General EQA

Educational Cases 1 and 2

Educational Case 1

Placenta

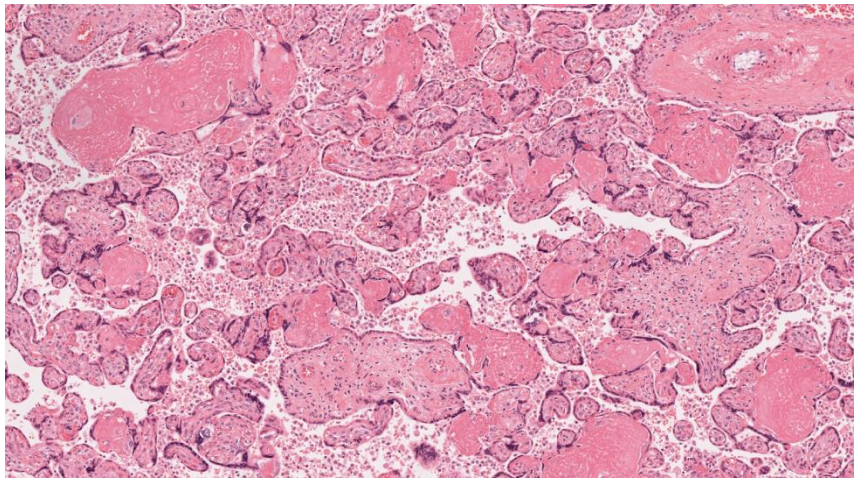
25 year old female.Gestation 40+1. Birth weight 2340g. Live birth. P1 small baby, intrauterine growth restriction

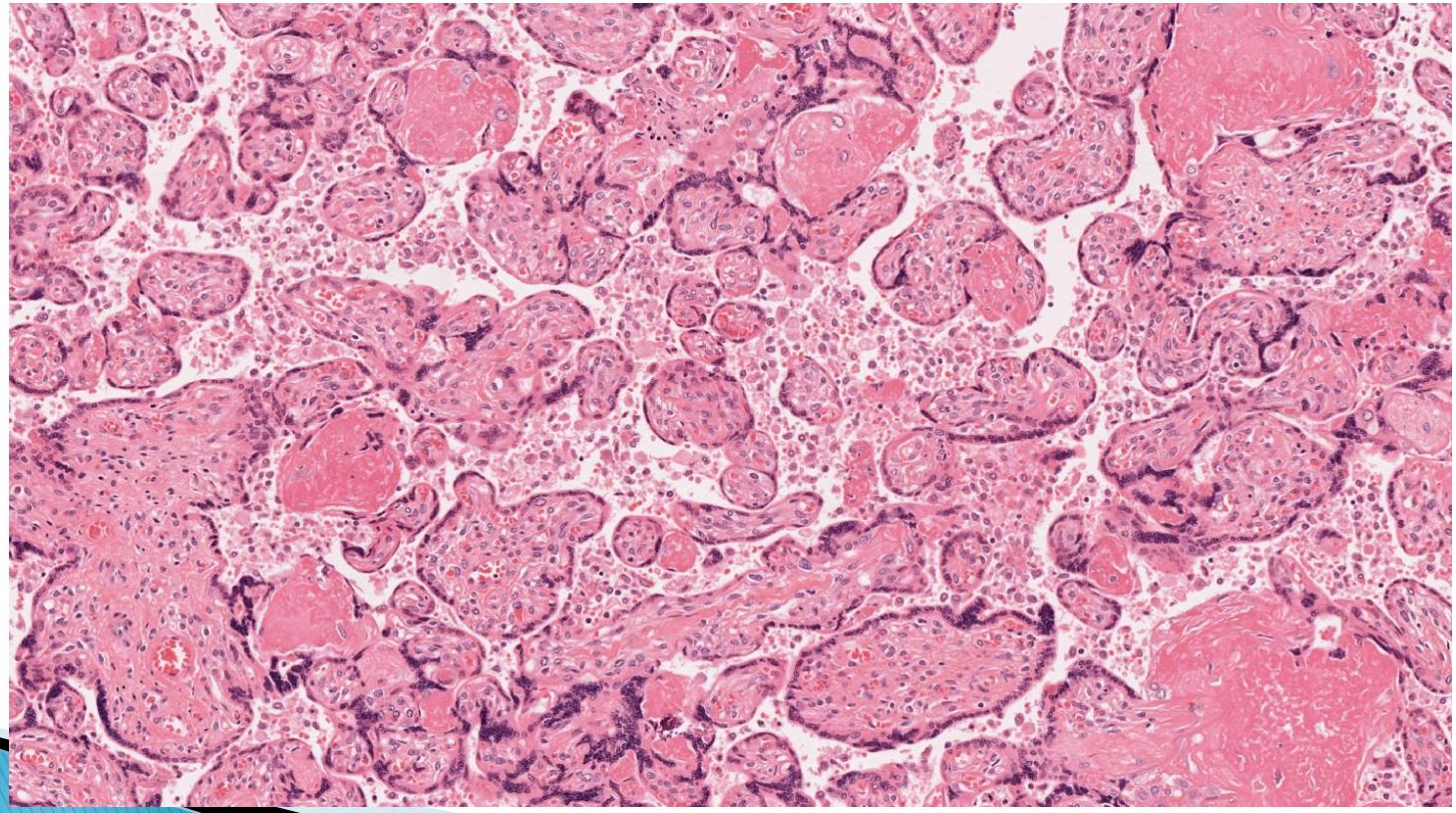
Responses

- Perivillous fibrin depostion (15)
- Chronic histocytic intervillositis (14)
- Chorangiosis (6)
- Pre eclampsia (5)
- Immature villi (5)
- Ischaemic changes/maternal vascular malperfusion (7)
- Other

others

- Not submitted/opted out (10)
- Infection
- Focal calcification
- Hyalinzed villi
- ?Normal
- Syncitial knots
- Fibrotic vessels
- 3rd trimester villi with calcification? Atheroma
- ?vascular abnormalities
- Acute chorioamnionitis
- ?Amyloid





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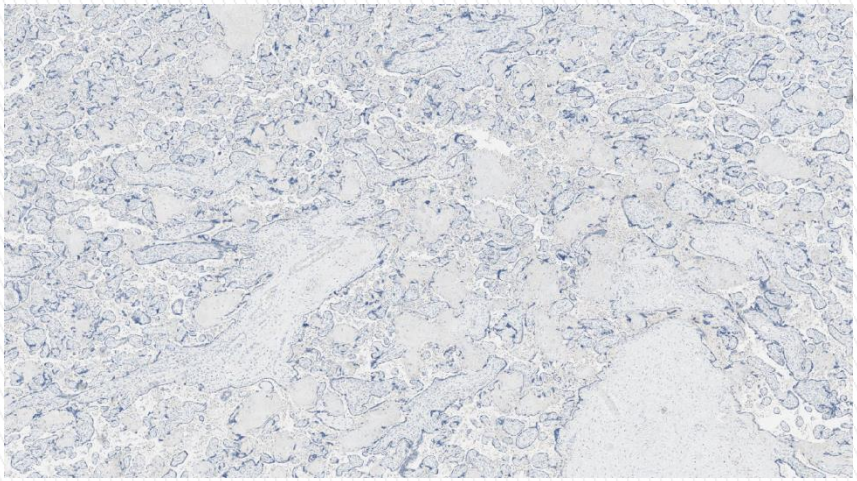
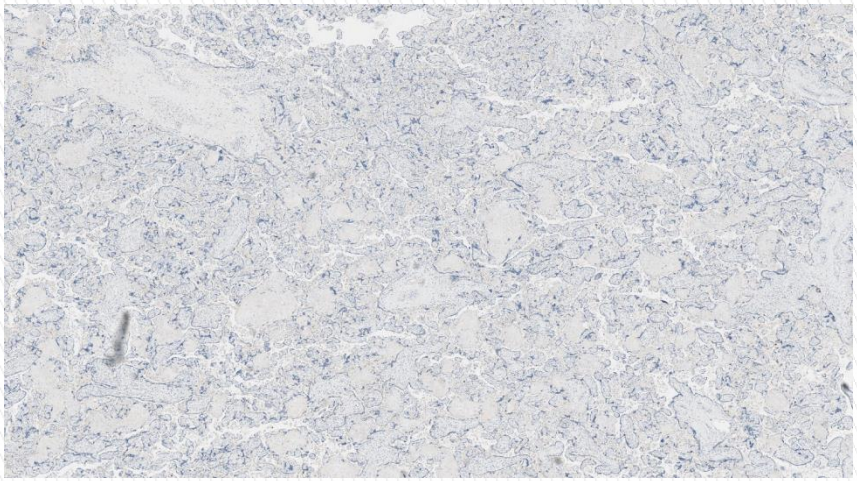


CD3



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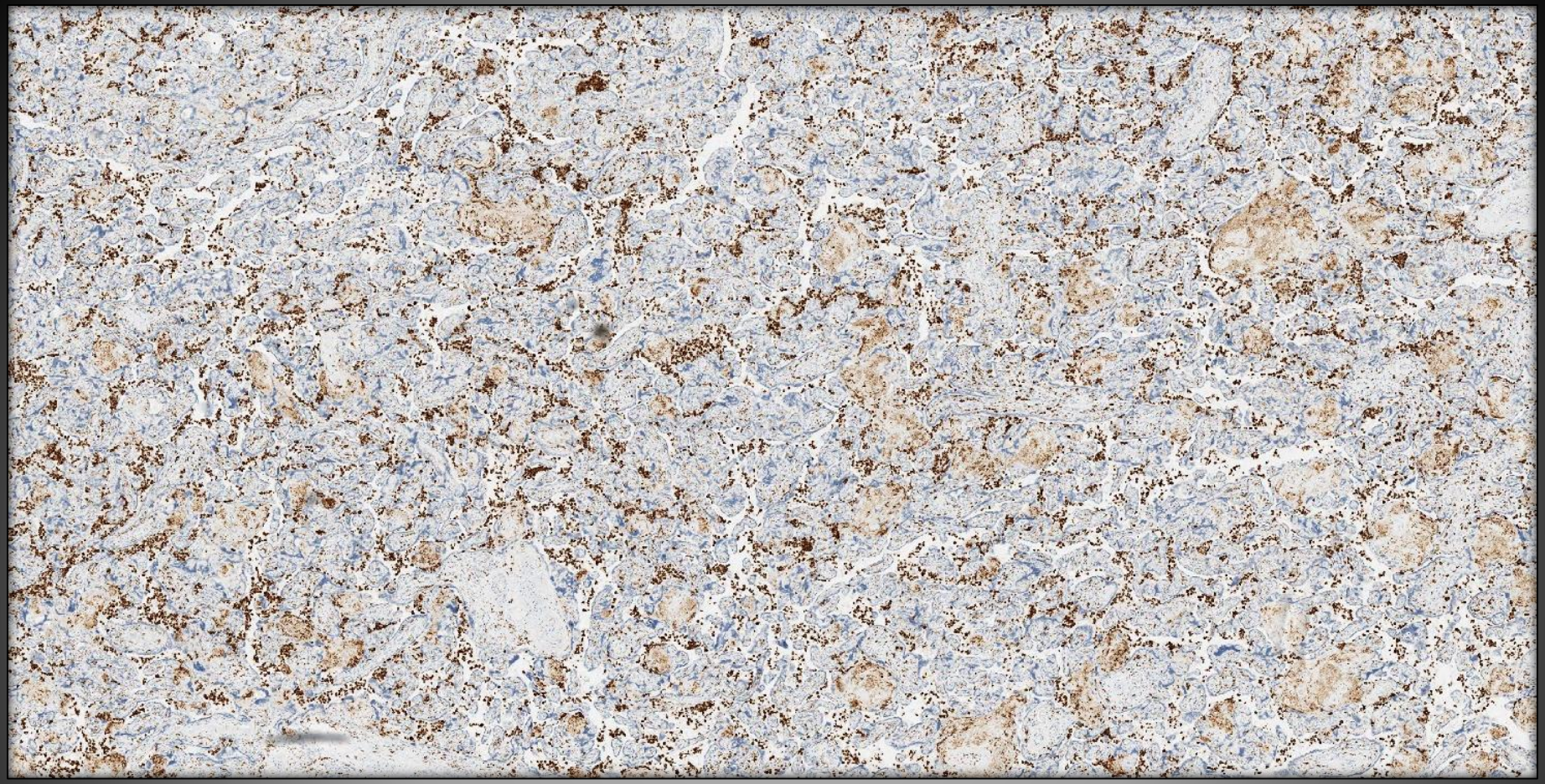


