

Skin Adnexal Tumors- An Overview

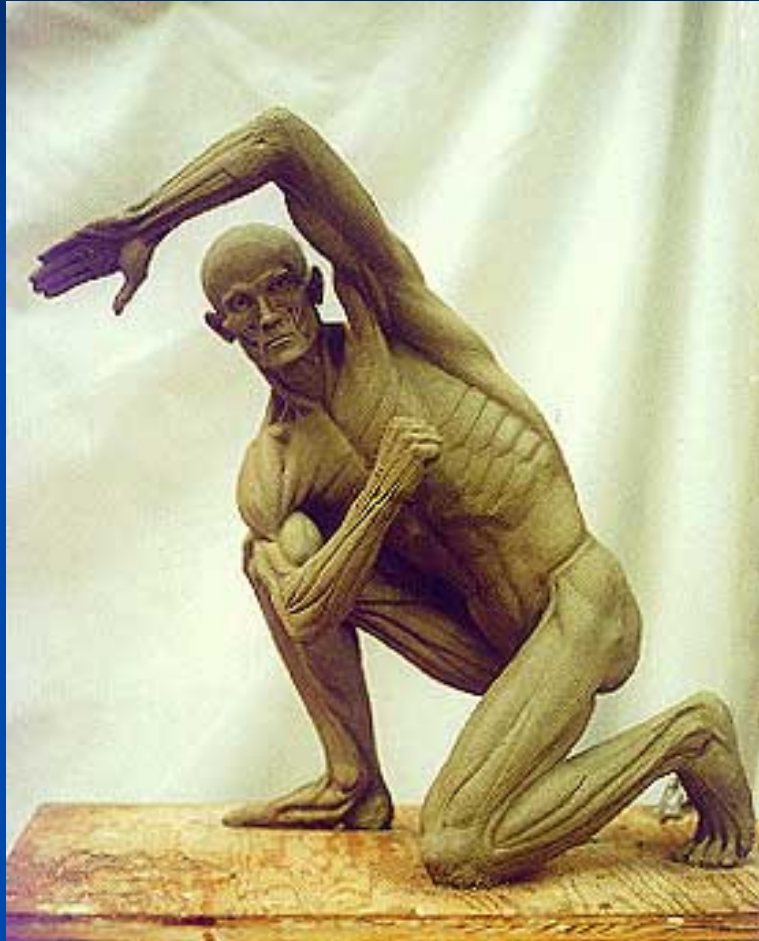
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A Bump!



- 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
 - Ansell-Spiegler syndrome
 - Cowden's syndrome
 - Muir-Torre syndrome
- Clear cell syringoma



Potential Multiplicity

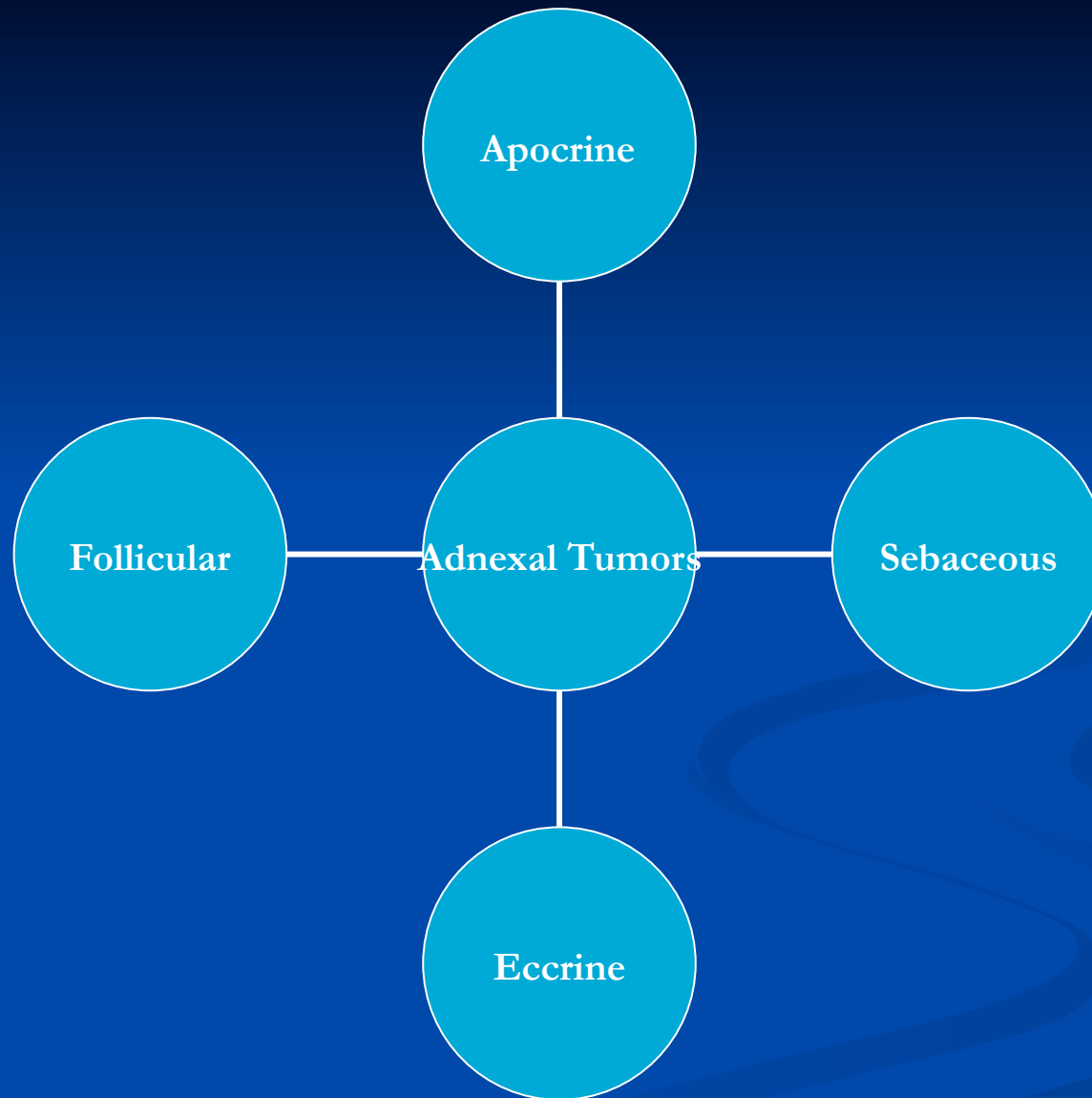


- Cylindroma (Turban tumor syndrome)
- Syringoma
- Poroma
- Trichoepithelioma
- Trichilemmoma (Cowden's syndrome)
- Sebaceous tumors (Muir-Torre syndrome)

Childhood Tumors

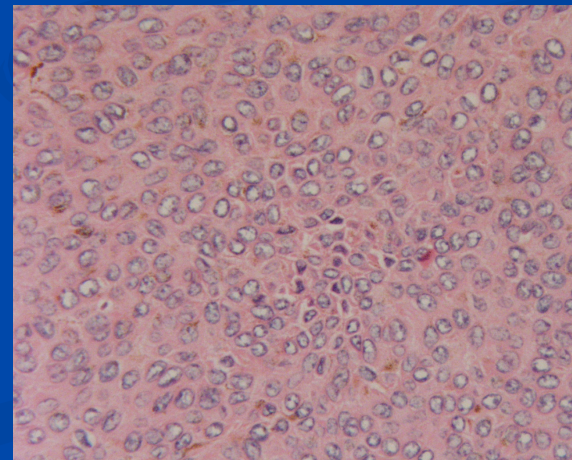
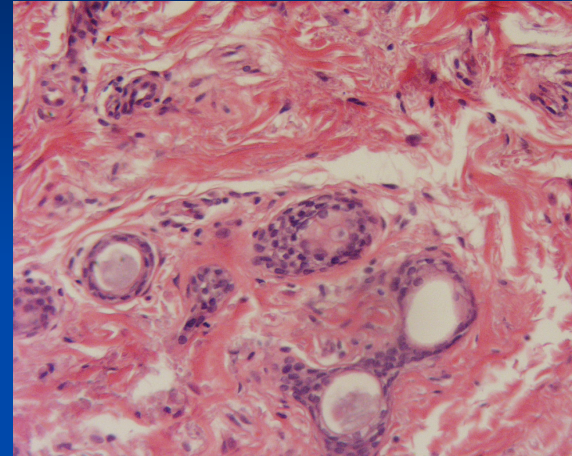
- Syringoma
- Syringocystadenoma papilliferum
- Poroma
- Cylindroma
- Pilomatrixoma
- Trichoepithelioma



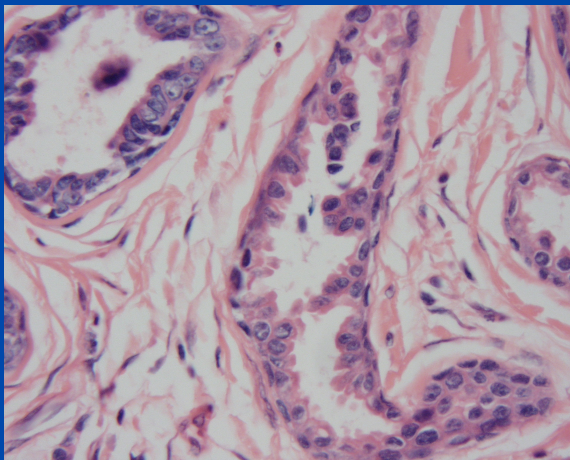
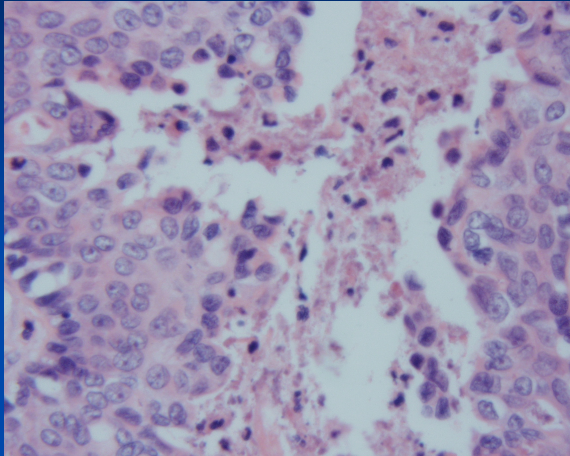


Sweat Gland Neoplasms (Eccrine)

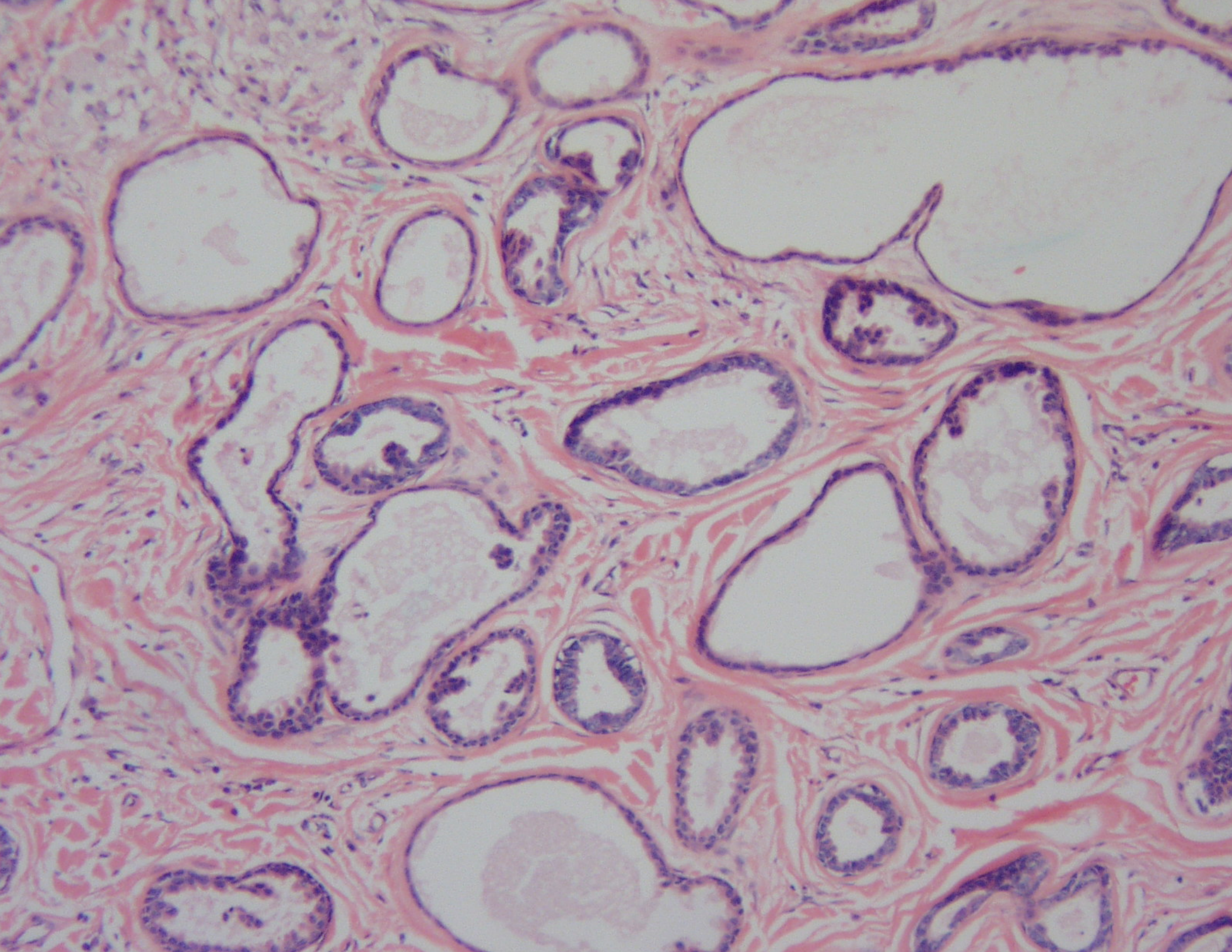
- Cylindroma
- Spiradenoma
- Acrospiroma
- Syringoma
- Hidrocystoma
- Poroma
- Mixed tumor
- Papillary eccrine adenoma
- Syringofibroadenoma

