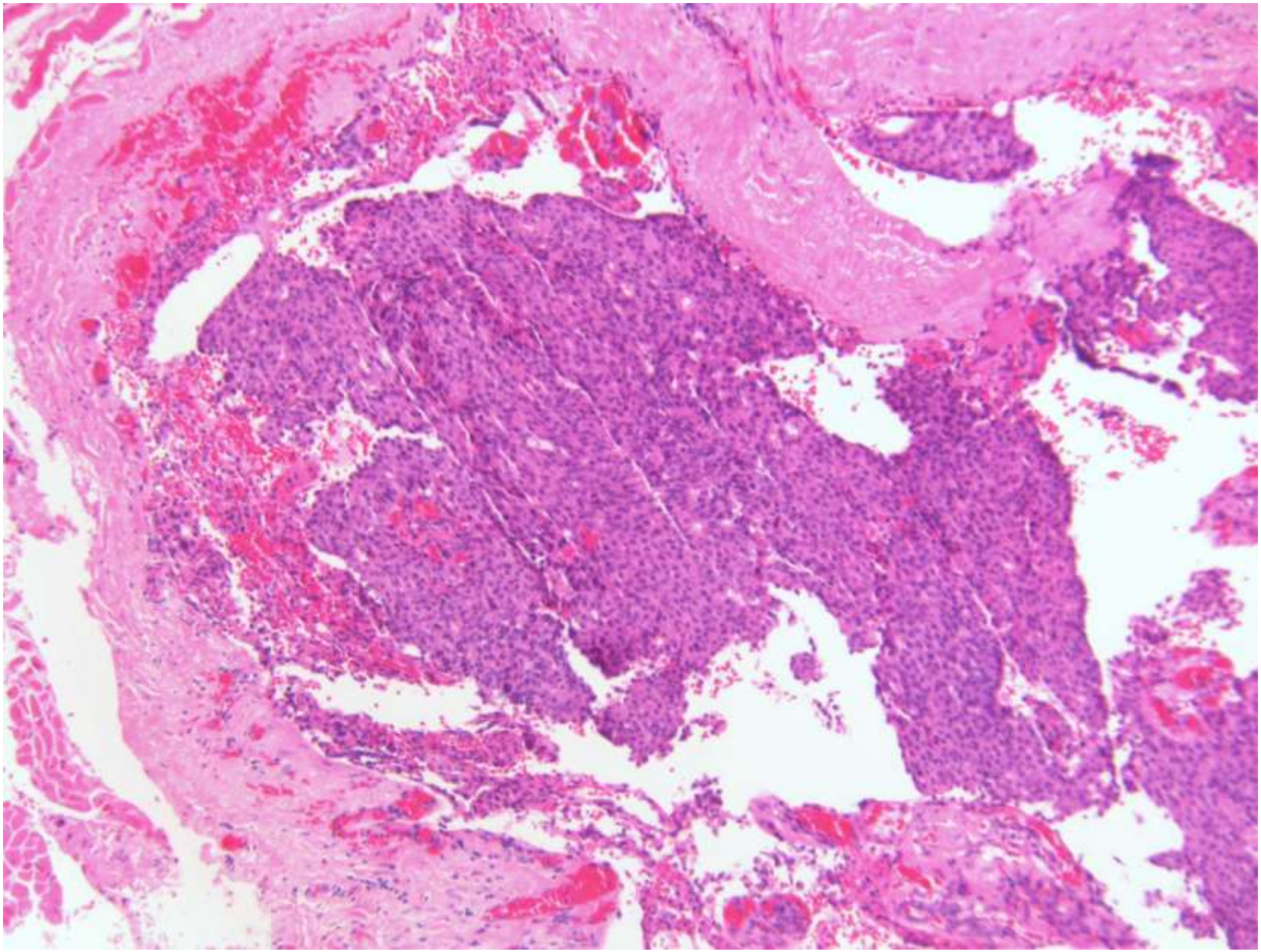
From Dermpathpro: They all called it digital papillary adenocarcinoma!!