CD68

Diagnosis:
Chronic Histiocytic Intervillositis

Chronic Histiocytic Intervillositis

- Rare disease of unknown aeitology
- Also called: chronic intervillositis, massive chronic intervillositis
- Diffuse inflammatory cell infiltration of the intervillous space without villitis
- Cells are predominamty CD68 positive macrophages
- Variable Intervillous fibrin deposition
- Generates no symptoms during pregnancy
- Diagnosis is established on a post natal basis

Differential diagnosis

- Chronic stage placental malaria
- Viral infections
- Villitis of unknown cause (VUE) with coexisting intervillositis
- Maternal floor infarction

CHIV

- Can cause severe IUGR
- High risk of recurrence in subsequent pregnancies (67%)
- Can be assocaited with underlying autoimmune disease
- Associated with recurrent spontanous abortion
- In subsequent pregancies may be given cortico steroid treatment

Educational Case 2

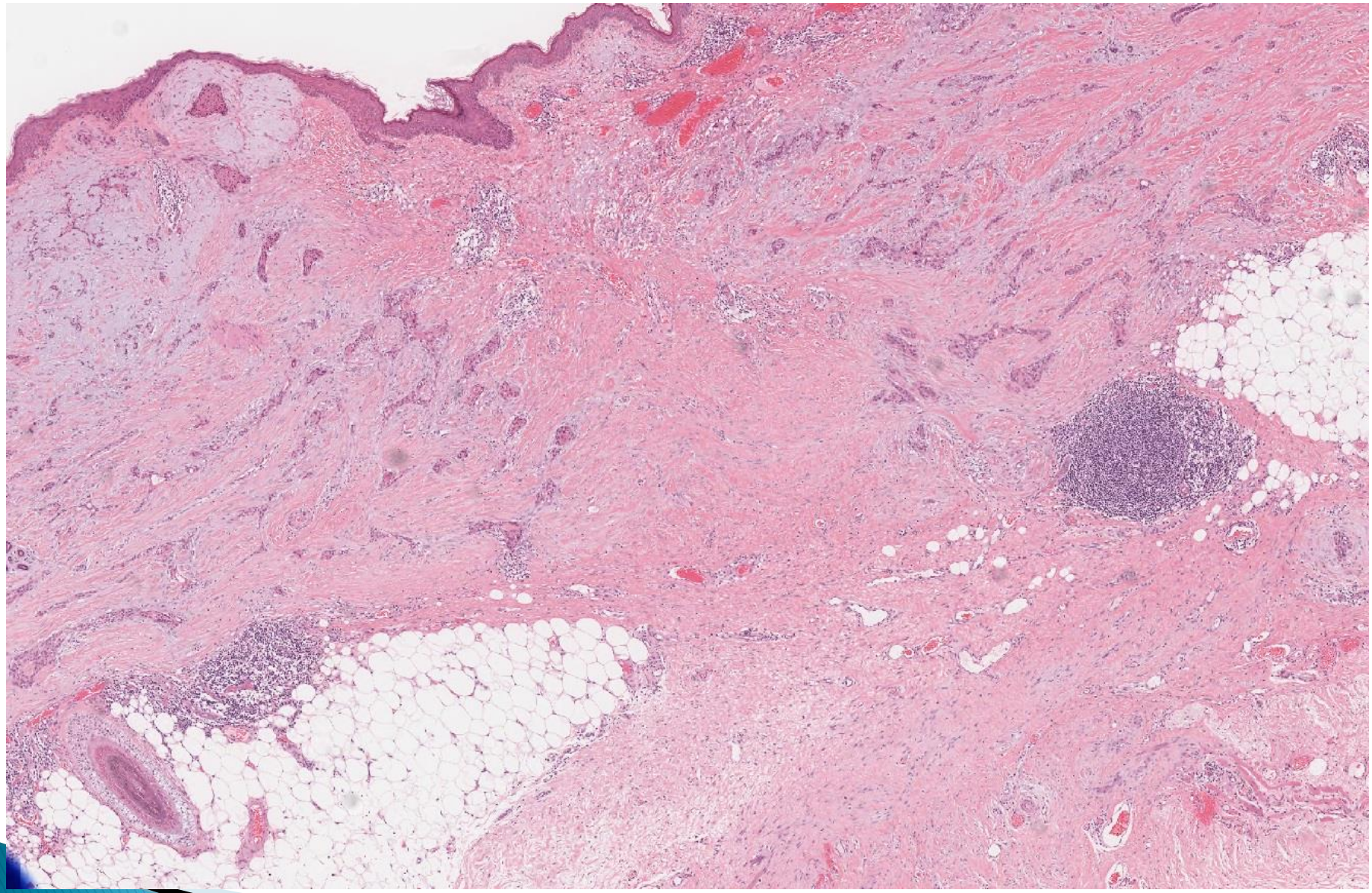
- 84 year old male .
- Lesion right temple
- Previously biopsy proven SCC. > 6mm margins. Anteriorly down to periosteum. Posteriorly down to muscle.

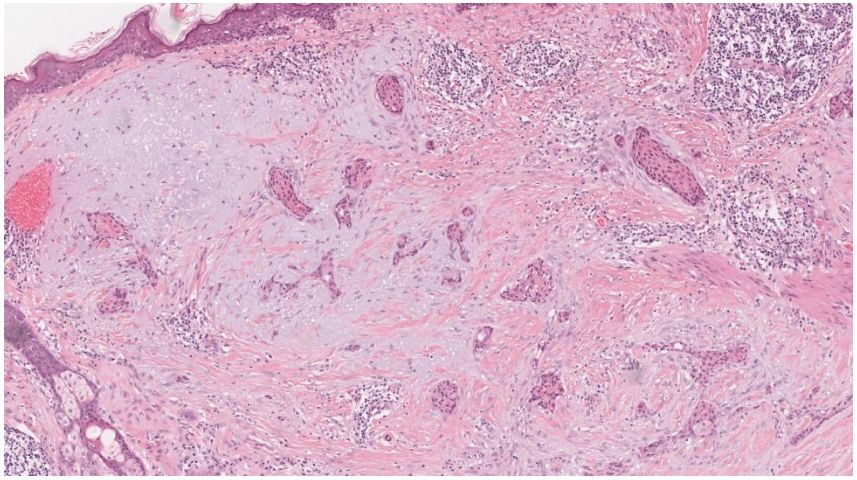
Responses

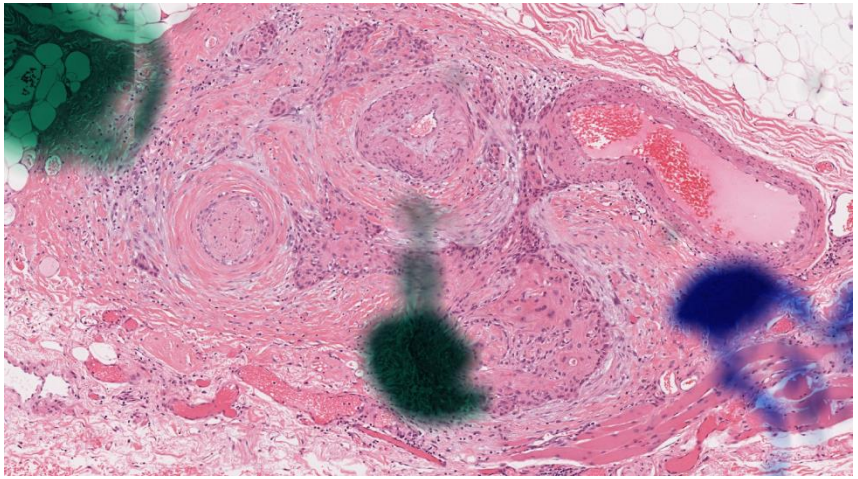
- Microcystic adenexal carcinoma (27)
- SCC/varients SCC (incl favoured) (33)
- Squamoid eccrine duct carcinoma (4)
- Other

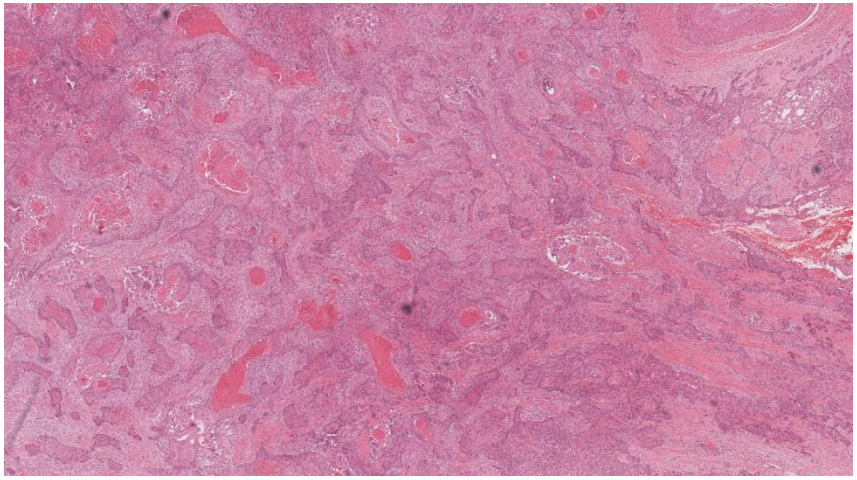
Other:

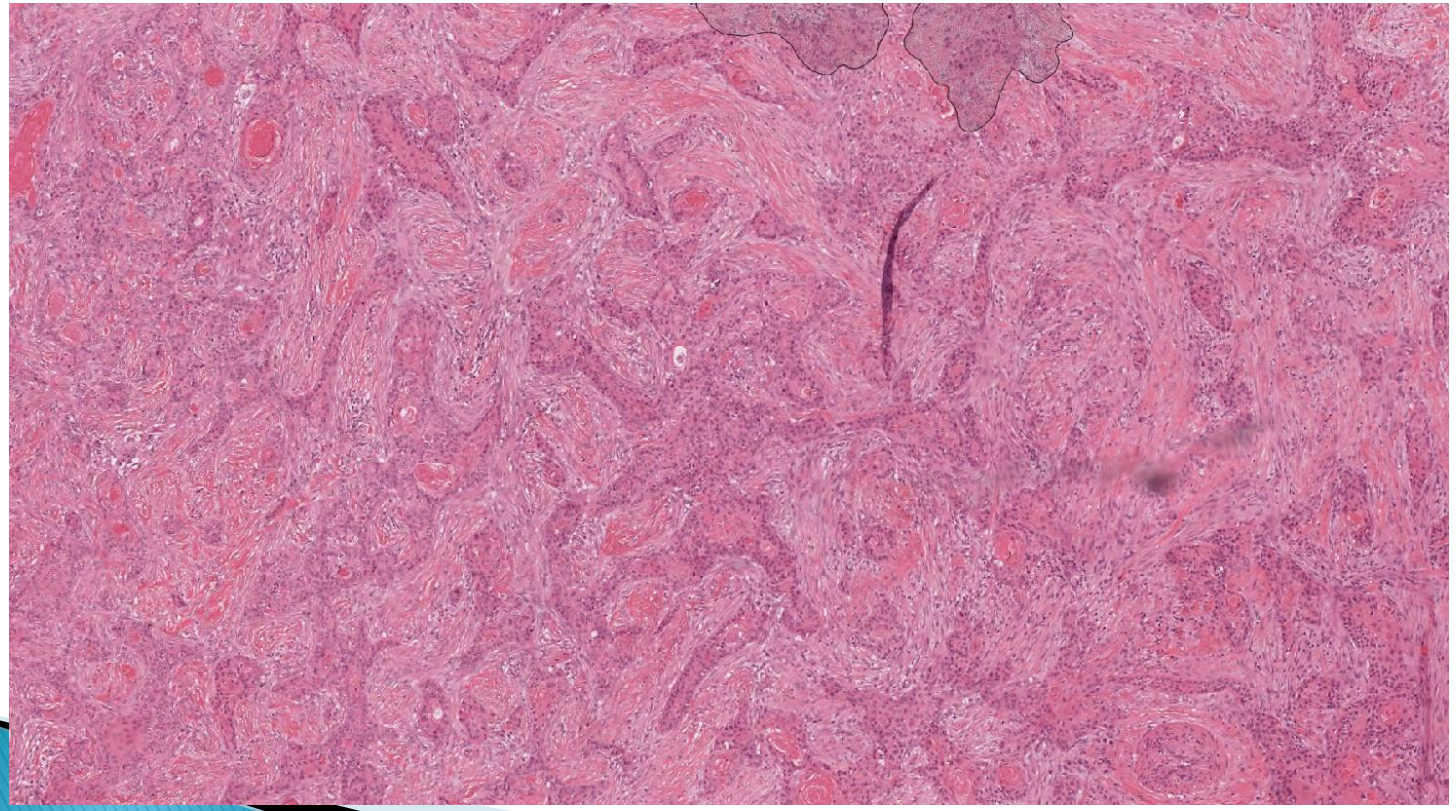
- Bcc vs trichoepithelioma
- Mucoepidermoid carcinoma
- Myoepithelial carinoma
- Malignant syringoma
- Adenoid cystic carcinoma
- Skin adenexal tunour
- Eccrine epithelioma
- Eccrine squamous syringometaplasia











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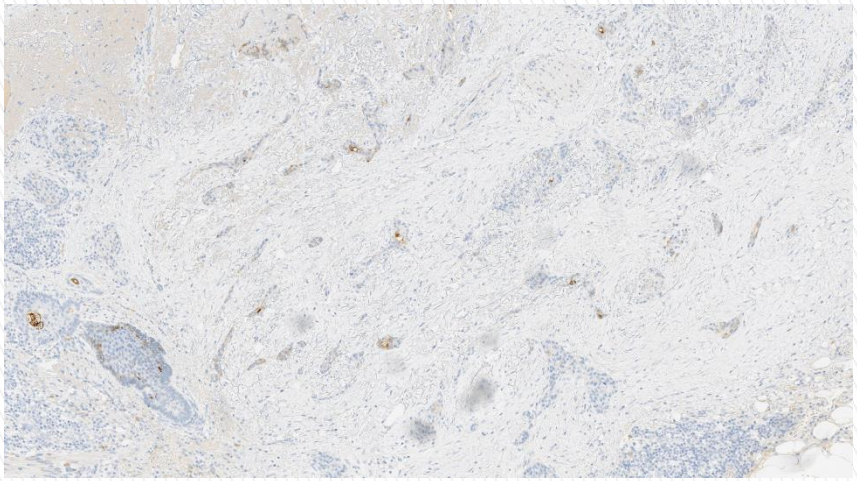
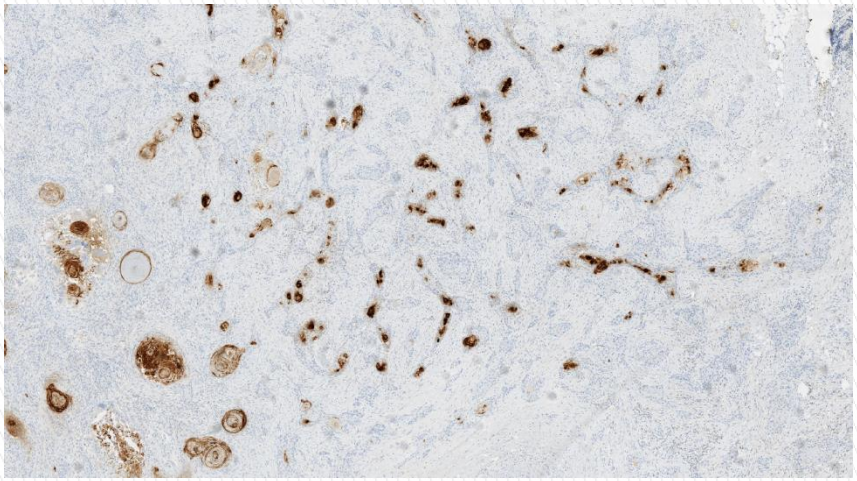


EMA



EMA/CEA

Squamoid eccrine duct carcinoma

- WHO 2019:
- Biphasic malignant tumour showing squamous and ductal differentiation
- Likely a variant of adenosquamous carcinoma

- Head and neck most commonly affect sites
- UV induced damage and immunosuppression thought to be causative

Squamoid eccrine duct carcinoma

- Often present as large nodules and plaques
- Rare tumour
  - Thought in part due to under recognition

- On superficial biopsies often indistinguishable from SCC
- Treatment and prognosis similar for the two

Squamoid eccrine duct carcinoma

- Poorly demarcated dermal baseed neoplasm
- Frequent invasion of subcutis
- Superficially overt squamous differntation and epidermal connection resembling a well to moderatley differentited SCC
- Deeper areas diffuse infiltrative growth pattern
- Ductal differentiation
- PNI common