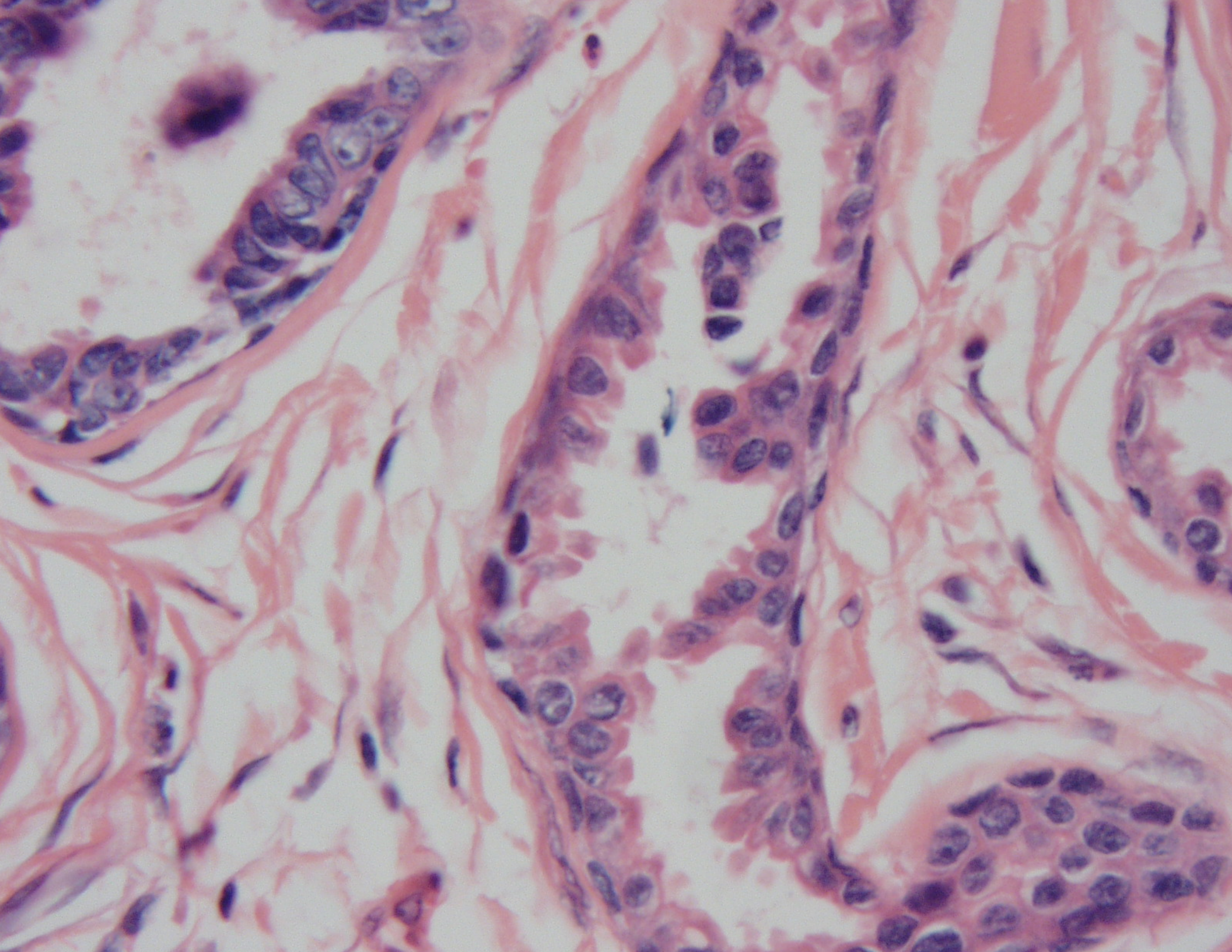


Clues to Eccrine Tumors



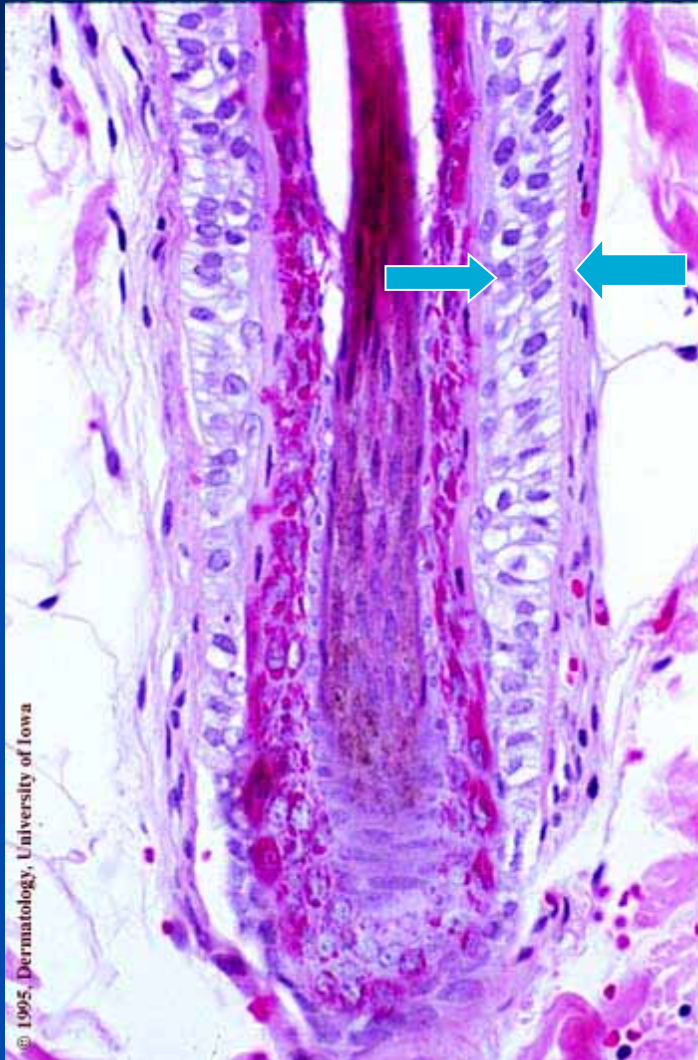
- Ductal or tubular differentiation
- Tubules not lined by corneocytes in crenulated pattern (sebaceous ducts)
- Not lined by cells with decapitation secretion





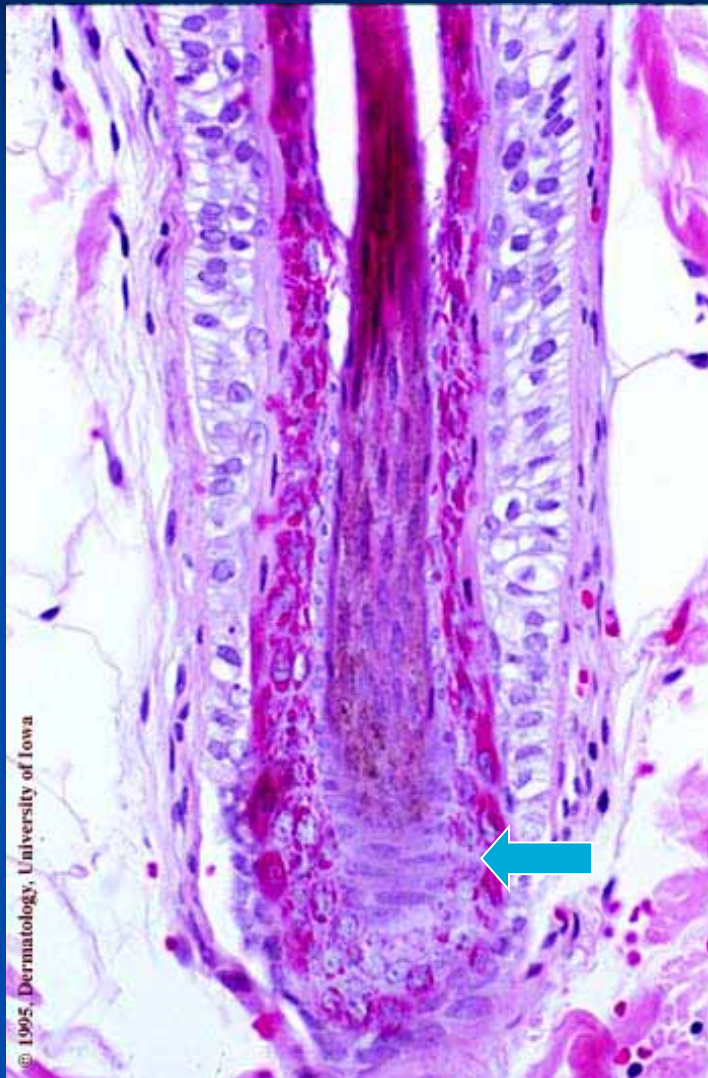


Outer Hair Sheath



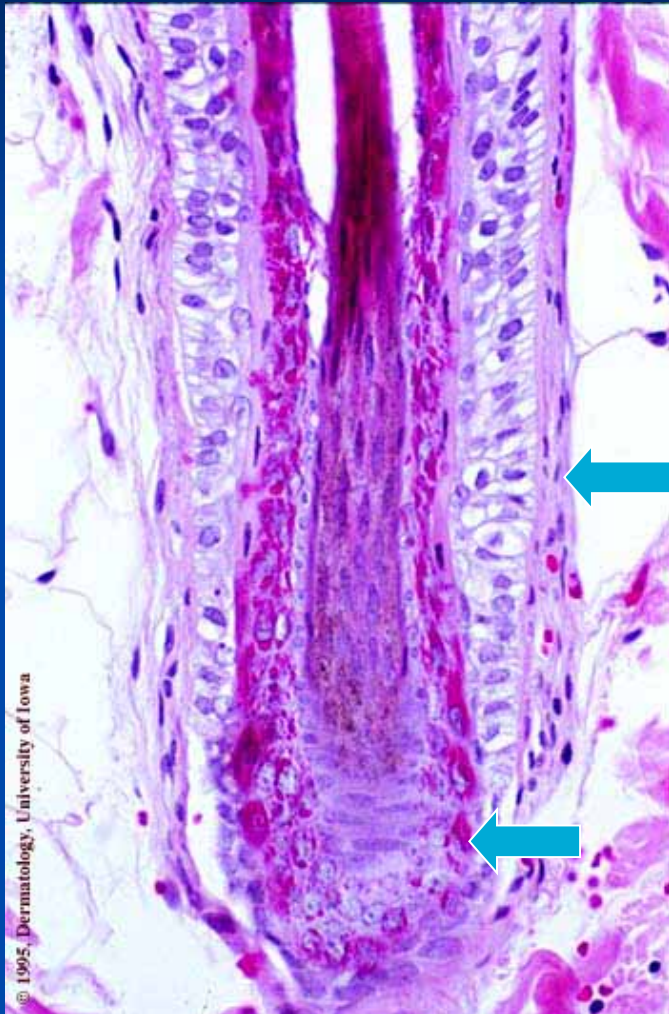
- Tumor of the follicular infundibulum
- Pilar sheath acanthoma
- Winer's pore
- Trichoadenoma
- Trichilemmoma
- Proliferating pilar tumor
- Trichilemmal carcinoma
- Malignant proliferating pilar tumor

Germanitive Epithelium



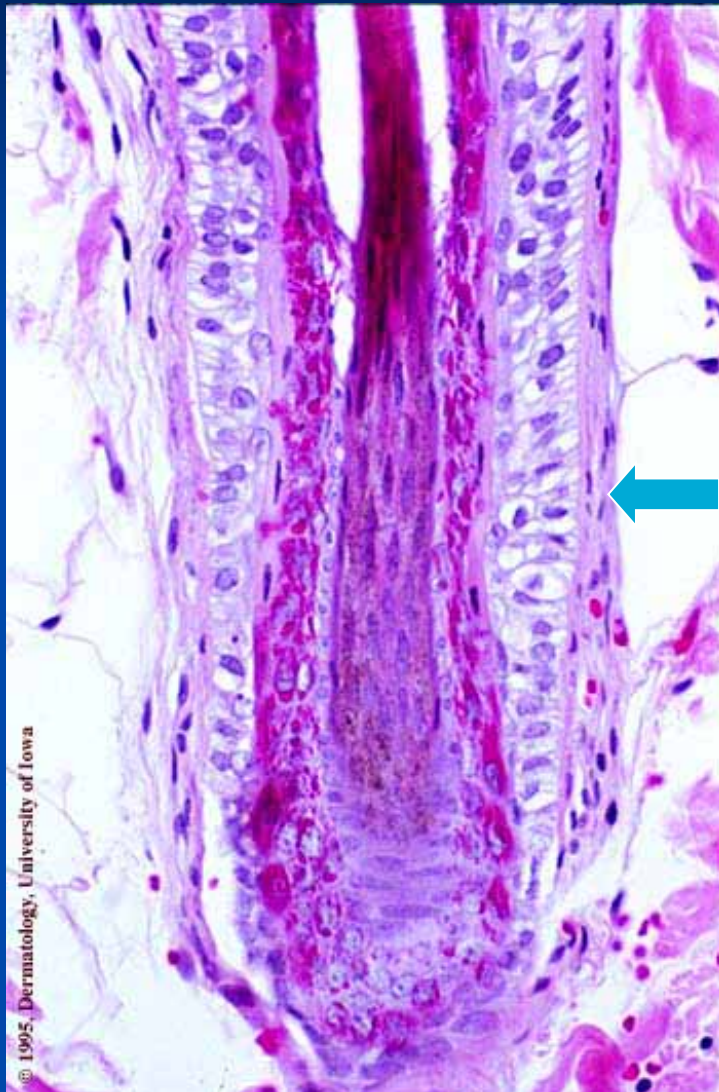
- Trichofolliculoma
- Trichoepithelioma
- Desmoplastic trichoepithelioma
- Pilomatrixoma
- Trichofollicular carcinoma
- Trichoepithelial carcinoma
- Pilomatrix carcinoma

Mixed Epithelium and Mesenchyme



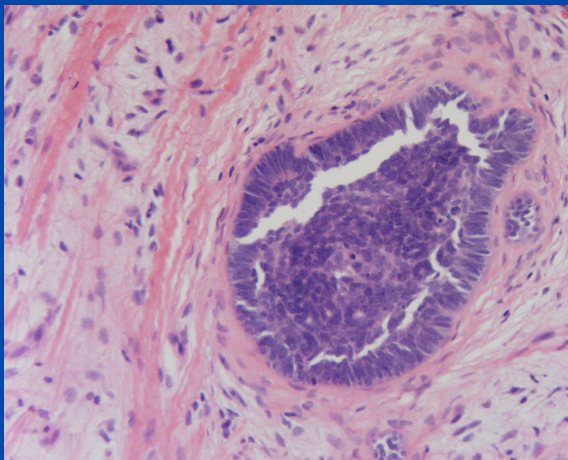
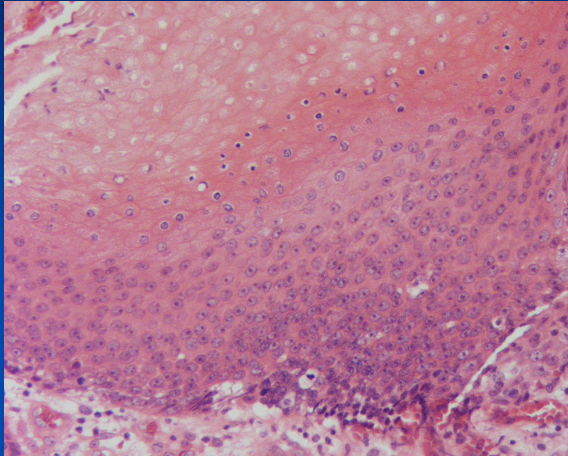
- Basaloid follicular hamartoma
- Trichoblastoma

