

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
- Cyndroma
- Pilomatrixoma
- Trichoepithelioma

Histopathologic Categories

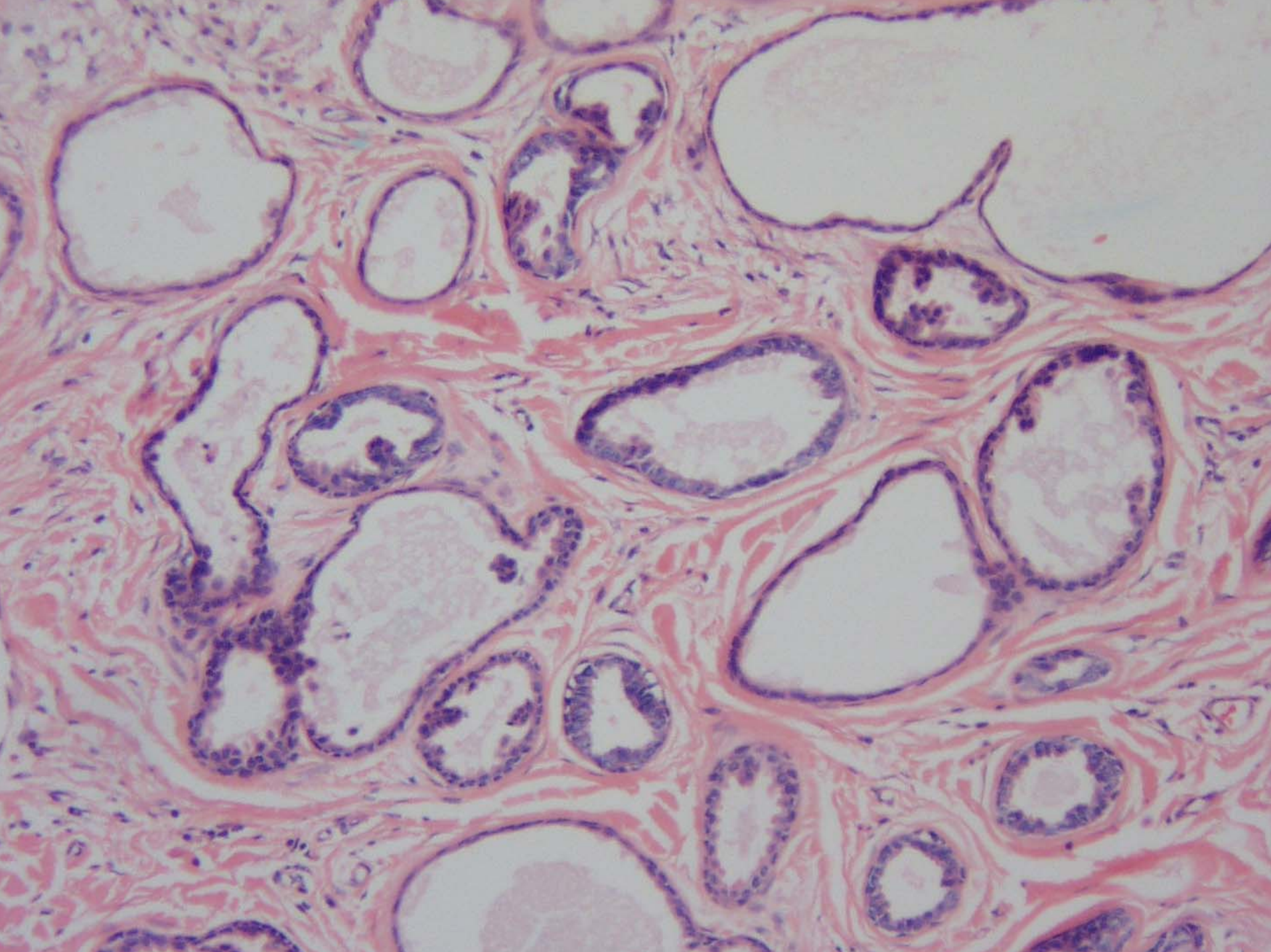
- Eccrine
- Follicular
- Sebaceous
- Apocrine
- Mixed

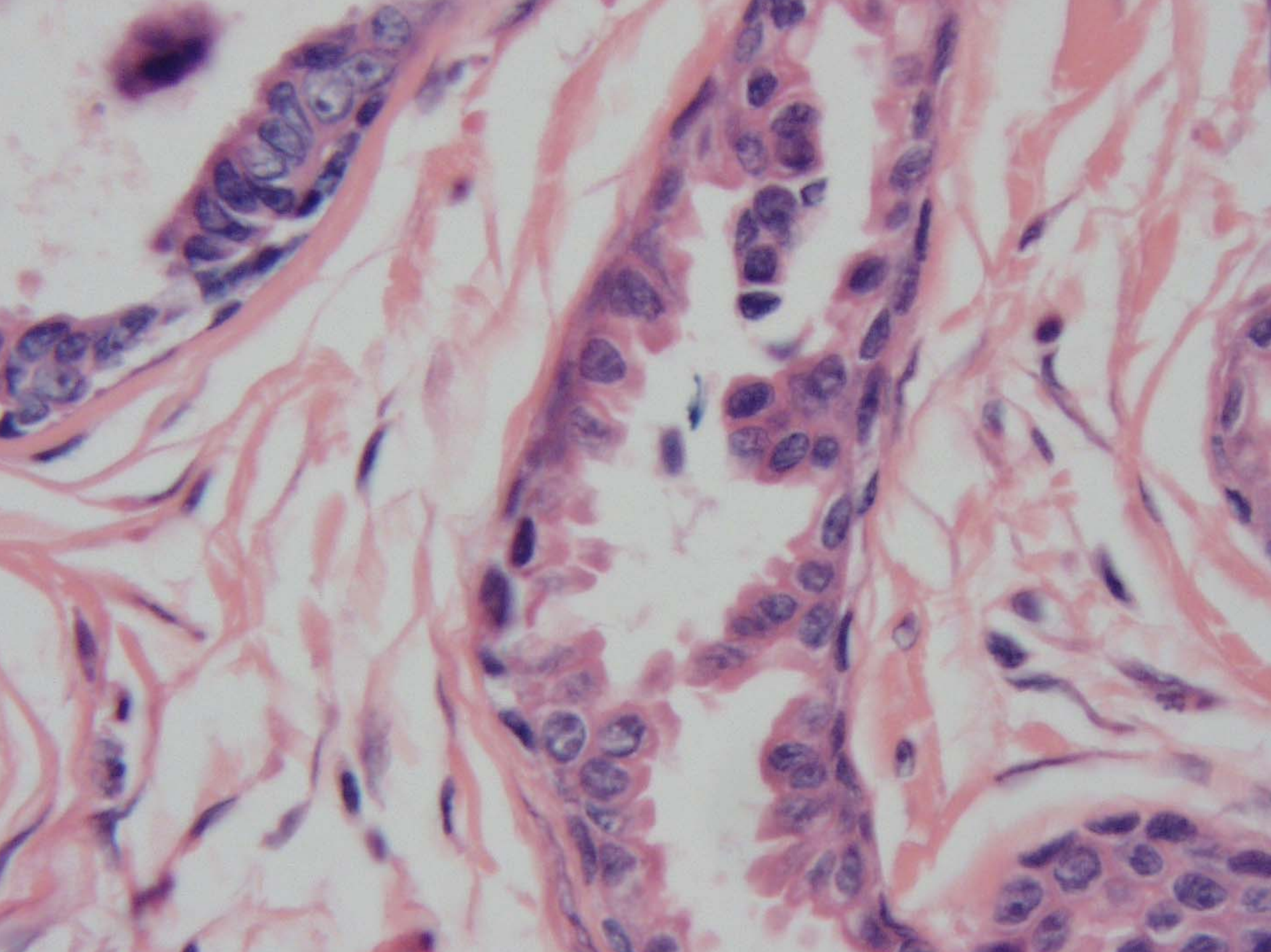
Sweat Gland Neoplasms (Eccrine)