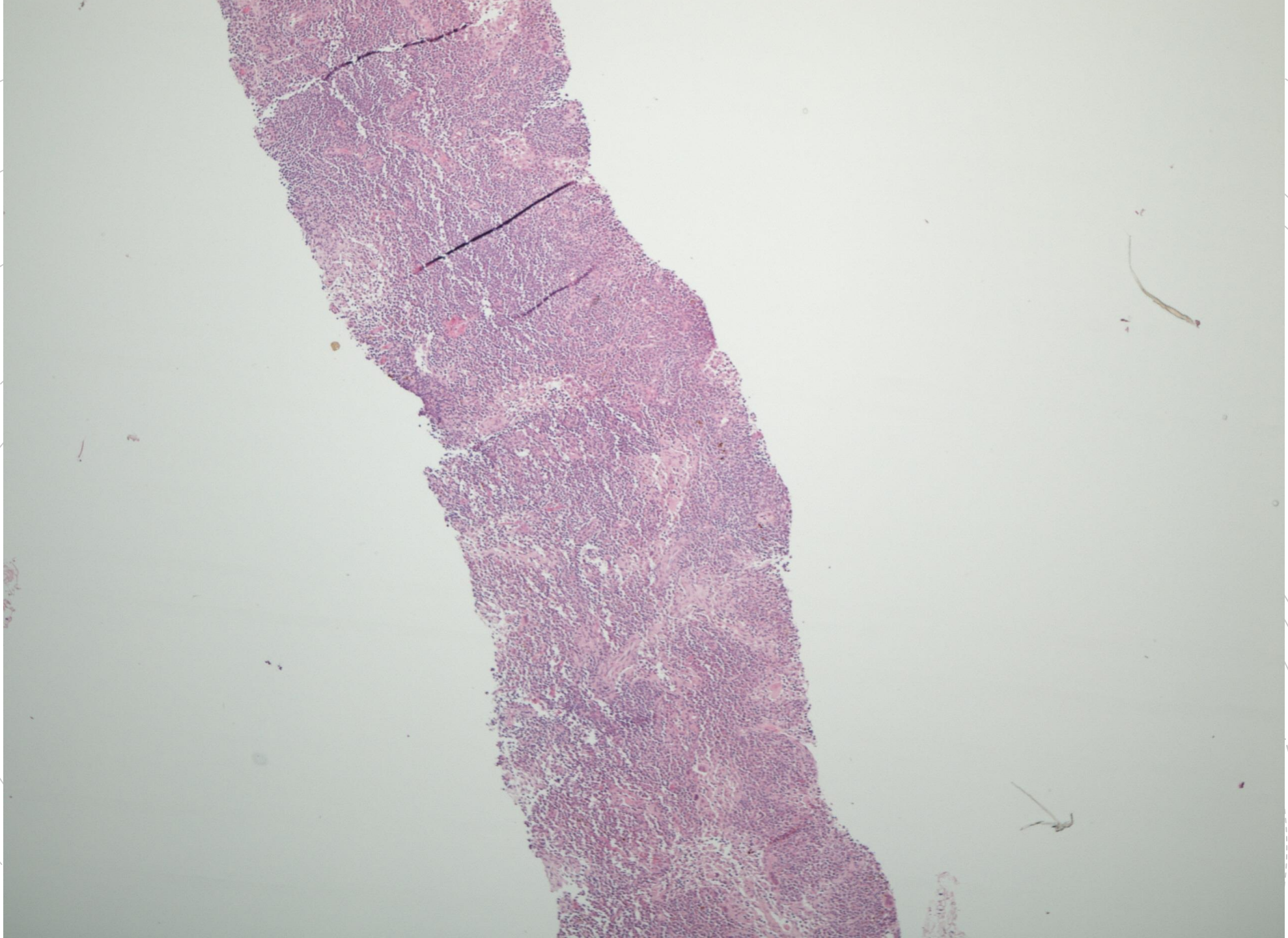
Squamoid eccrine duct carcinoma

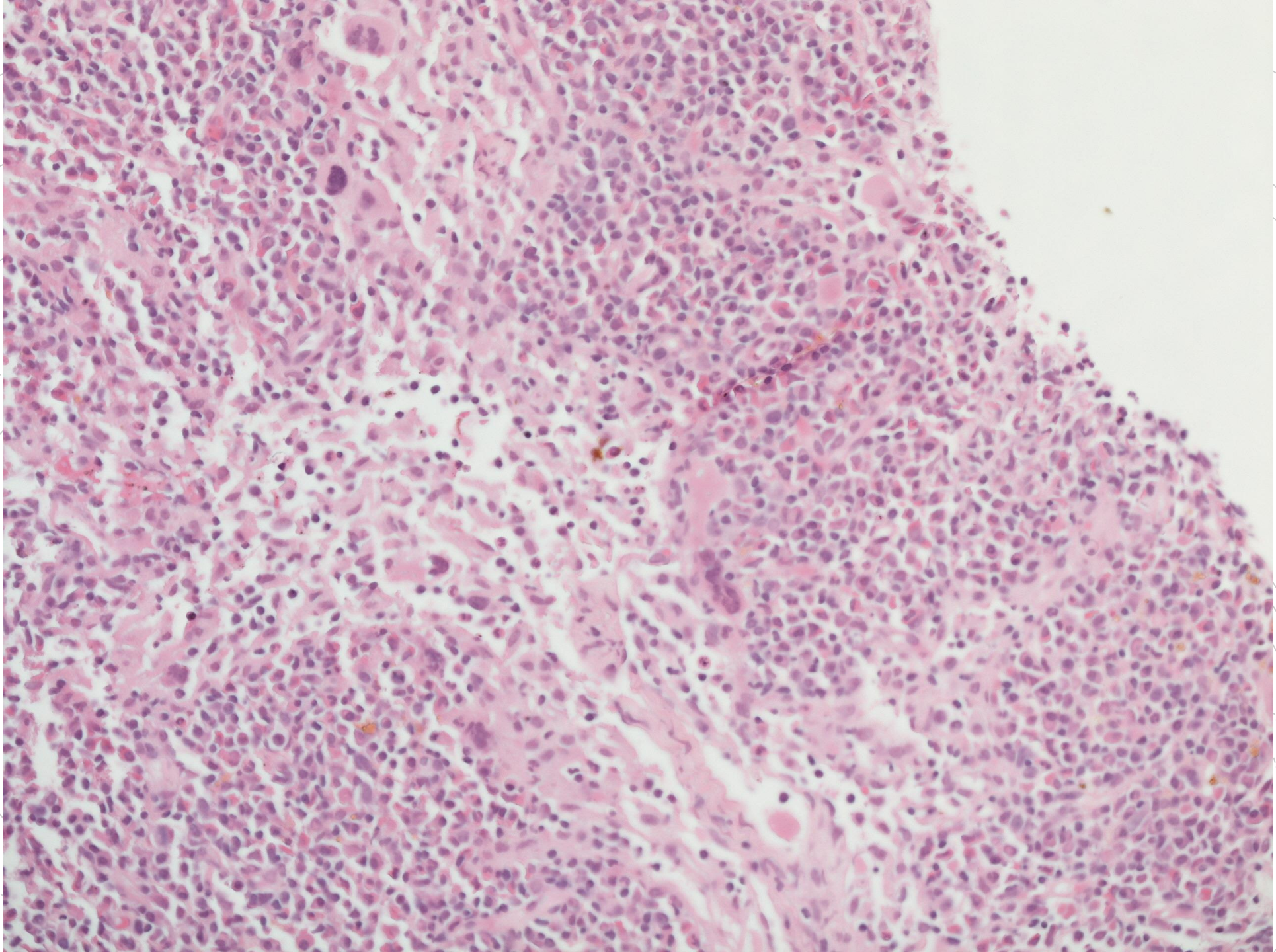
- Prognosis:
- High risk of local recurrence
- Risk of nodal metastasis

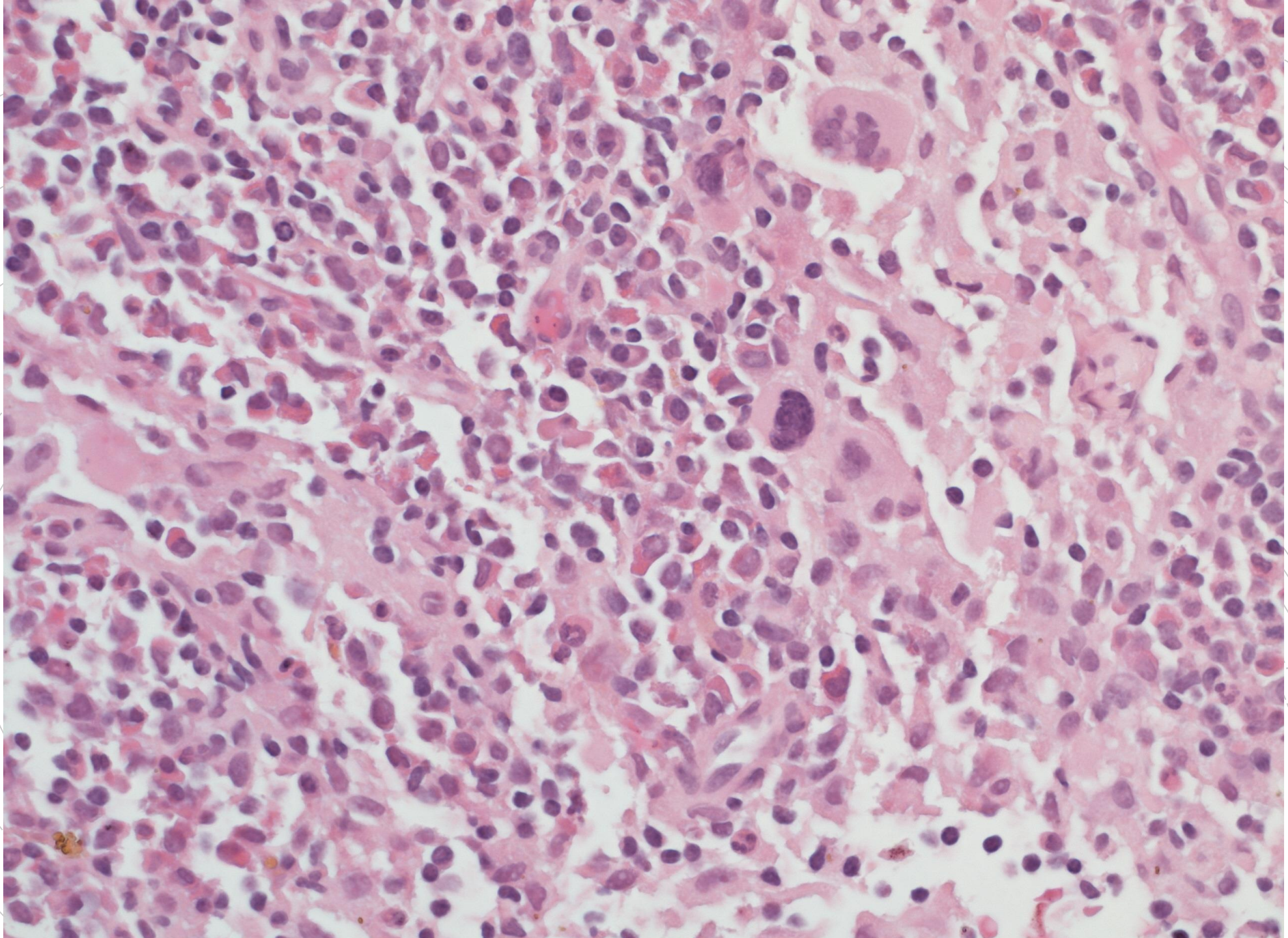
- This tumour was incompletely excised at the deep margin on the initial excision.

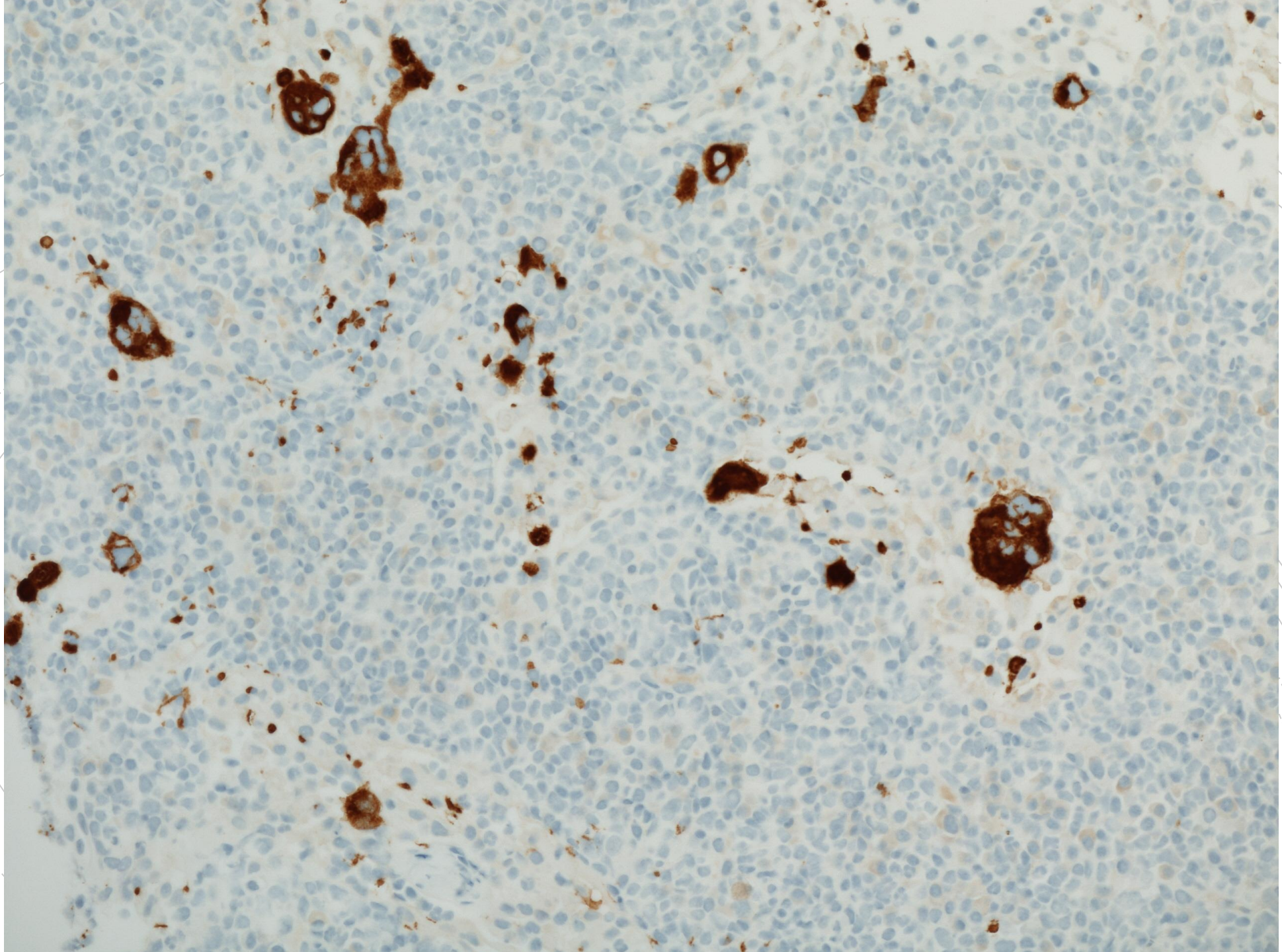
Educational Case 3

72 year old female. Left axillary lymph node. Rheumatoid arthritis, weight loss, lymphadenopathy. Difficult access, unable to fully elevate arm. A single core obtained.