Pilar Mesenchyme



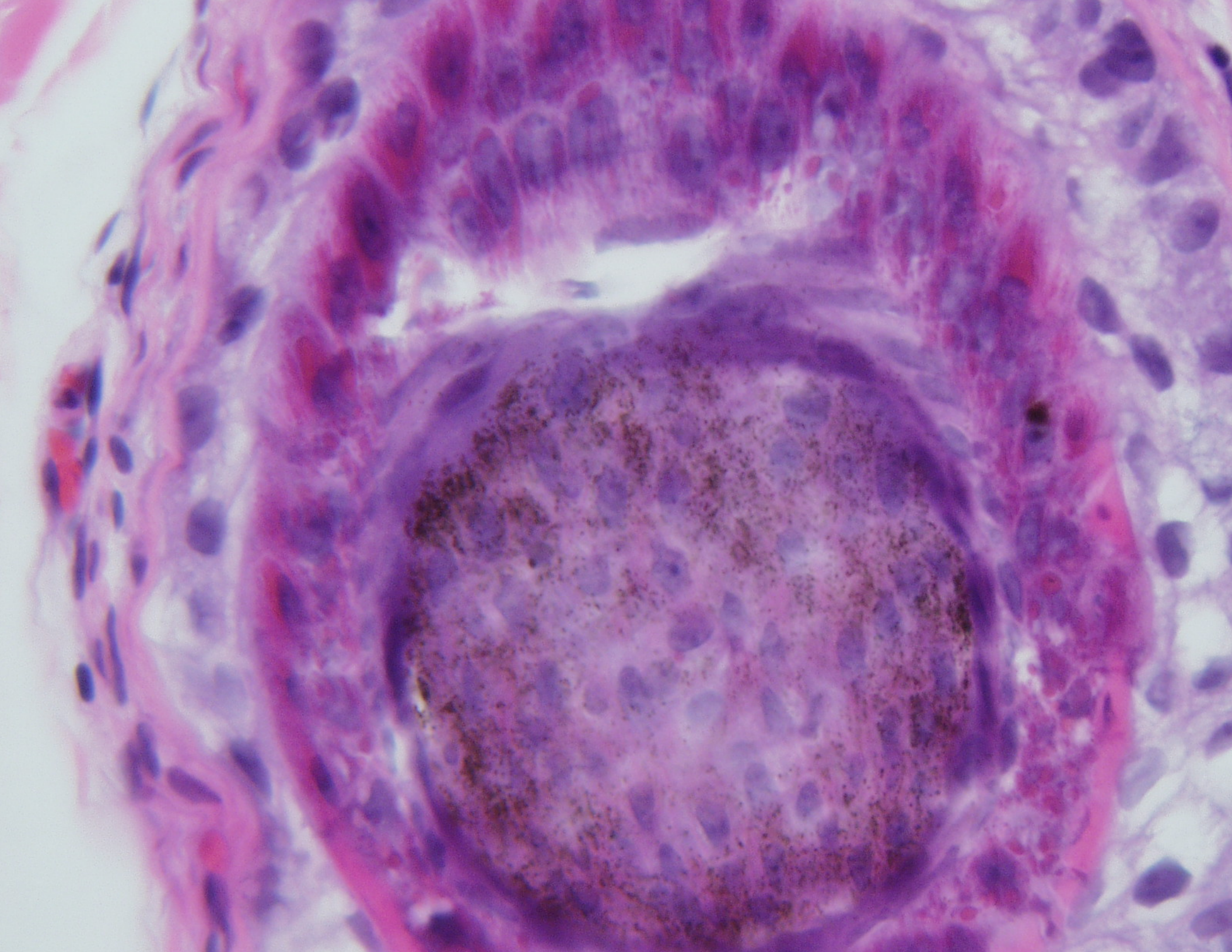
- Trichodiscoma
- Perifollicular fibroma
- Fibrofolliculoma
- Follicular myxoma
- Leiomyoma

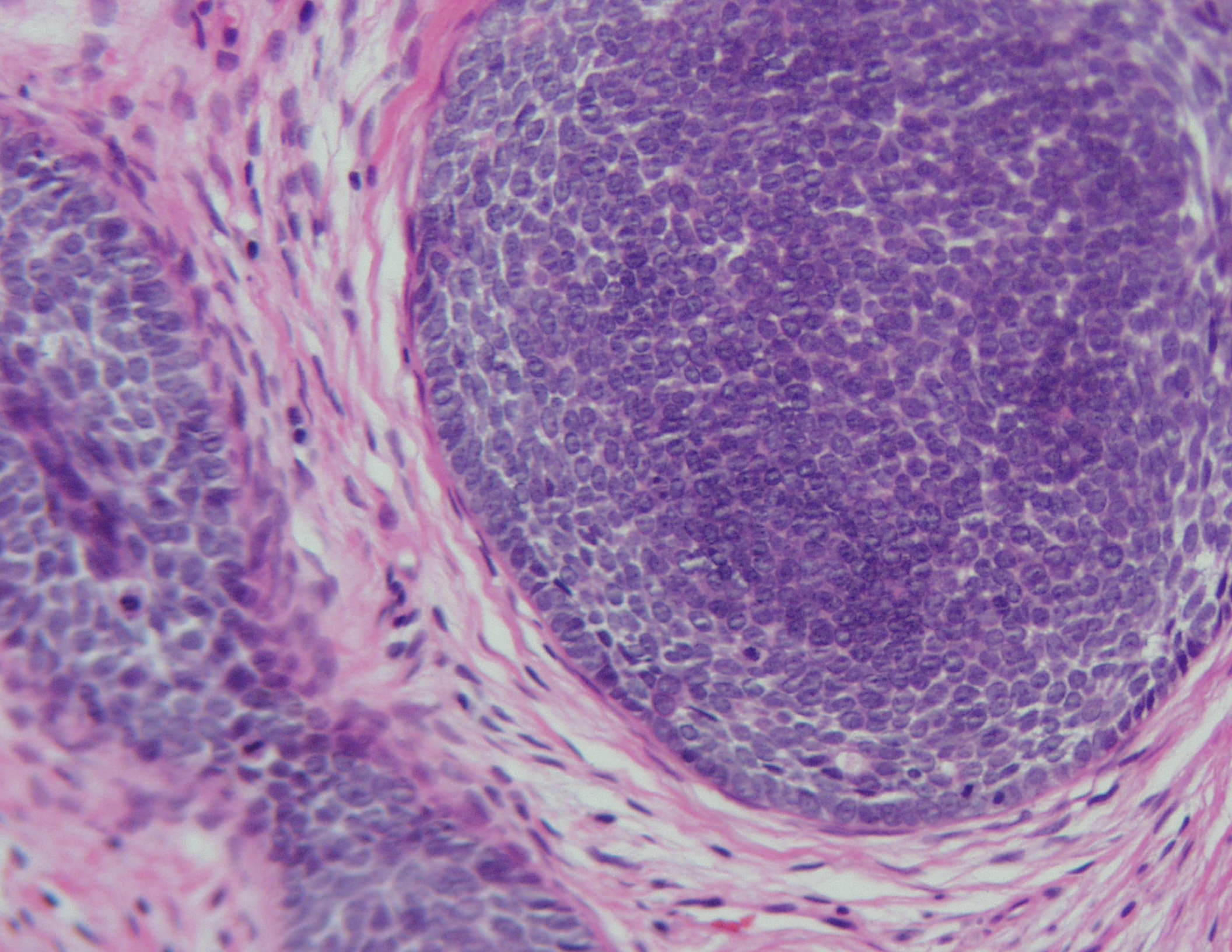
Clues to Follicular Neoplasms

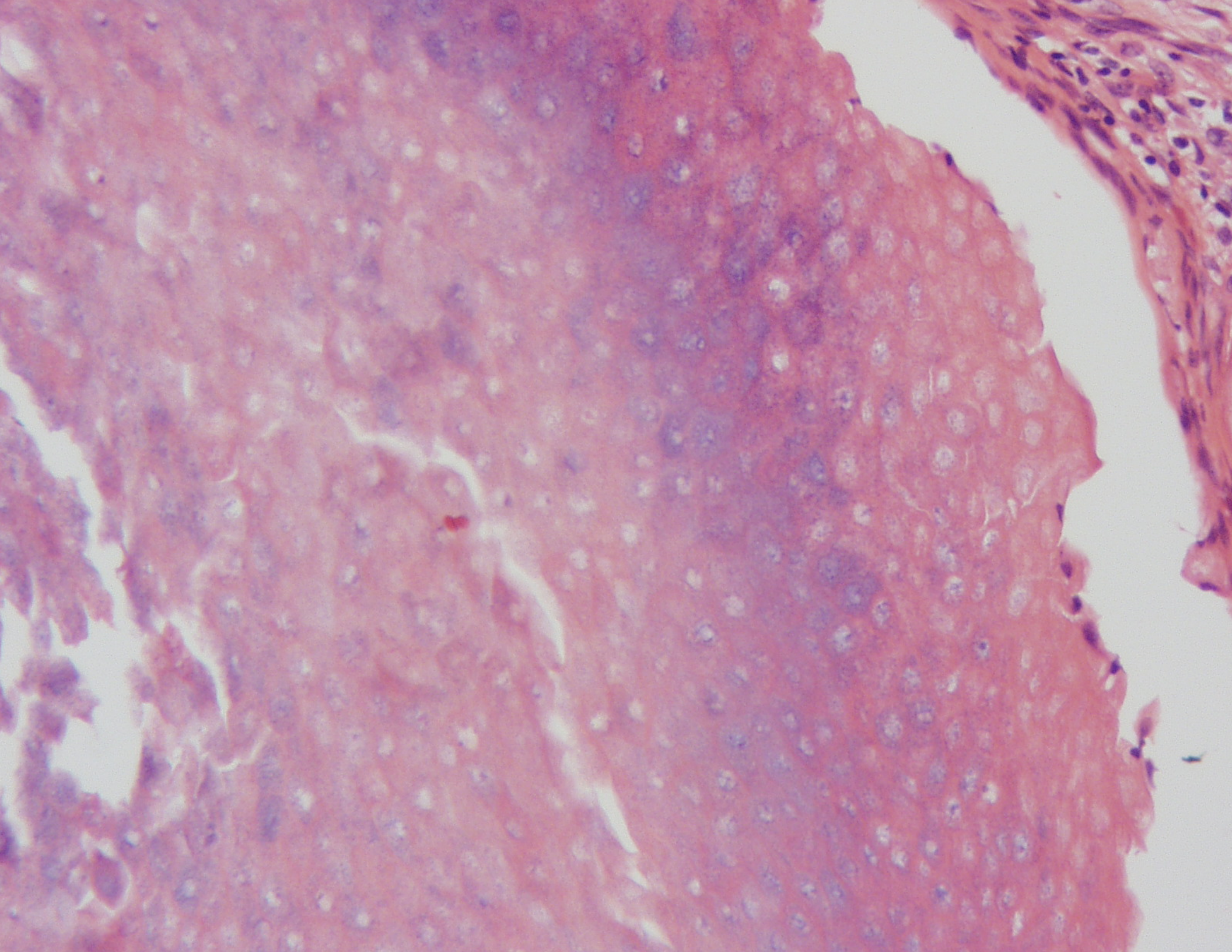


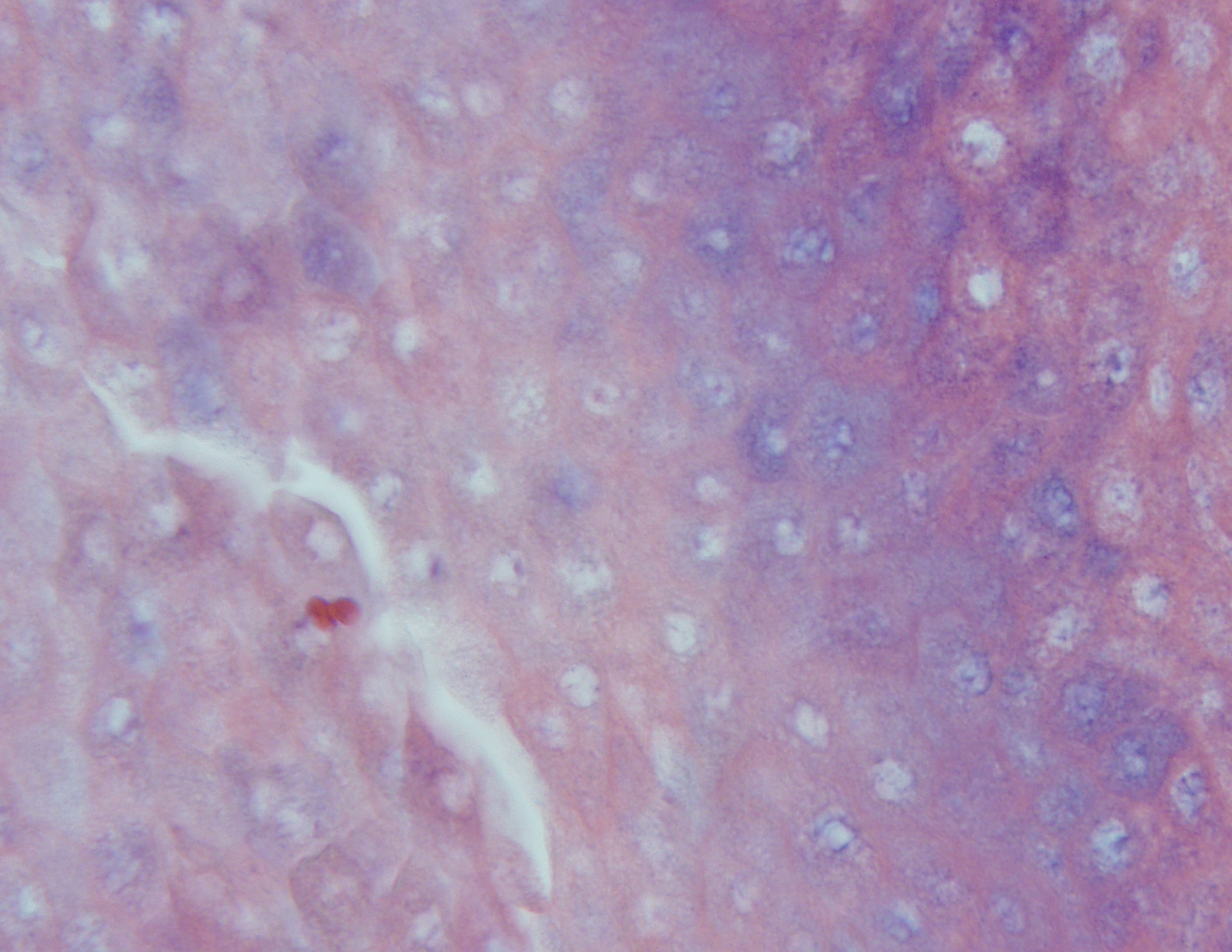
■ Recapitulate Hair Follicles

- Follicular bulb and papilla
- Matrical cells
- Shadow cells
- Trichohyalin granules









