

# Skin Adnexal Tumors-An Overview

Paul K. Shitabata, M.D.

Dermatopathologist

APMG

# A Bump!

- Nonspecific clinical appearance
  - Usually minimal skin changes
- Head and neck, trunk

# Site Specific Tumors

- Extremities
  - Papillary digital adenocarcinoma
  - Papillary eccrine adenoma
- Axillae
  - Apocrine carcinoma
- Vulva and Perineum
  - Hidradenoma papilliferum
  - Extramammary Paget's disease
  - Ductopapillary apocrine carcinoma

# Clues to Underlying Disease

- Genodermatosis
  - Turban Tumor
  - Anzell-Spiegler syndrome
  - Cowden's syndrome
  - Muir-Torre syndrome
- Clear cell syringoma

# Potential Multiplicity

- Cylindroma (Turban tumor syndrome)
- Syringoma
- Poroma
- Trichoepithelioma
- Trichilemmoma (Cowden's syndrome)
- Sebaceous tumors (Muir-Torre syndrome)

# Childhood Tumors

- Syringoma
- Syringocystadenoma papilliferum
- Poroma
- Cylindroma
- Pilomatrixoma
- Trichoepithelioma

# Histopathologic Categories

- Eccrine
- Follicular
- Sebaceous
- Apocrine
- Mixed

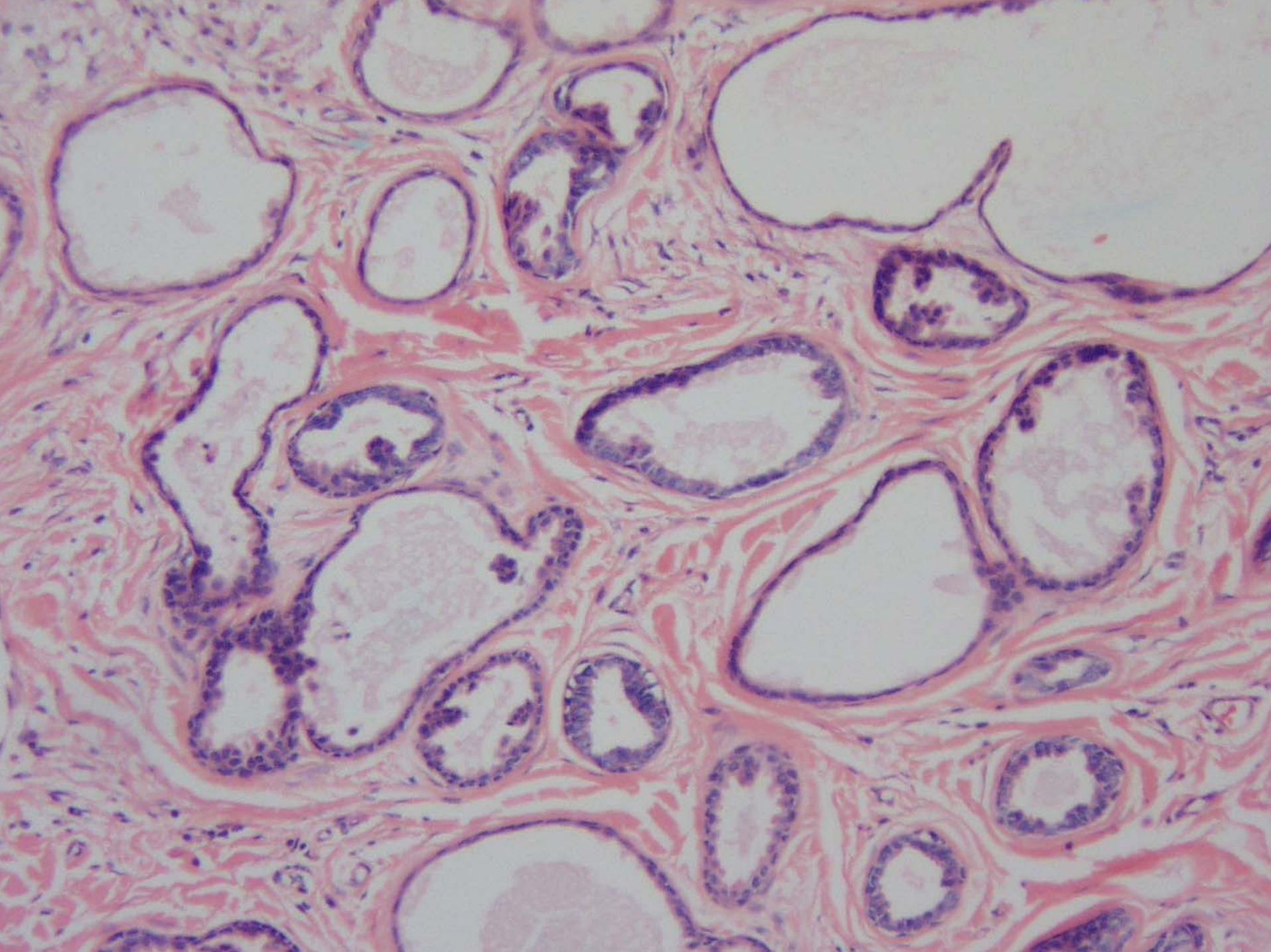
# Sweat Gland Neoplasms (Eccrine)

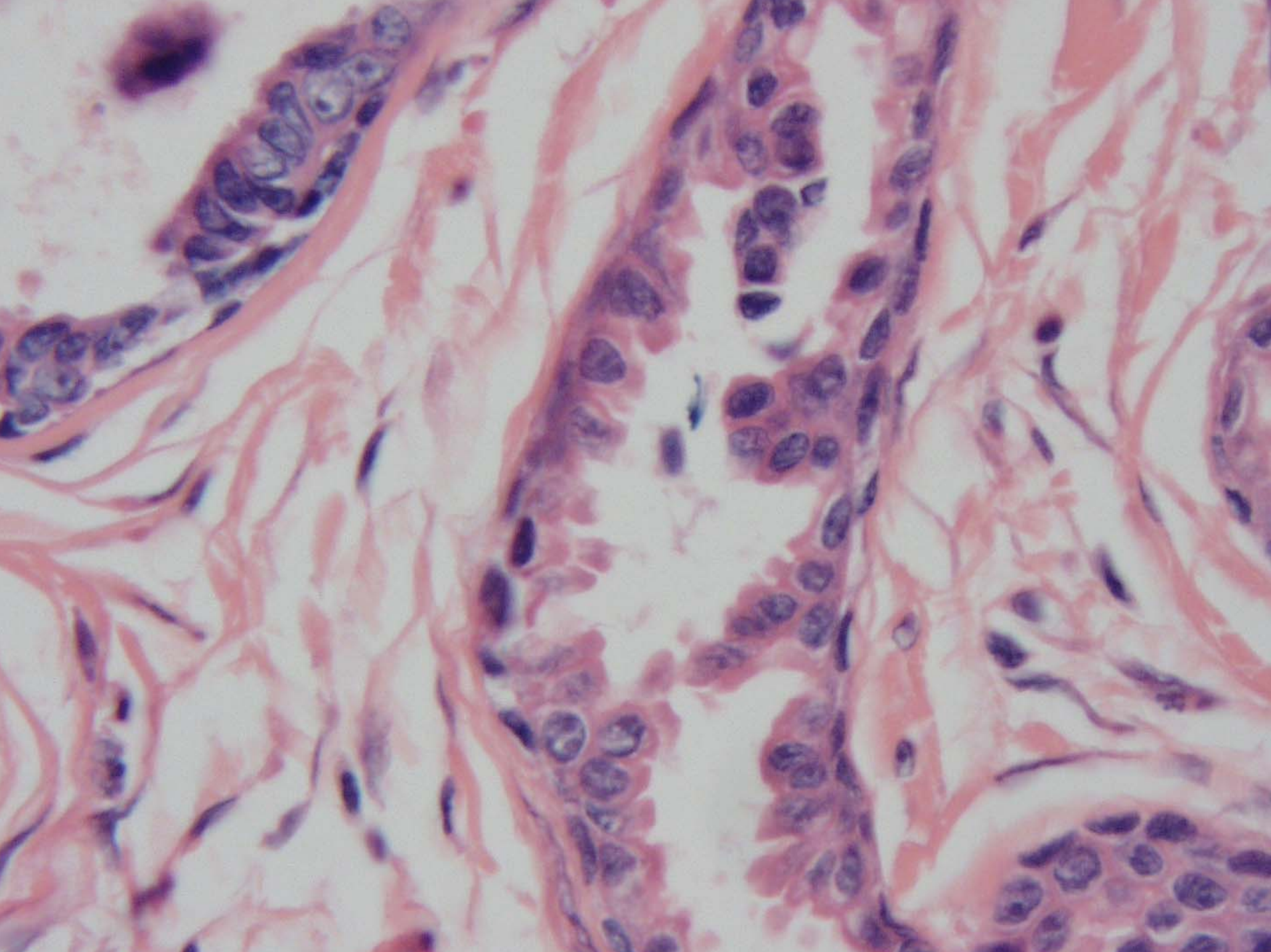
- Cylindroma
- Spiradenoma
- Acrospiroma
- Syringoma
- Hidrocystoma
- Poroma
- Mixed tumor
- Papillary eccrine adenoma
- Syringofibroadenoma



# Clues to Eccrine Tumors

- Ductal or tubular differentiation
  - Tubules not lined by keratinocytes in crenulated pattern (sebaceous ducts)
  - Not lined by cells with decapitation secretion