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

Clues to Eccrine Tumors

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



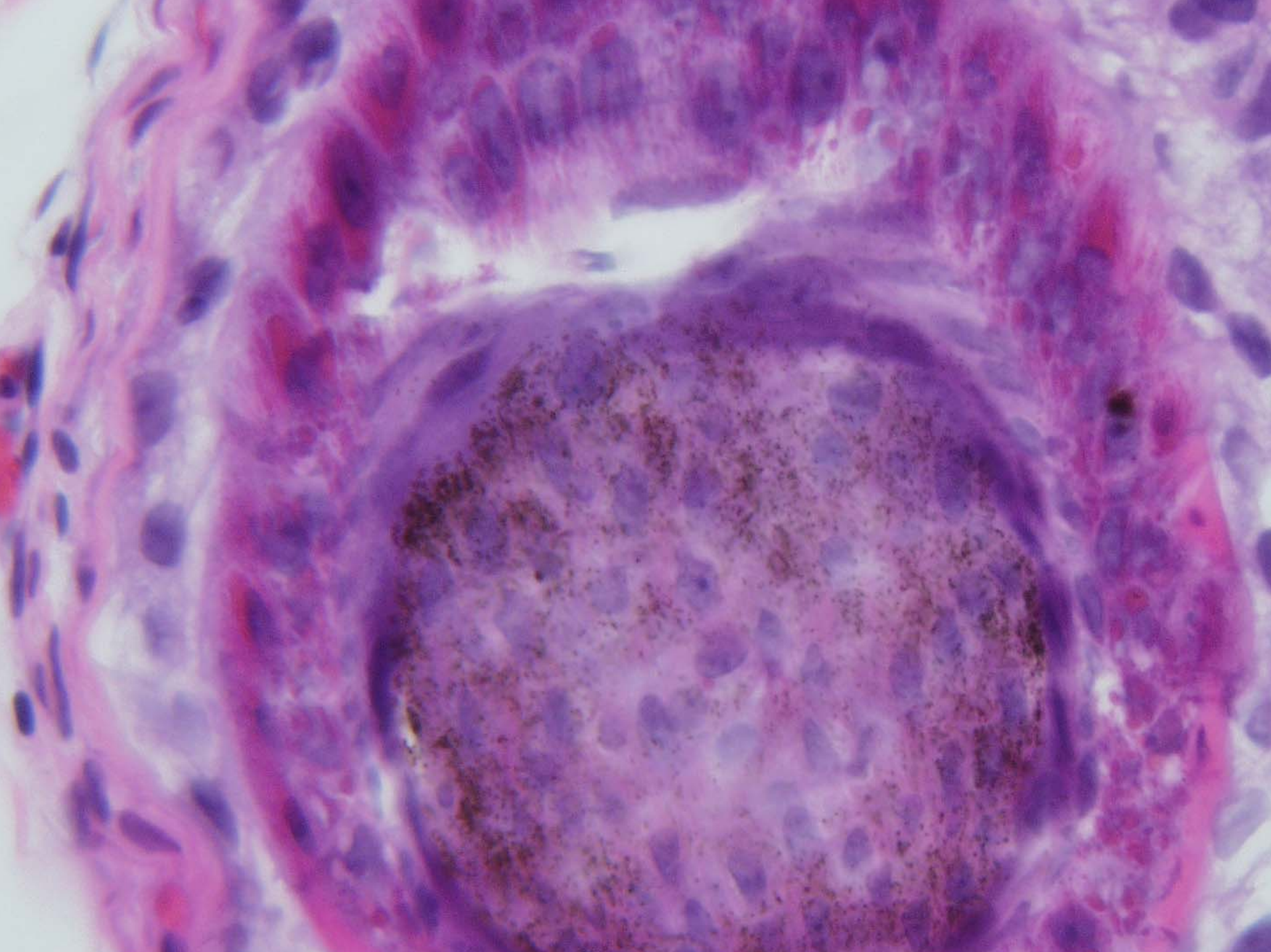


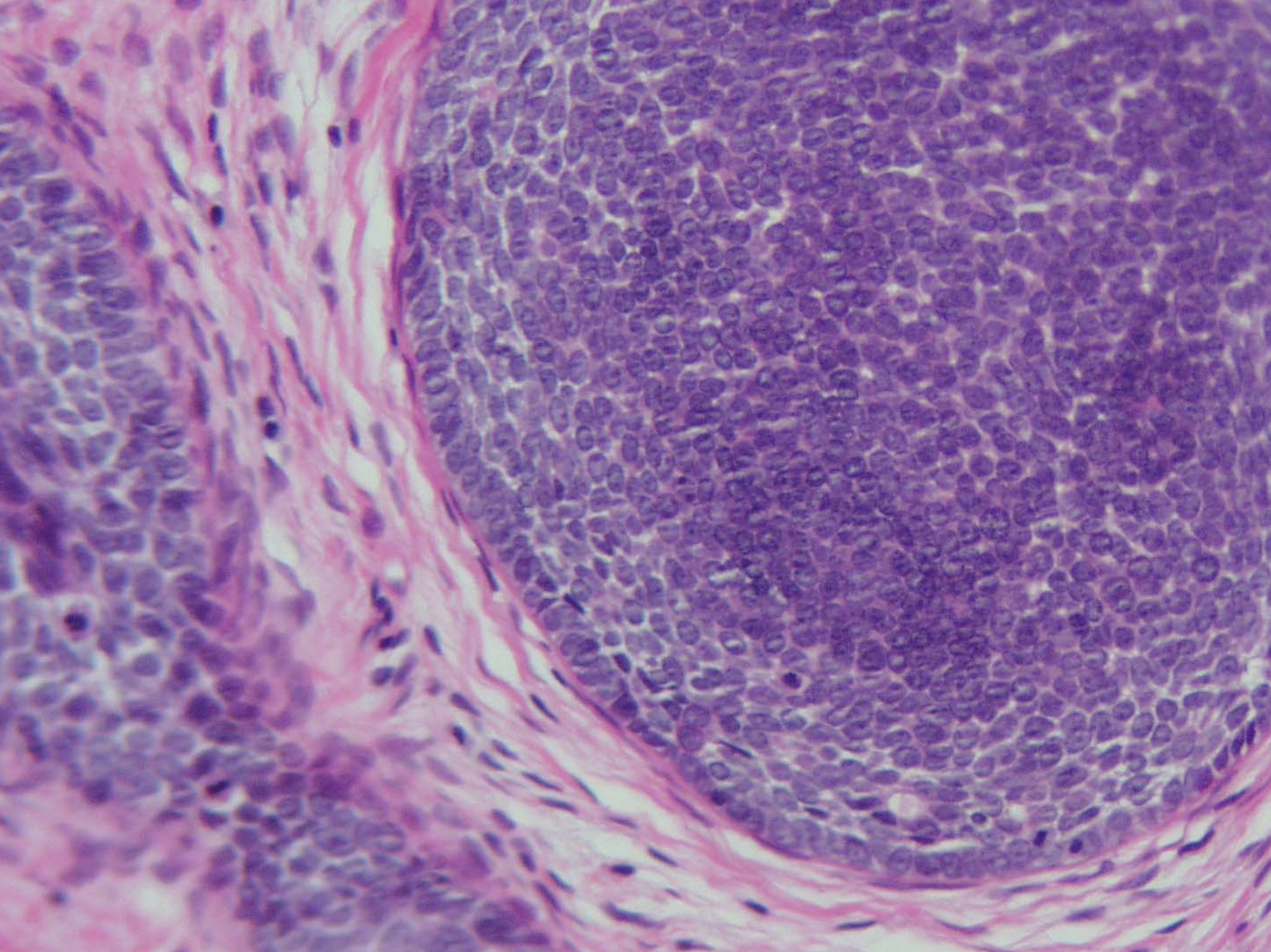
Follicular Neoplasms

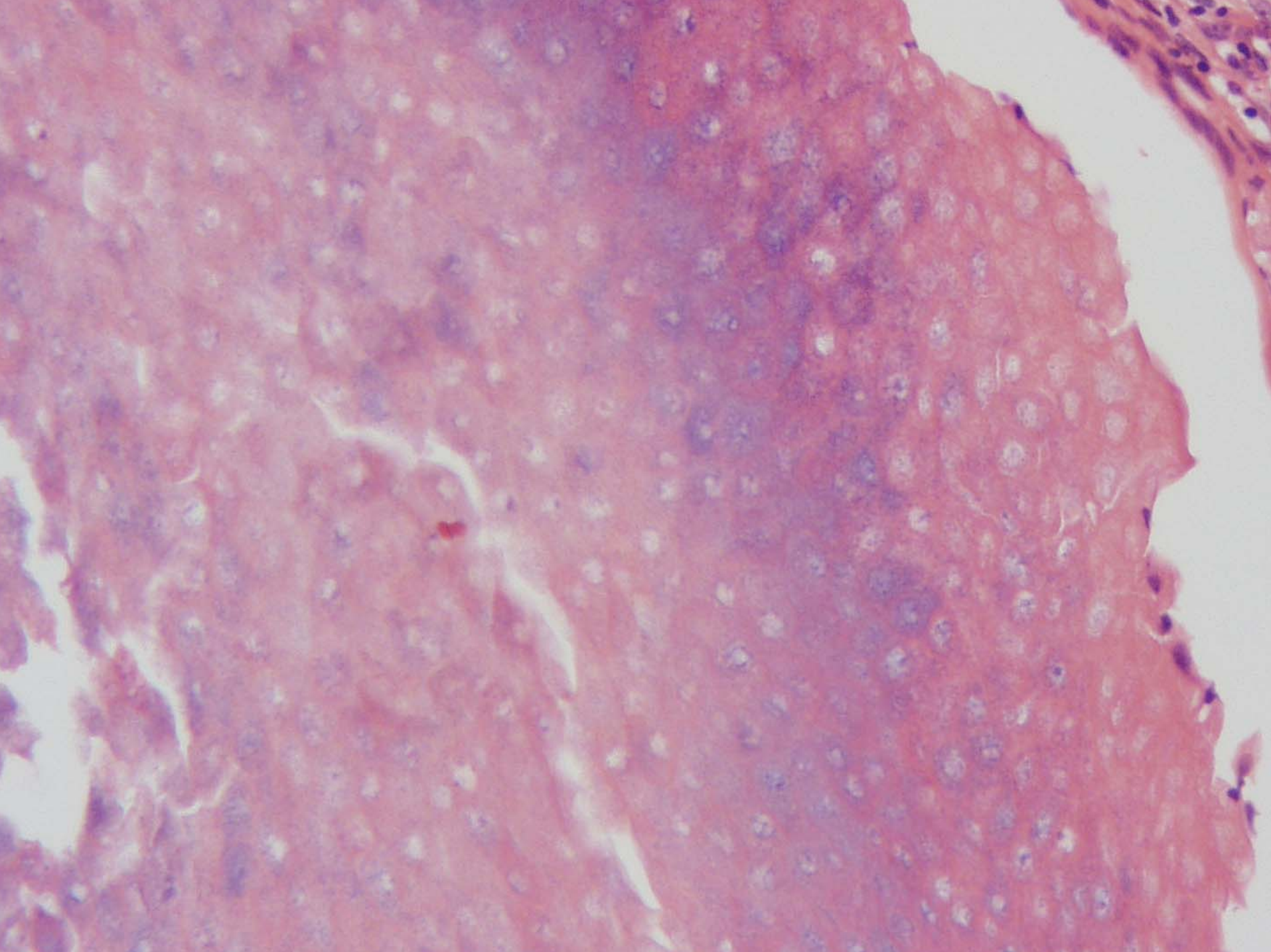
Location	Benign	Malignant
Outer Hair sheath	Tumor of the follicular infundibulum Pilar sheath acanthoma Winer's pore Trichoadenoma Trichilemmoma Proliferating pilar tumor	Trichilemmal carcinoma Malignant proliferating pilar tumor
Germanitive epithelium	Trichofolliculoma Trichoepithelioma Desmoplastic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