Sebaceous Neoplasms

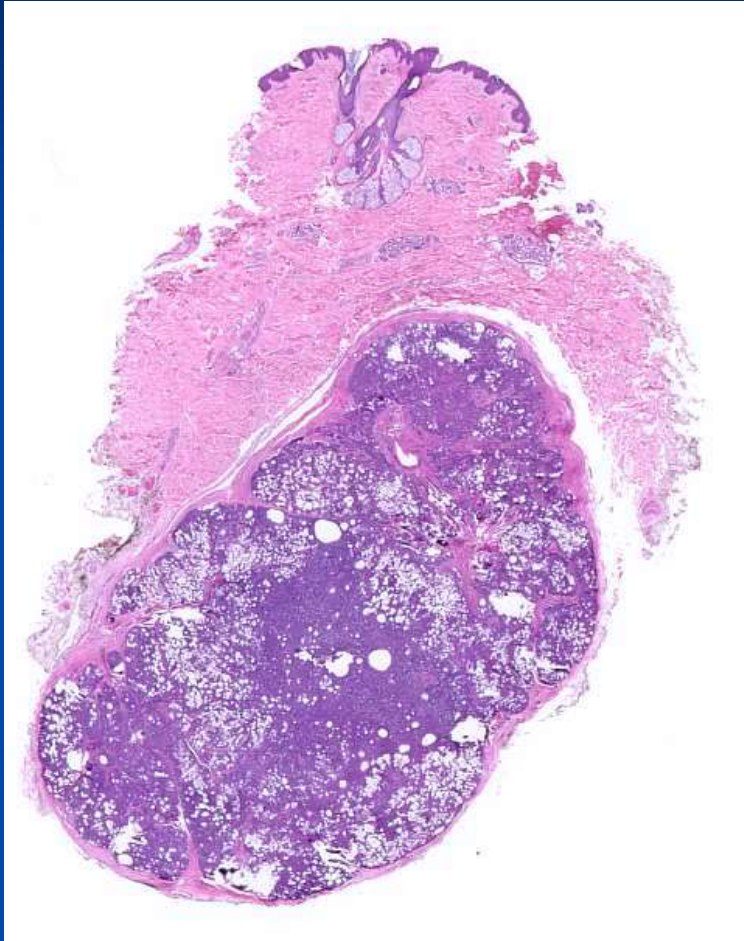
- Hyperplasias
- Benign
- Malignant

Hyperplasias



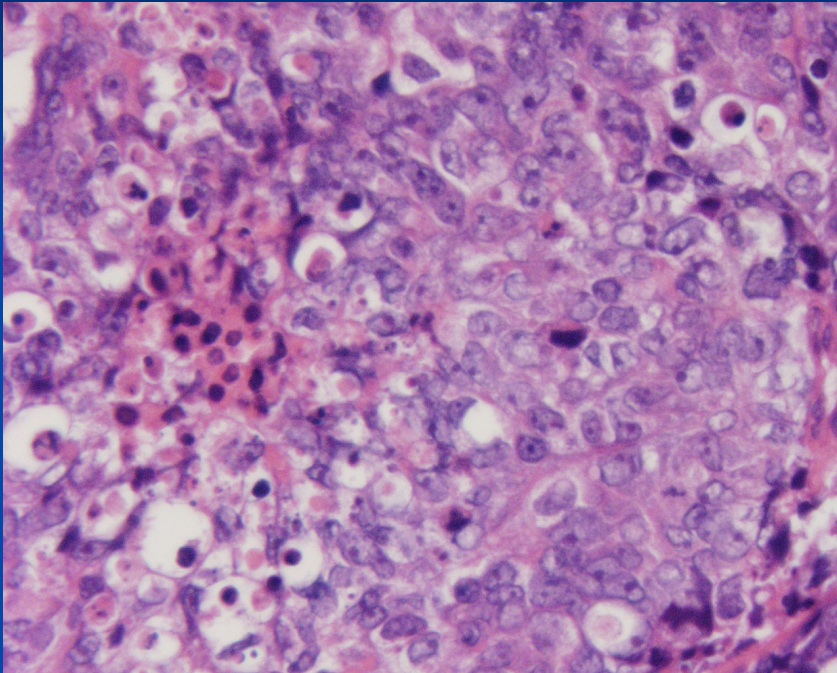
- Senile
- Premature
- Nevus sebaceus of Jadassohn

Benign



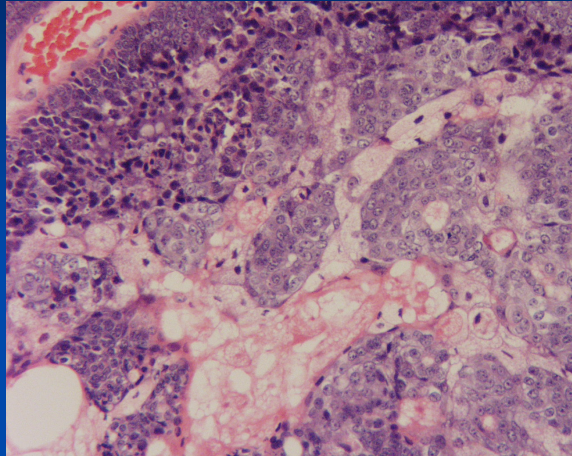
- Sebaceous adenoma
- Basosebaceous epithelioma
- Superficial epithelioma with sebaceous differentiation
- Sebaceoma

Malignant

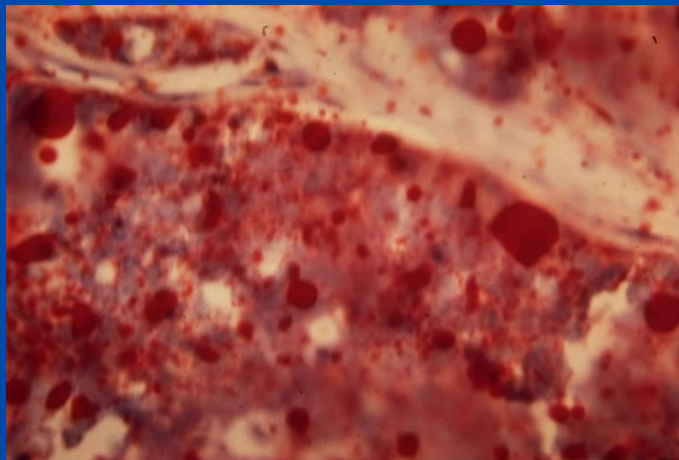


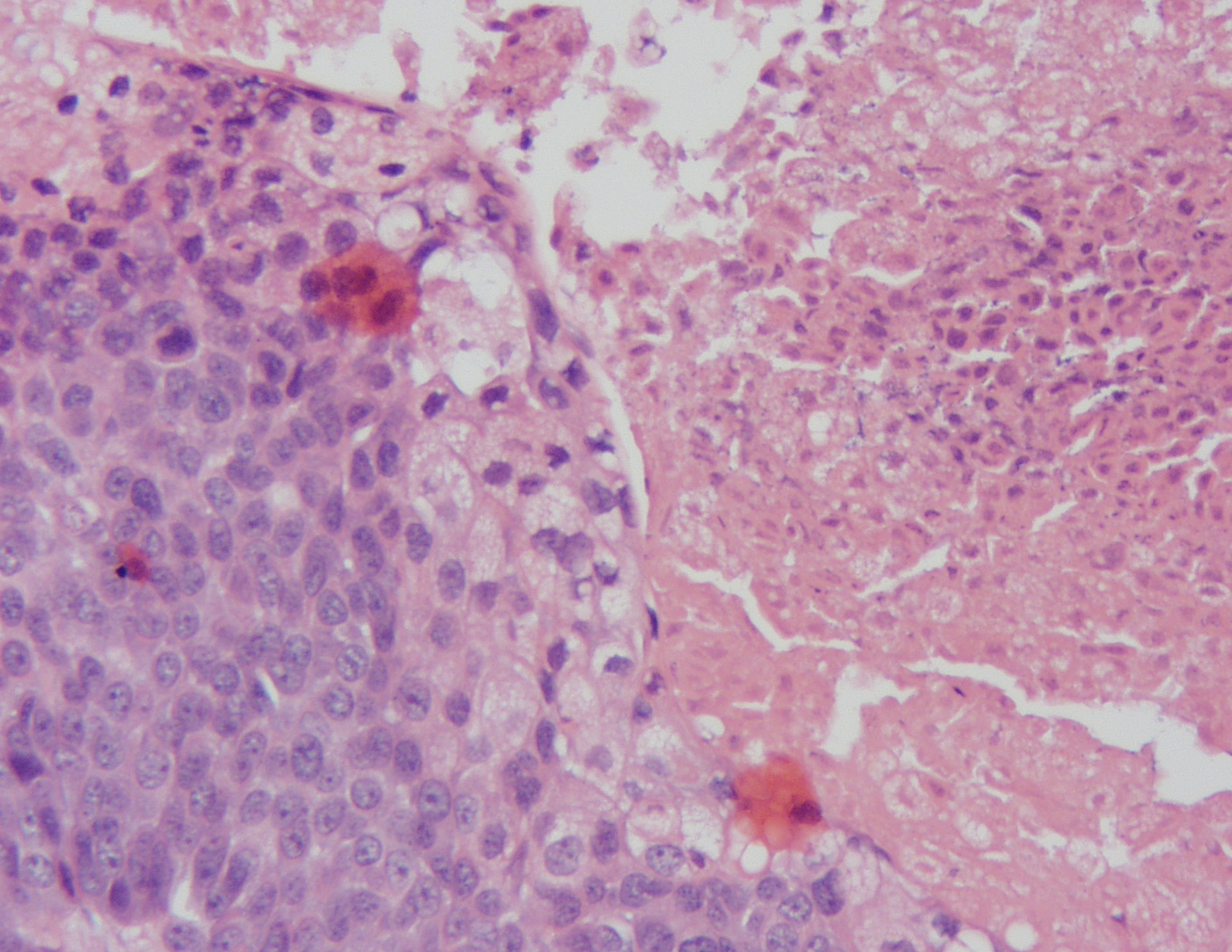
- Ocular sebaceous carcinoma
- Extraocular
- Carcinoma with mixed adnexal differentiation