Opinions

Diagnosis	Count
Extramedullary Haematopoesis	30
Reactive Lymphadenopathies/Lymphadenitis	10
Plasma Cell Dyscrasia/Plasma Cell Neoplasm	7
Hodgkin Disease	6
Other Lymphoma	3
Myeloid Sarcoma	2
Other Malignancy	1
Rosai-Dorfman	1

Extramedullary Haematopoesis

- Defined as development of blood cells outside the bone marrow medullary space
- In adults it is not considered a physiological process
- EMH can be
  - Secondary to other disorder (e.g. benign hematologic disorders and cancer)
  - Idiopathic and without clinical consequence

Sites of EMH

- Spleen is the most frequent site, usually in red pulp
- Liver
  - EMH normal up to about 5 weeks
  - In adults - association with other disease (e.g. hepatic disorders/tumours, transplants)
  - EMH usually in hepatic sinusoids.
- Lymph nodes
  - Frequent association with haematology neoplasms e.g. MPNs
  - Assessment by haematology is useful

Many other sites possible including heart, adipose tissue, adrenals, kidneys, periosteum, pleural calvity, intra/paraspinal tissue, nasopharynx and paranasal sinuses and in neoplasms.

Association with hematological disorders

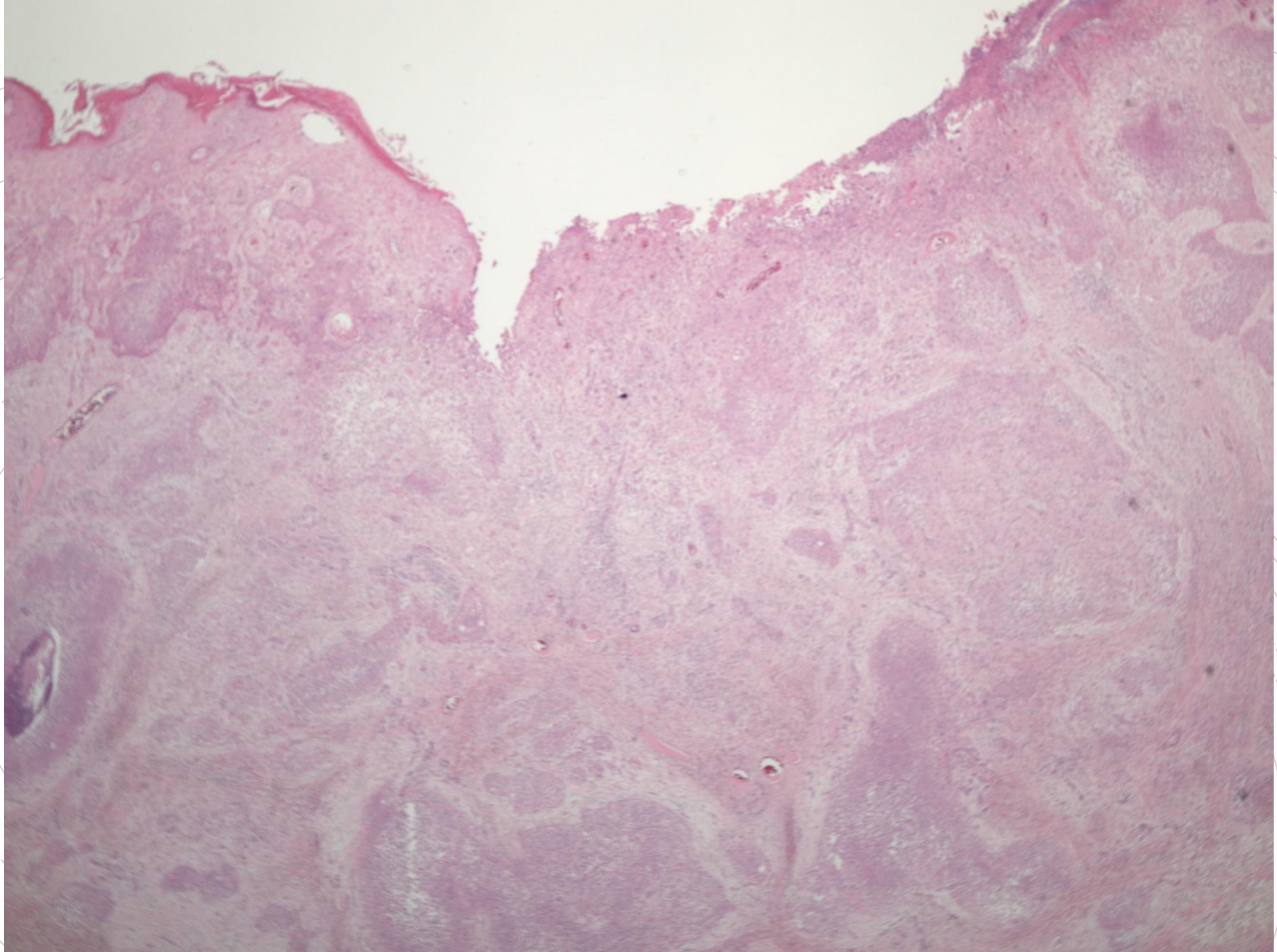
- Thalassemia, sickle cell anemia, spherocytosis, congenital dyserythroblastic anaemia and idiopathic thrombocytopenic purpura
- Mechanism likely a response to anaemia, if sufficiently severe will cause haemopoesis in extramedullary spaces
- Neoplastic myeloid proliferation in the extramedullary spaces can happen - association with MPNs, EAML, MDS and other myeloid neoplasms
- May have trilineage marrow elements like benign EMH
- Common sites associated with neoplasia are spleen, lymph nodes, skin, bone, small intestine, orbit, breast, cervix, nasal sinus, mediastinum and brain.