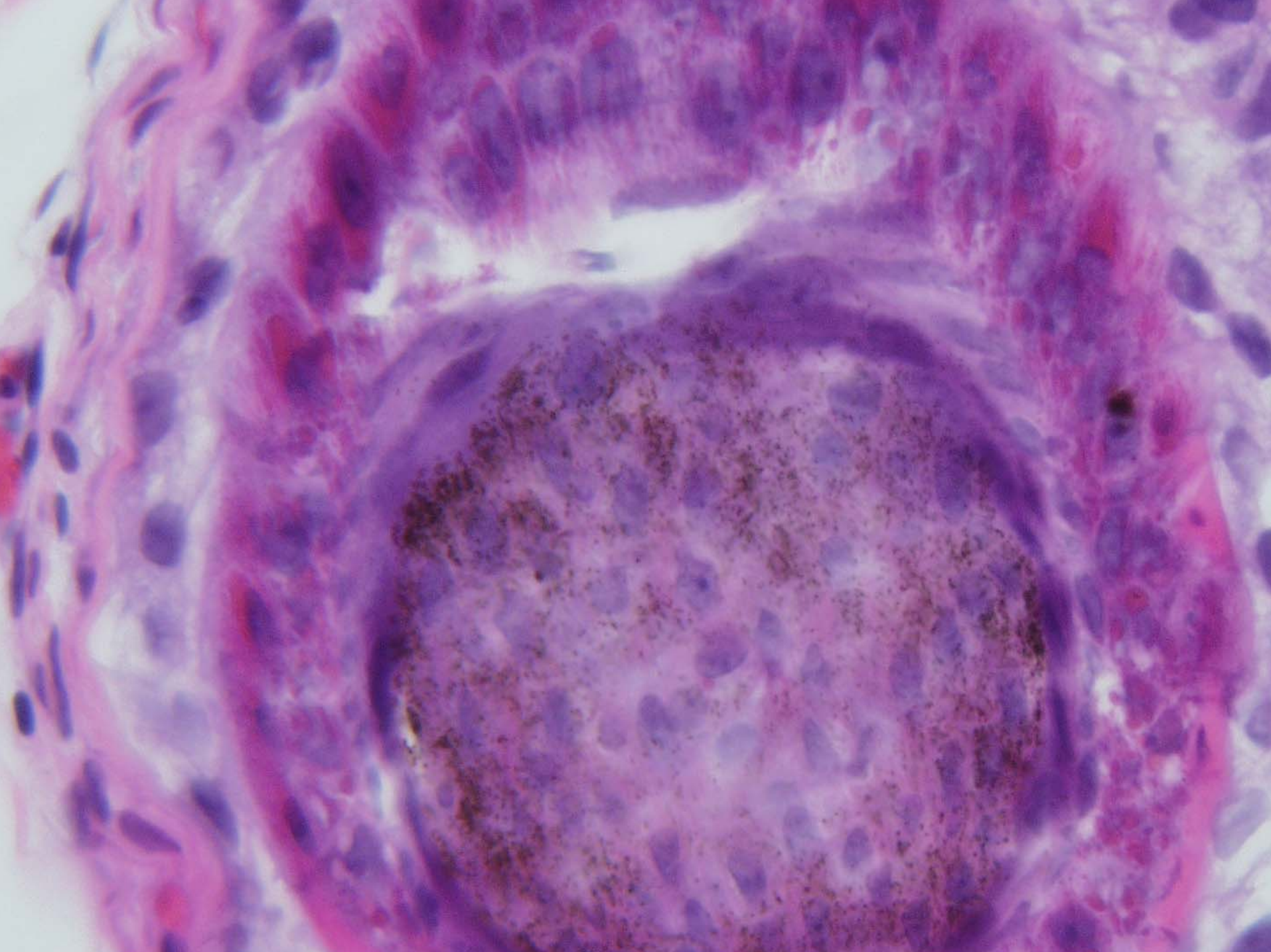


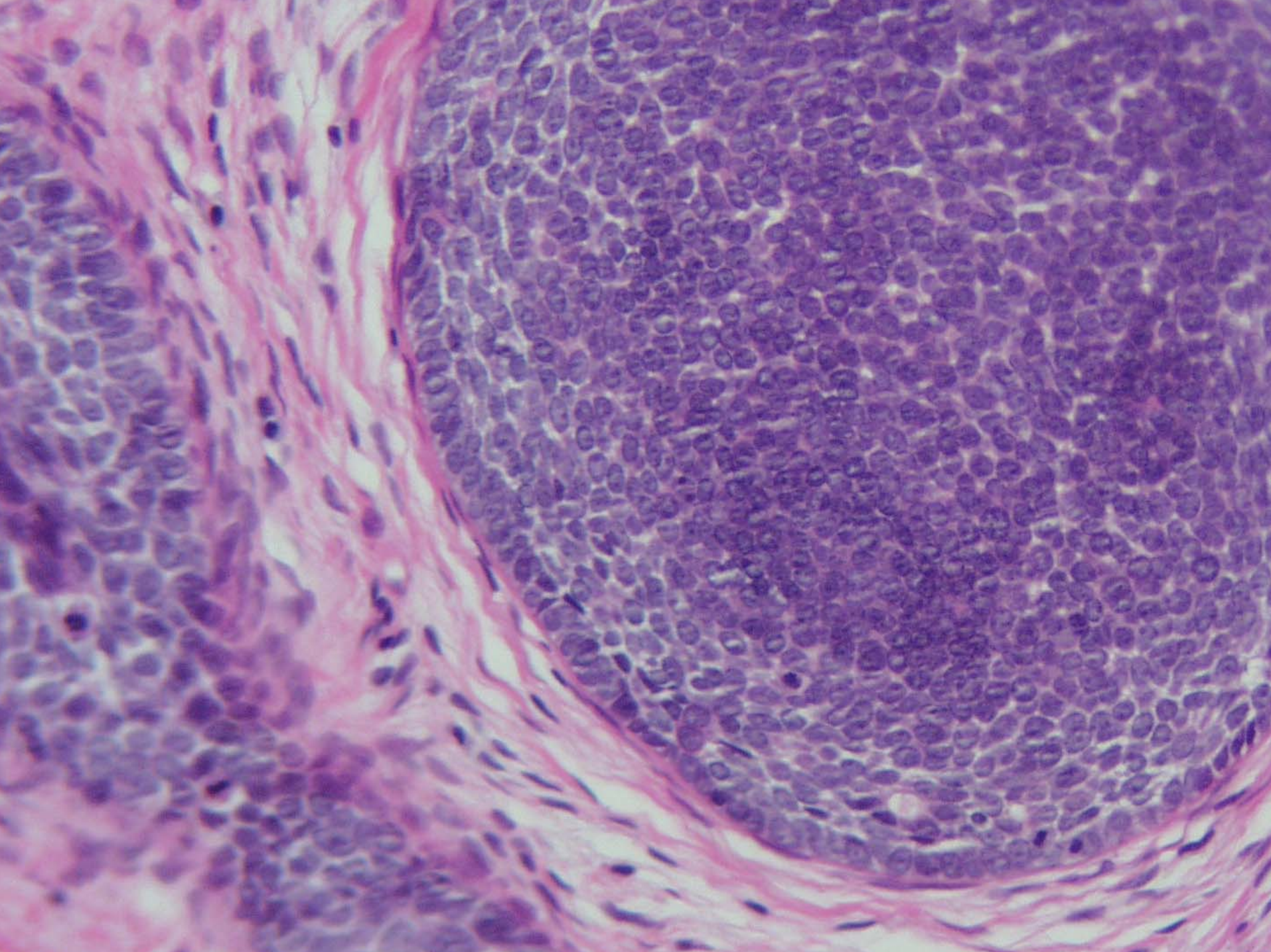
# Follicular Neoplasms

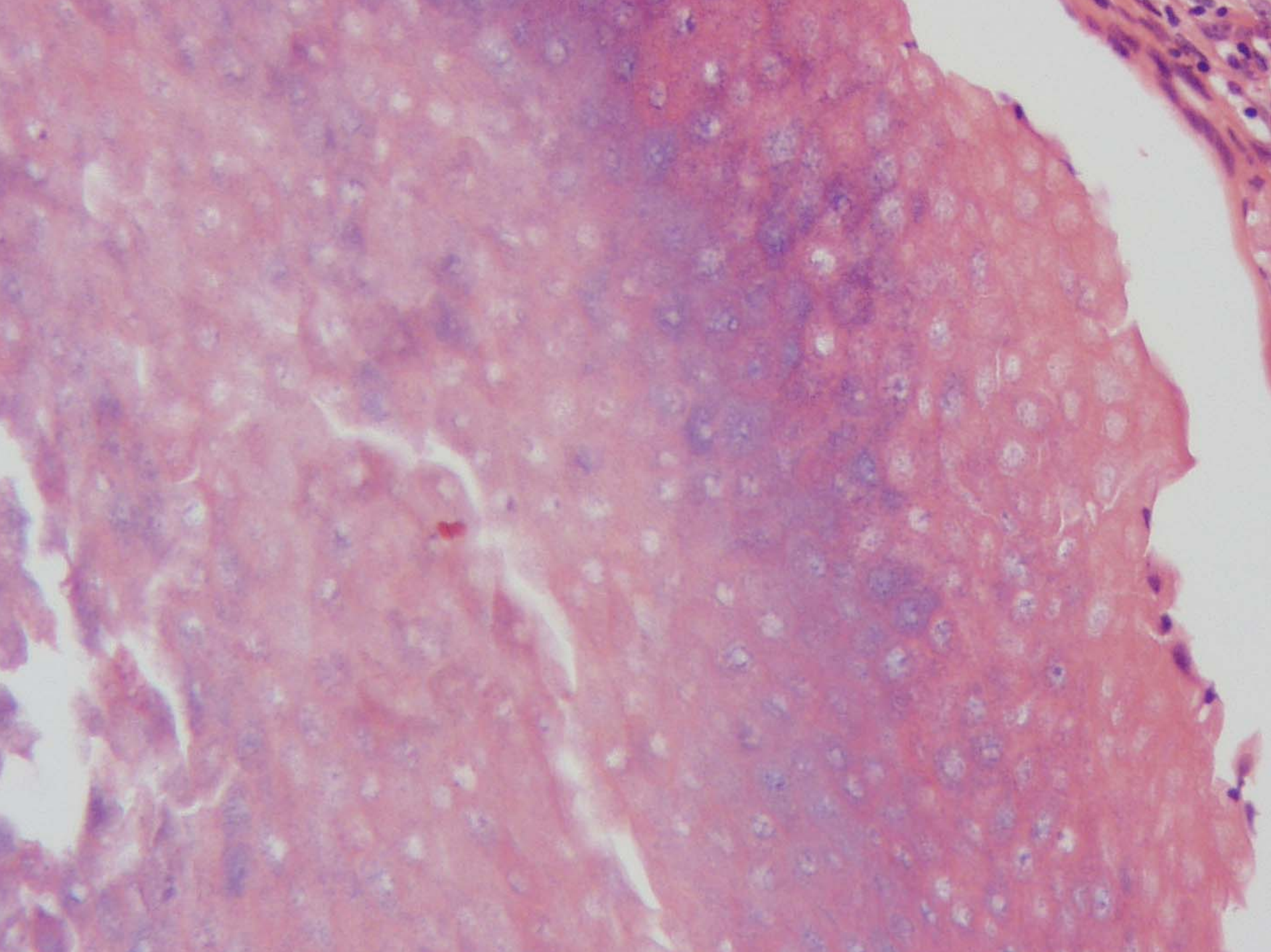
| Location                        | Benign  | Malignant  |
|---------------------------------|---|--|
| Outer Hair sheath               | Tumor of the follicular infundibulum<br>Pilar sheath acanthoma<br>Winer's pore<br>Trichoadenoma<br>Trichilemmoma<br>Proliferating pilar tumor | Trichilemmal carcinoma<br>Malignant proliferating pilar tumor                    |
| Germanitive epithelium          | Trichofolliculoma<br>Trichoepithelioma<br>Desmoplastic trichoepithelioma<br>Pilomatrixoma   | Trichofollicular carcinoma<br>Trichoepithelial carcinoma<br>Pilomatrix carcinoma |
| Mixed epithelium and mesenchyme | Basaloid follicular hamartoma<br>Trichoblastoma   |  |
| Pilar mesenchyme                | Trichodiscoma<br>Perifollicular fibroma<br>Fibrofolliculoma<br>Follicular myxoma<br>Leiomyoma   |  |