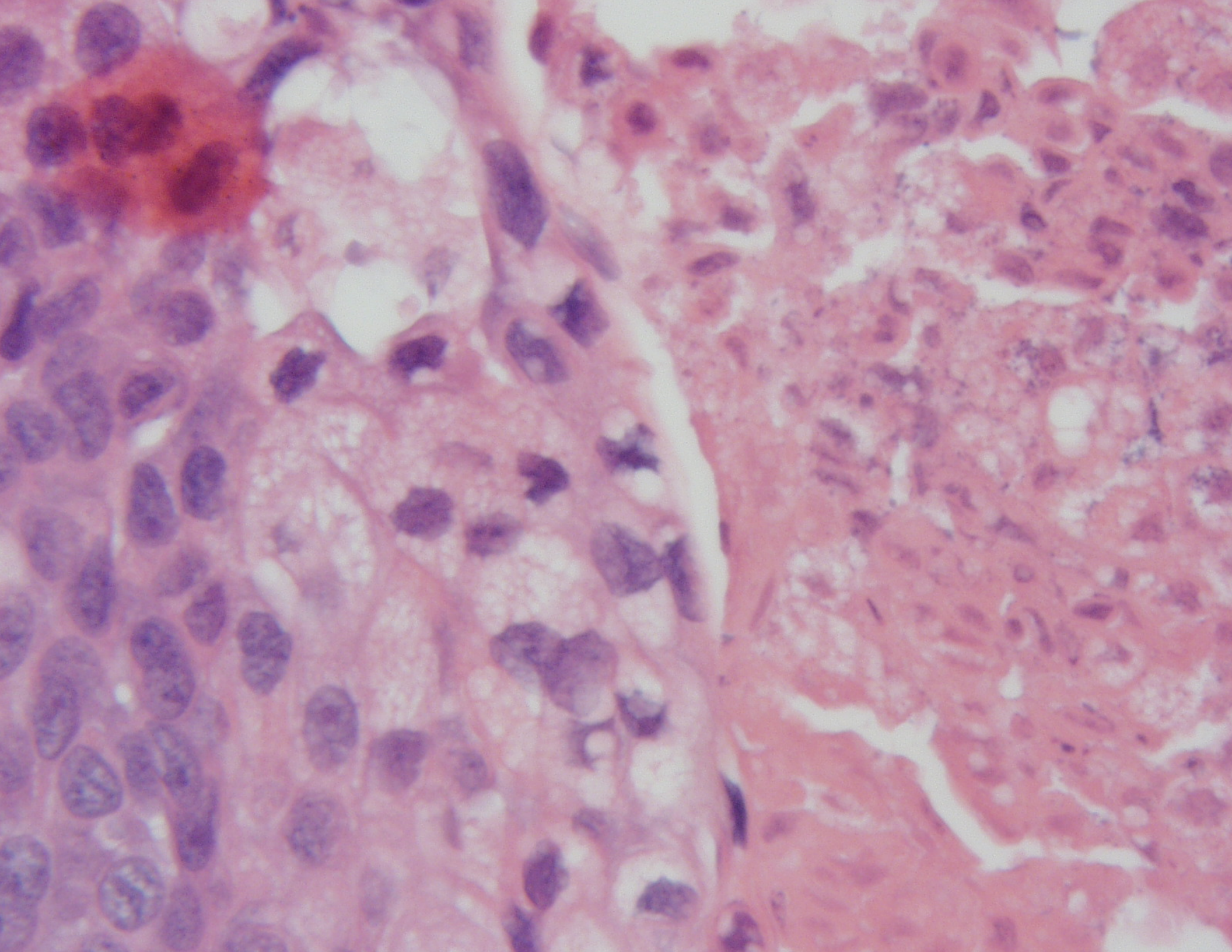
Clues to Sebaceous Neoplasms



- Sebocytes or tubule resembling sebaceous duct
- Holocrine secretion





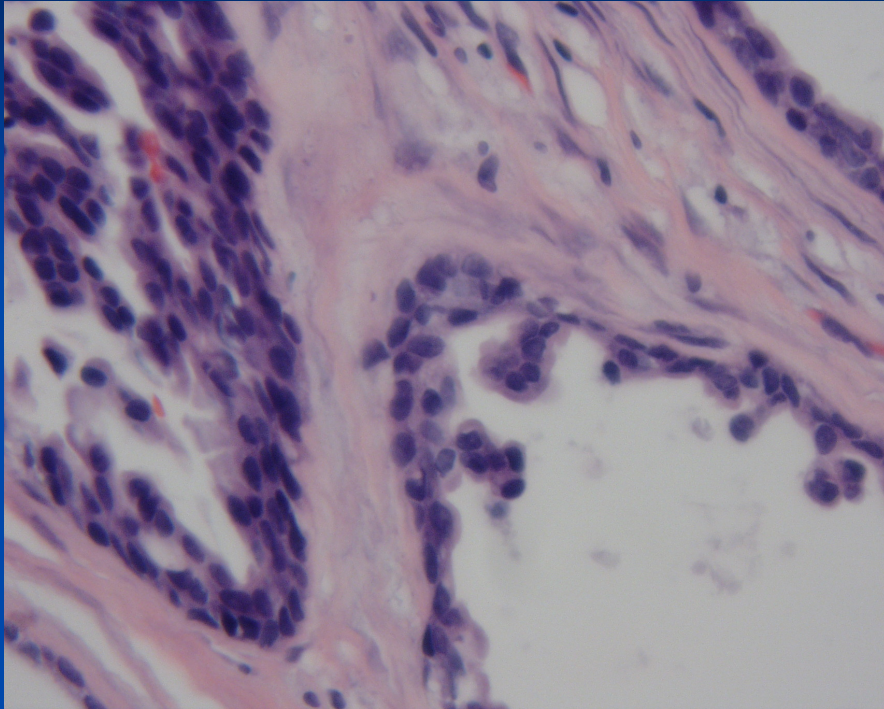


Apocrine Neoplasms

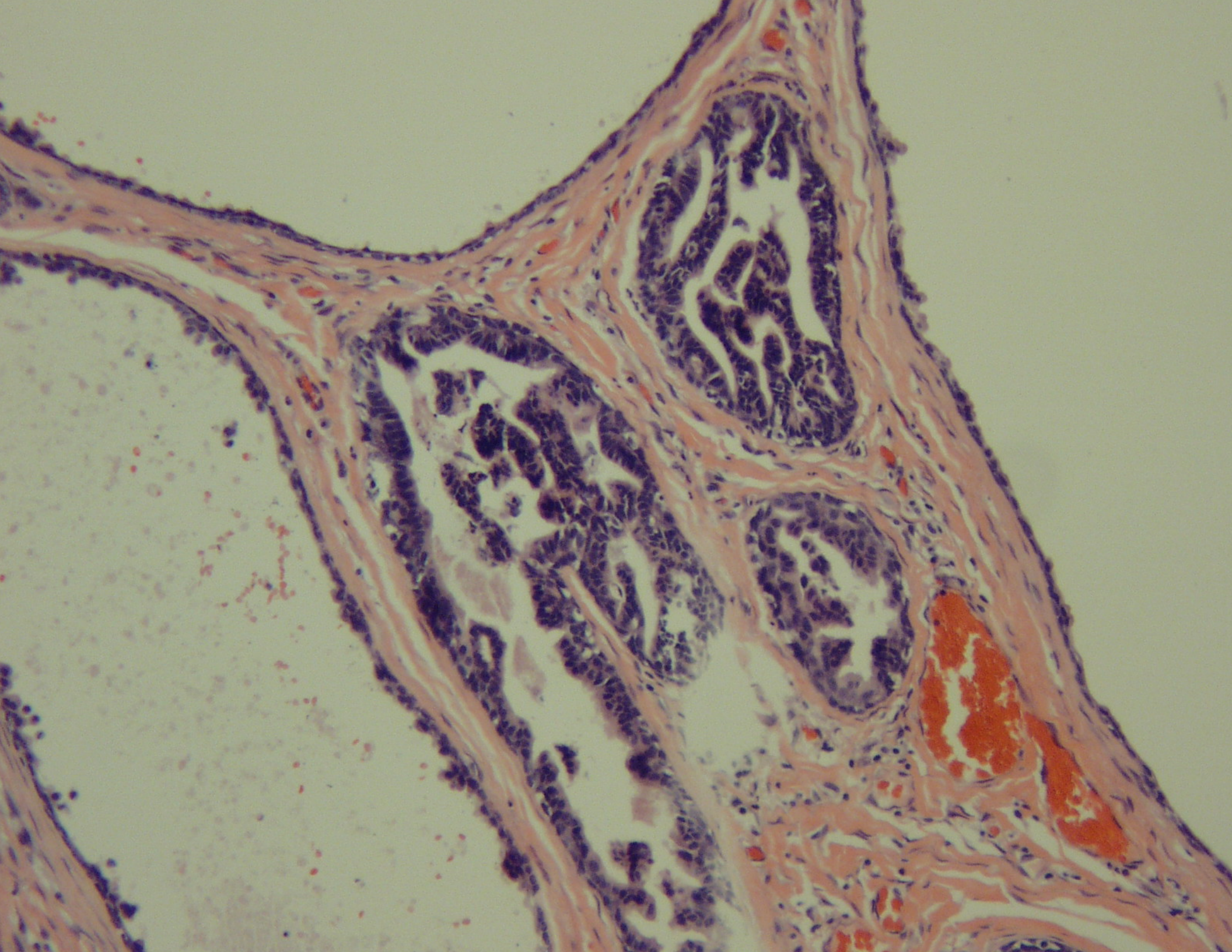


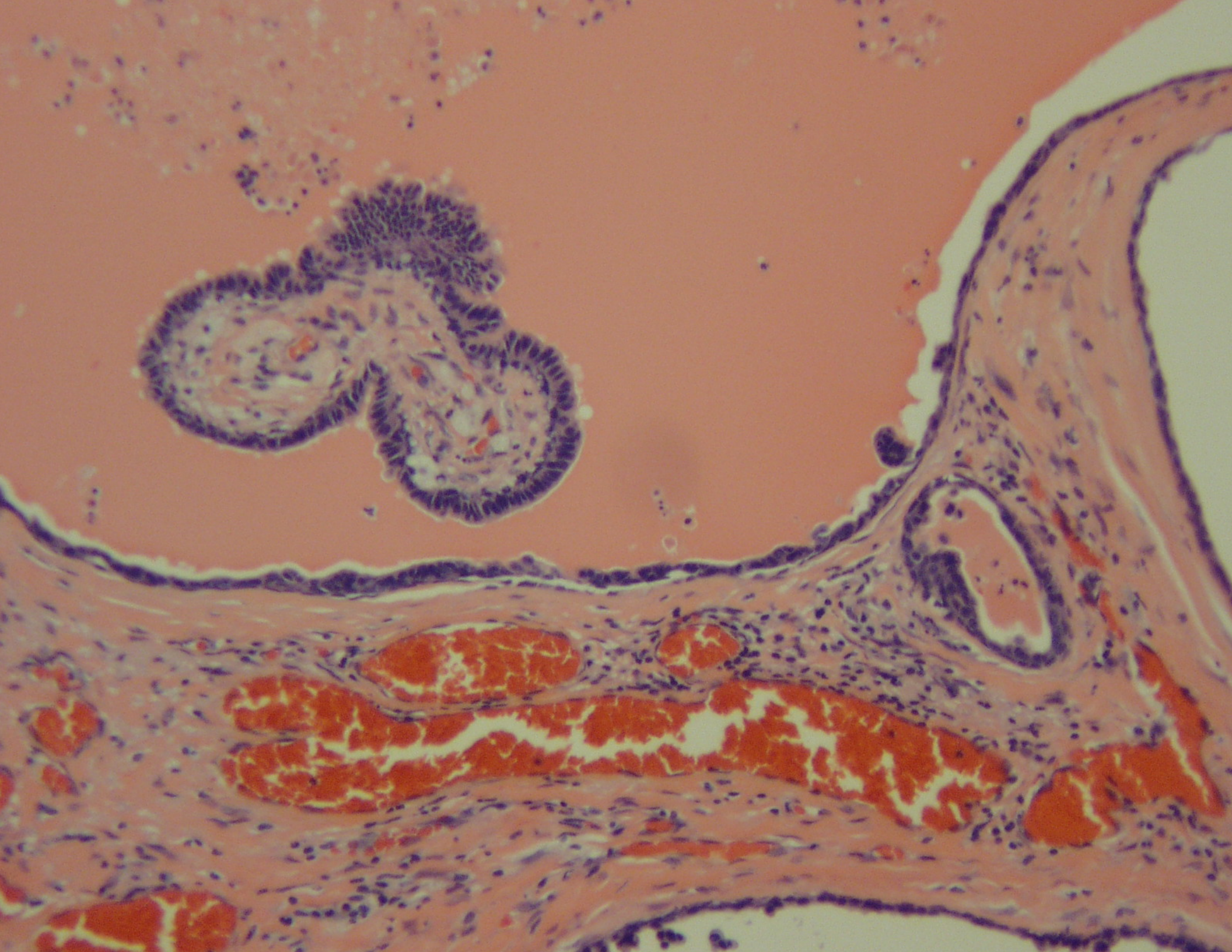
- Hidrocystoma
- Tubular adenoma
- Syringocystadenoma papilliferum
- Hidradenoma papilliferum
- Extramammary Paget's disease