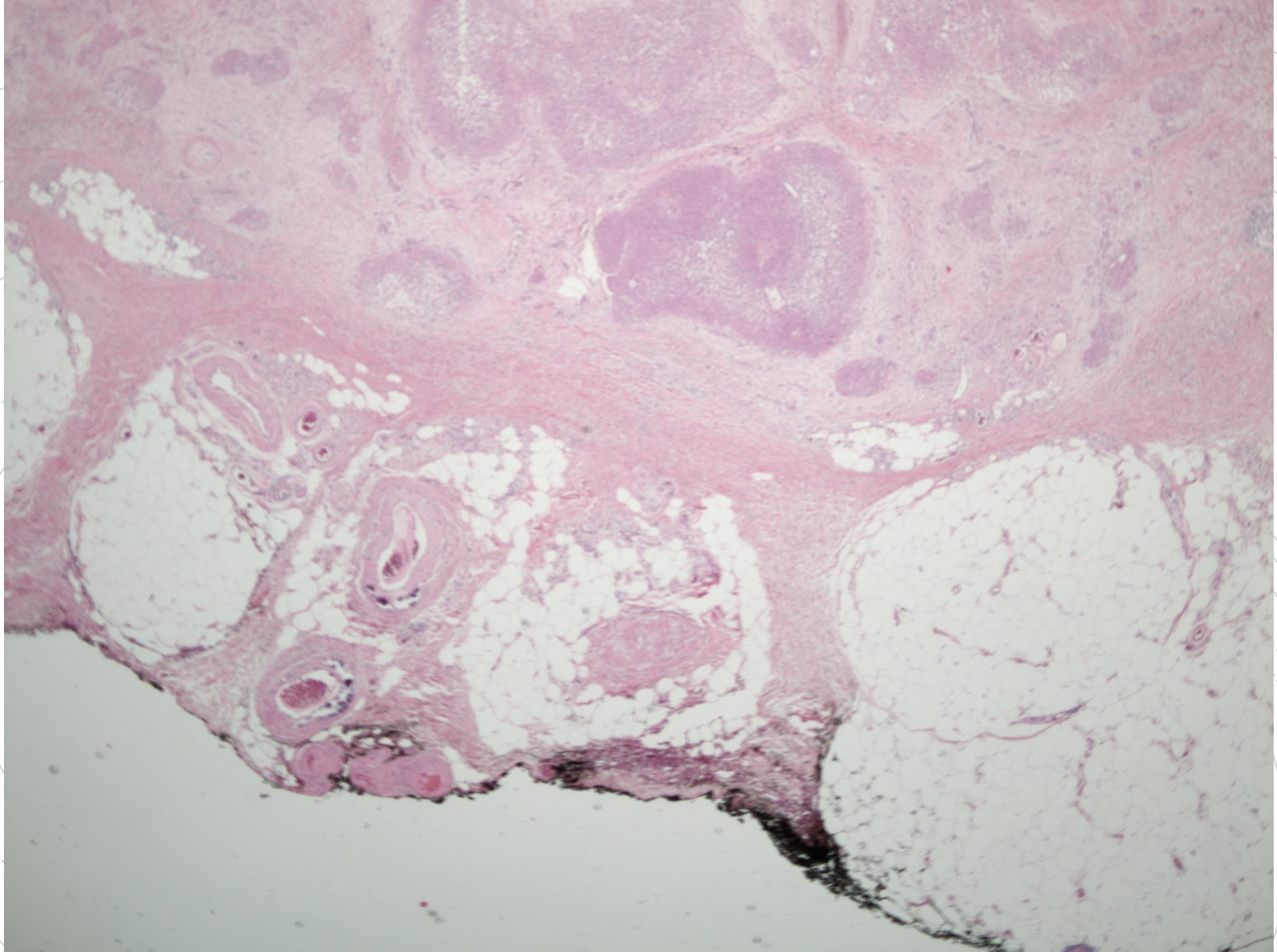
Association with stromal abnormalities

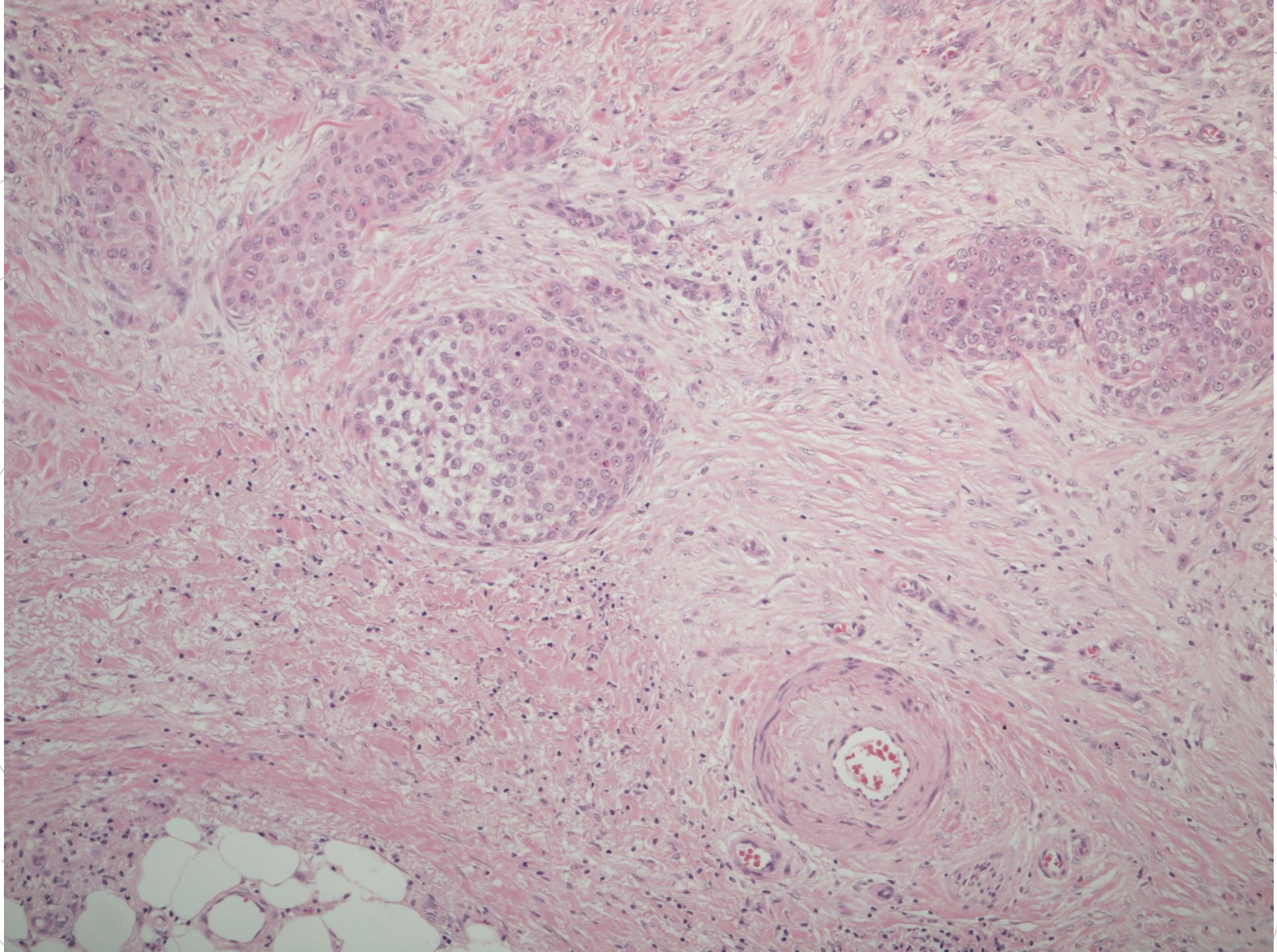
- Infrequent association with bone stromal disorders where marrow spaces are compromised by excess bone formation/proliferation:
  - Severe renal osteodystrophy
  - Paget's disease
  - Osteopetrosis
- Or replaced by non-haematopoietic/non-bone tissue:
  - Marrow fibrosis following inflammation
  - Tumour metastasis

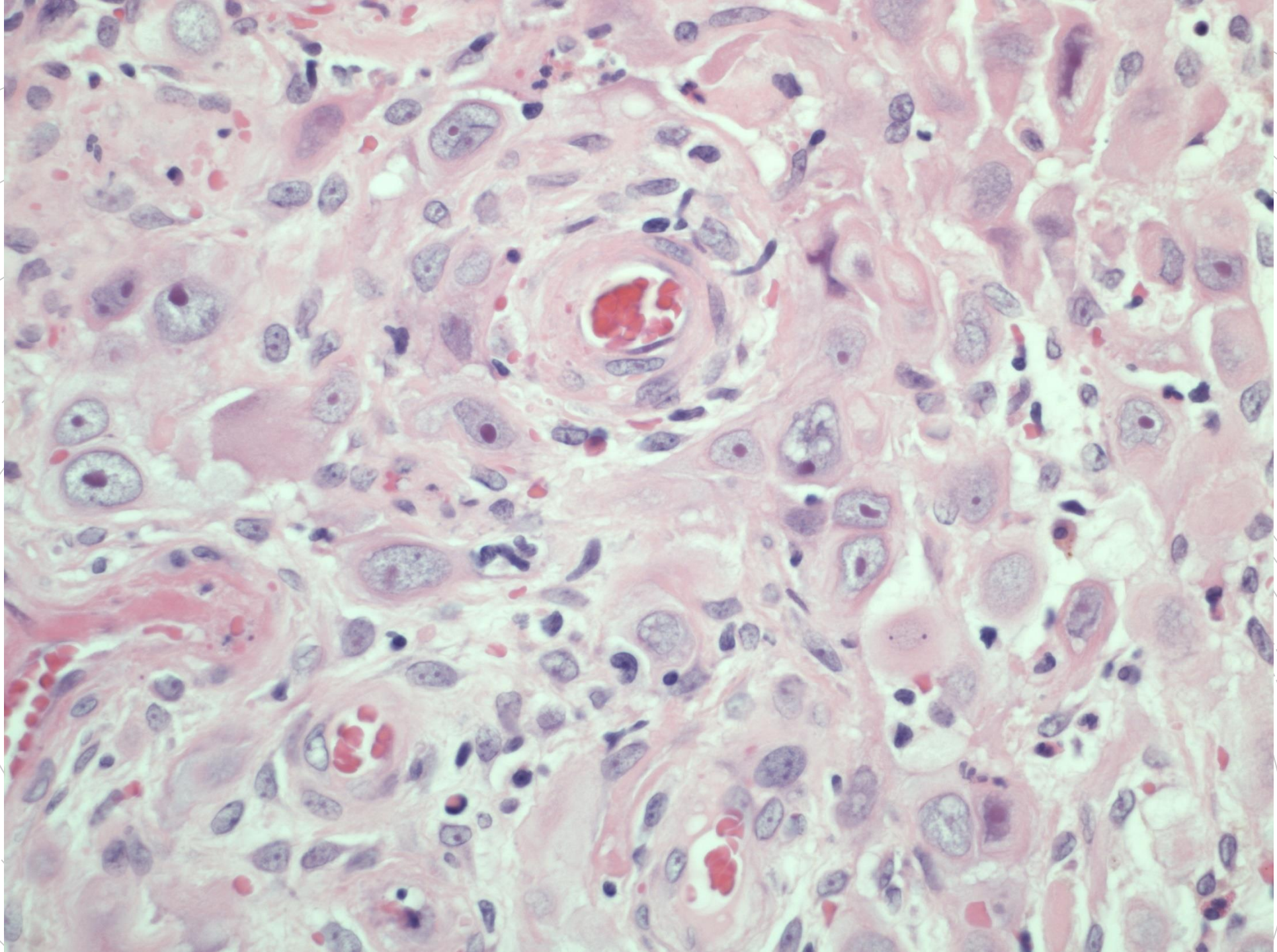
Educational Case 4

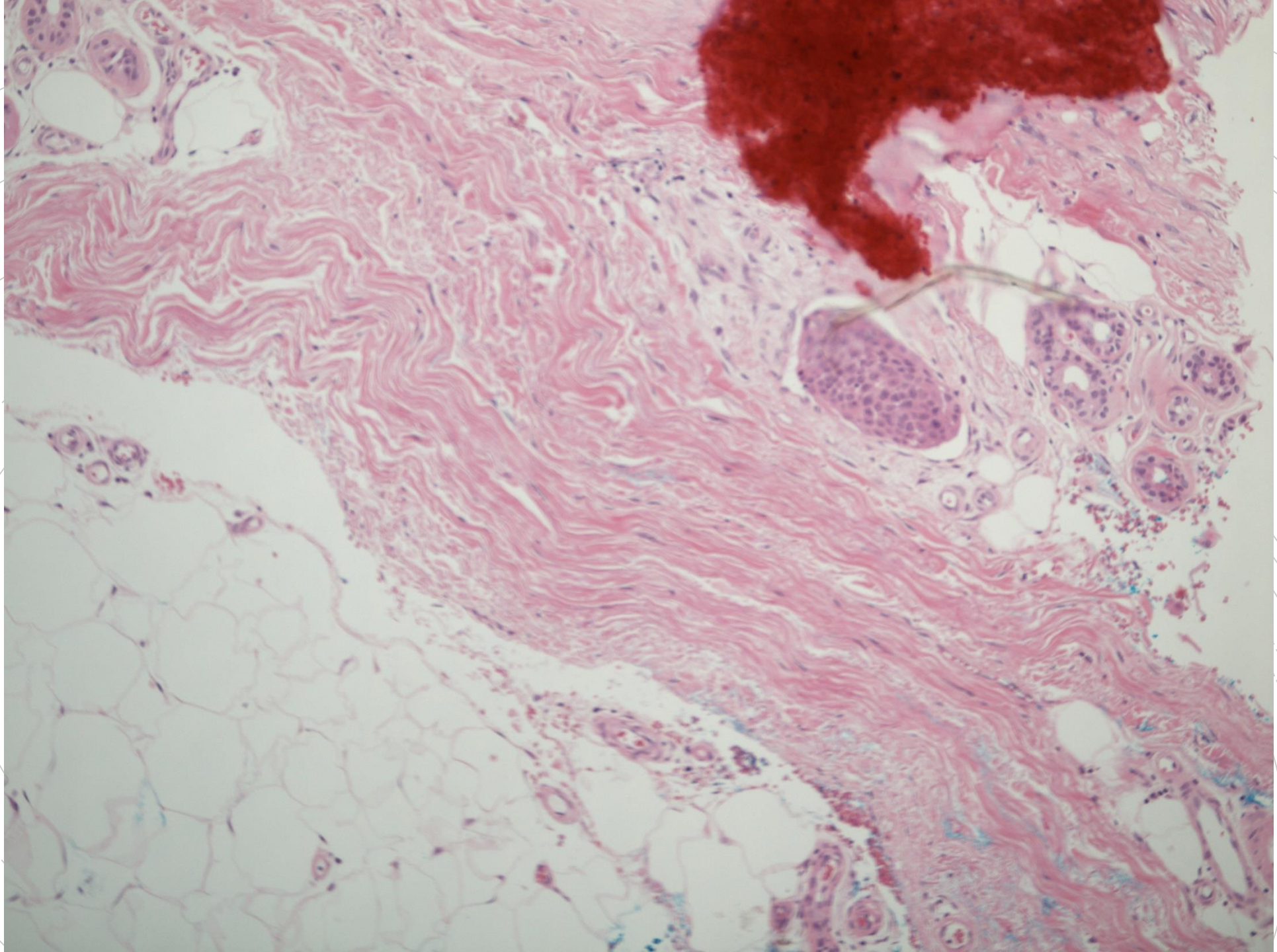
83 year old female. Excision lesion right shin. ?SCC, ?BCC right shin. Excised.