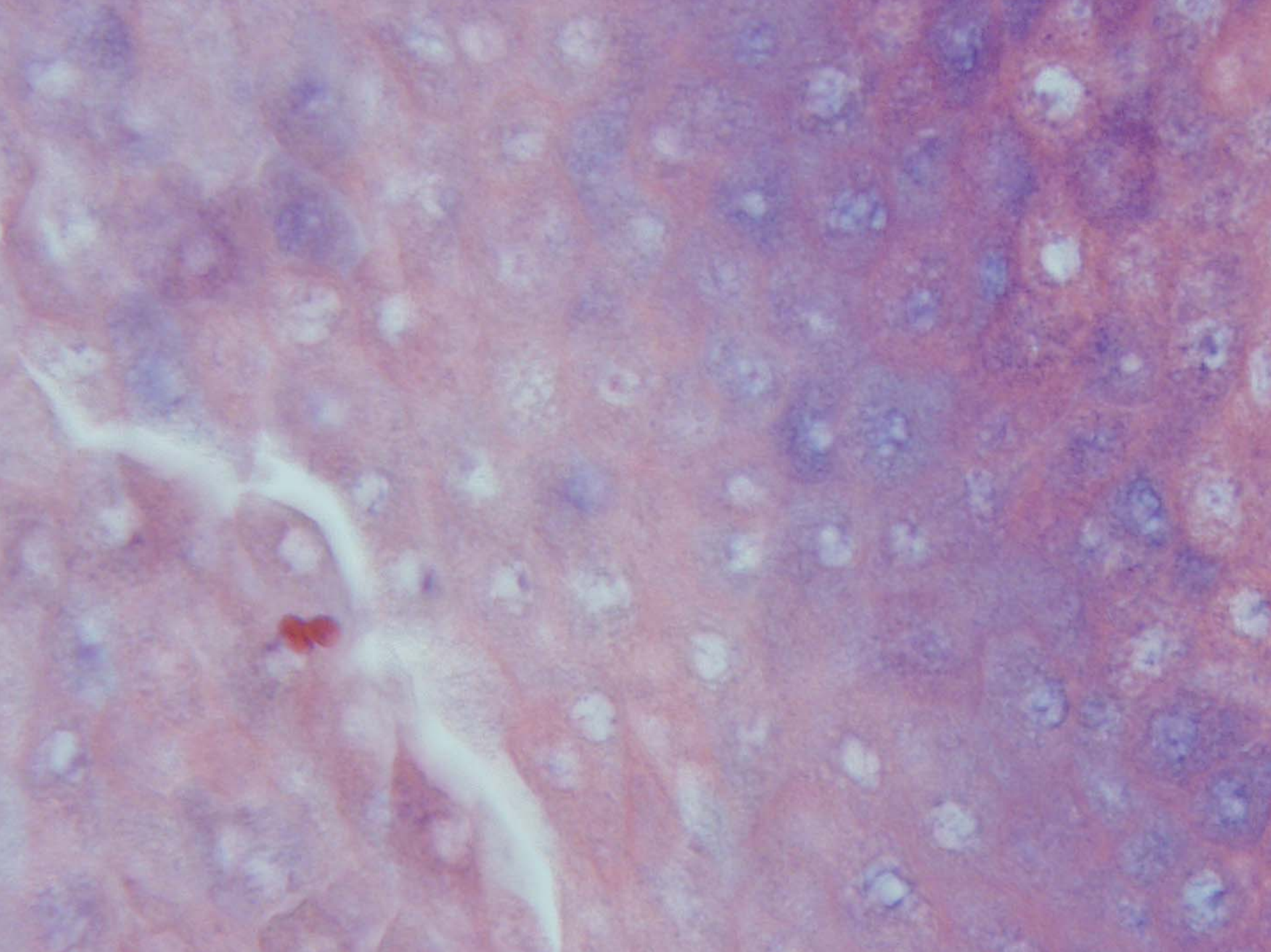
Clues to Follicular Neoplasms

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







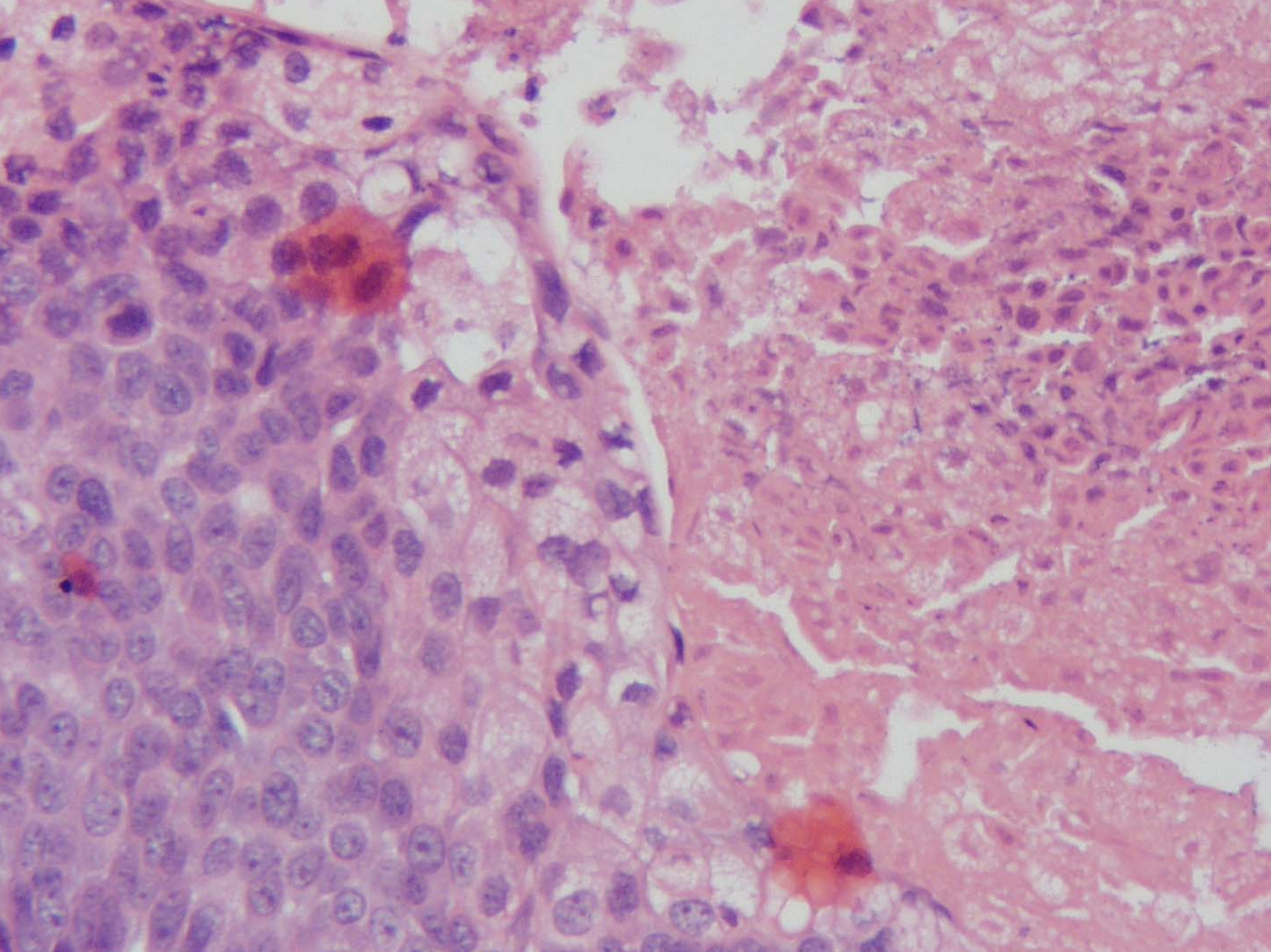


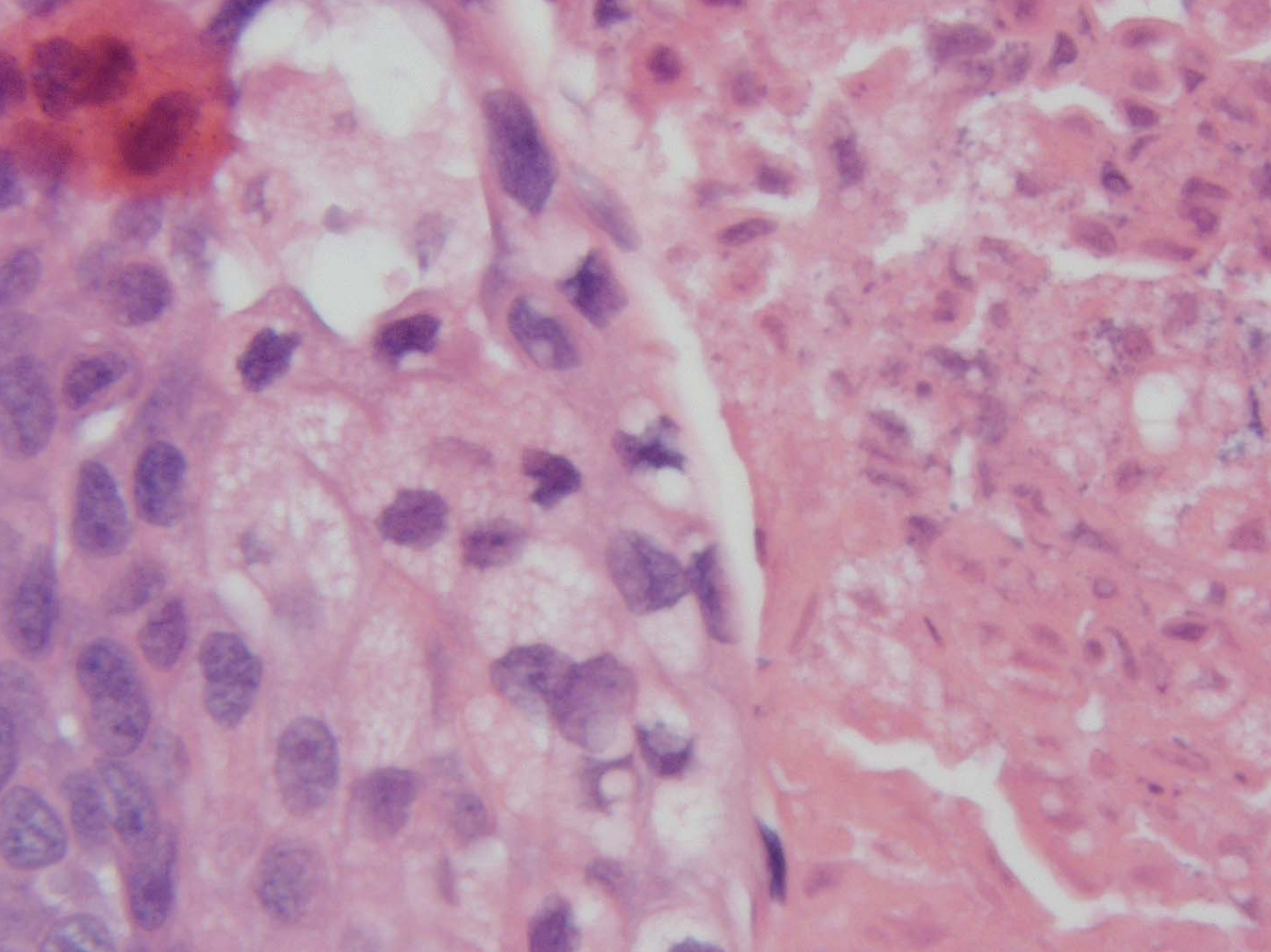
Sebaceous Neoplasms