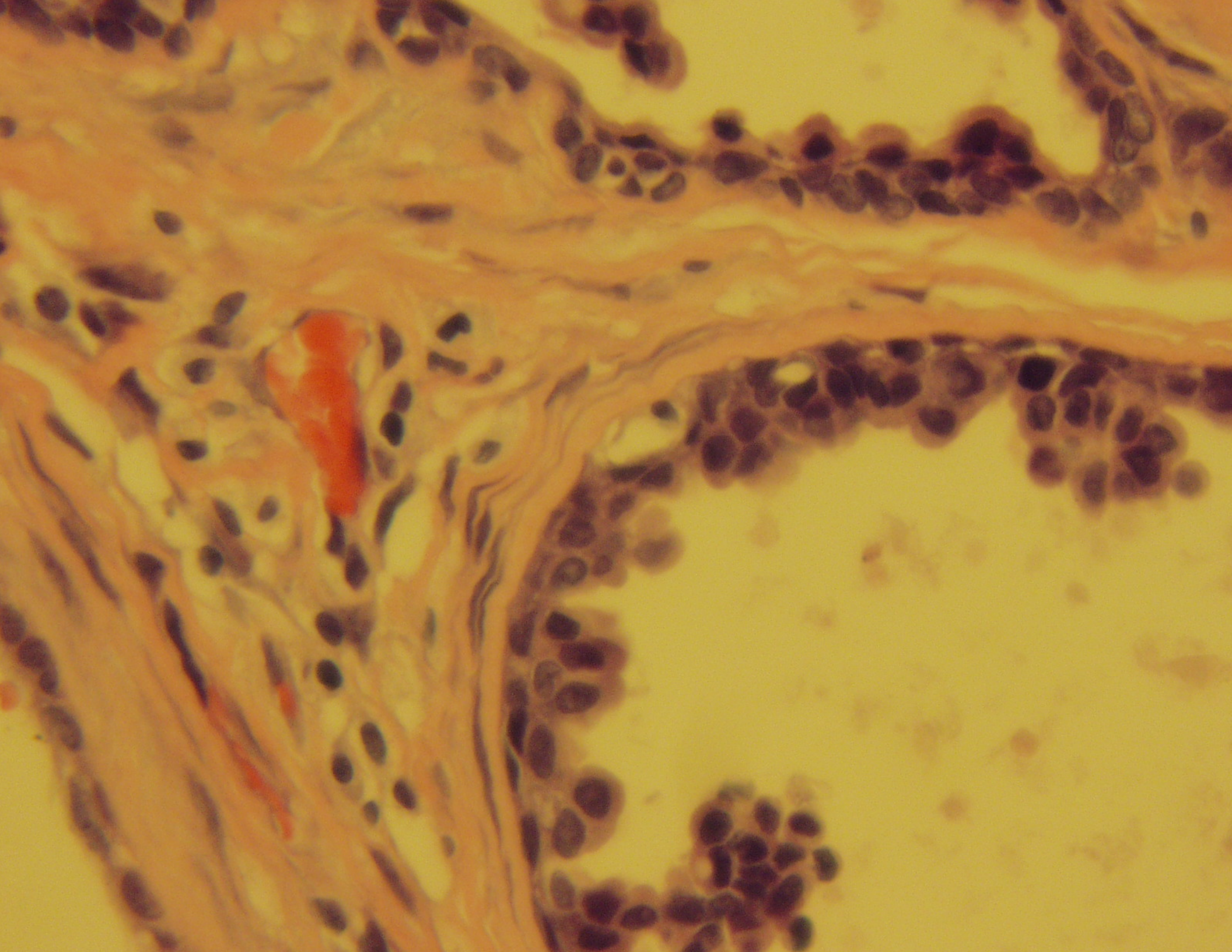
Clues to Apocrine Neoplasms



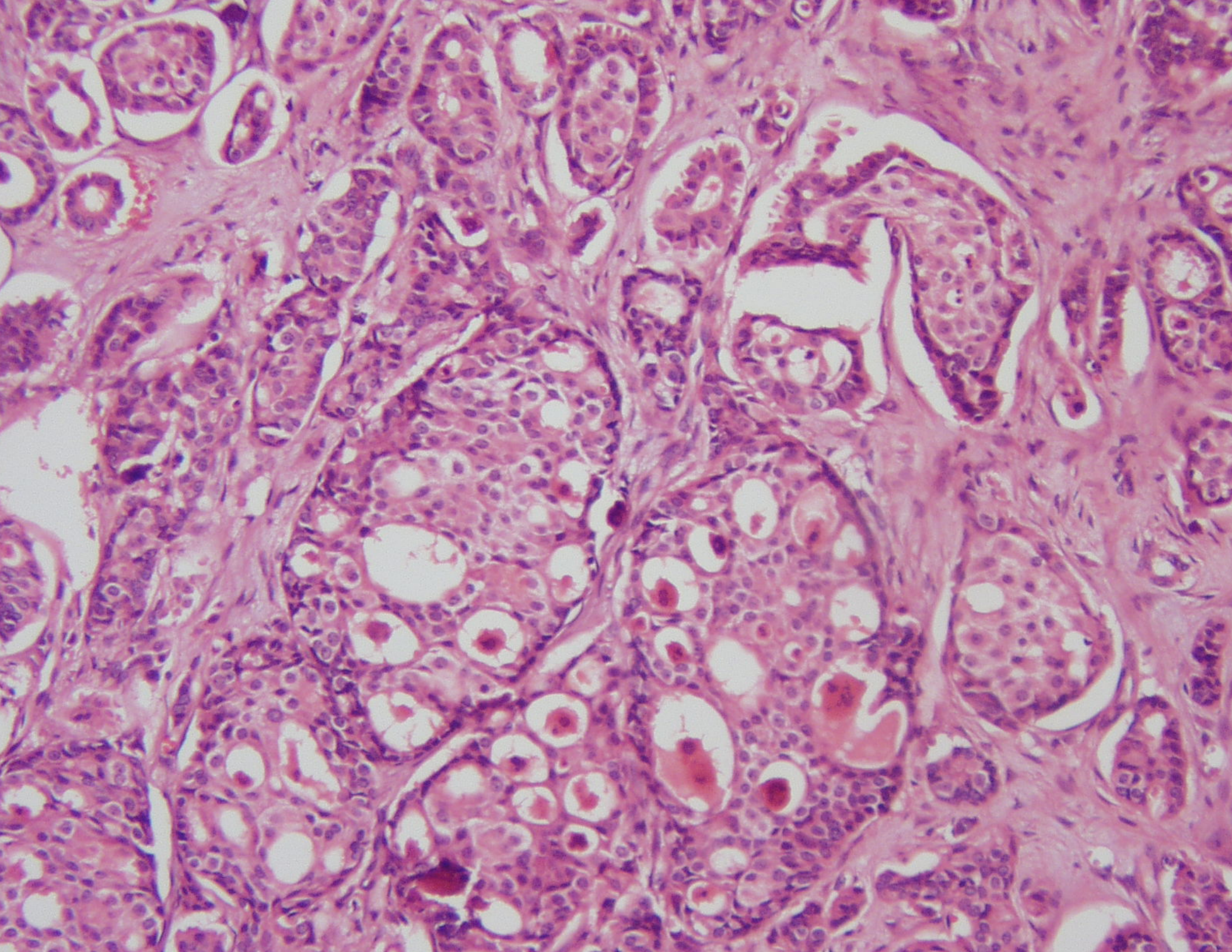
- Ductal changes with apocrine snouting (decapitation secretion)