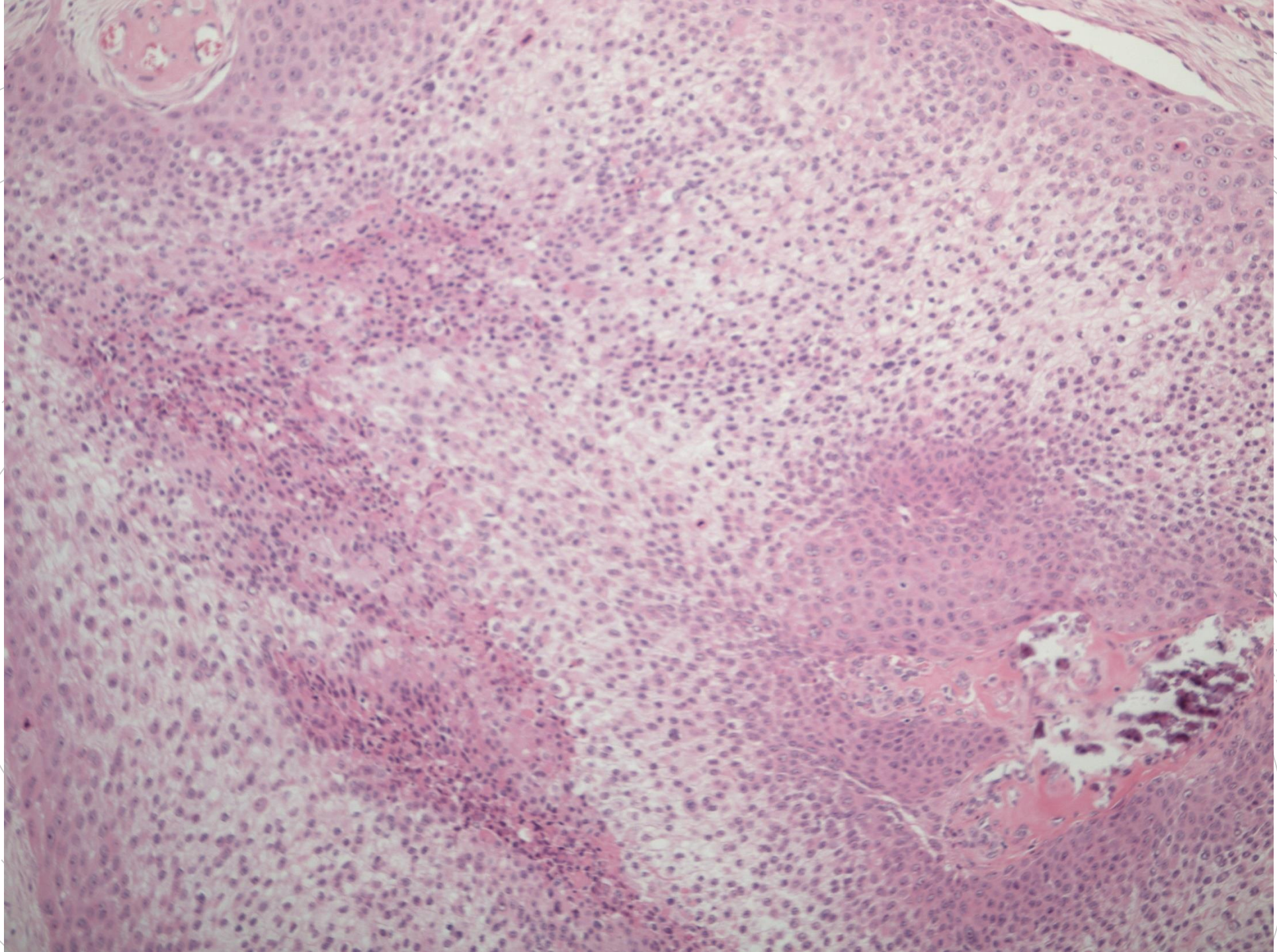


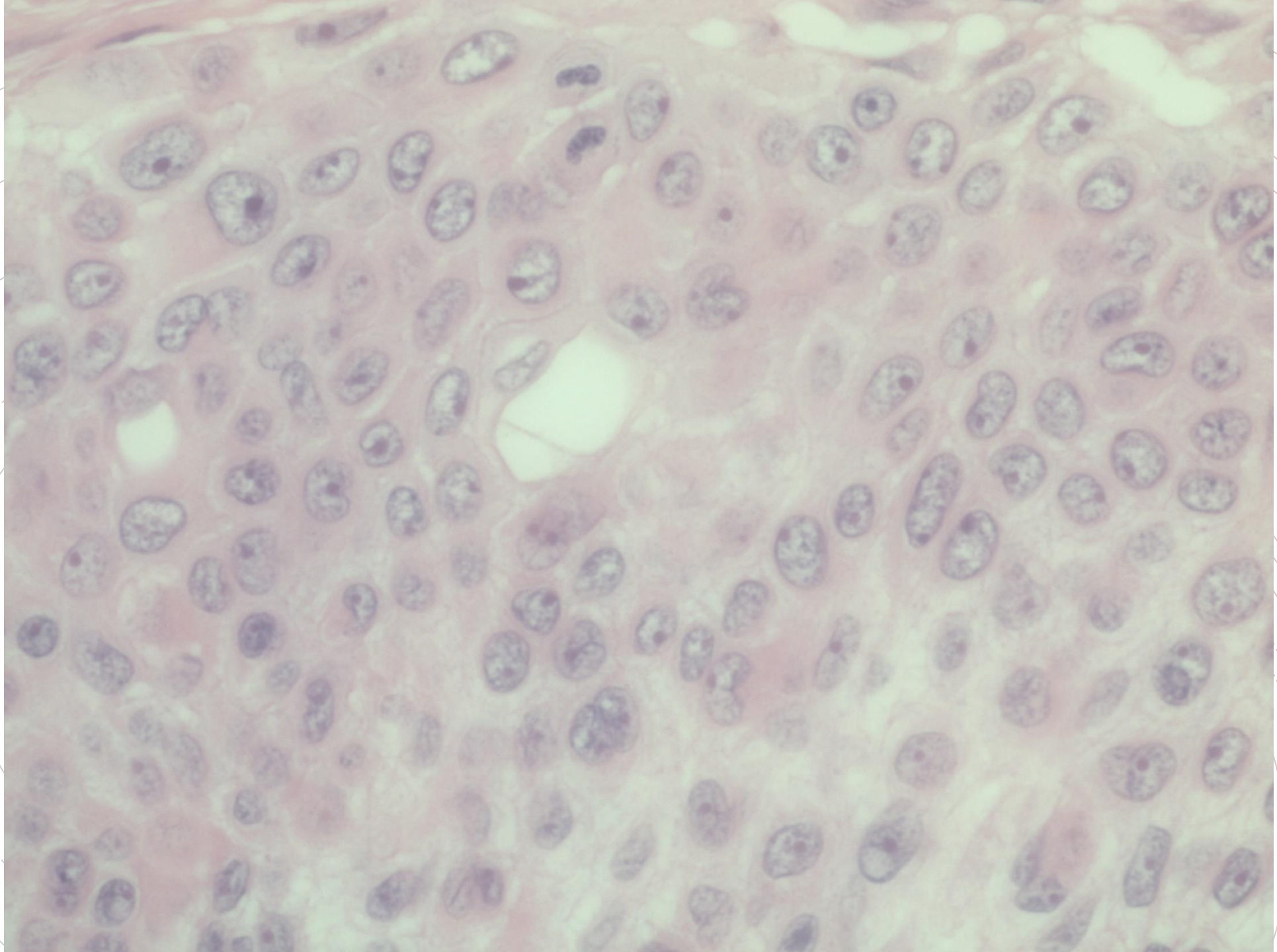


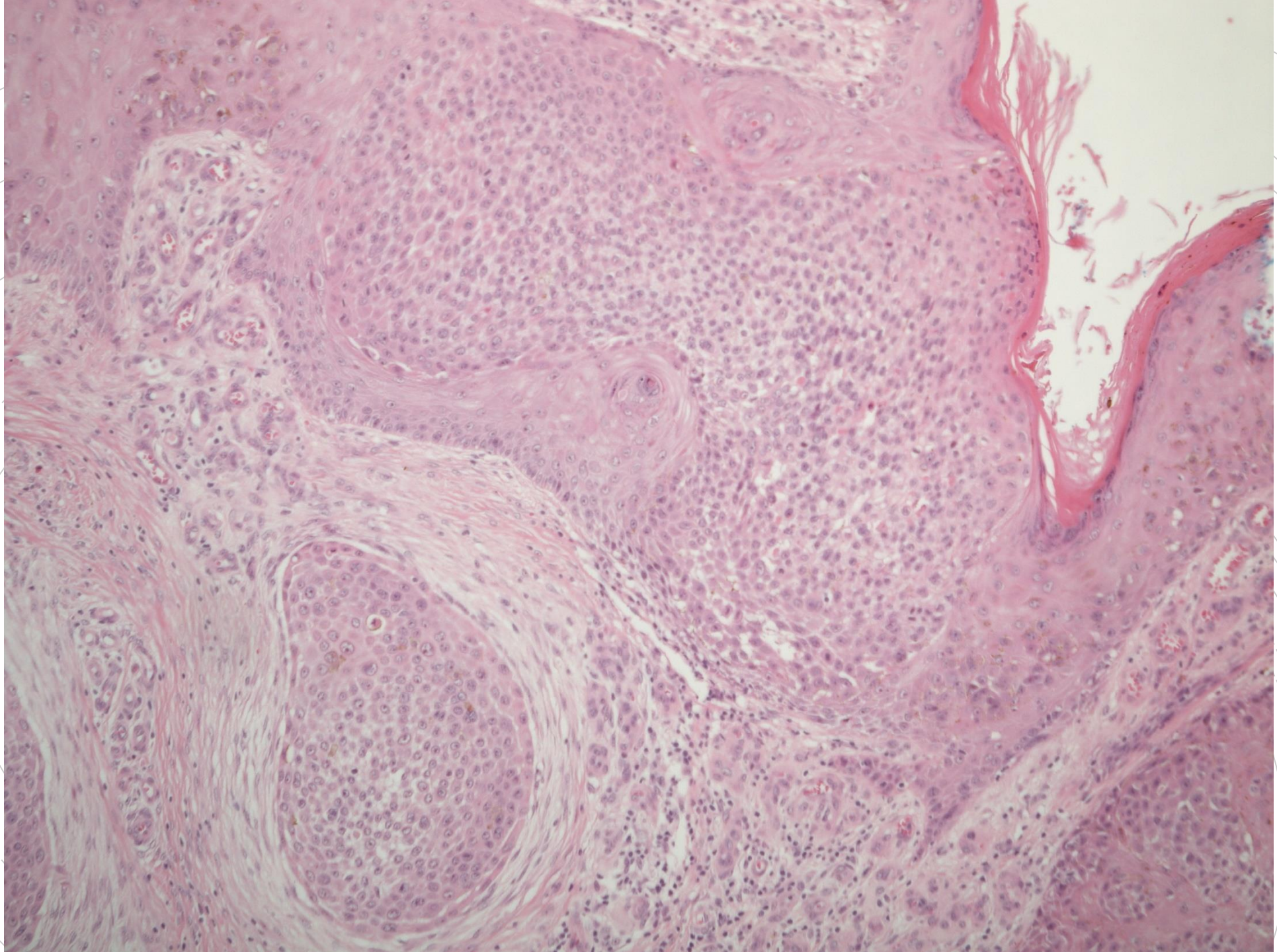


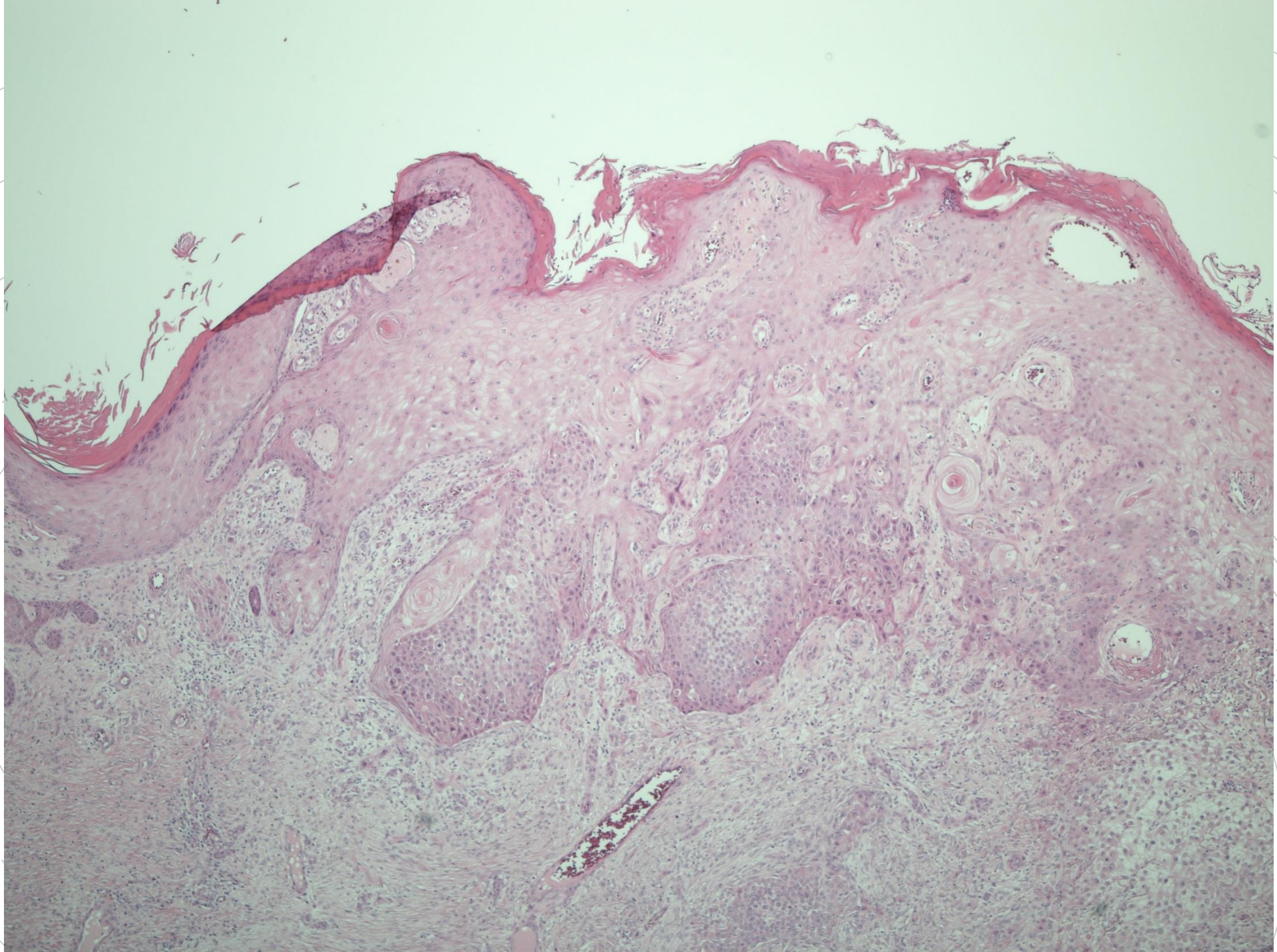


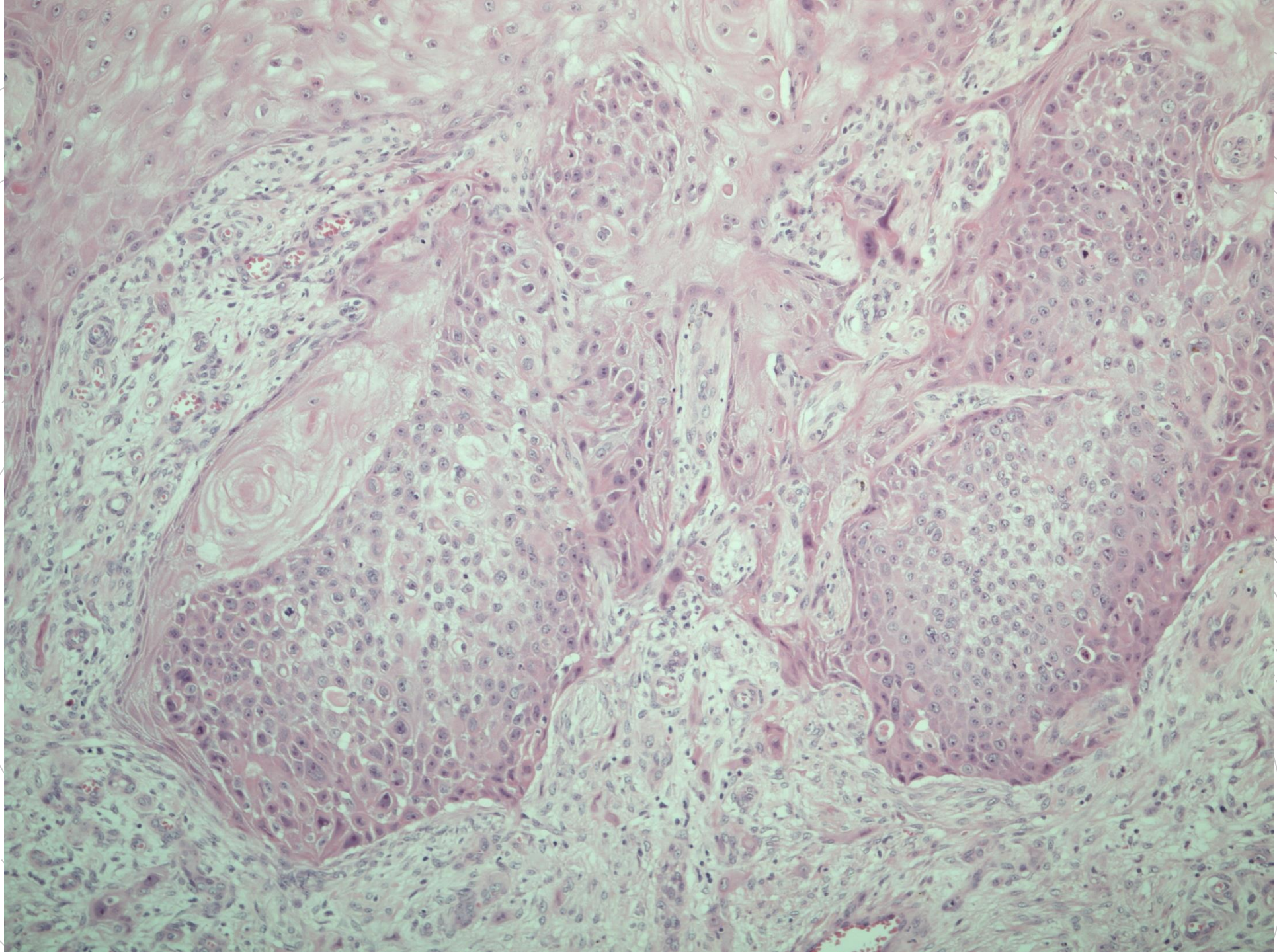












Opinions

Diagnosis	Count
Porocarcinoma	**26**
with MIS	4
With SCC	1
with Poroma	1
Squamous Cell Carcinoma	**15**
Differential with Adnexal Malignancy	4
with Sebaceous Adenoma	1
with MIS	1
with Melanoma	1
Other Adnexal Malignancies	**8**
Trichilemmal Carcinoma	8
Hidradenocarcinoma	4
Eccrine Carcinoma	1
Sebaceous Carcinoma	1
Malignant Pilar Tumour	1
Adnexal Carcinoma	1
Malignant Acrospiroma	1
Other	**4**
Adnexal Tumour	2
Eccrine Acrospiroma	1
Apocrine Tumour	1

Porocarcinoma

- **Sites:** lower limbs, trunk, head, and upper limbs
- **Mean Age:** 61.5-73; **Range:** 12-91
- Rare – 0.005% to 0.01% of all epidermal skin neoplasms
- Presents as rapid-growing ulcerated nodule that can be pigmented

Porocarcinoma

- In-situ or invasive
- **Features:** Nuclear pleomorphism, nuclear hyperchromasia, and atypical mitoses, atypical cytological features that vary from moderate to frankly anaplastic
- Infiltrative borders
- Perineural and intravascular invasion, necrosis and ductal differentiation are variable
- Rare features include clear cell change, focal squamous cell differentiation, sarcomatoid (metaplastic) transformation, intratumoural melanin deposits, melanocytic colonization, and focal sebaceous differentiation

Differentials

- Single cell apoptosis in other tumours can mimic abortive ductal differentiation – EMA or CEA can highlight true ductal differentiation
- Difficult to diagnose low-grade porocarcinomas. The presence of an infiltrative architecture is important.
- Variable differentiation makes diagnosis difficult. An in-situ lesion (i.e. a pre-existing poroma or porocarcinoma in situ, in-situ SCC) is the best way to discriminate.

Thank You

References

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