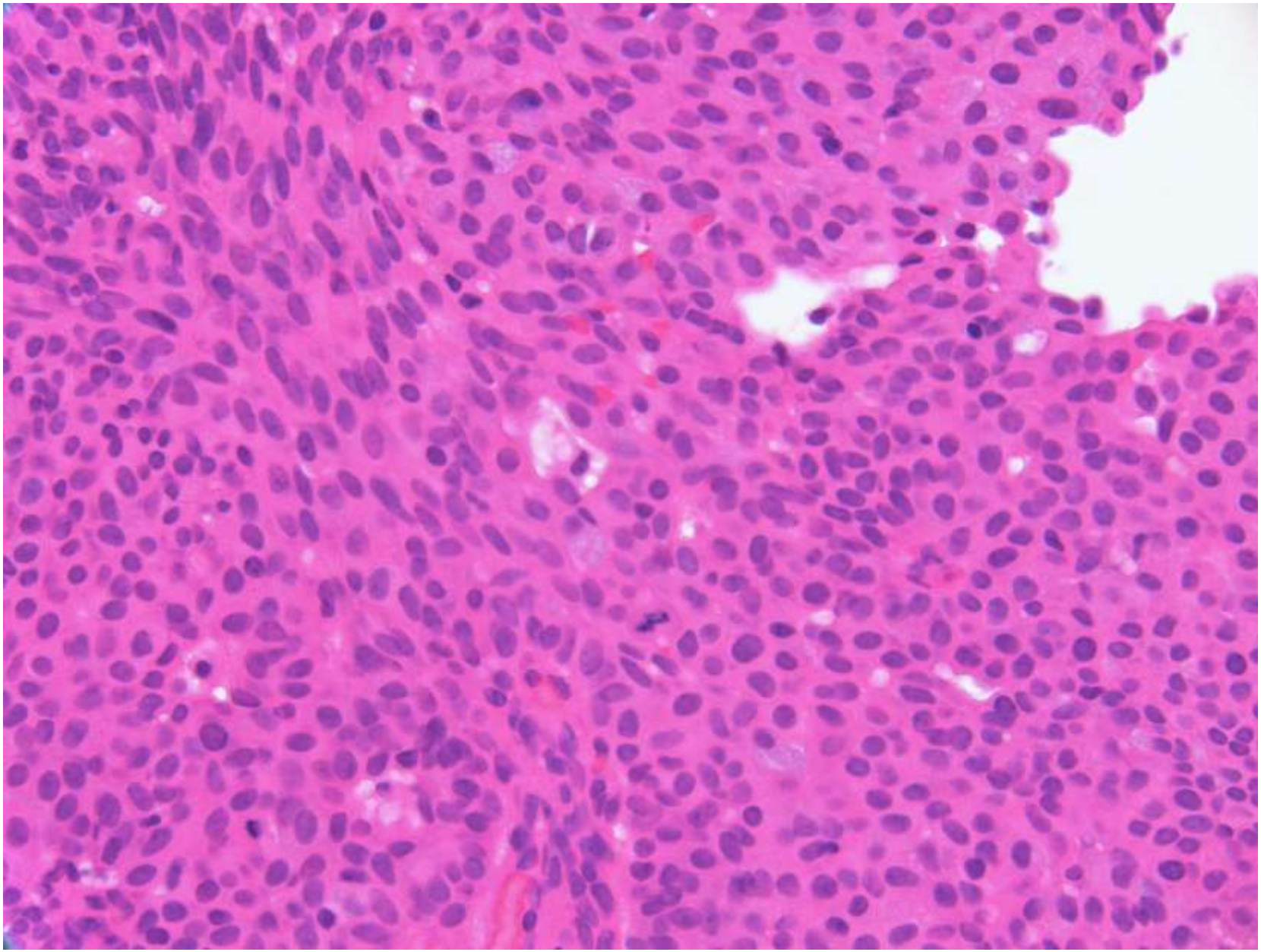
Next Case

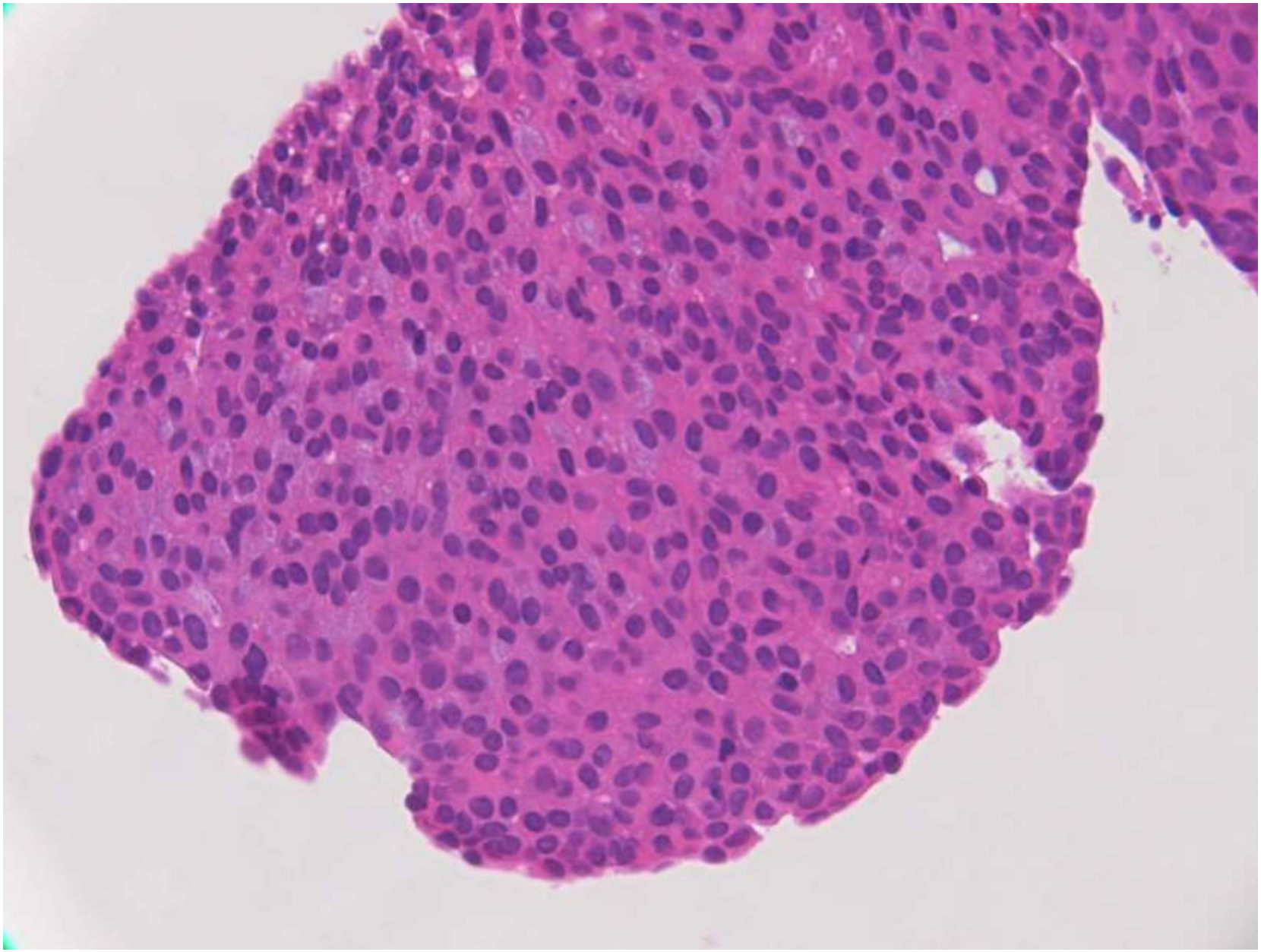
F69. Left upper lid. Cyst of Moll. Burst during last part of excision