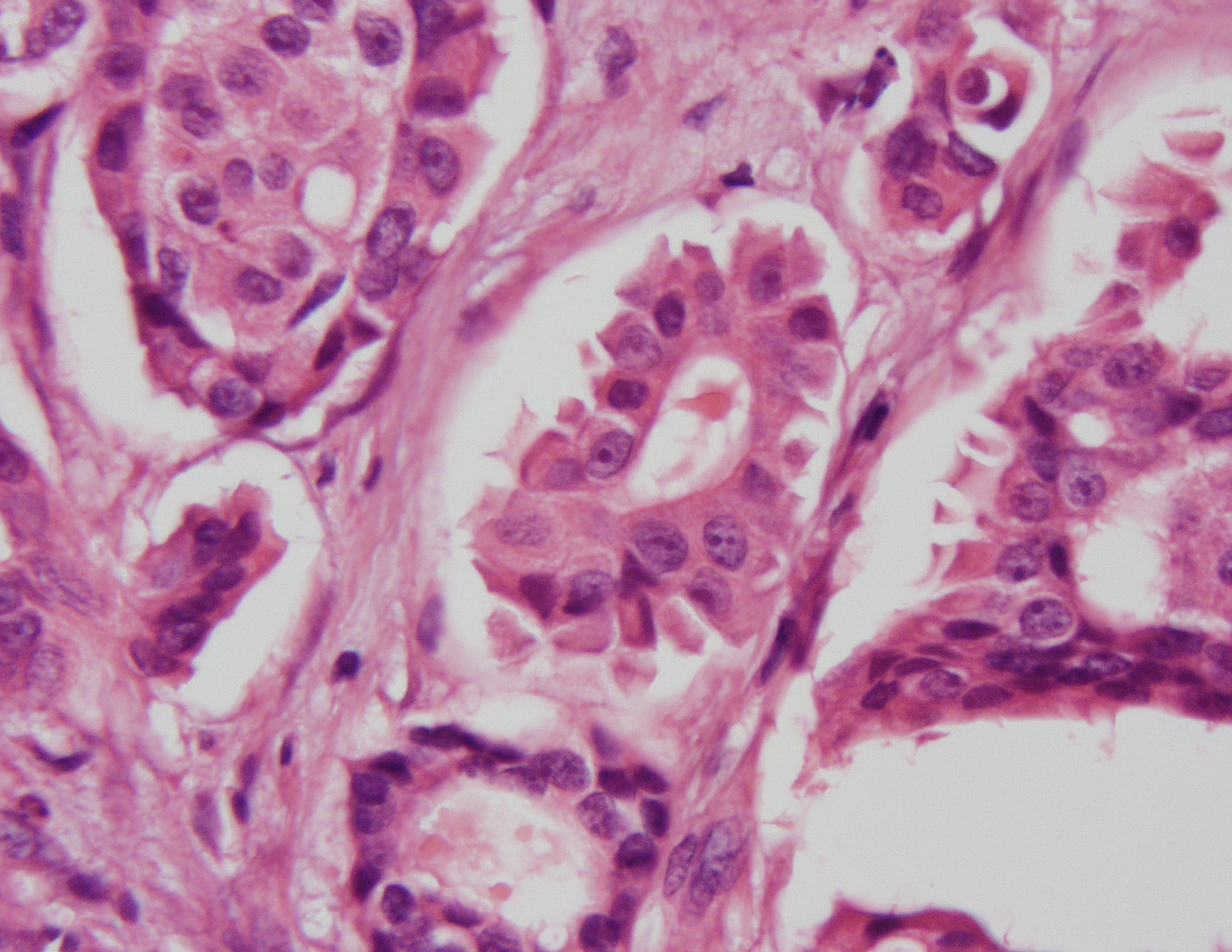






Apocrine Cystadenoma

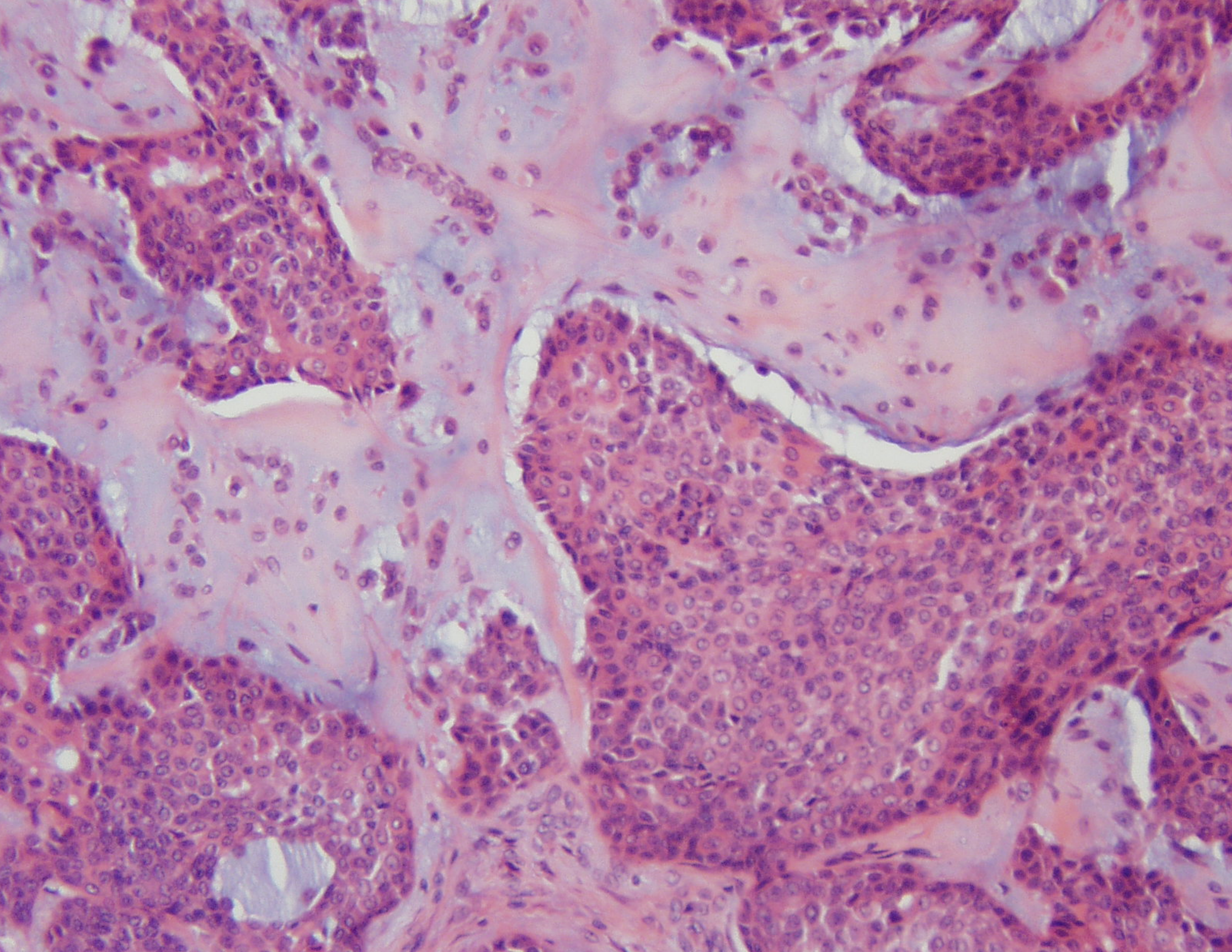


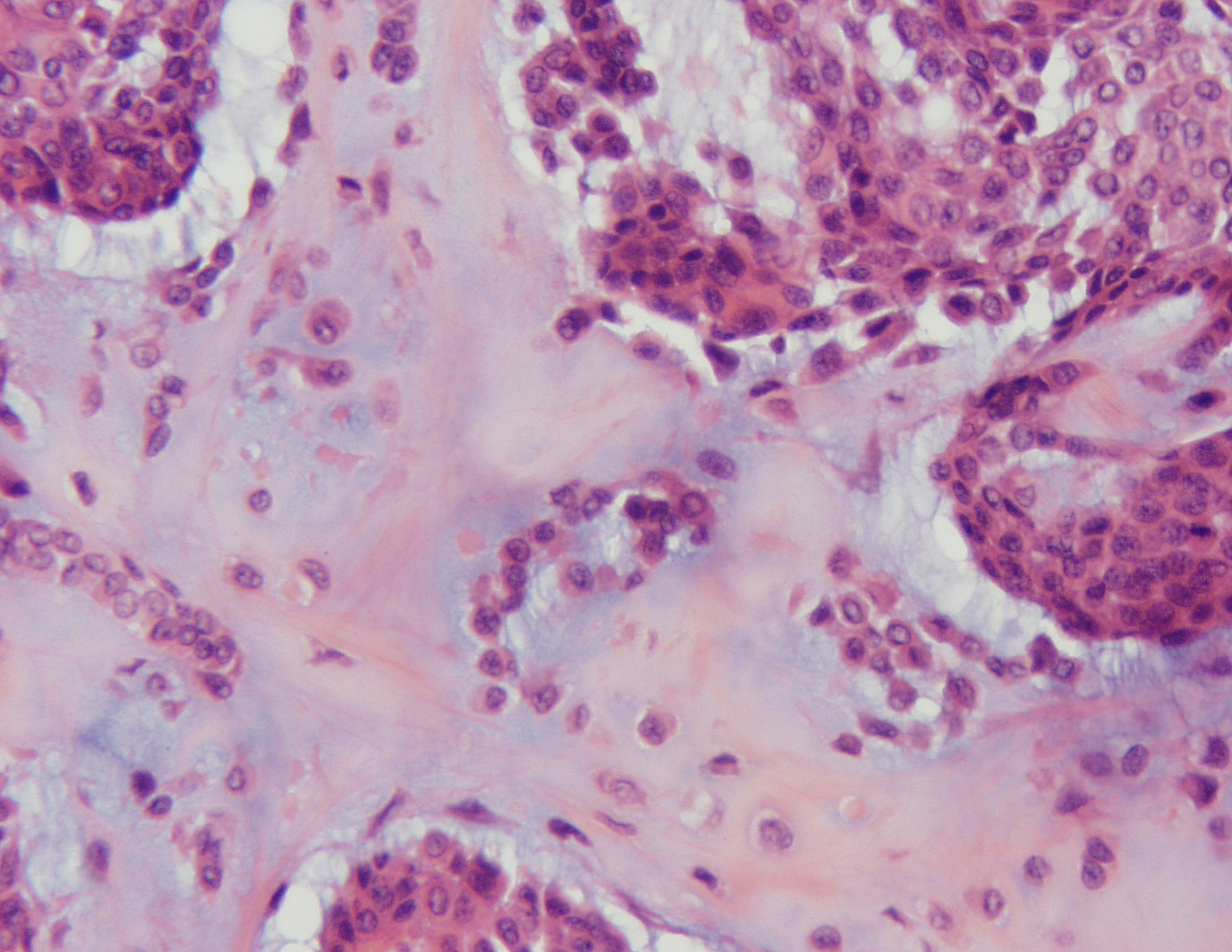


Apocrine Adenocarcinoma

Mixed Neoplasms

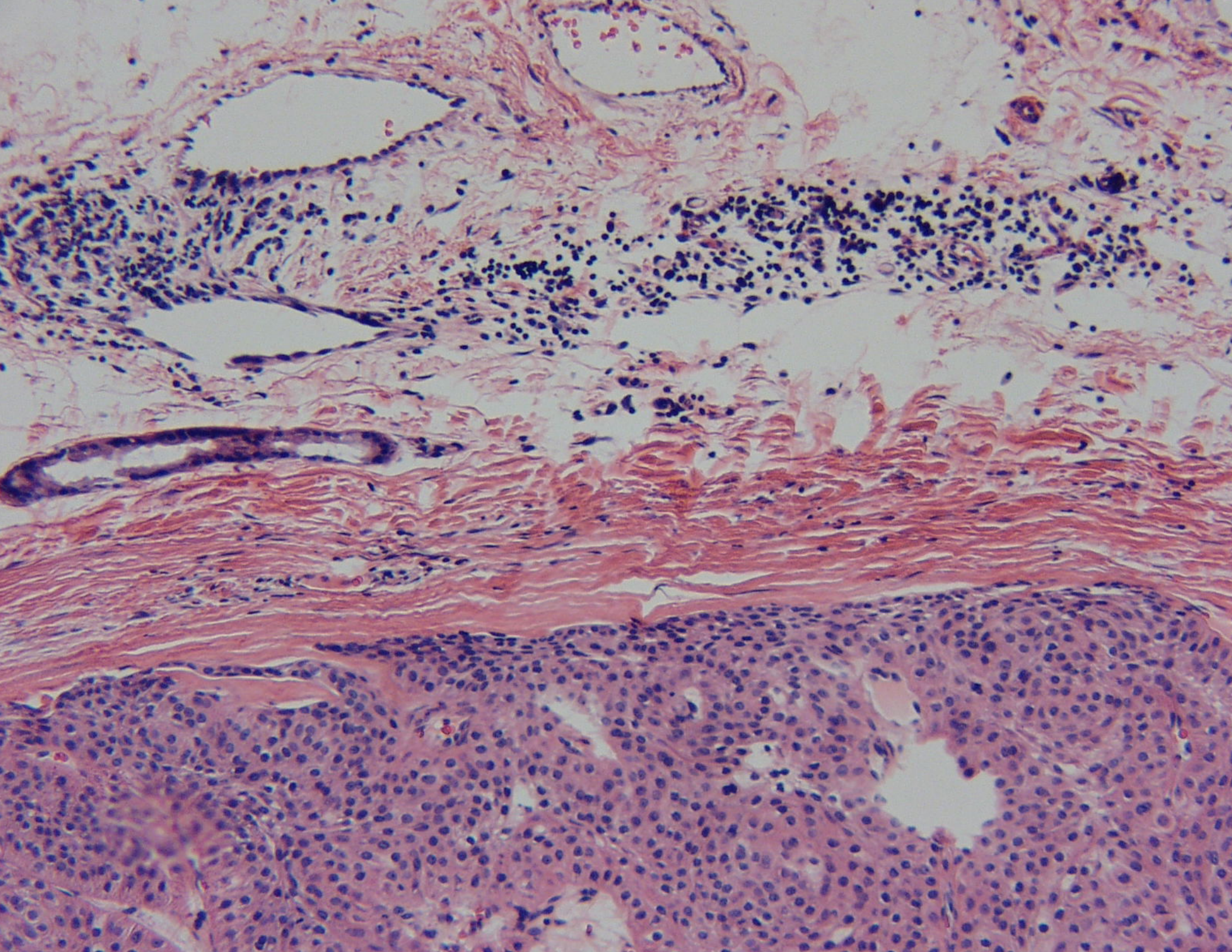
- Microcystic adnexal carcinoma
- Lymphoepithelioma-like carcinoma of the skin
- Malignant mixed tumors

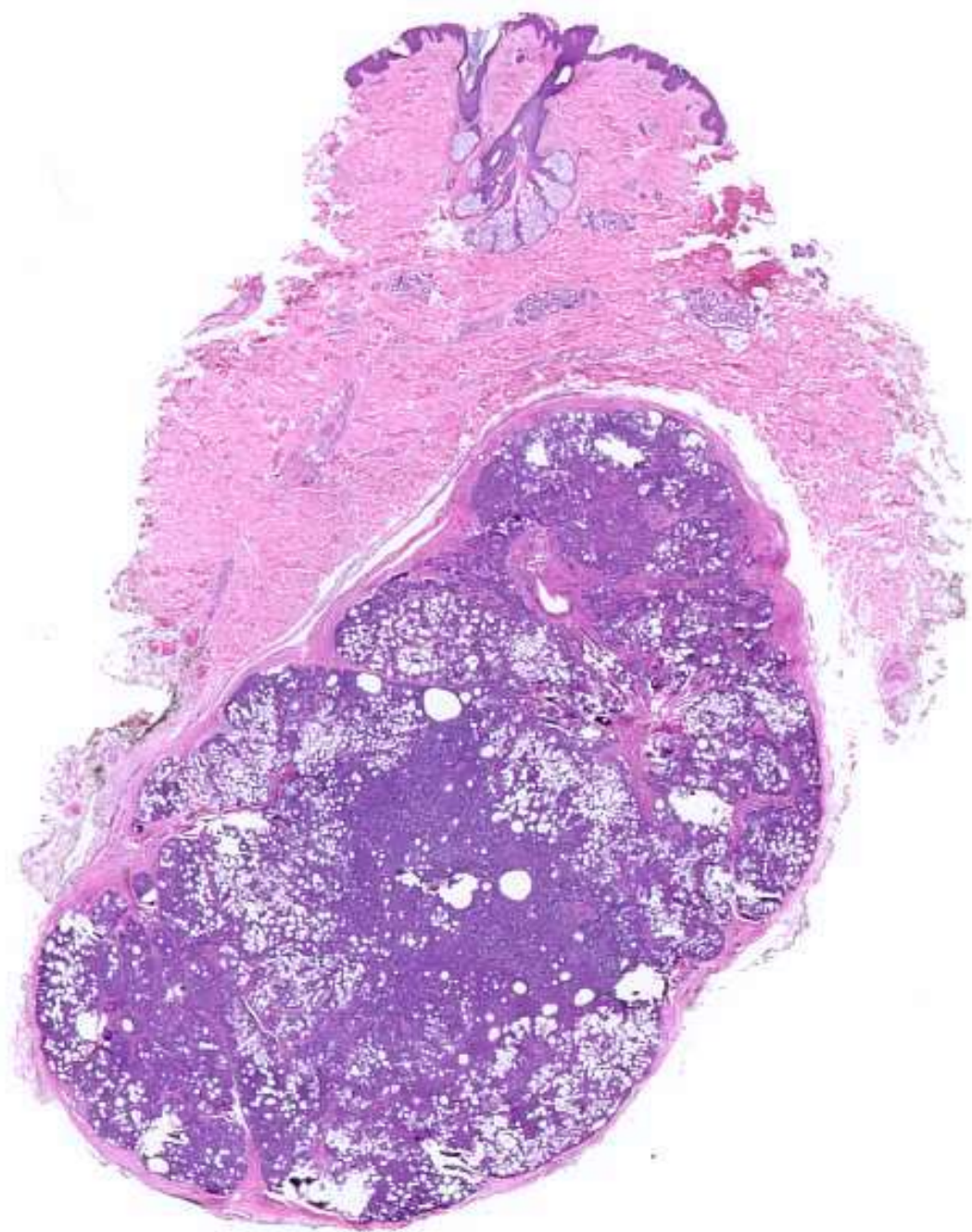


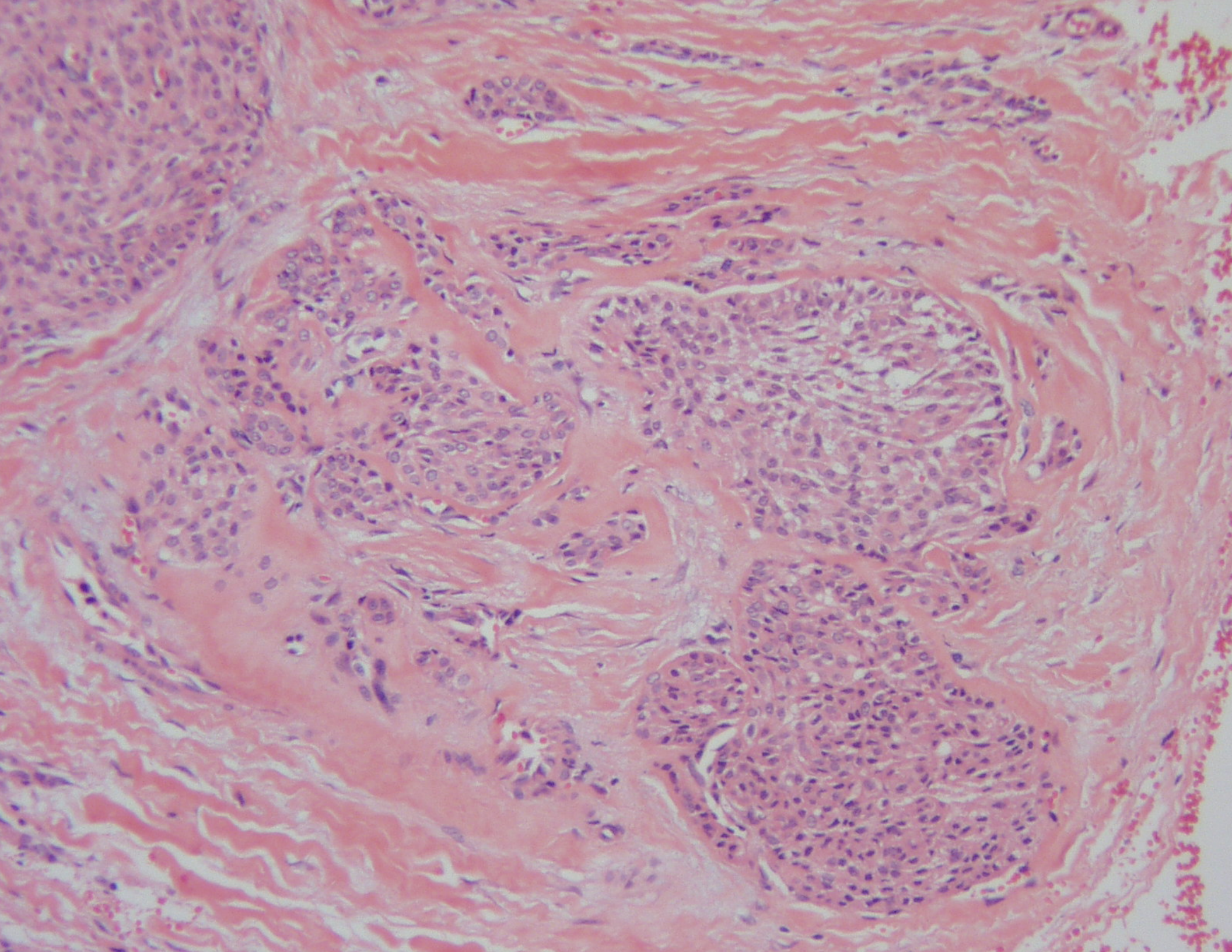


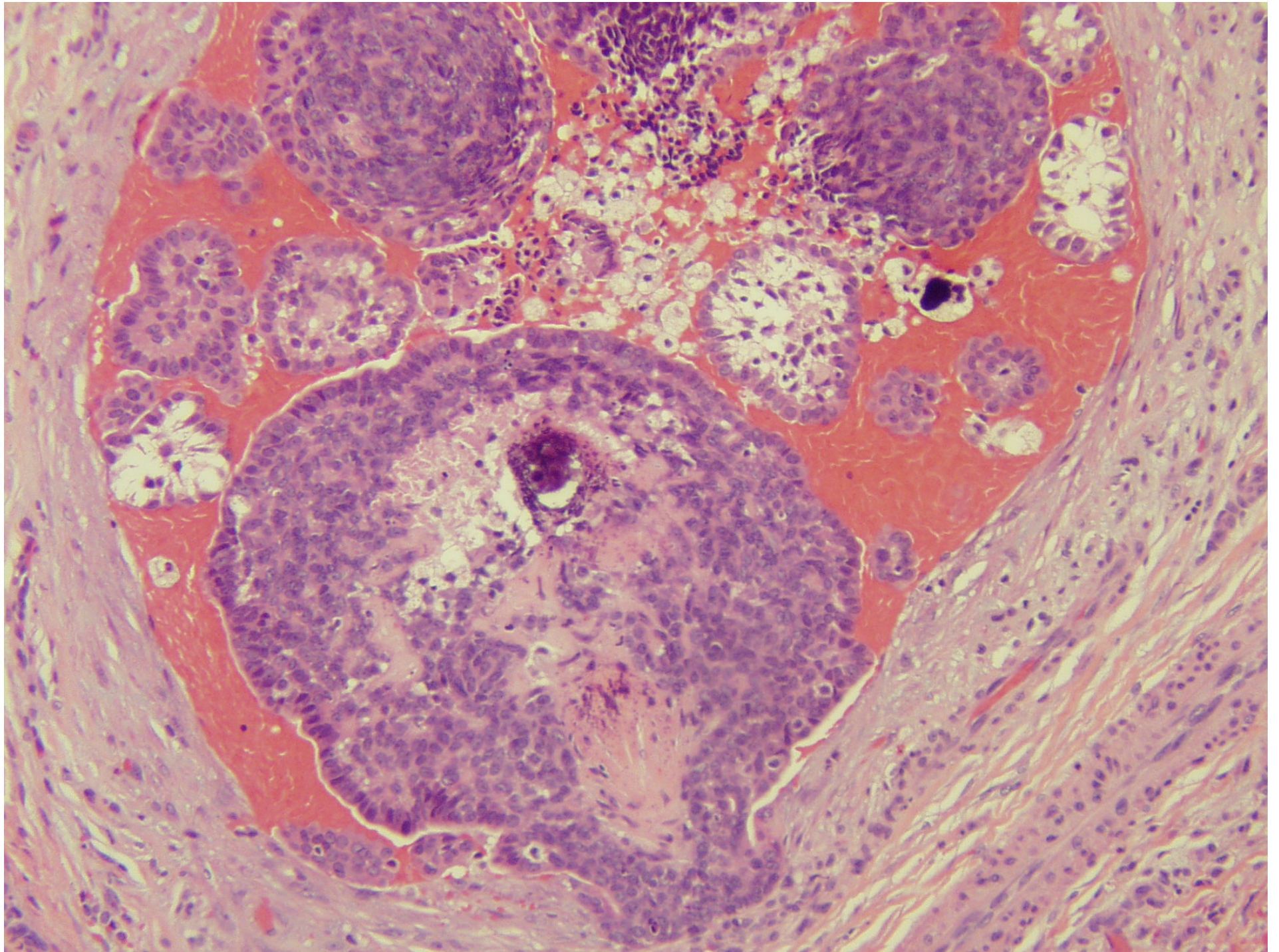
Histologic Clues for Benign vs. Malignant