- 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



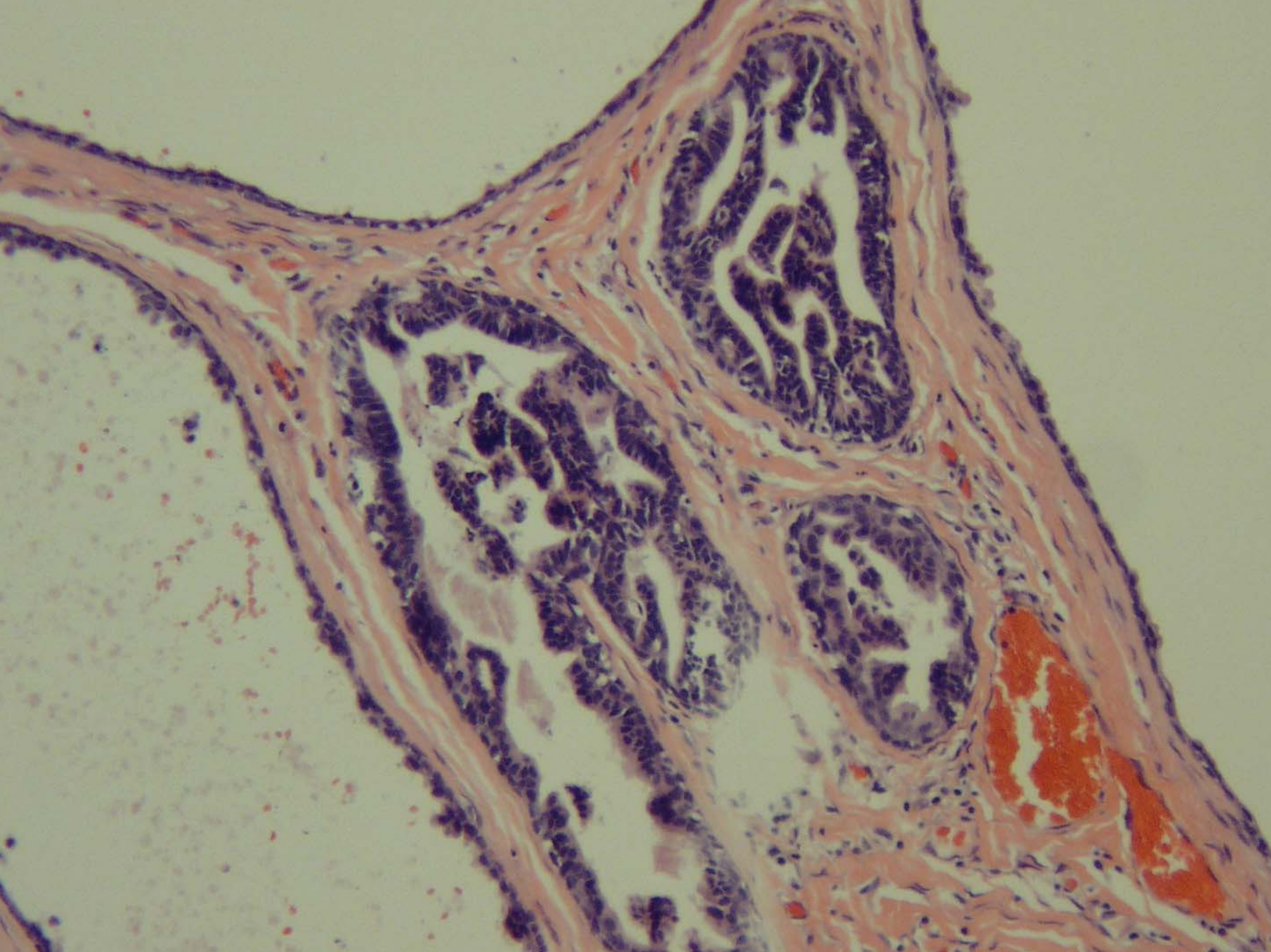


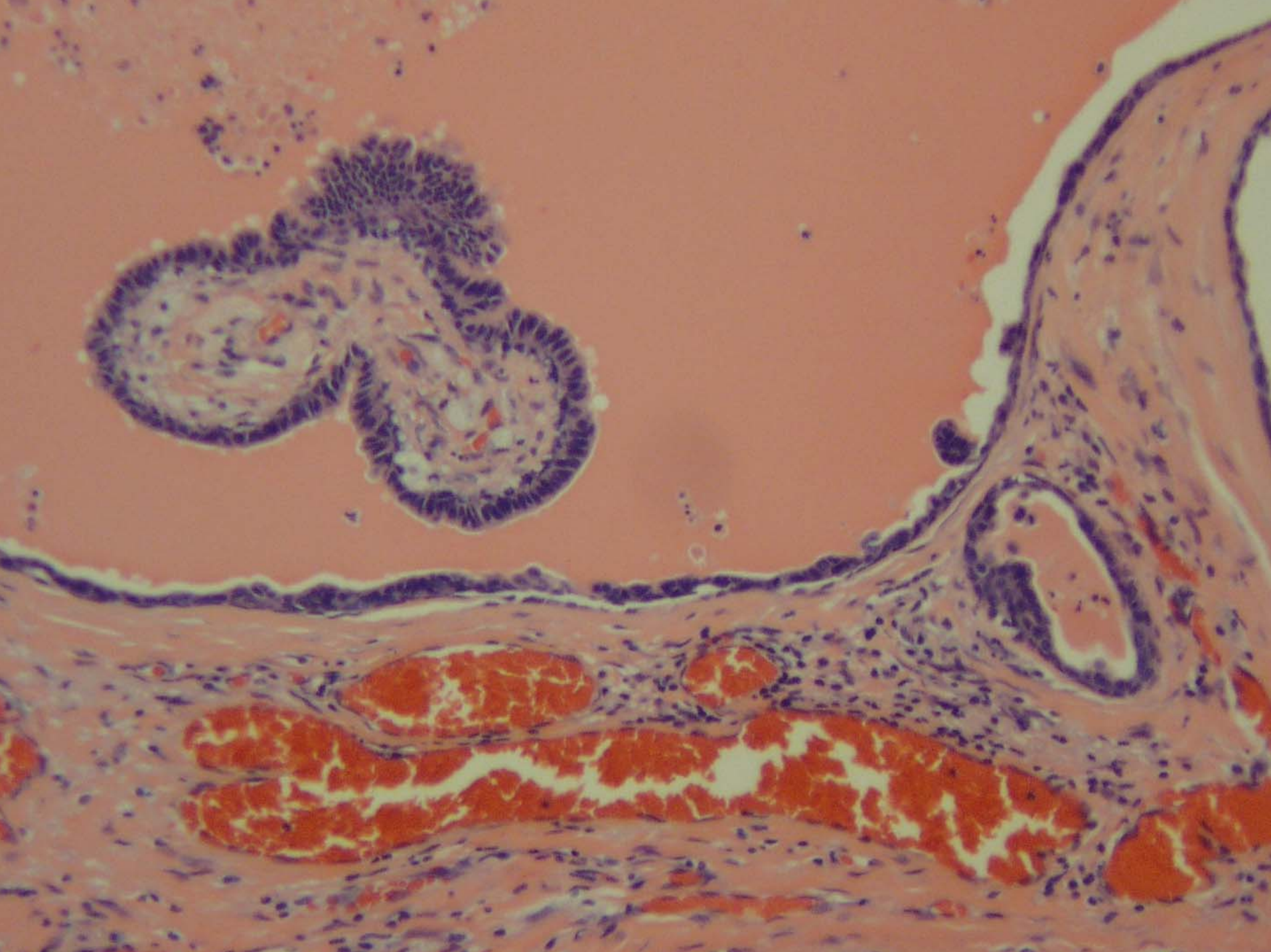
Apocrine Neoplasms

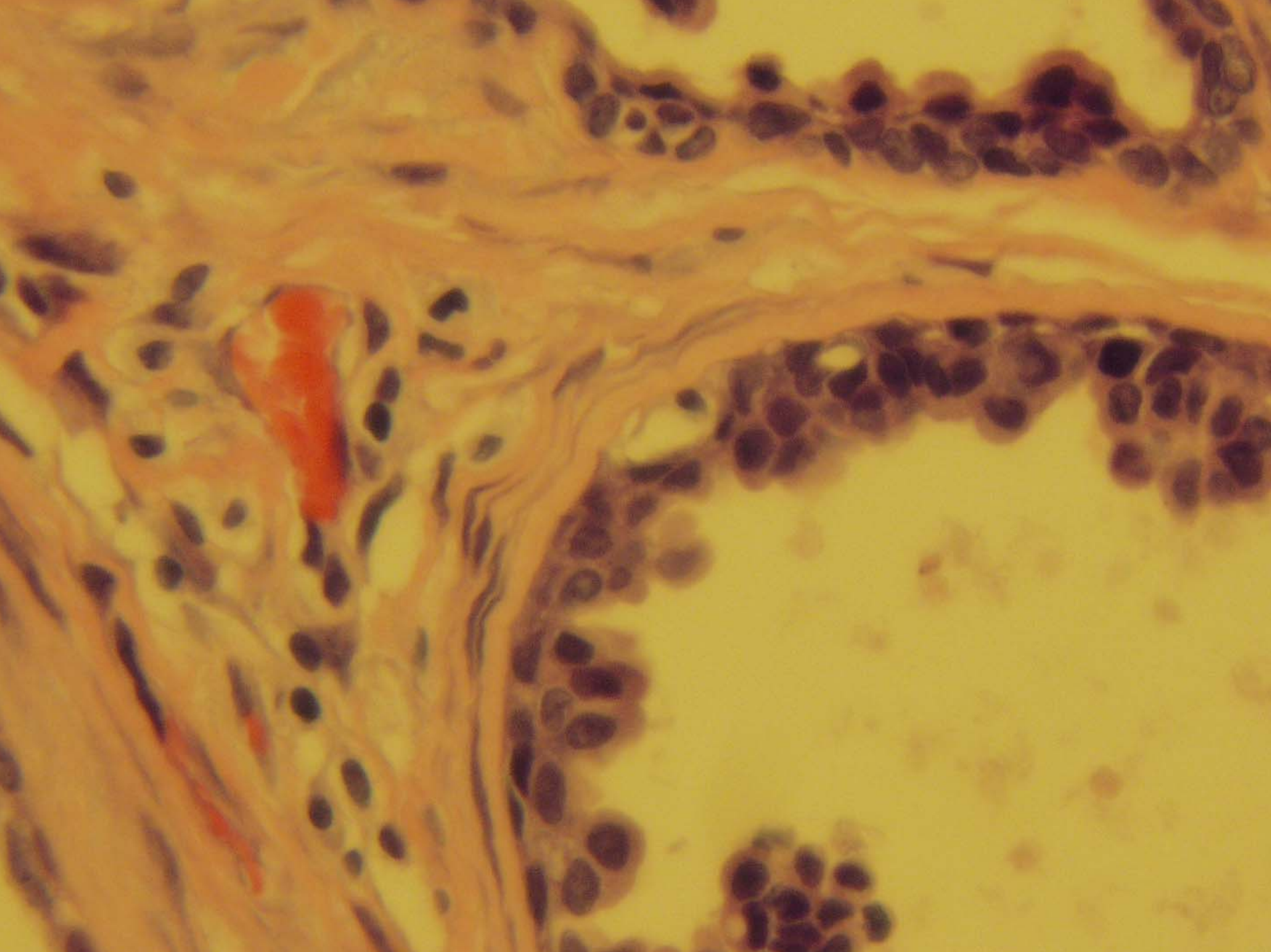
- Hidrocystoma
- Tubular adenoma
- Syringocystadenoma papilliferum