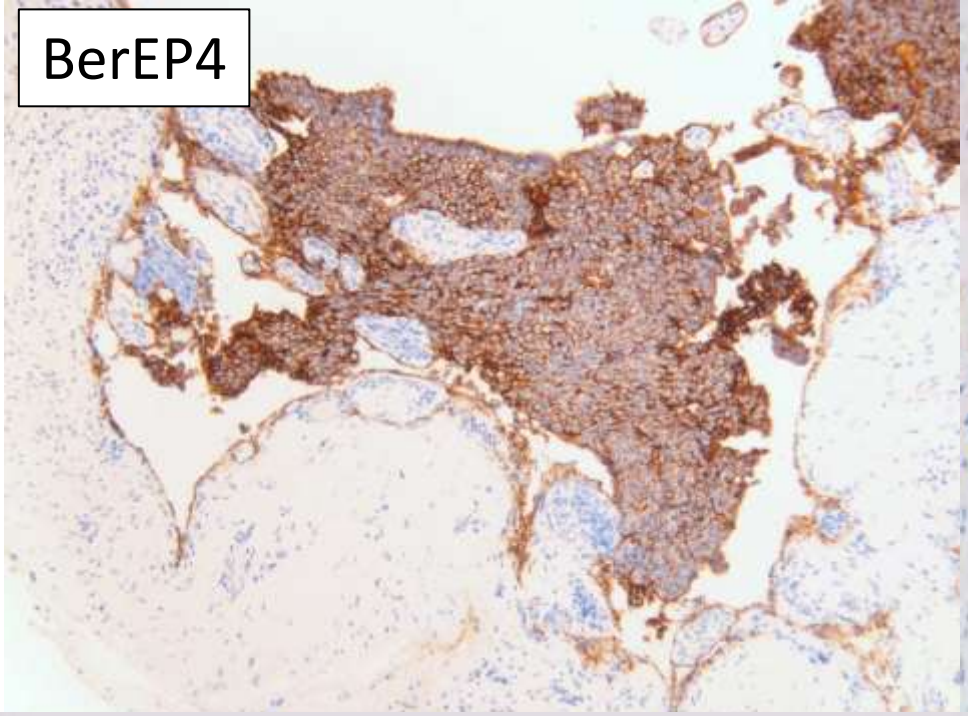


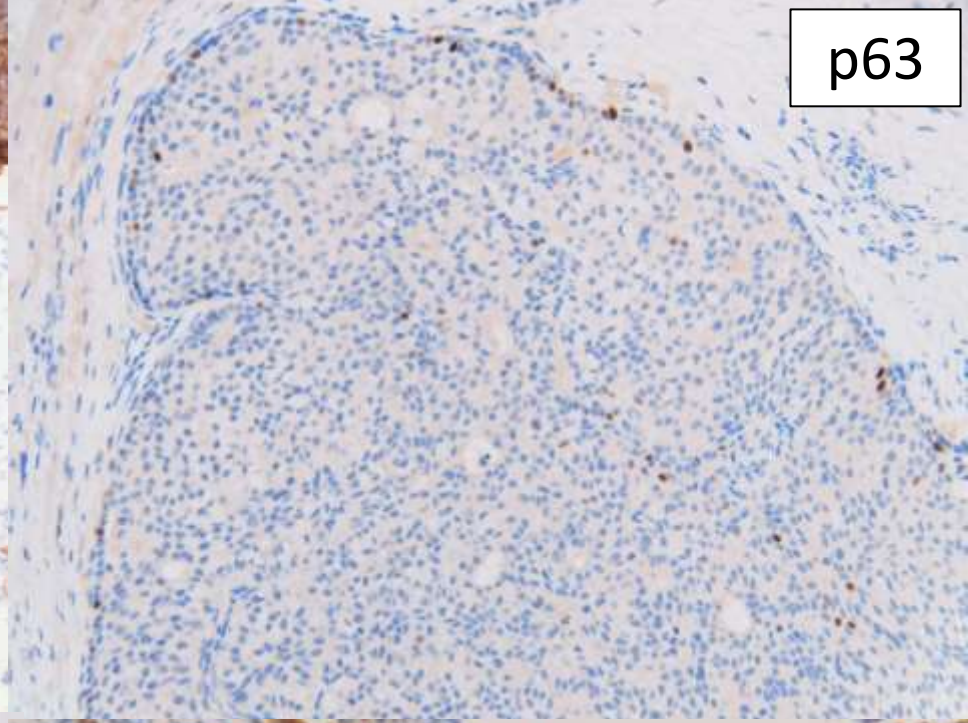
RAC8400








BerEP4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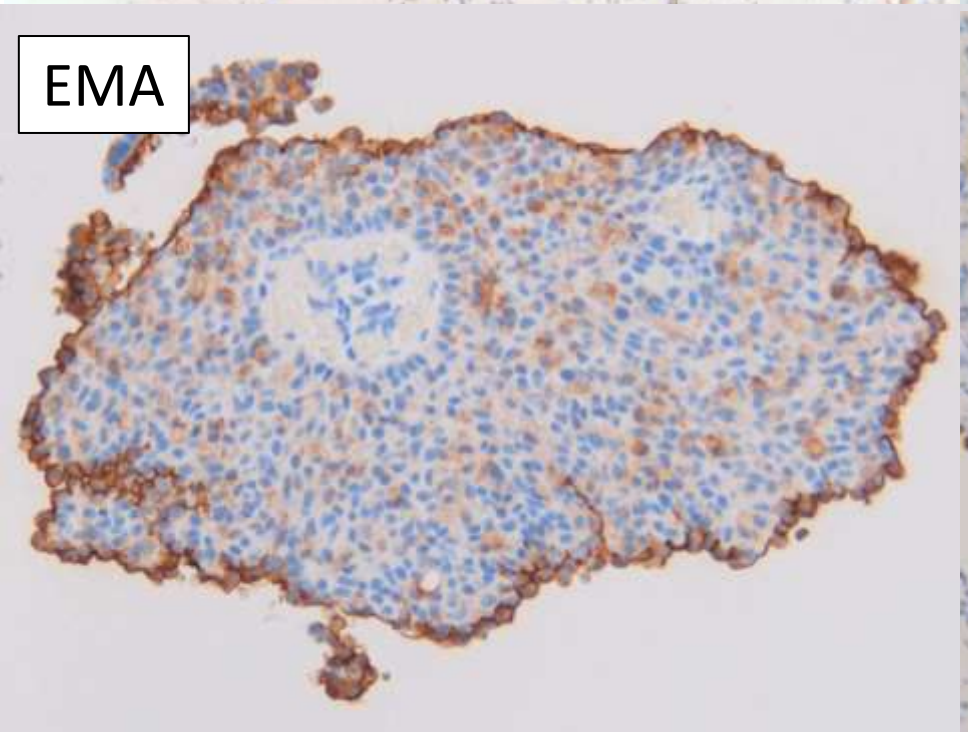