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



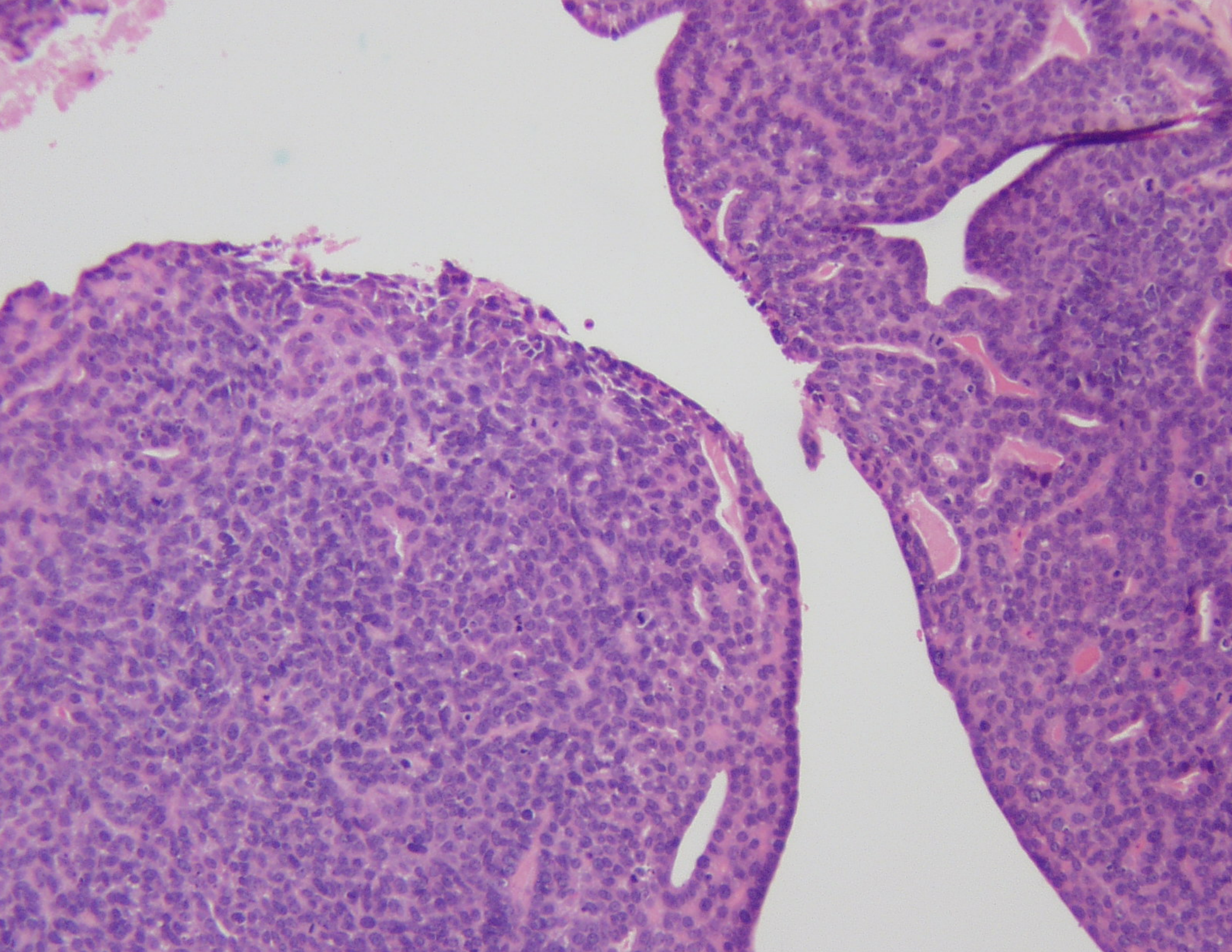


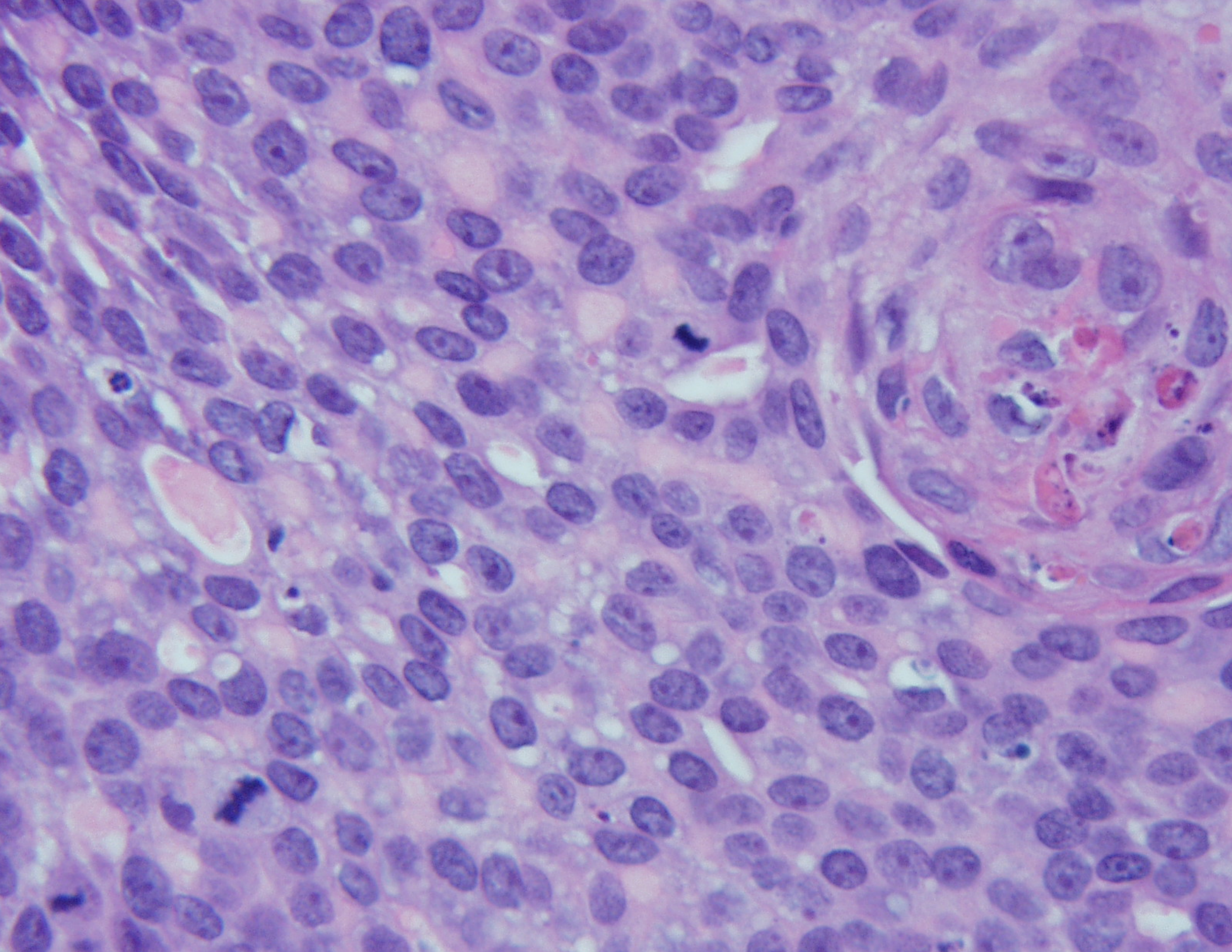


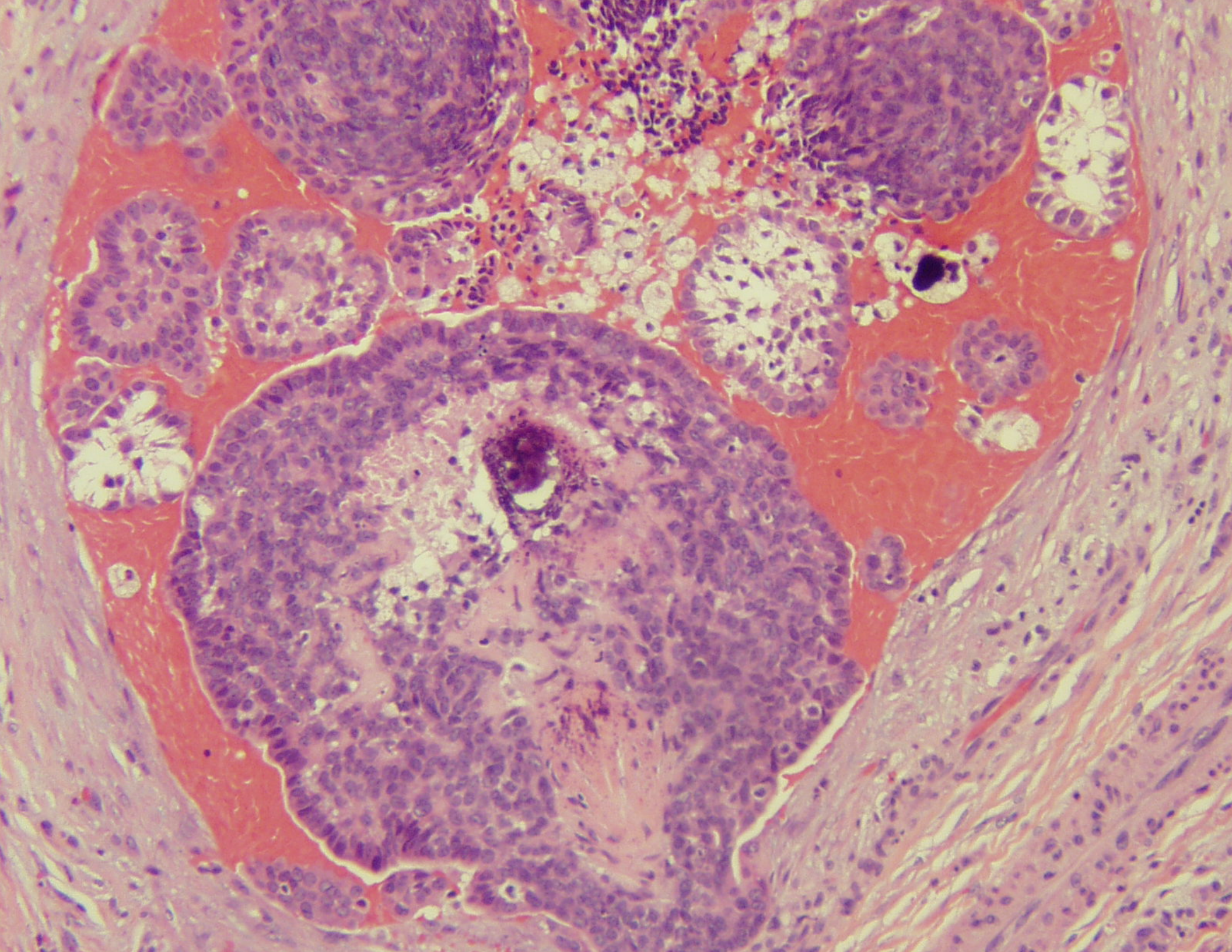


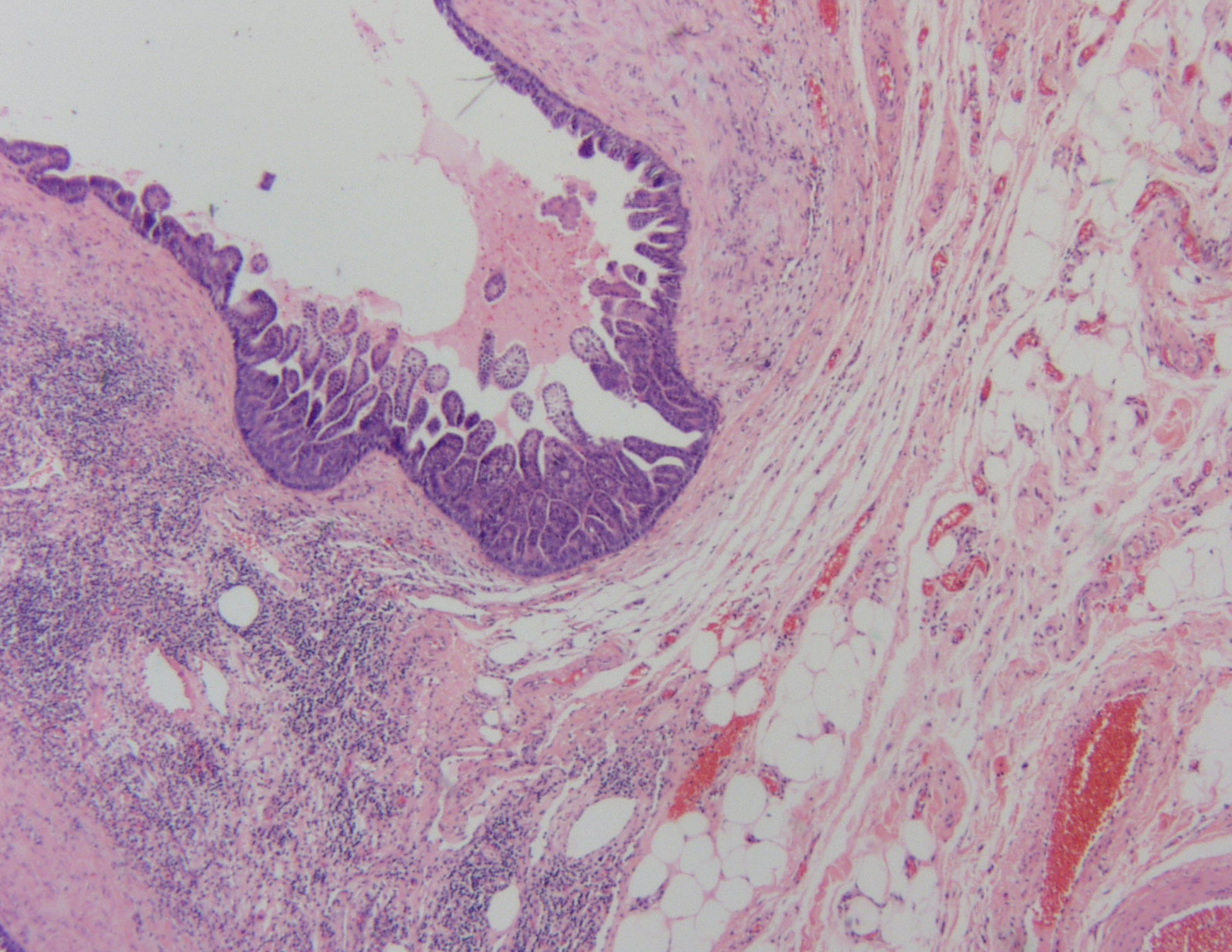
Treatment for Carcinomas

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









Pitfalls with Adnexal Carcinomas

- Skin to skin metastases
 - Porocarcinoma
 - Sebaceous carcinoma
- Regional Lymph node metastasis
- Lung, liver, bone metastasis
- Always rule out organ metastases to skin