# Clues to Follicular Neoplasms

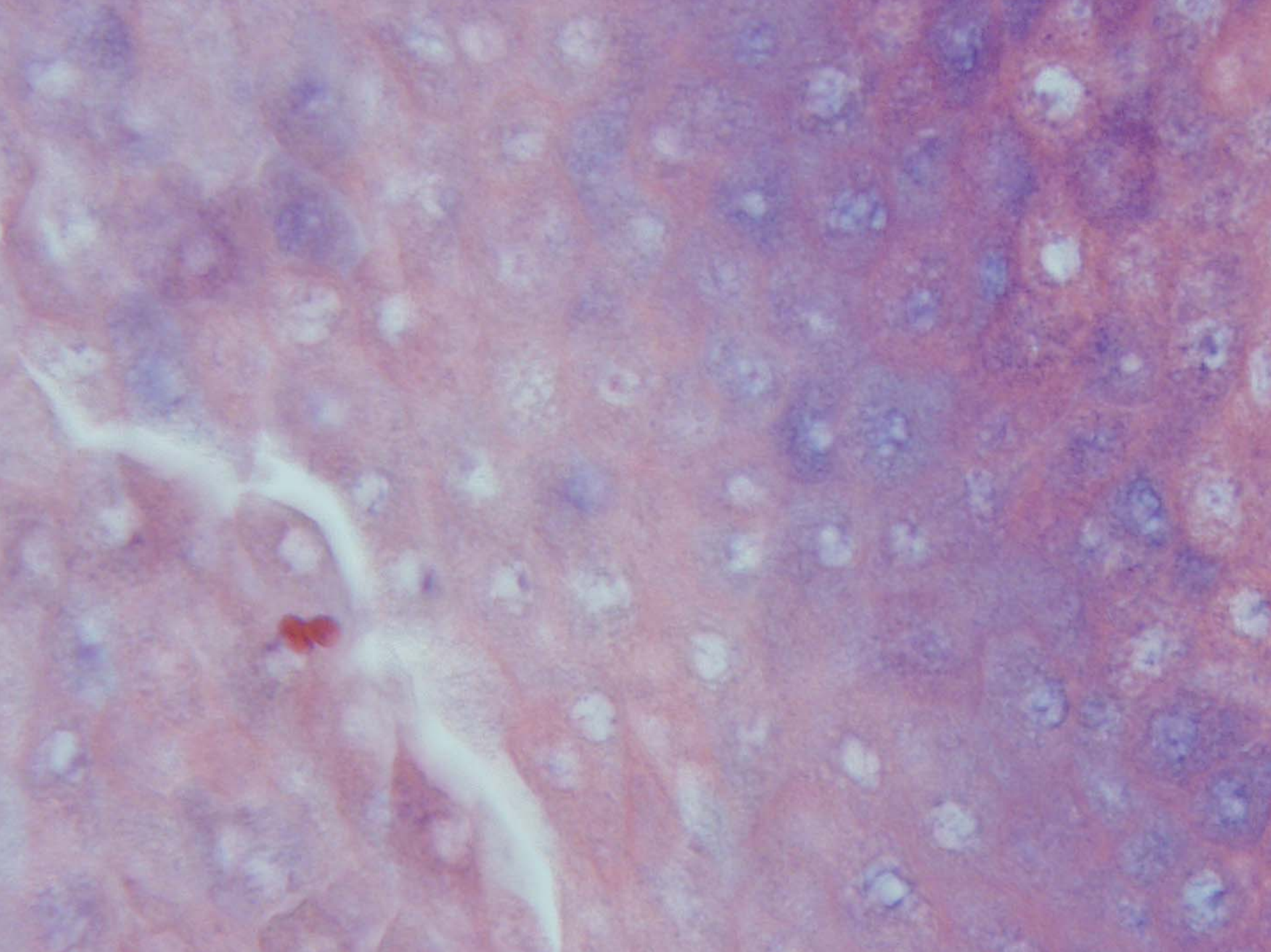
- Recapitulate Hair Follicles
  - Follicular bulb and papilla
  - Matrical cells
  - Shadow cells
  - Trichohyalin granules