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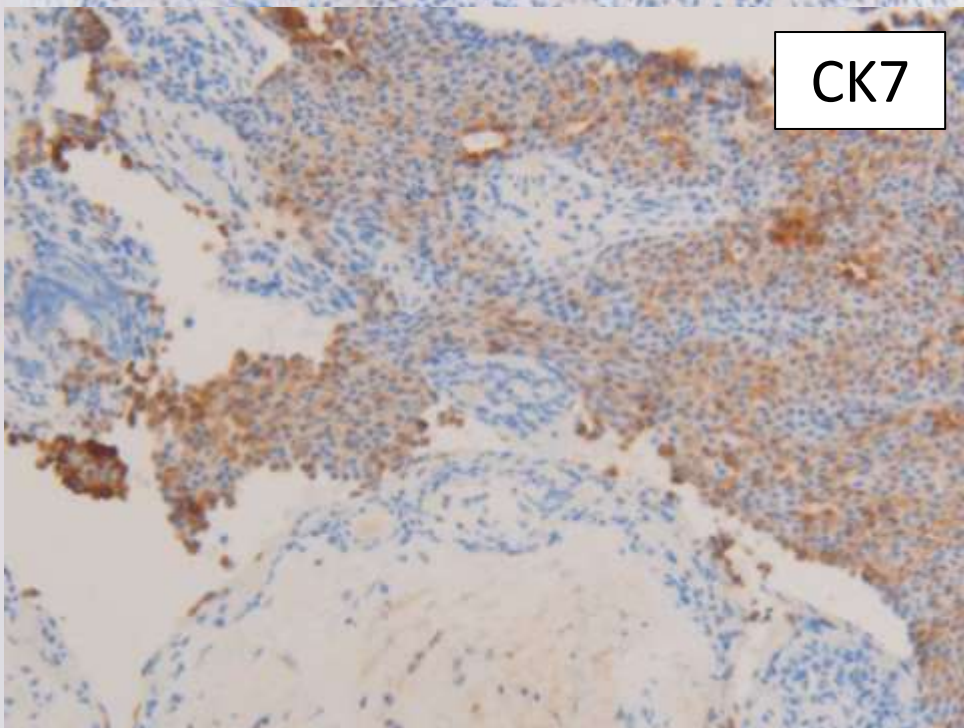
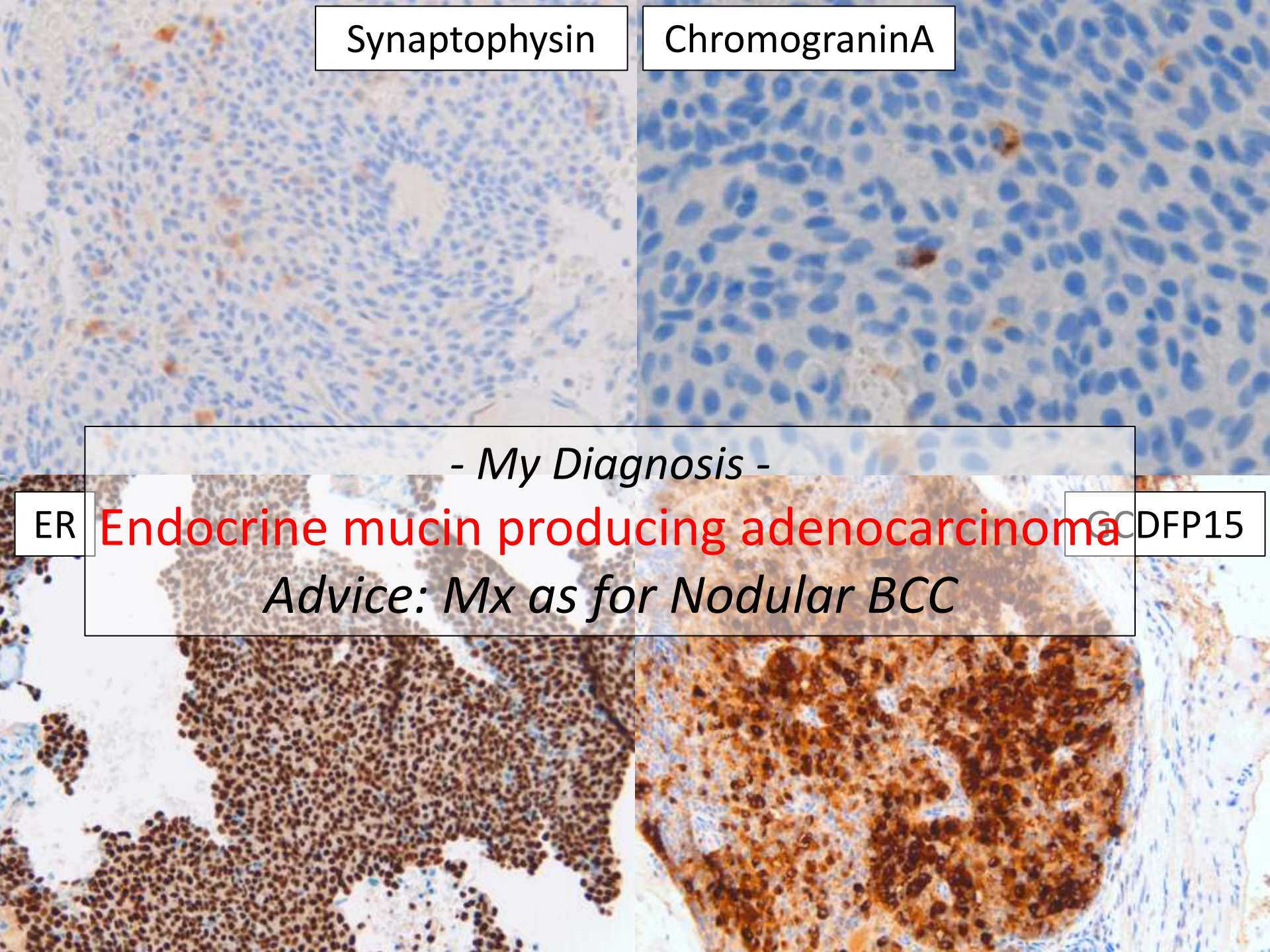
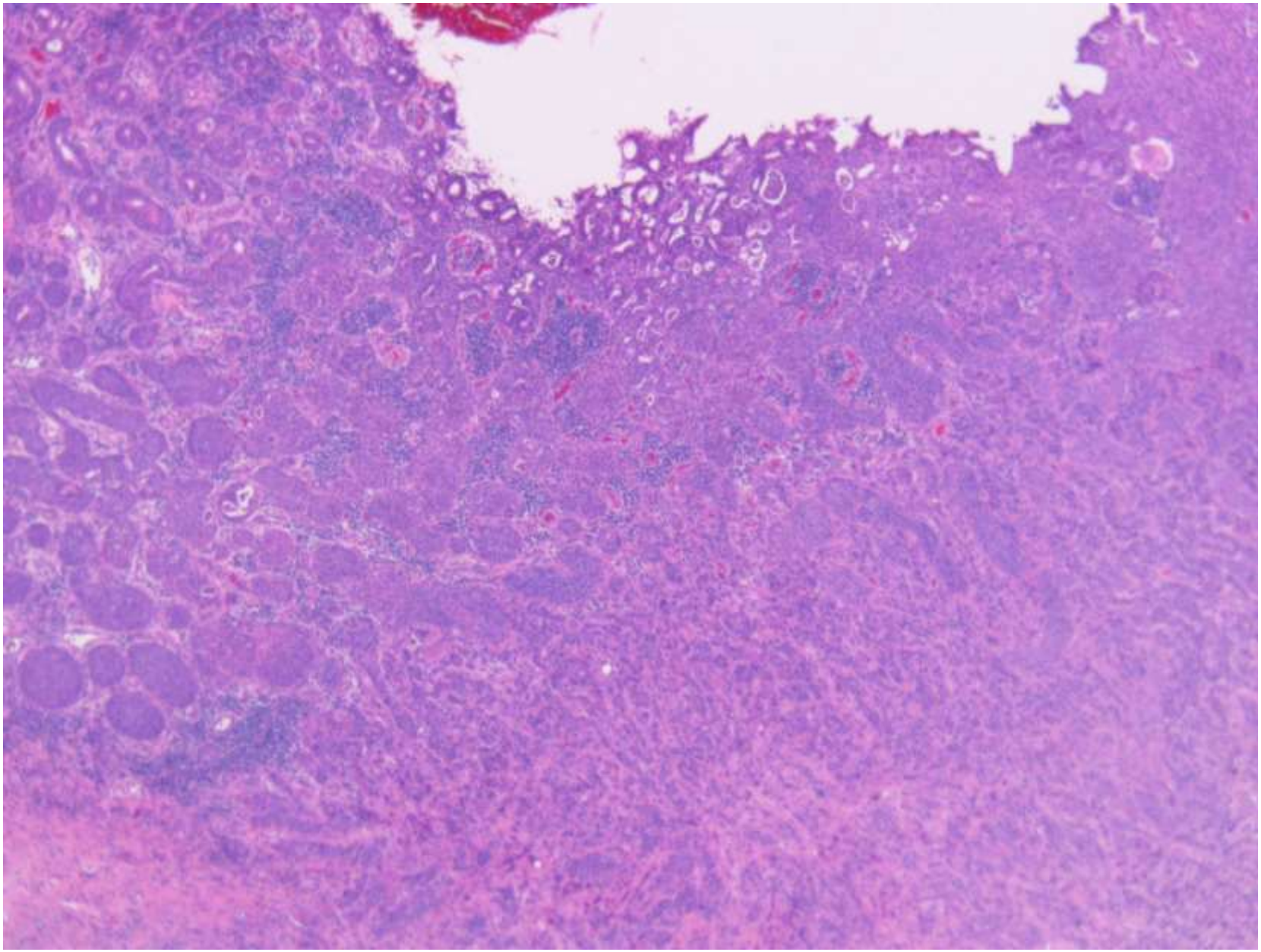