- Hidradenoma papilliferum
- Extramammary Paget's disease

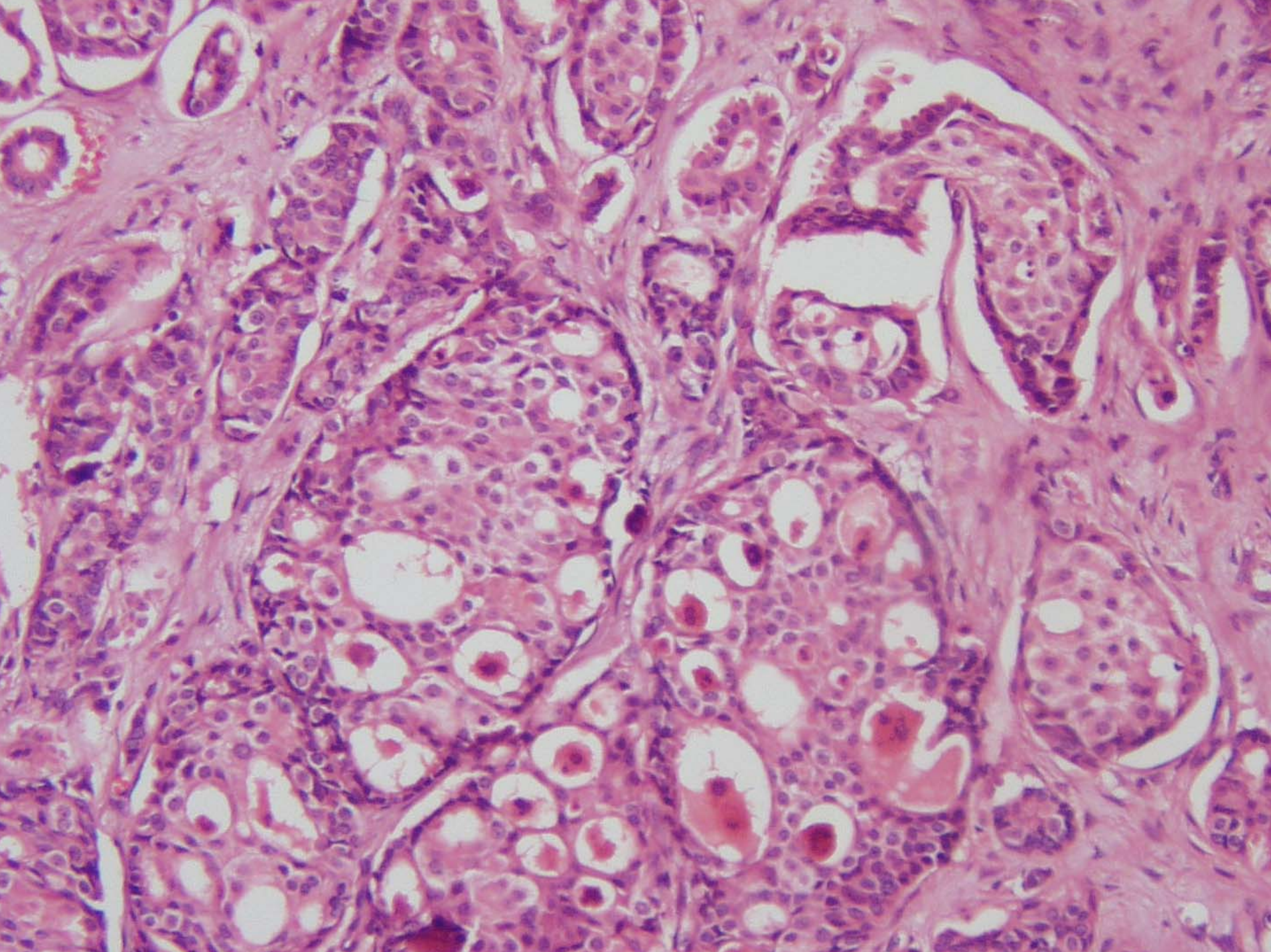
Clues to Apocrine Neoplasms

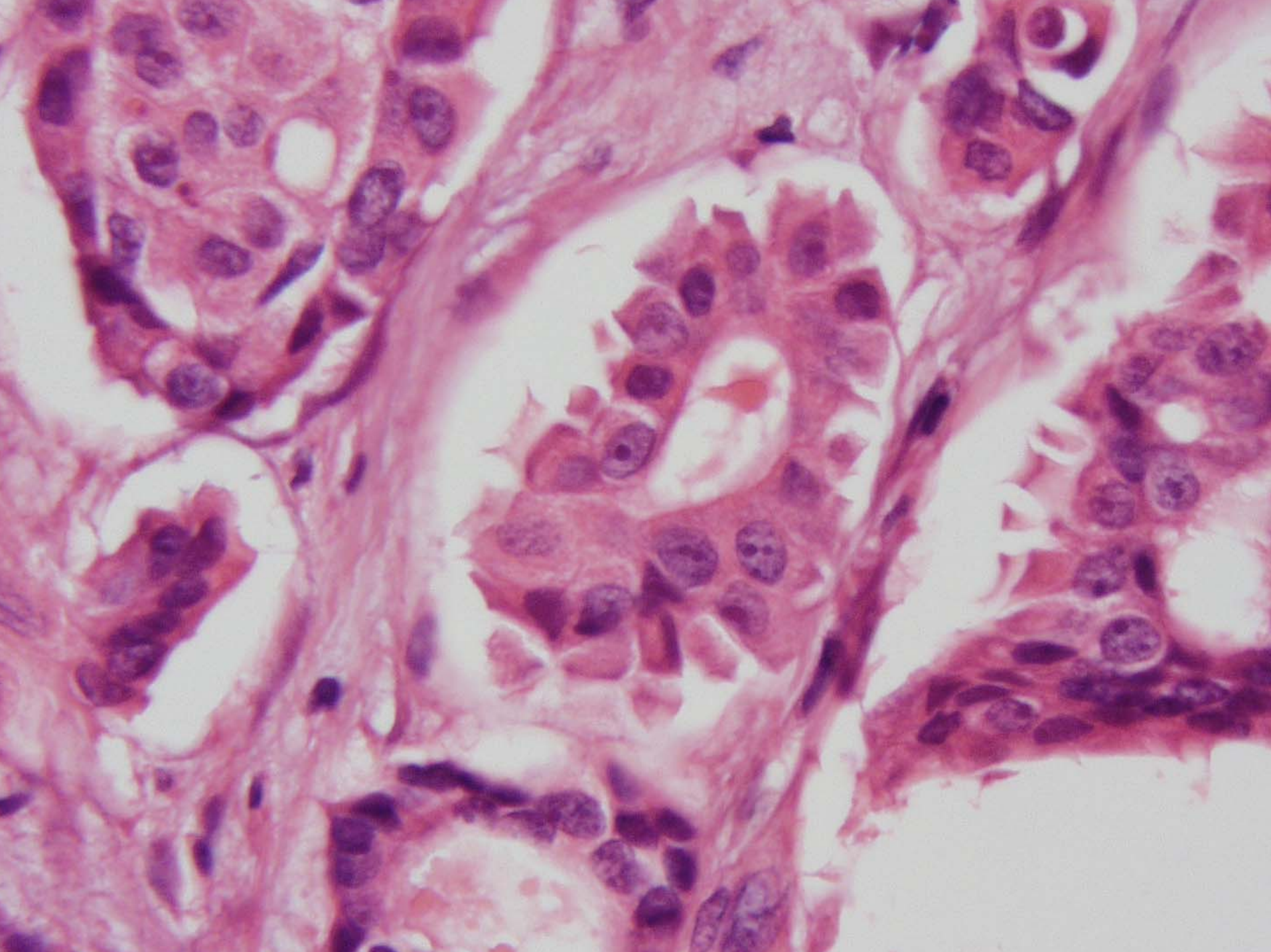
- Ductal changes with apocrine snouting (decapitation secretion)