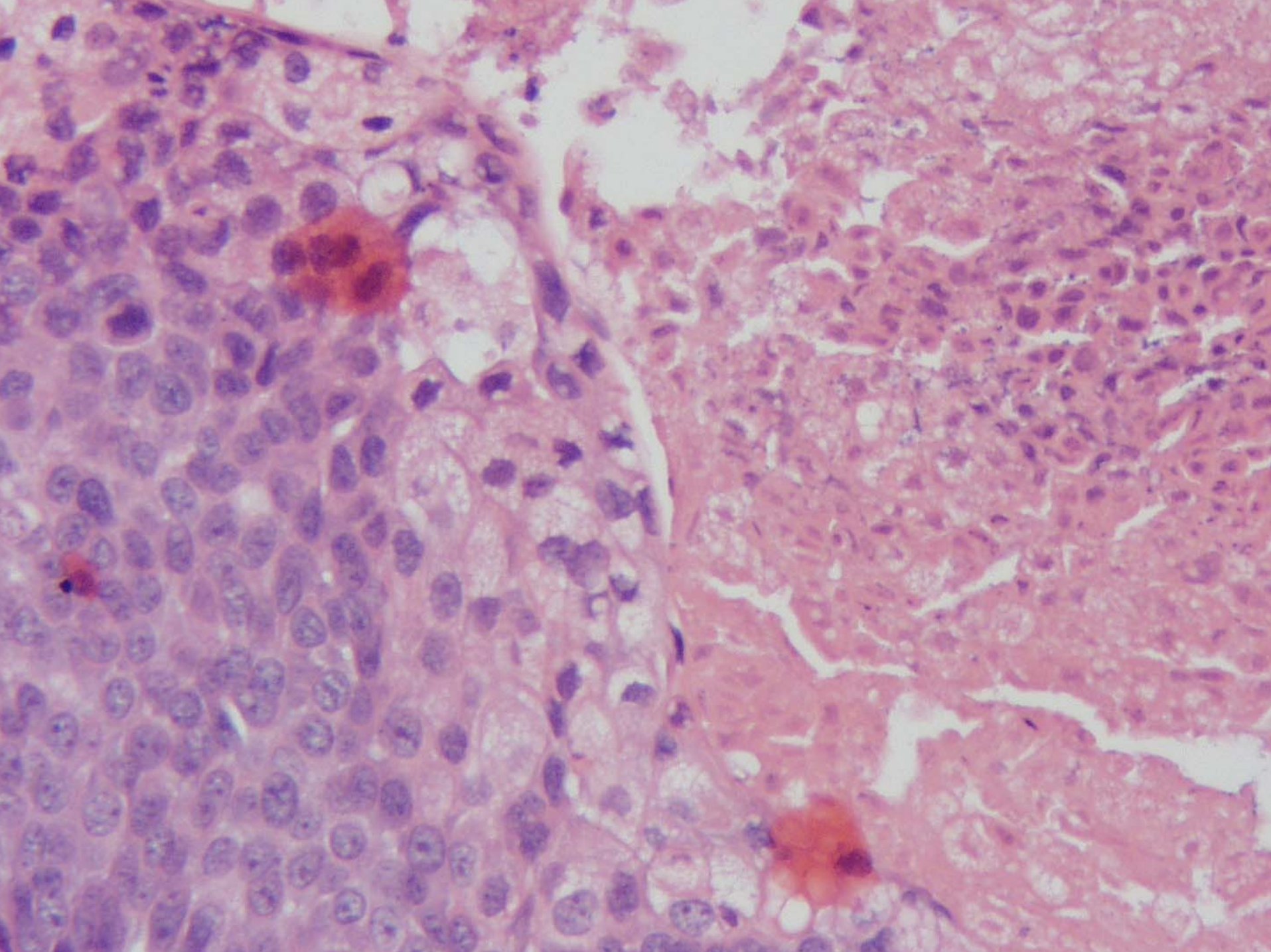


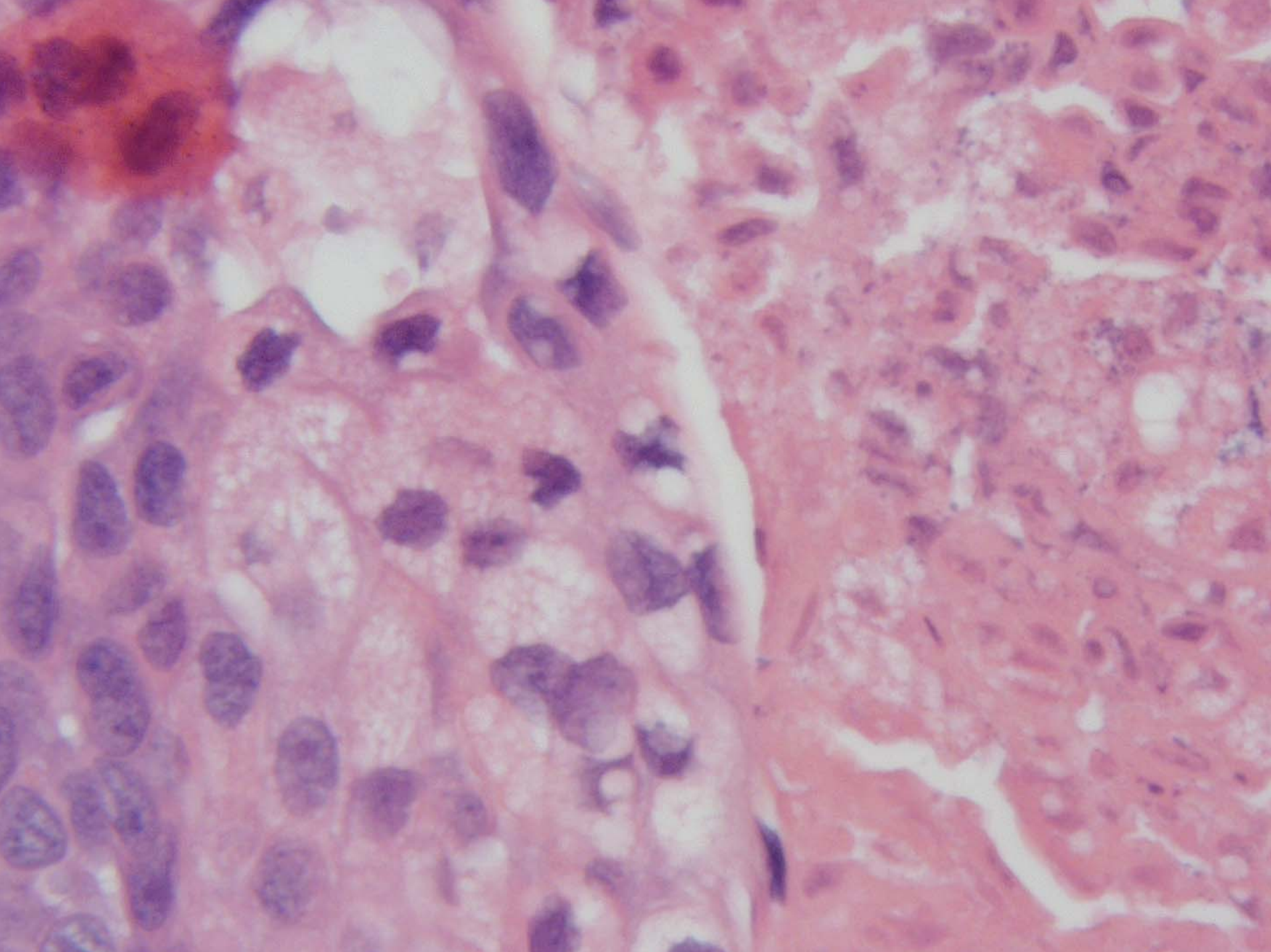
# Sebaceous Neoplasms

- Hyperplasias
  - Senile
  - Premature
  - Nevus sebaceus of Jadassohn
- Benign
  - Sebaceous adenoma
  - Basosebaceous epithelioma
  - Superficial epithelioma with sebaceous differentiation
  - Sebaceoma
- Malignant
  - Ocular sebaceous carcinoma
  - Extraocular
  - Carcinoma with mixed adnexal differentiation

# Clues to Sebaceous Neoplasms

- Sebocytes or tubule resembling sebaceous duct
- Holocrine secretion



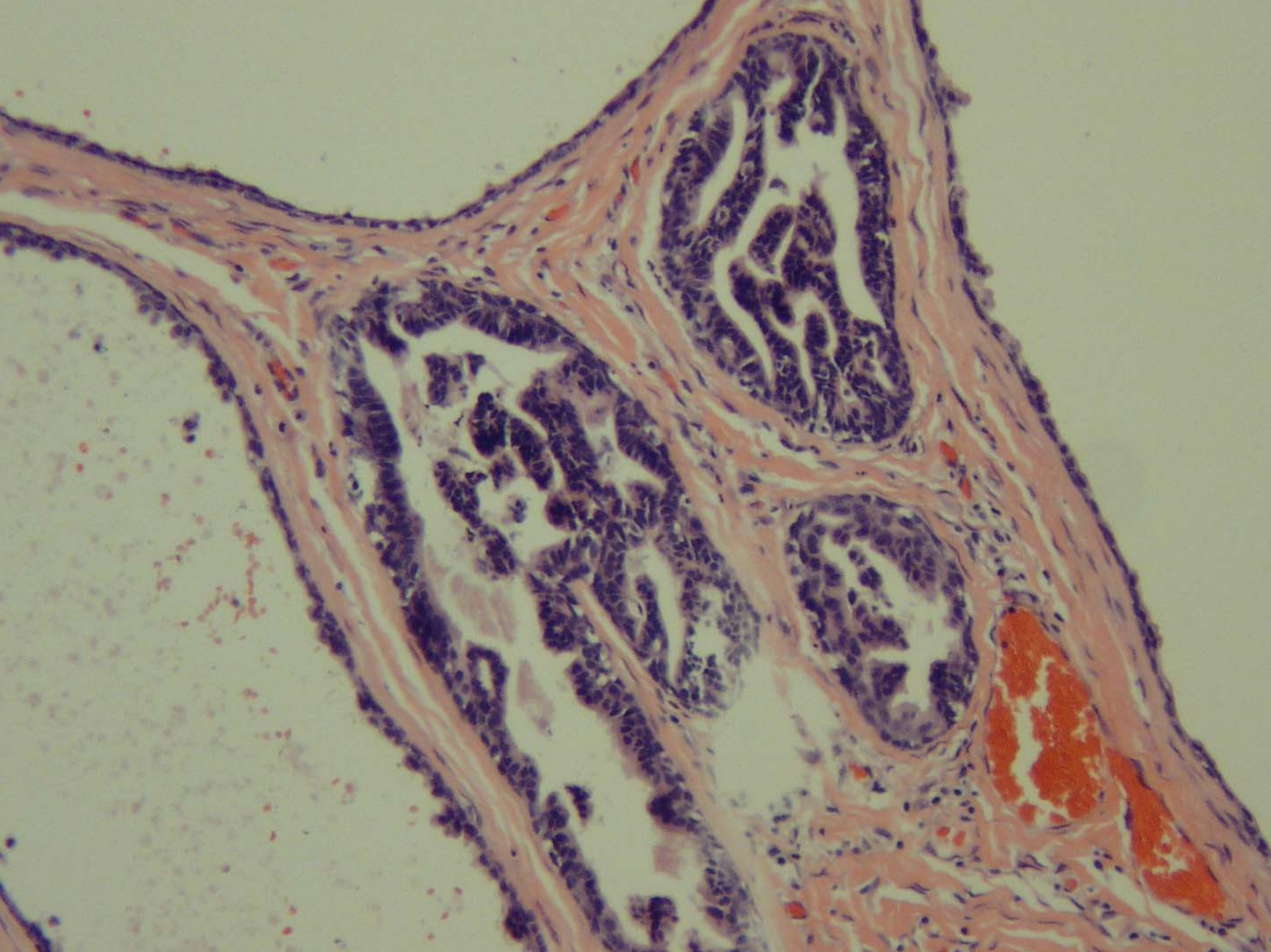


# Apocrine Neoplasms

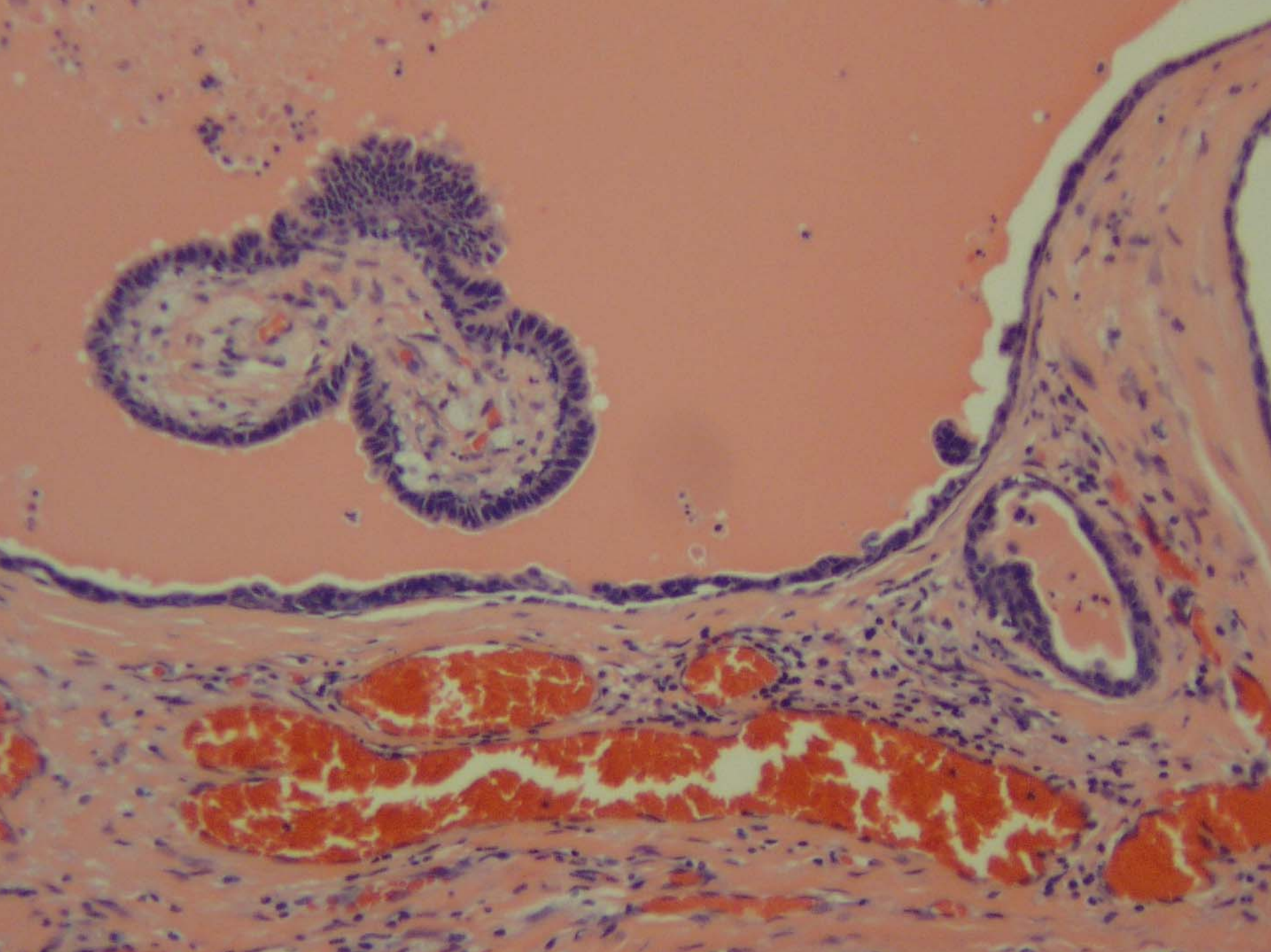
- Hidrocystoma
- Tubular adenoma
- Syringocystadenoma papilliferum
- Hidradenoma papilliferum
- Extramammary Paget's disease