CK7


Synaptophysin
ChromograninA
- My Diagnosis -
ER
Endocrine mucin producing adenocarcinoma
Advice: Mx as for Nodular BCC
GCDFP15

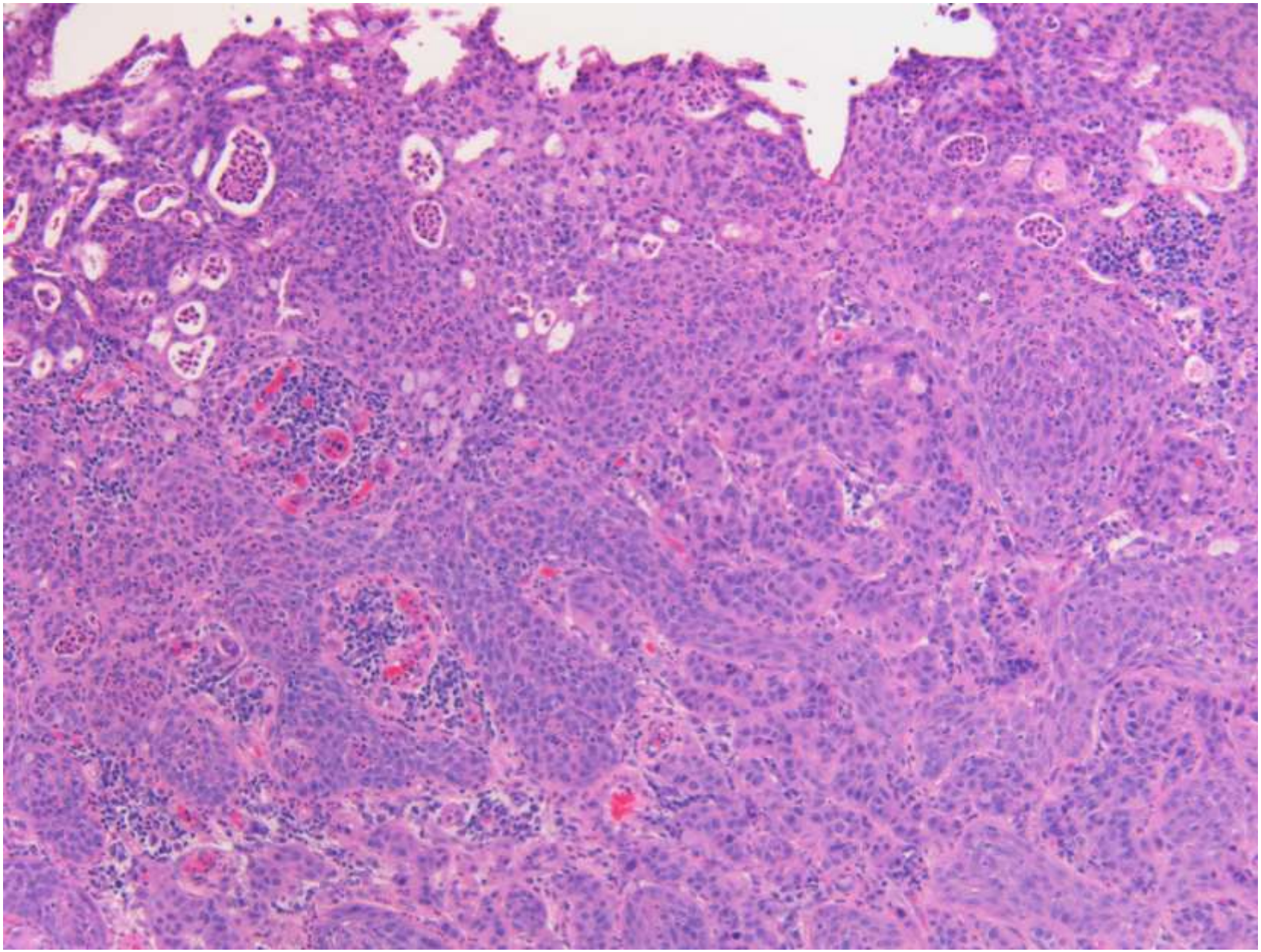
Next Case

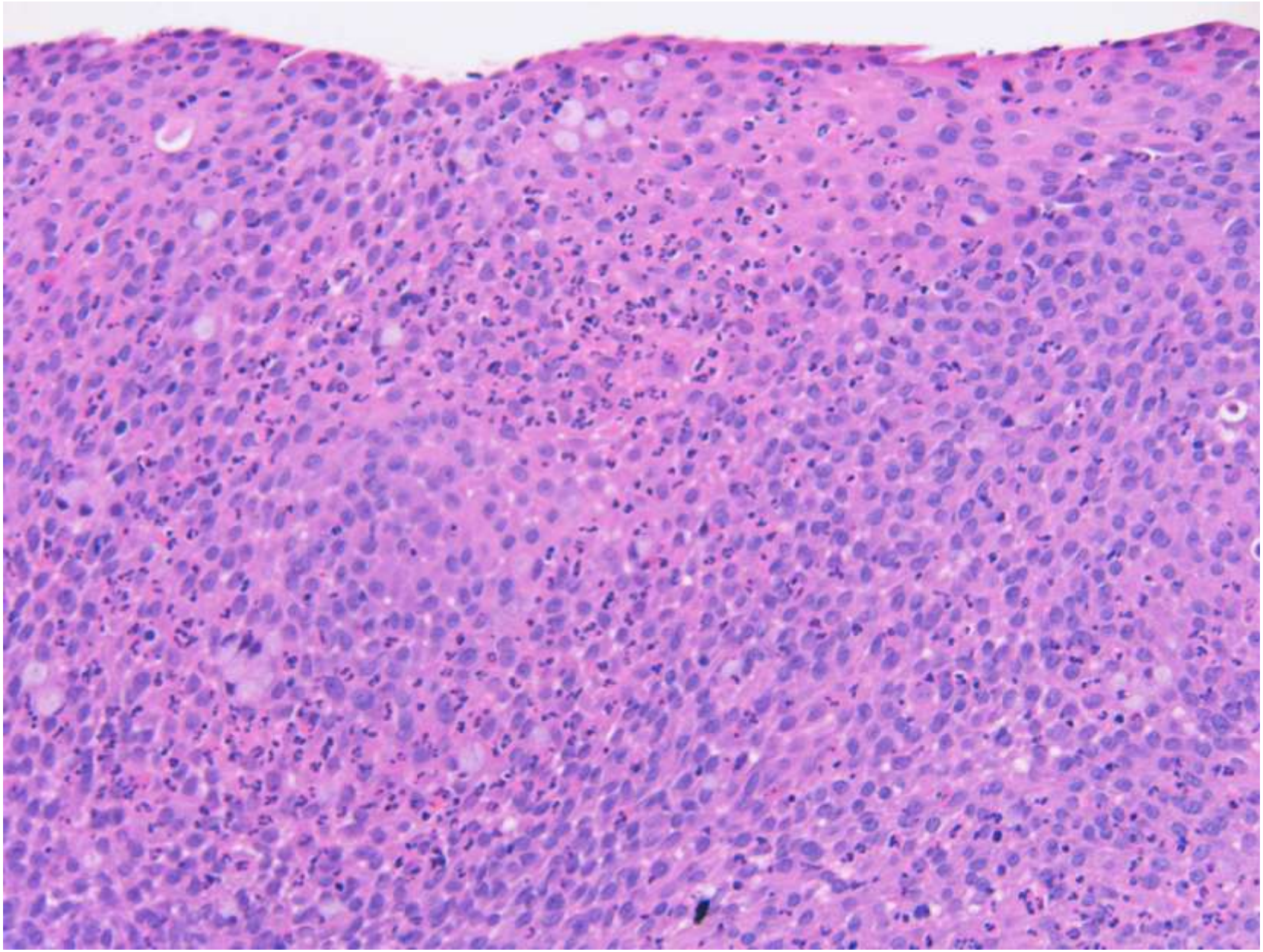
M83 Right Upper Eyelid. Bladder cancer 2 years ago. ?secondary