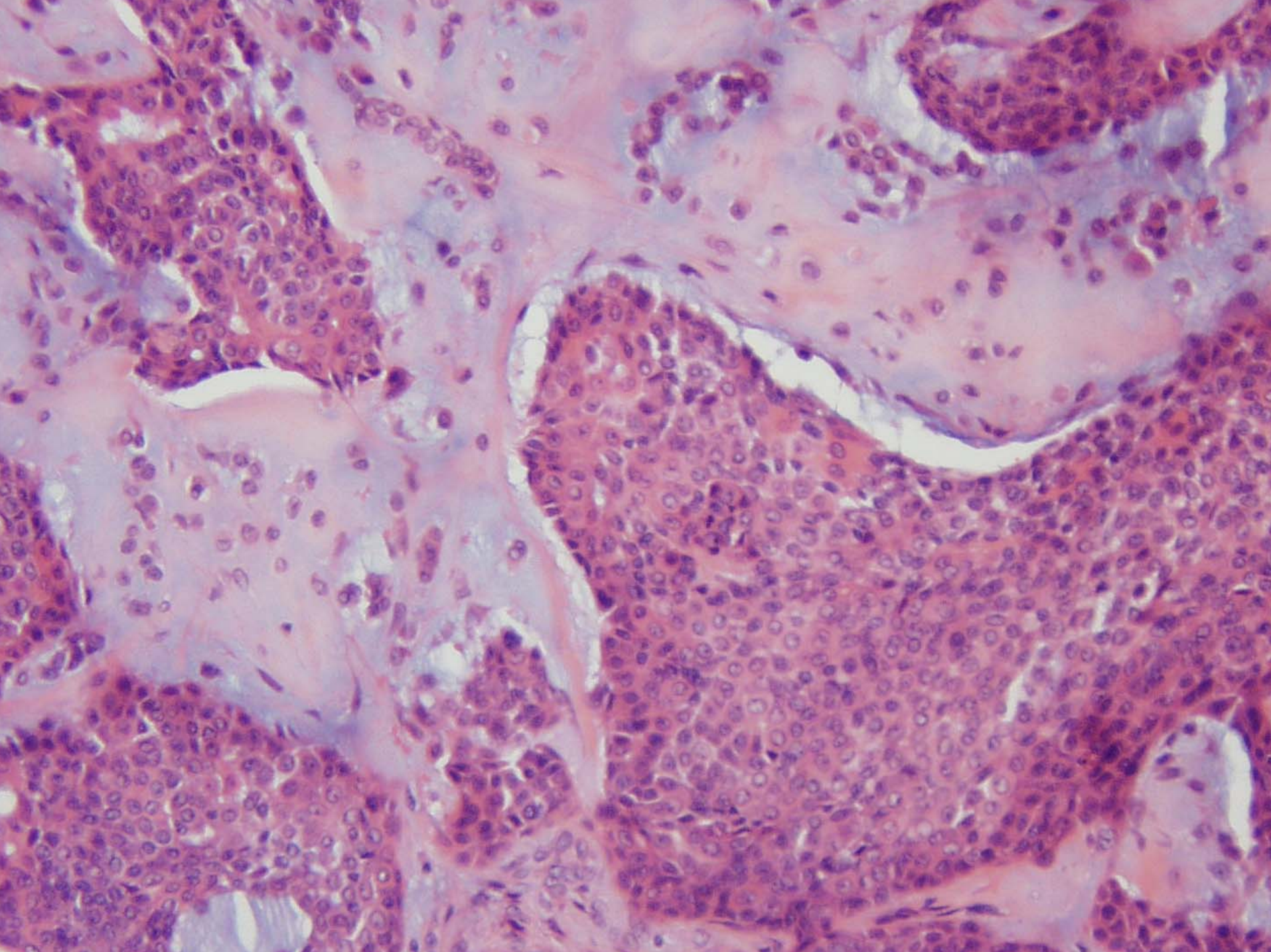


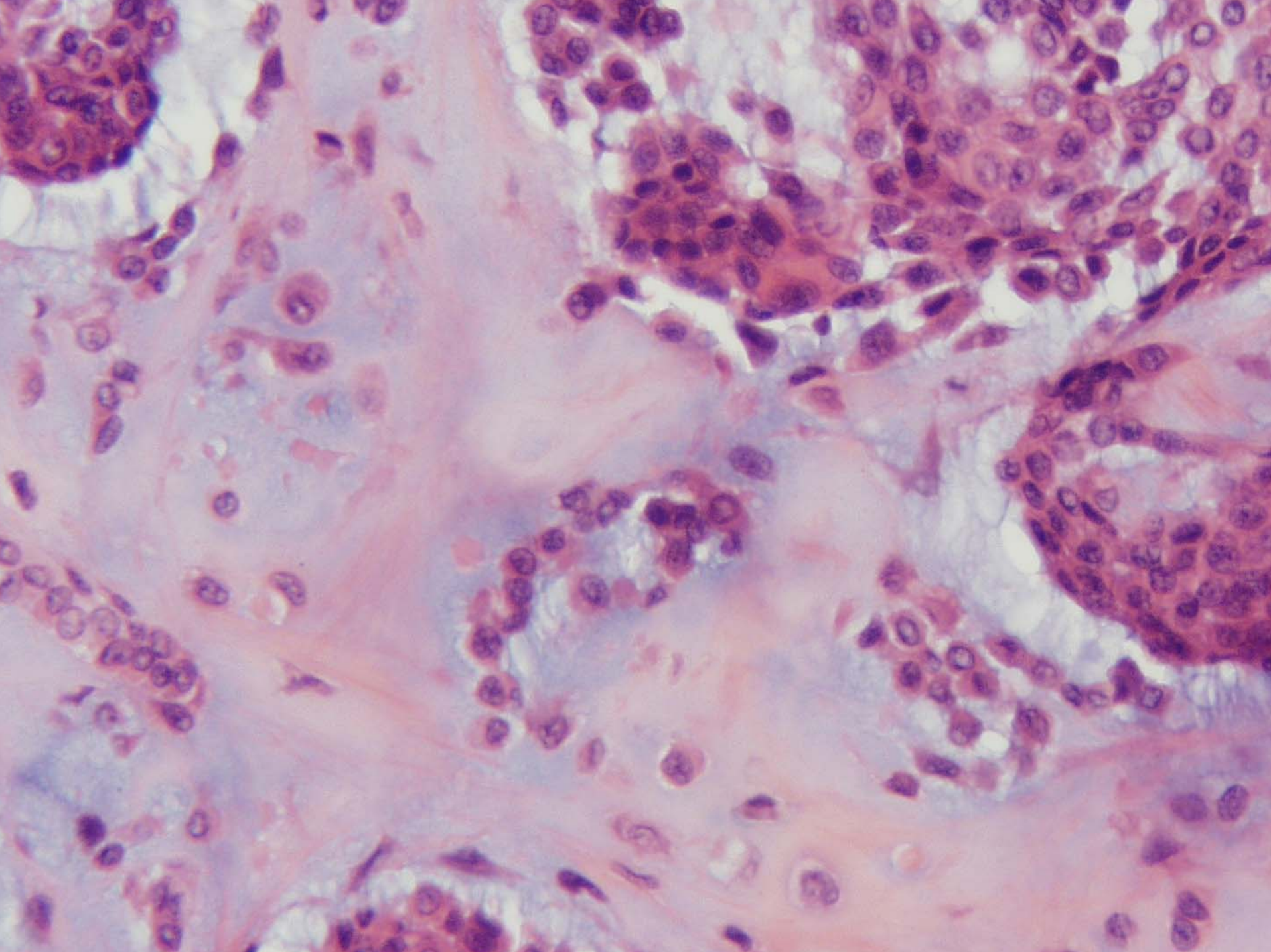




Mixed Neoplasms

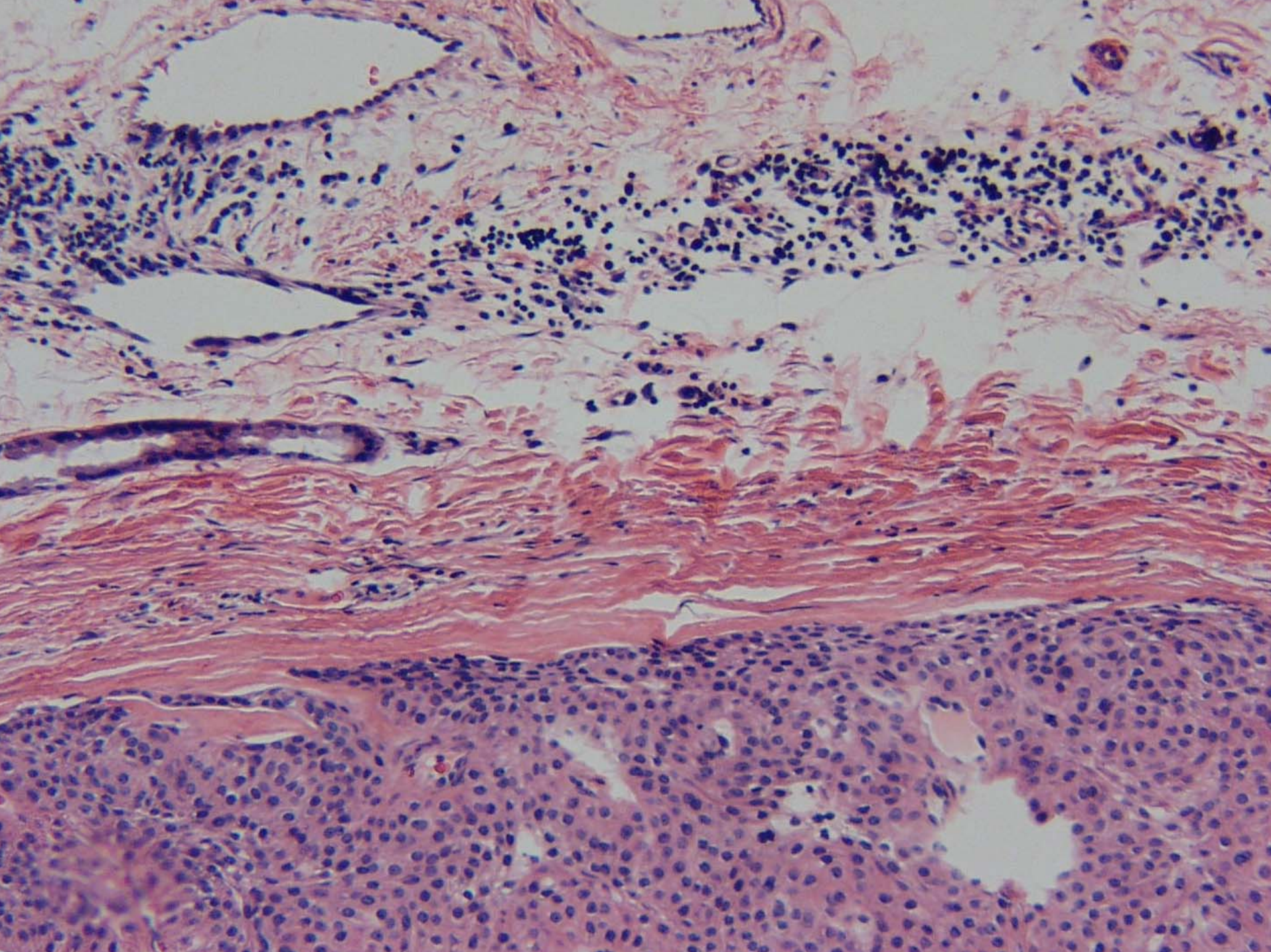
- Microcystic adnexal carcinoma
- Lymphoepithelioma-like carcinoma of the skin
- Malignant mixed tumors