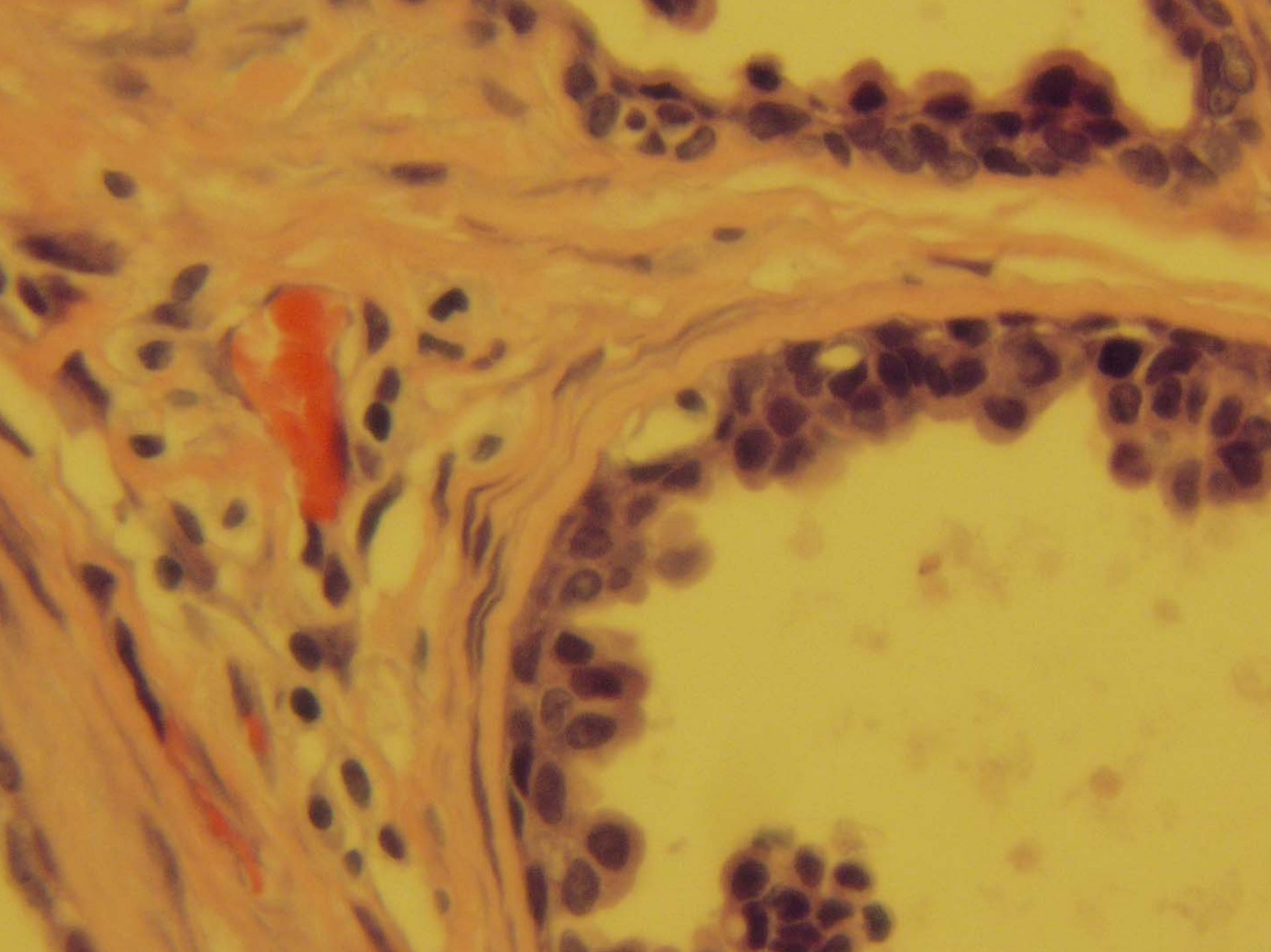
# Clues to Apocrine Neoplasms

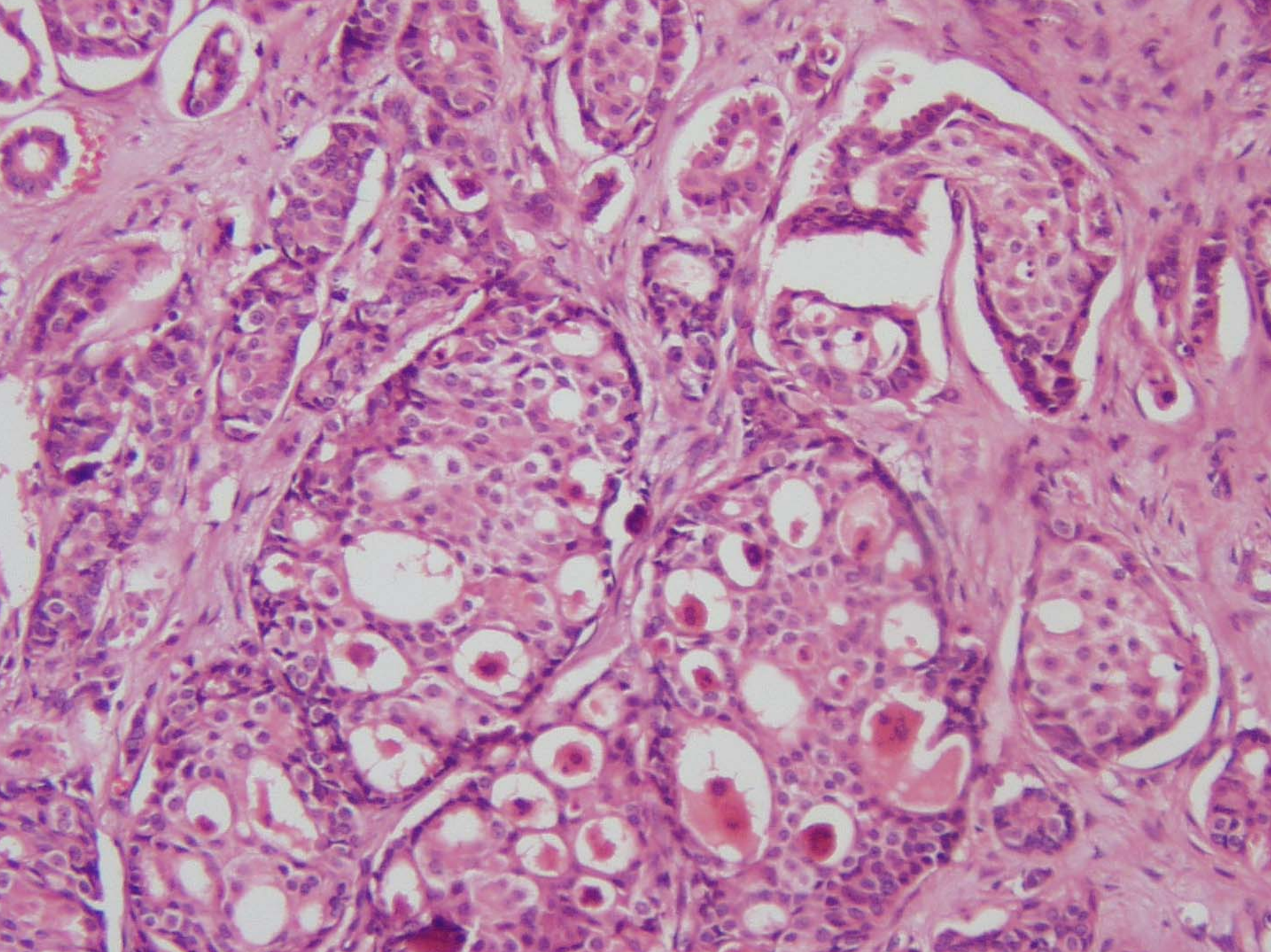
- Ductal changes with apocrine snouting (decapitation secretion)