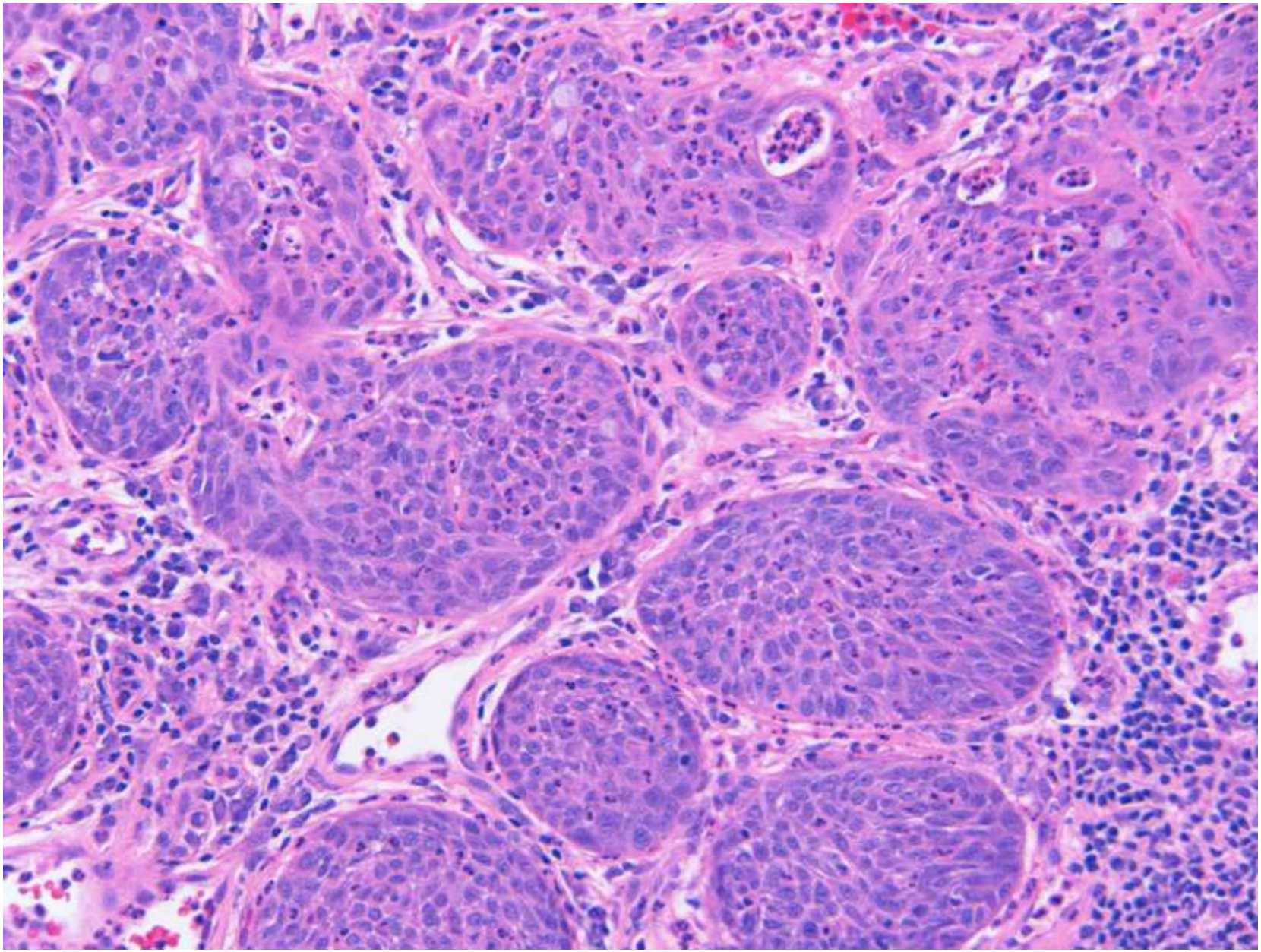


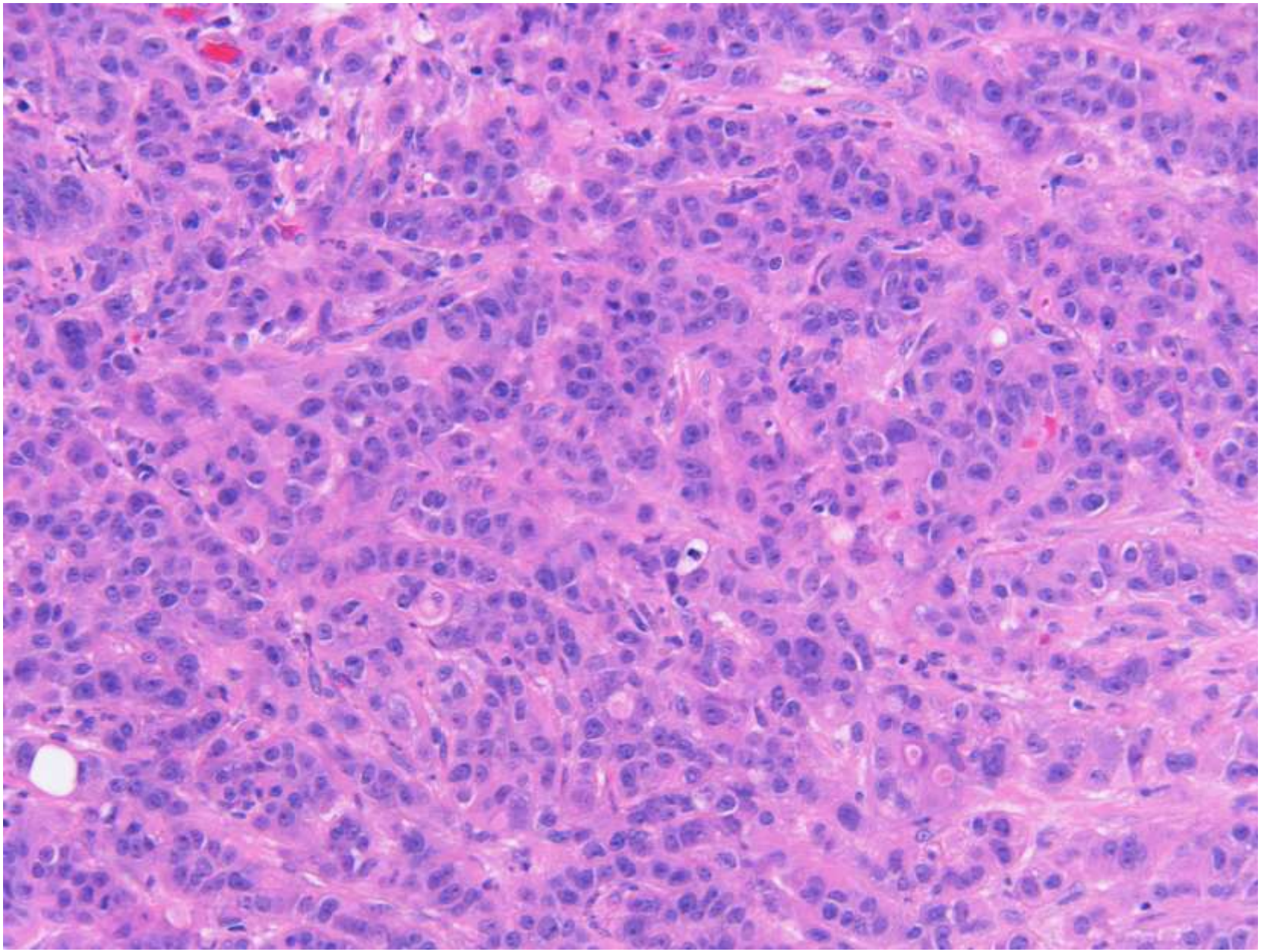
Case c/o Dr Sixto Batitang

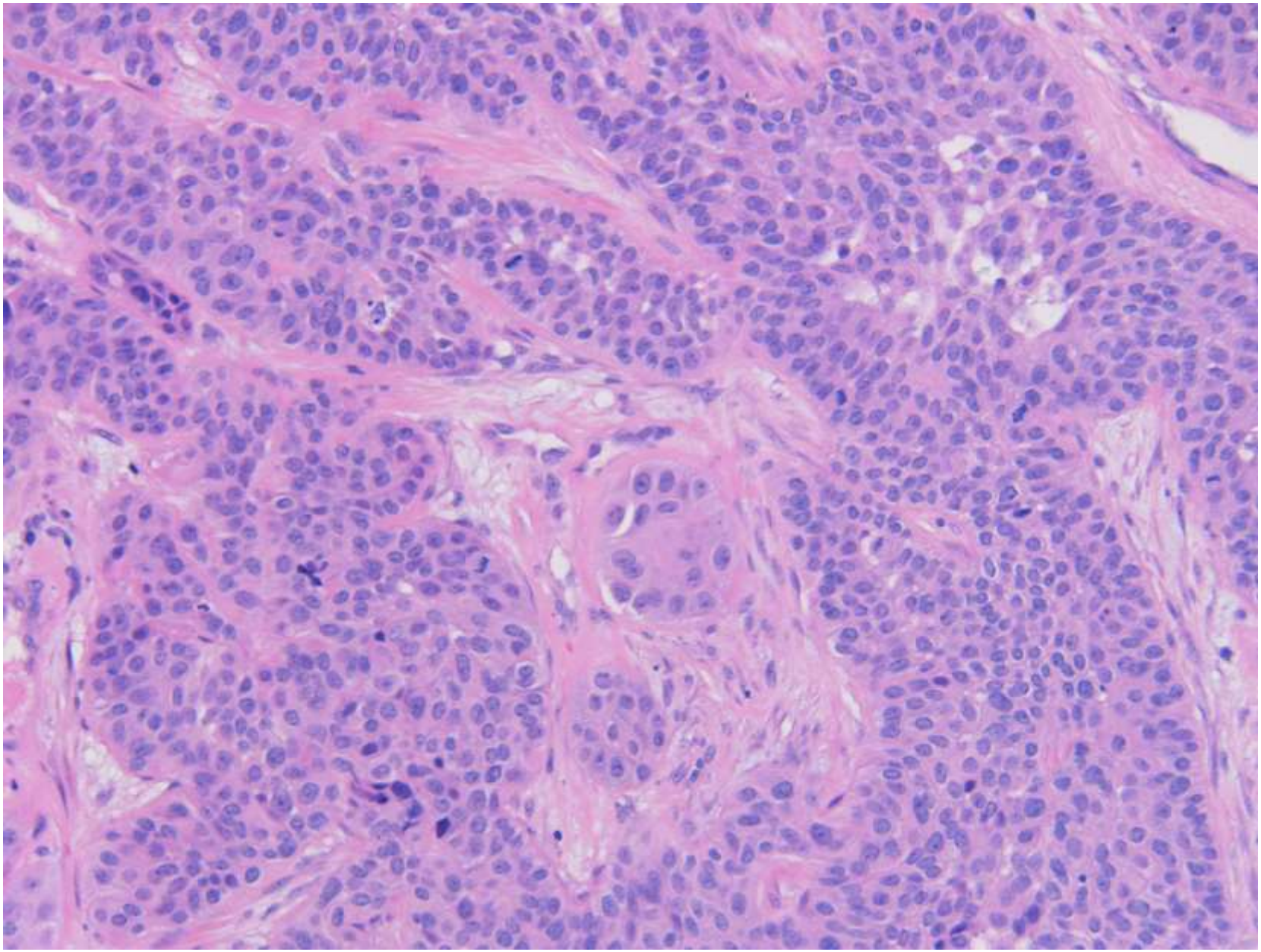
RAC8401

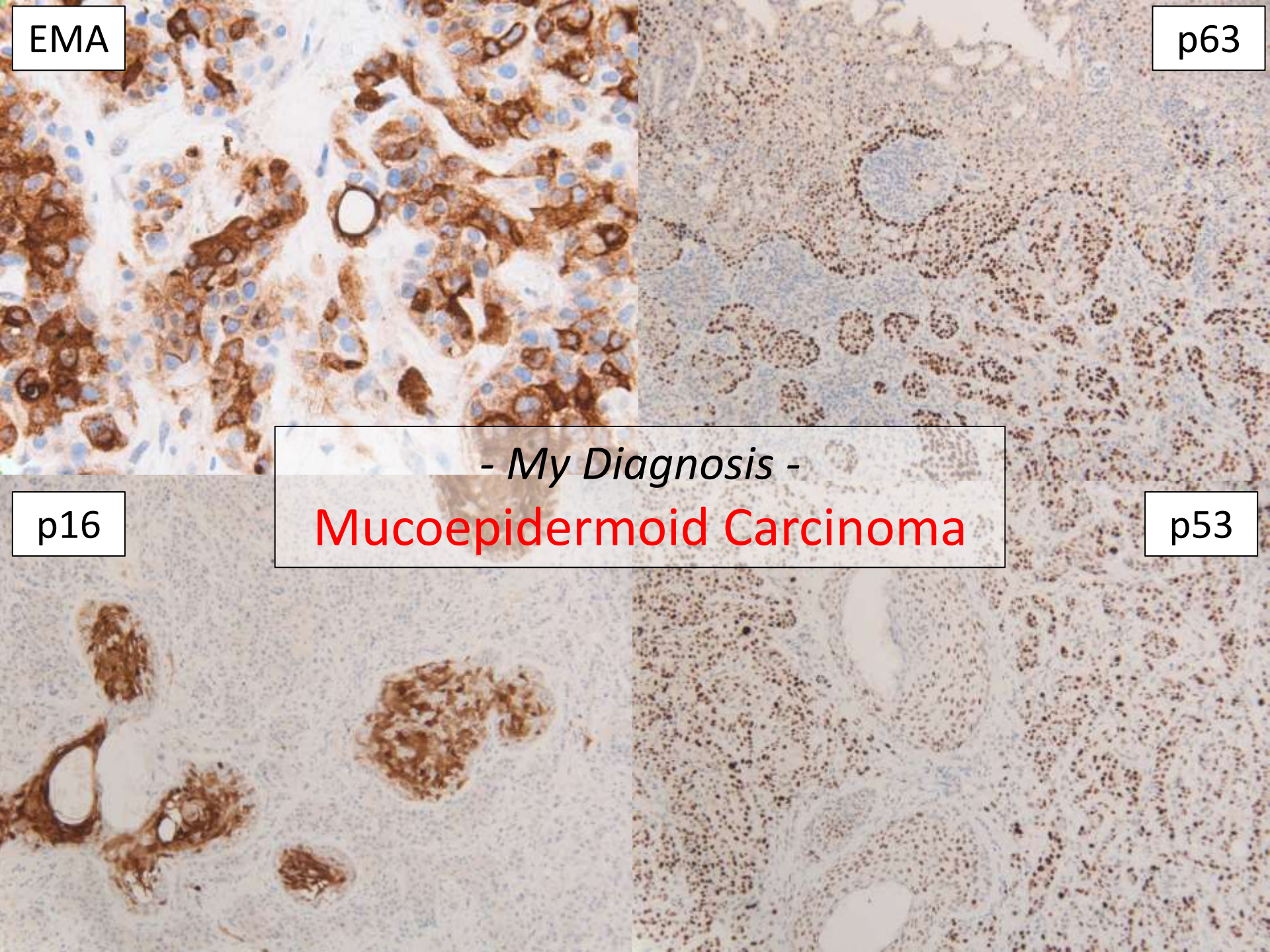








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Mucoepidermoid Carcinoma
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Learning Points:

Anatomic location can help make a diagnosis