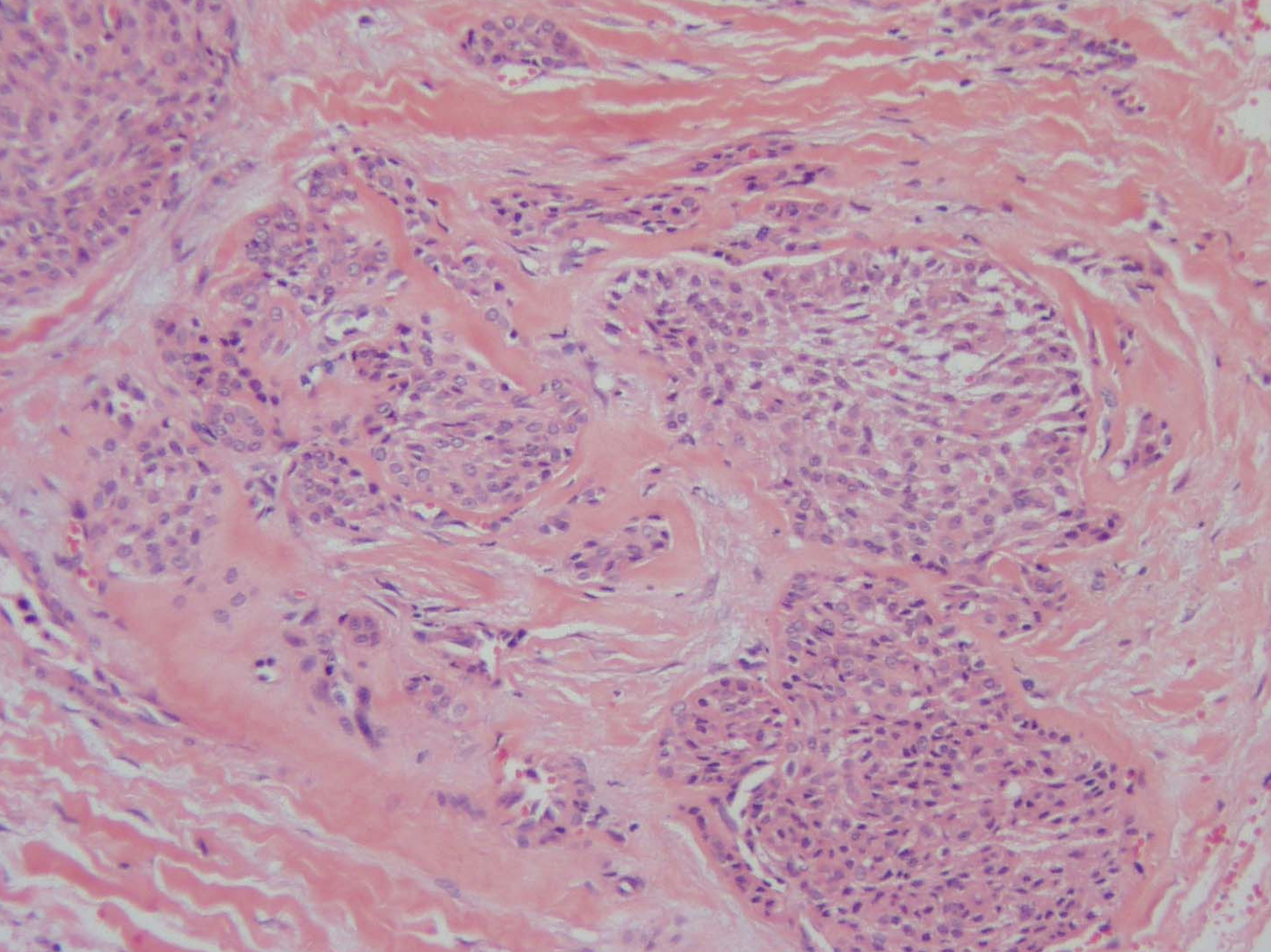




Histologic Clues for Benign vs. Malignant

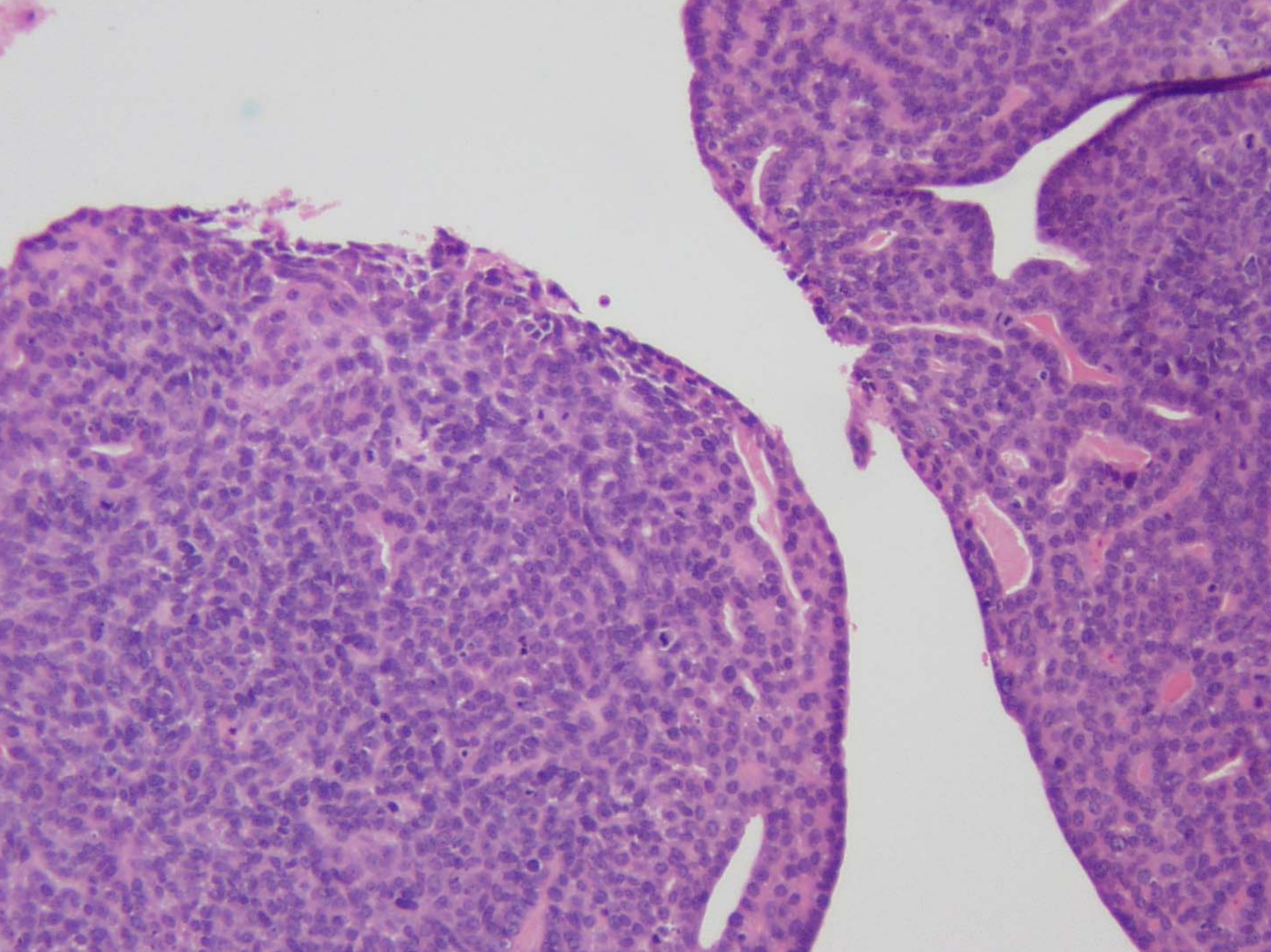
Benign	Malignant
Vertically oriented	Horizontally oriented
Borders smooth	Borders infiltrative
Cytologically bland	Cytologically atypical
Mitotic figures usually scarce	Mitotic figures usually abundant
Lymphovascular invasion absent	Lymphovascular invasion may be present