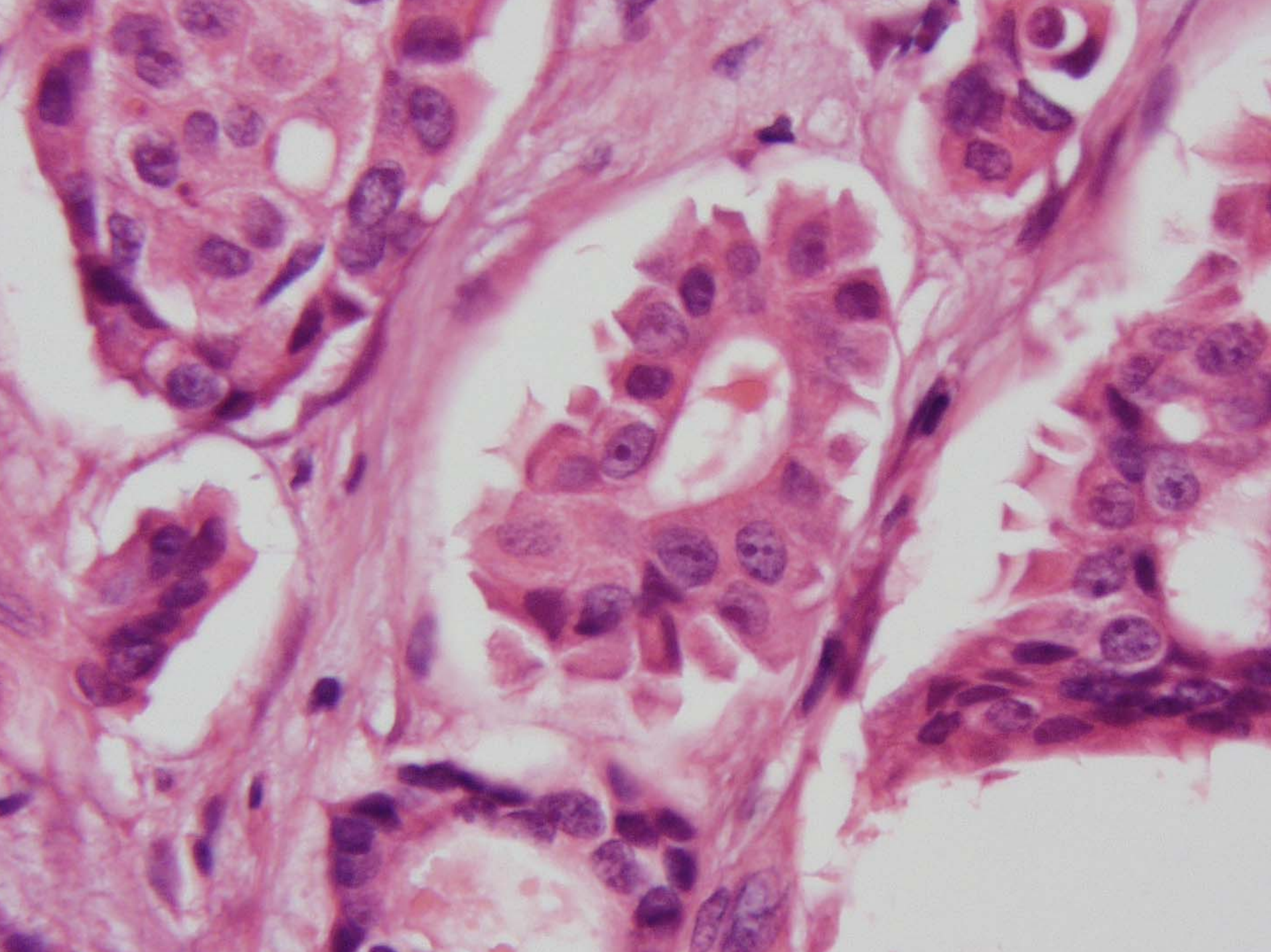






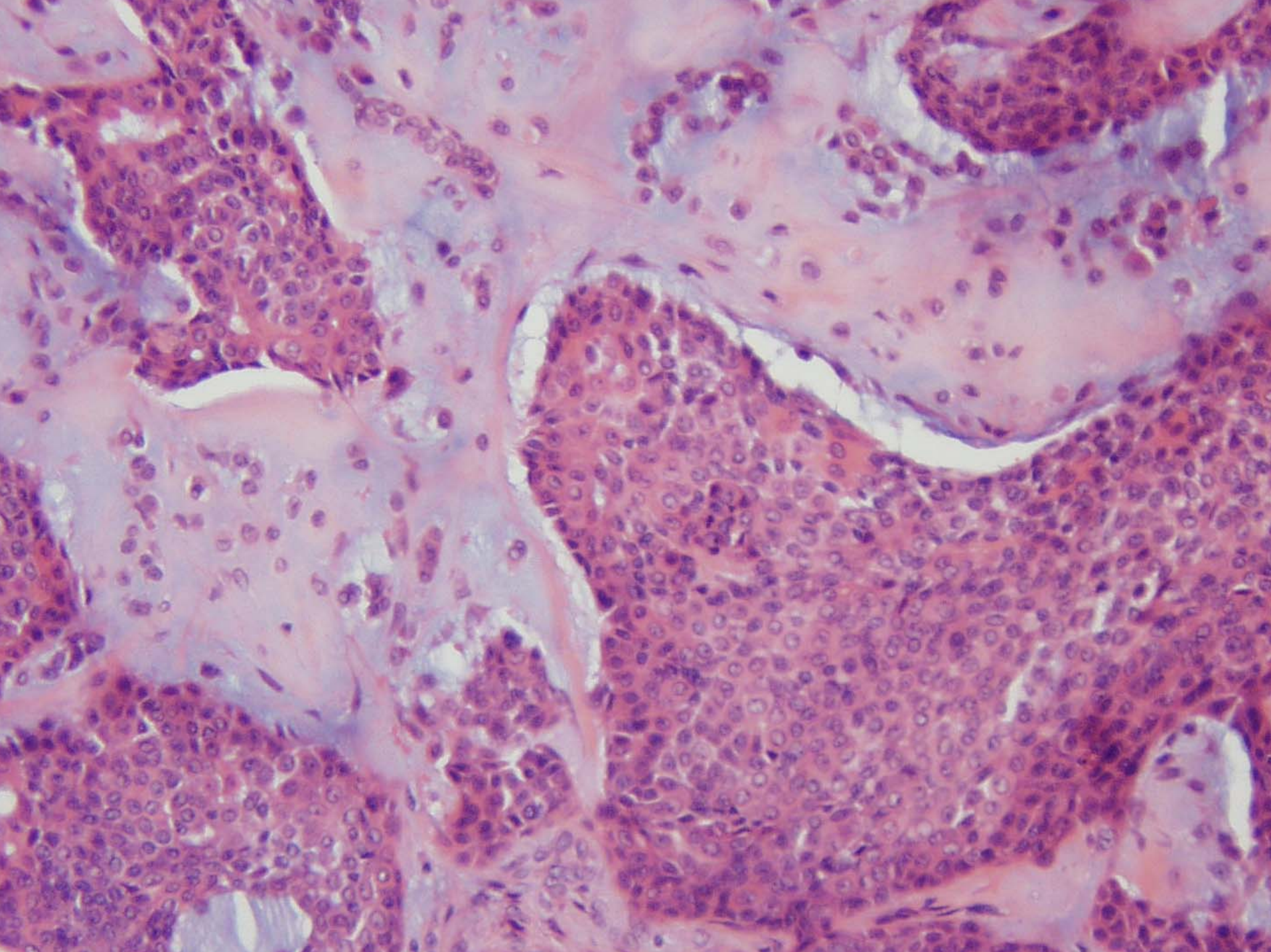


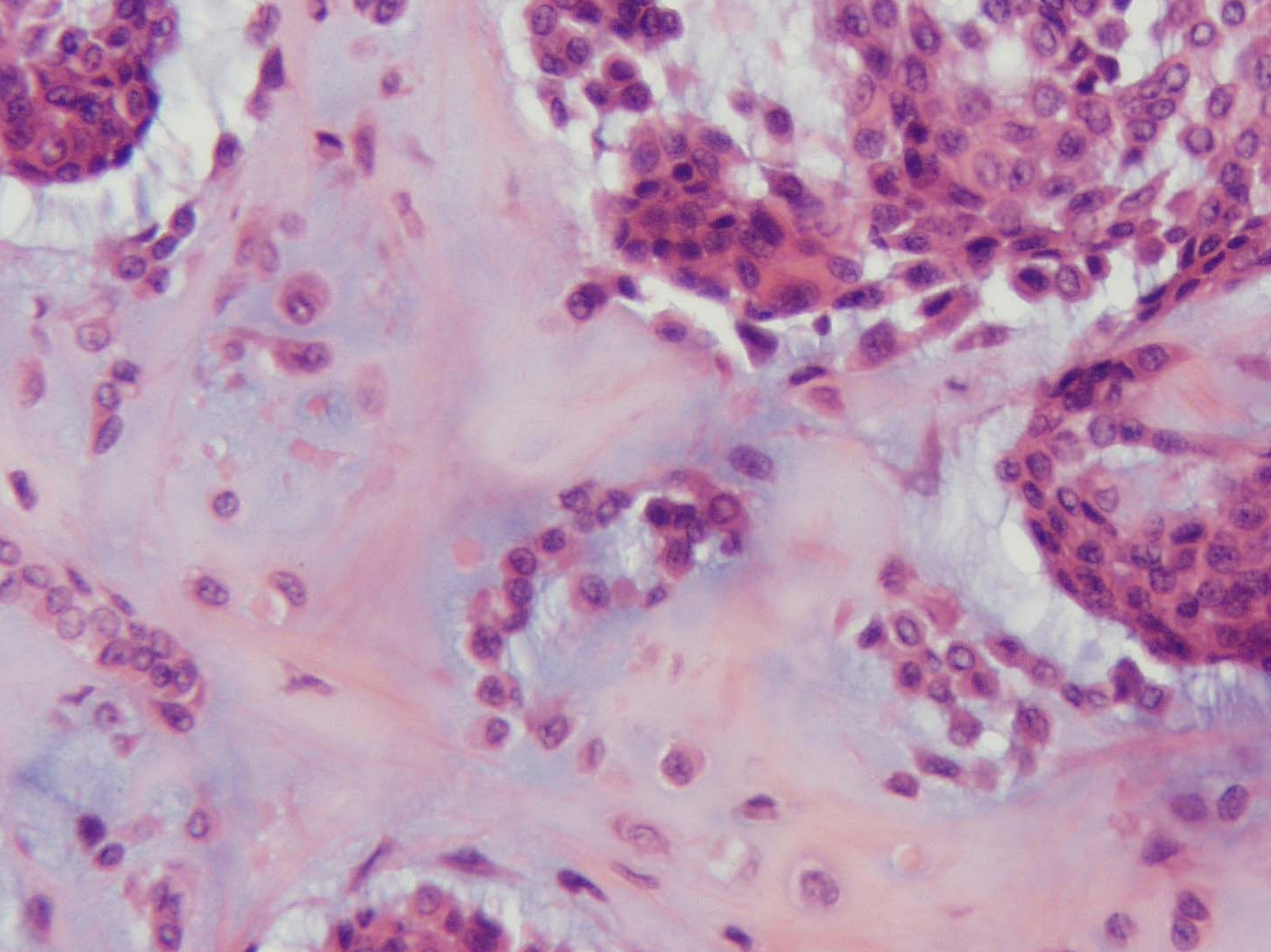




# Mixed Neoplasms

- Microcystic adnexal carcinoma
- Lymphoepithelioma-like carcinoma of the skin
- Malignant mixed tumors