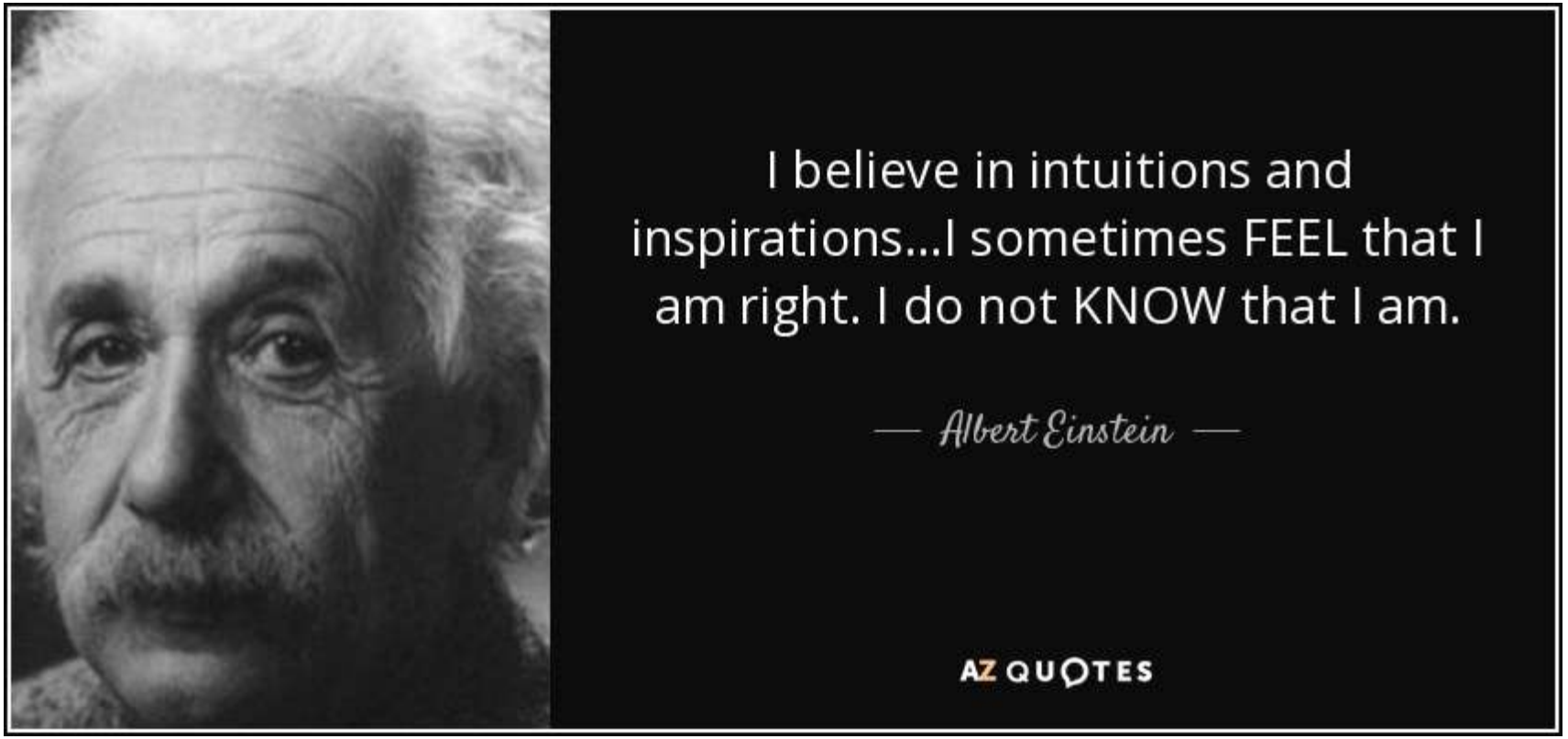
Completely circumscript tumours with malignant cytological features may be “in situ carcinoma”

Nearly all adnexal tumours that are mitotically active can grow large or undergo malignant transformation.

Most experts have seen cases of unexpected metastasis of apparently “benign” lesions

- In addition truly benign lesions e.g. hidradenomas may give rise to “benign” nodal metastases presumably due to implanation of tumour cells in to lymphatics at incomplete removal or biopsy

On this base I prefer to see adnexal tumours completely excised with clear margins.


I believe in intuitions and inspirations...I sometimes FEEL that I am right. I do not KNOW that I am.
— Albert Einstein —
AZ QUOTES

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