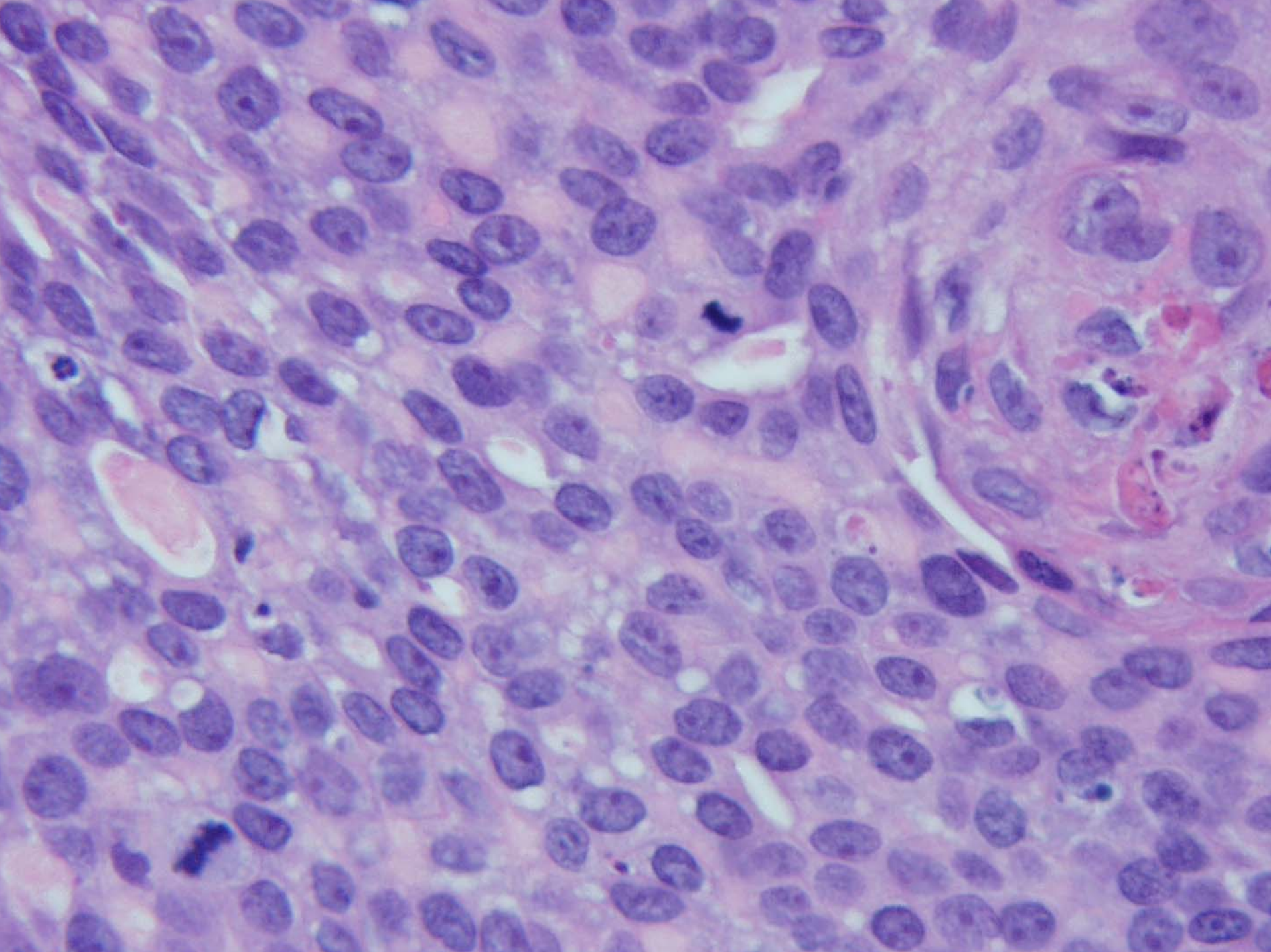


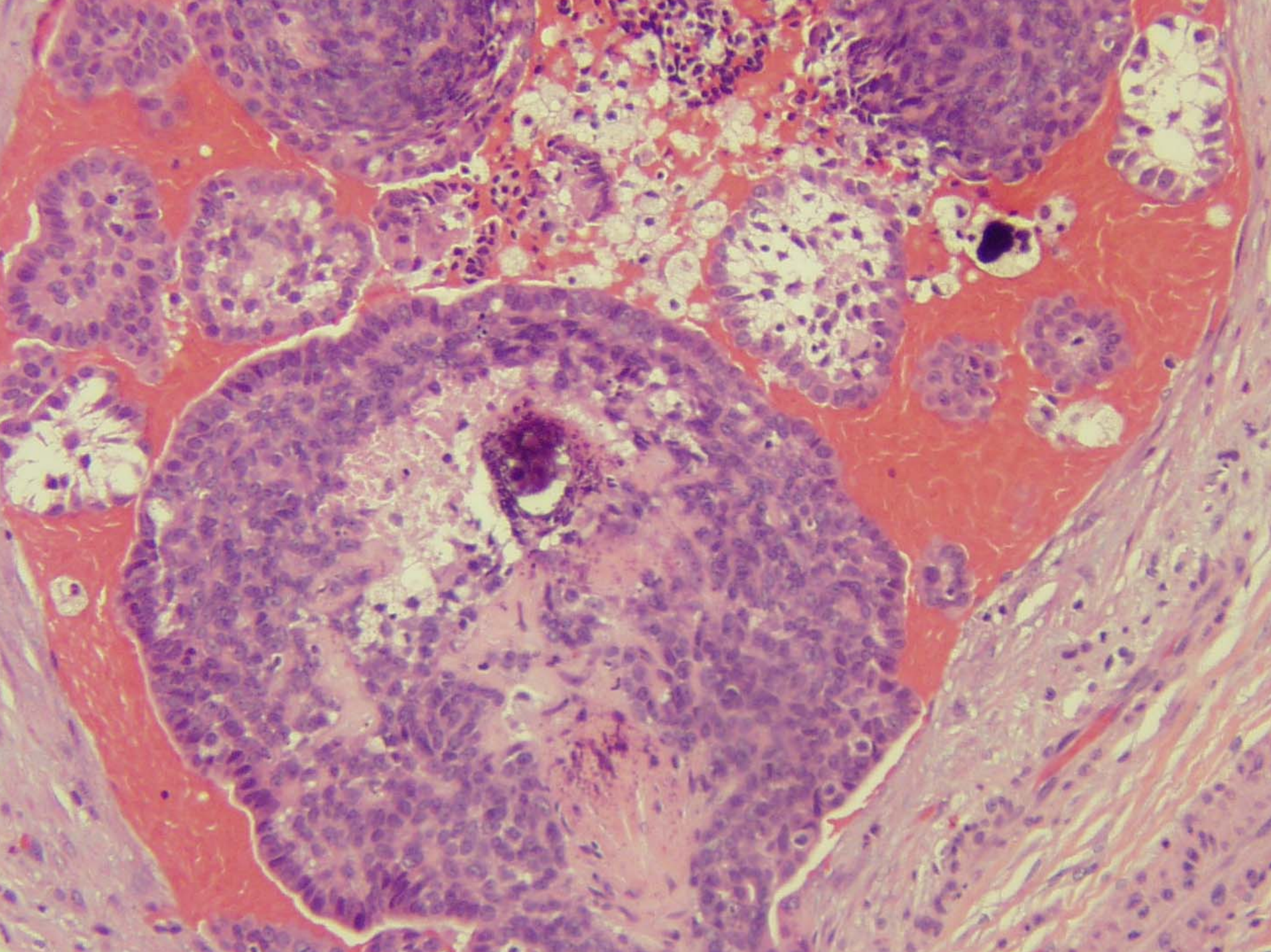


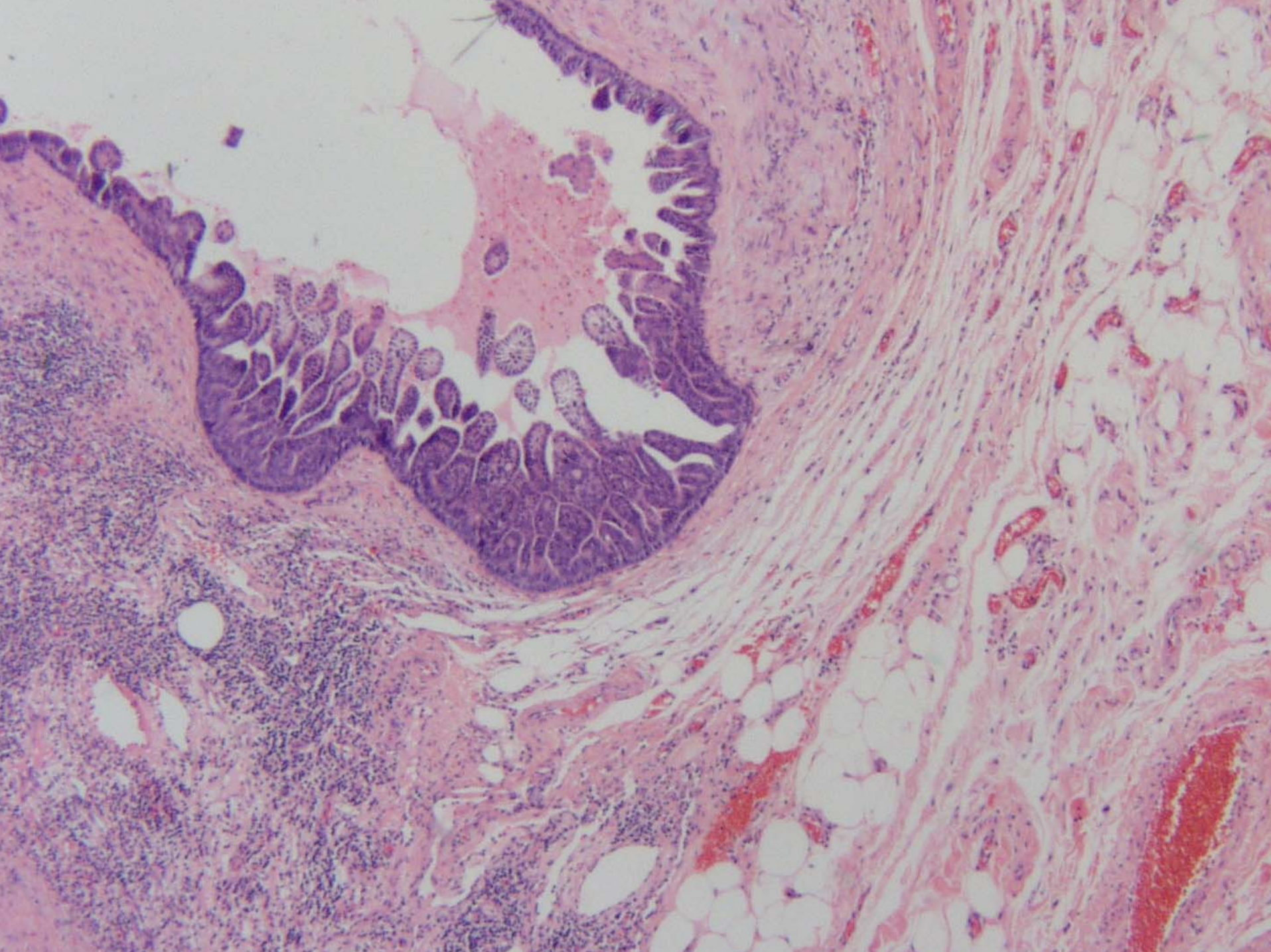
Treatment for Carcinomas

- 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