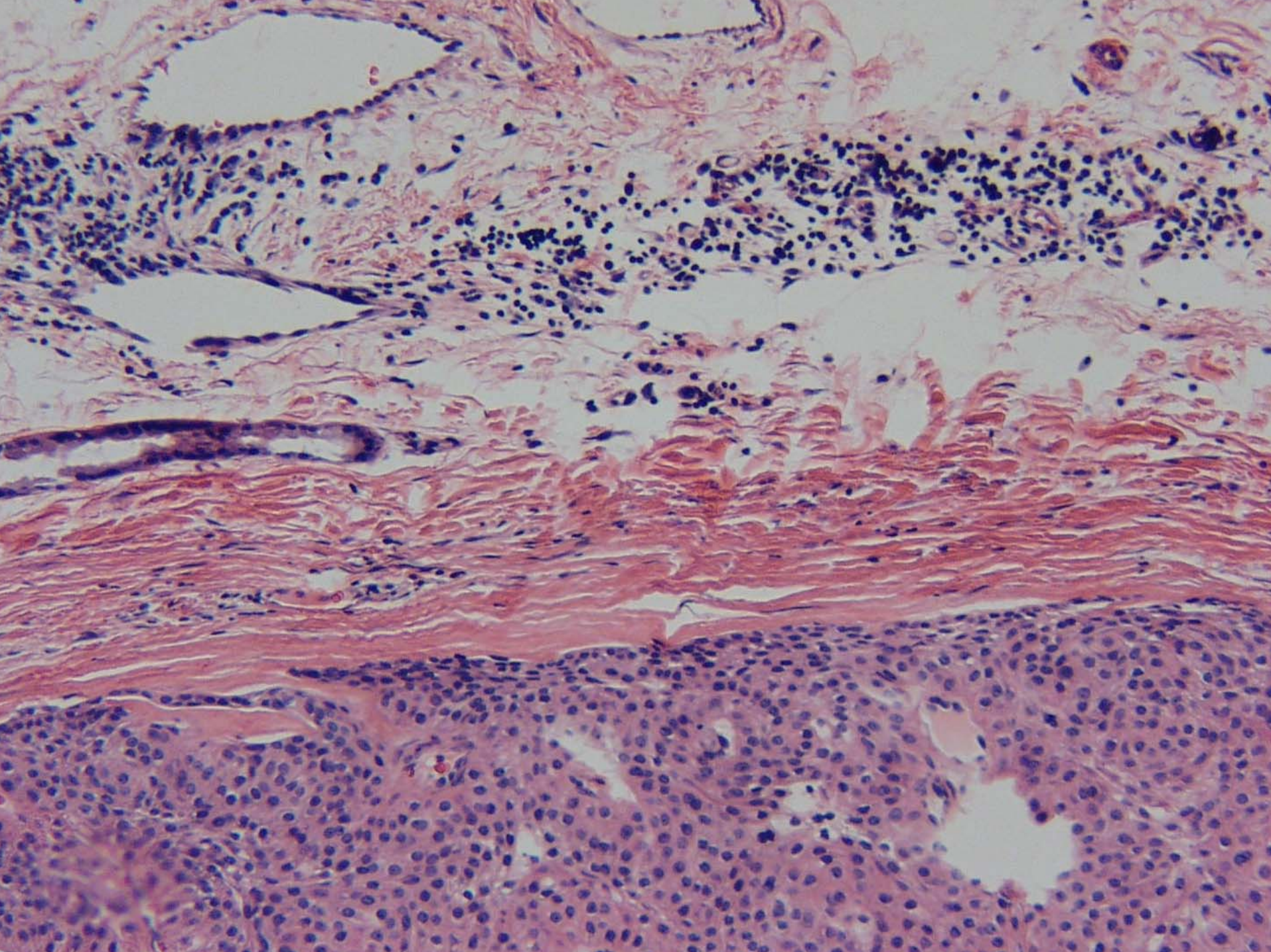


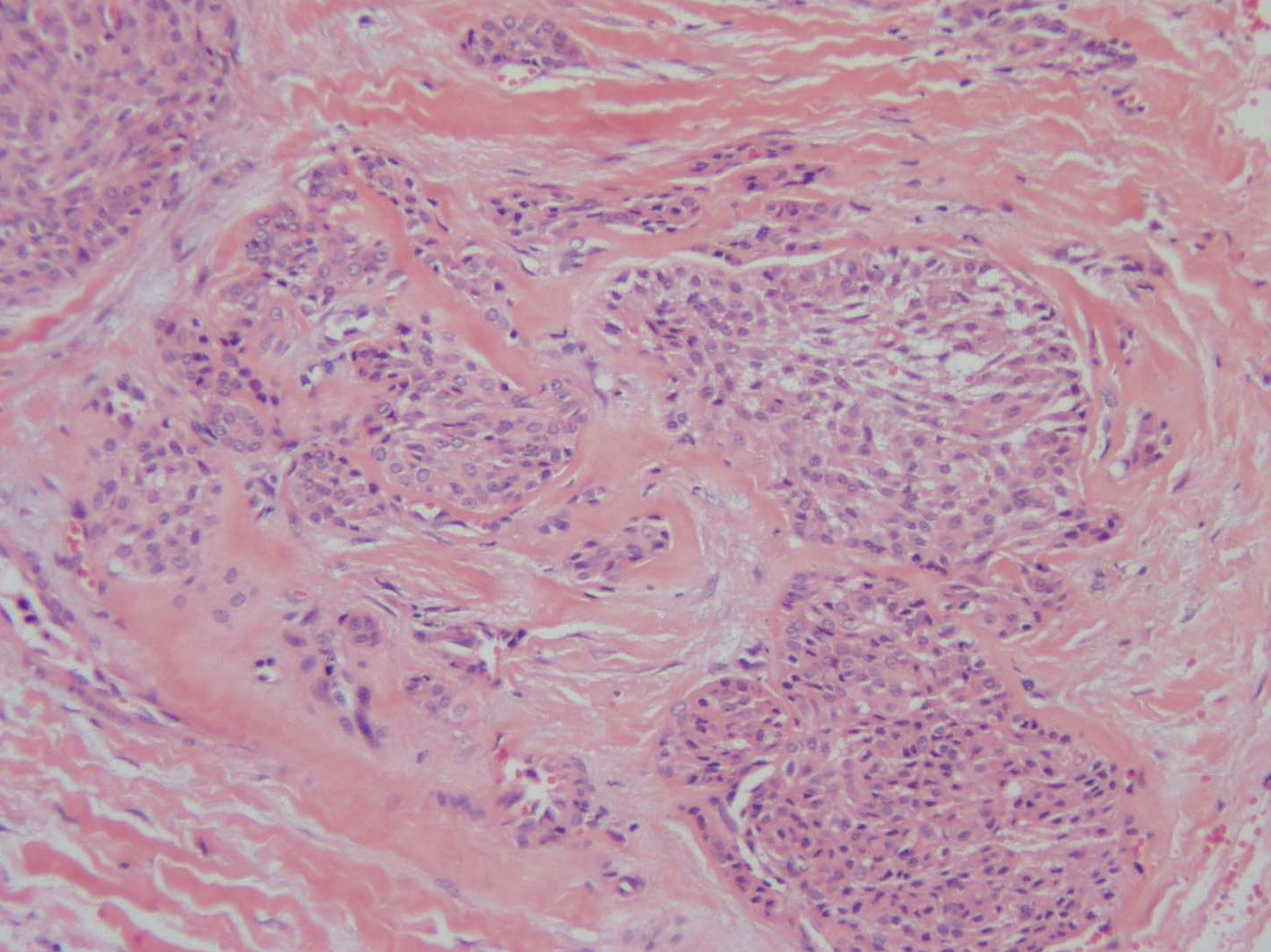


# Histologic Clues for Benign vs. Malignant

| Benign                         | Malignant                              |
|--------------------------------|--|
| Vertically oriented            | Horizontally oriented                  |
| Borders smooth                 | Borders infiltrative                   |
| Cytologically bland            | Cytologically atypical                 |
| Mitotic figures usually scarce | Mitotic figures usually abundant       |
| Lymphovascular invasion absent | Lymphovascular invasion may be present |

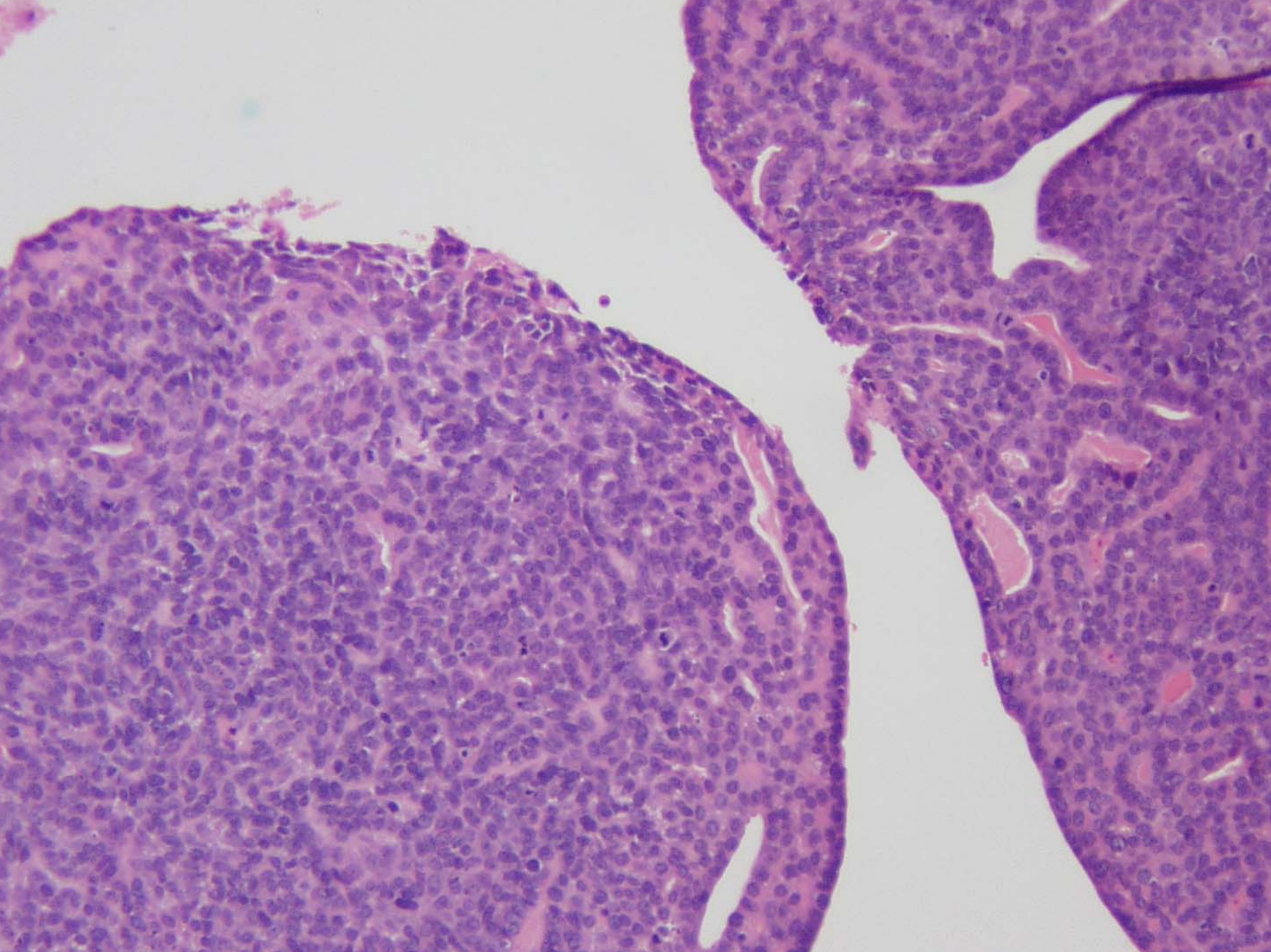


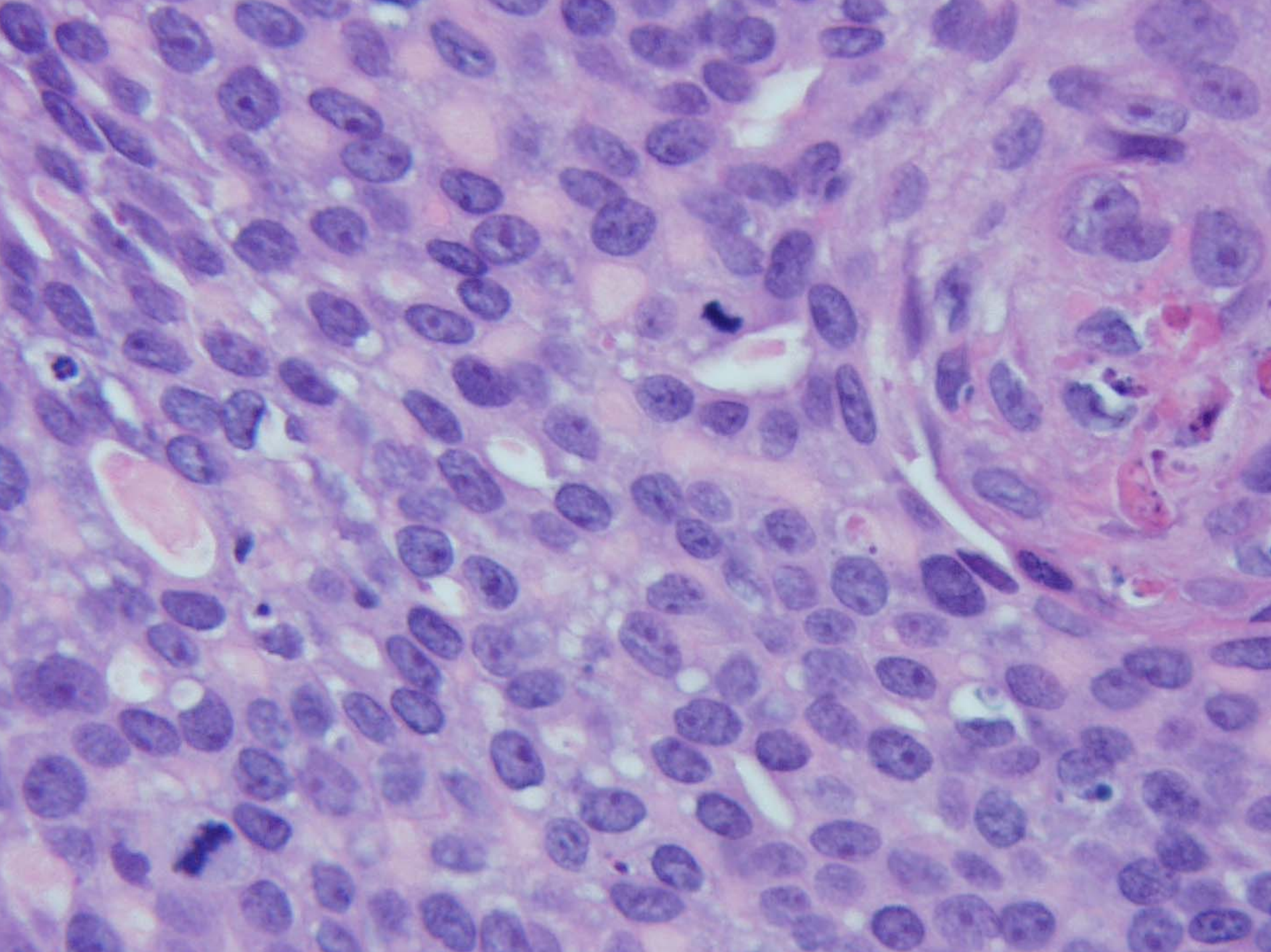


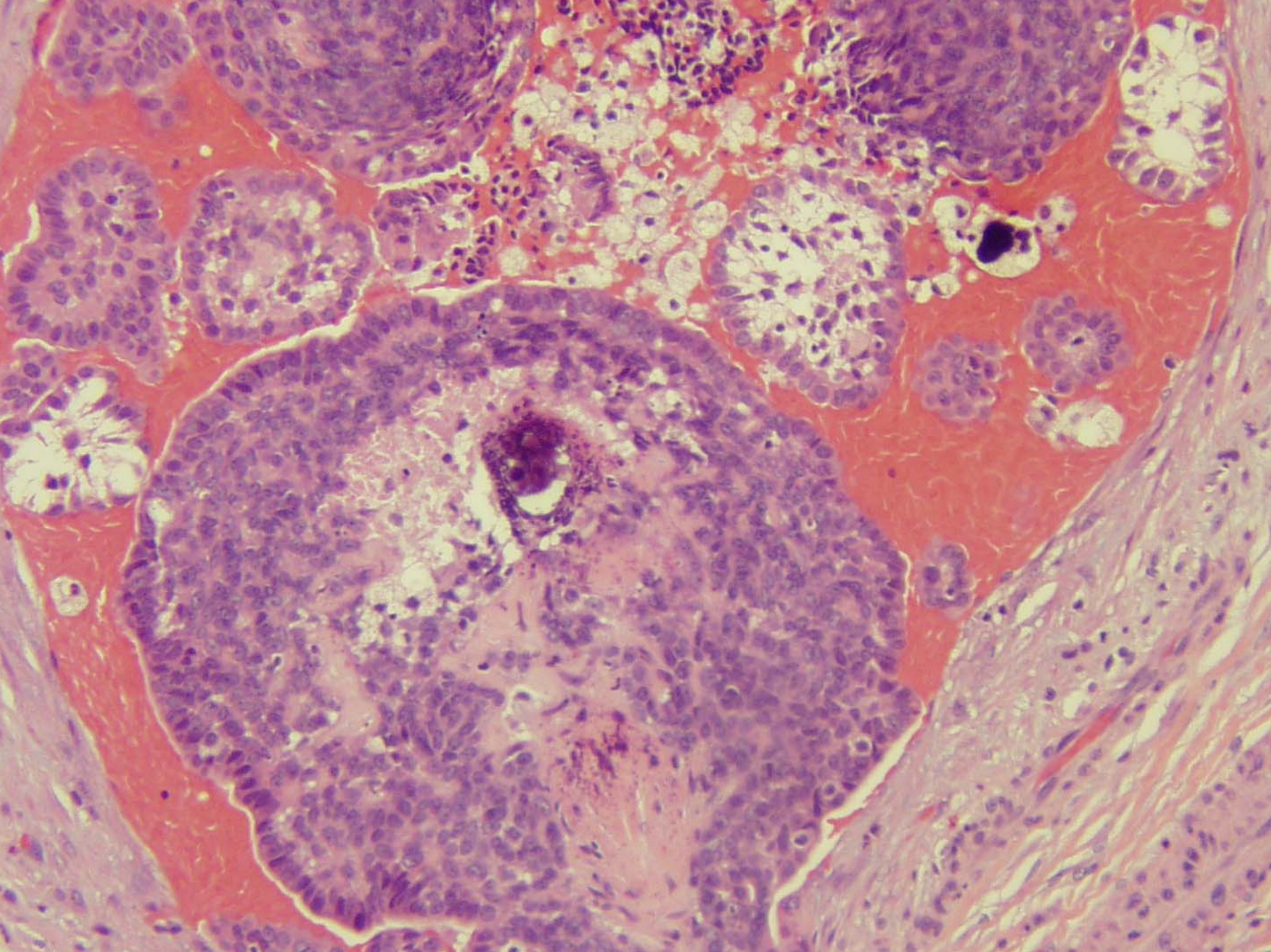


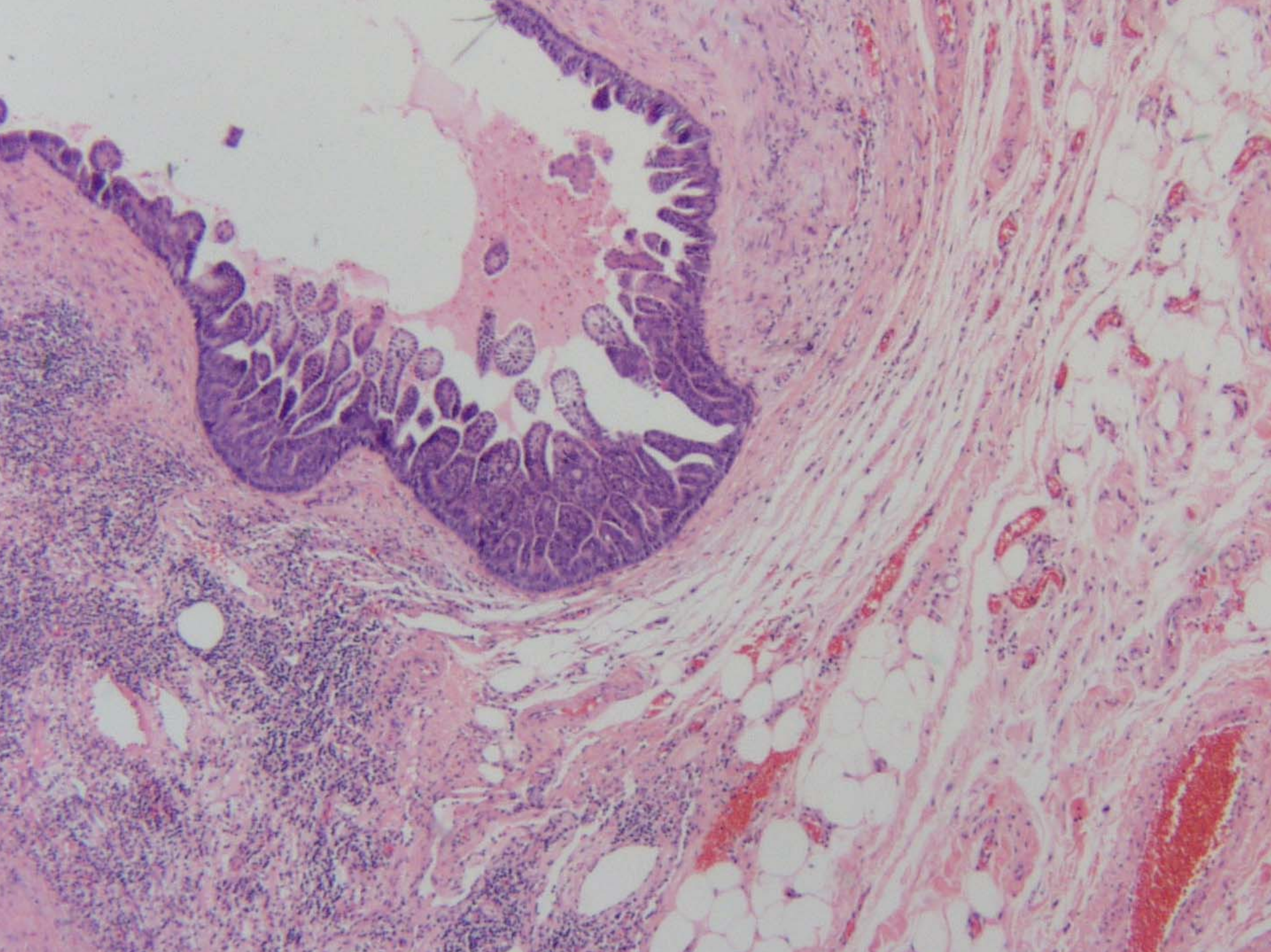
# Treatment for Carcinomas

- Wide excision
- Physical examination to rule out lymph node metastasis
- Sentinel lymph node?
  - Digital Papillary Adenocarcinoma
  - Eccrine carcinomas









# Prognosis

- Skin to skin metastases
  - Porocarcinomas
  - Sebaceous carcinoma
- Regional Lymph node metastasis
- Lung, liver, bone metastasis