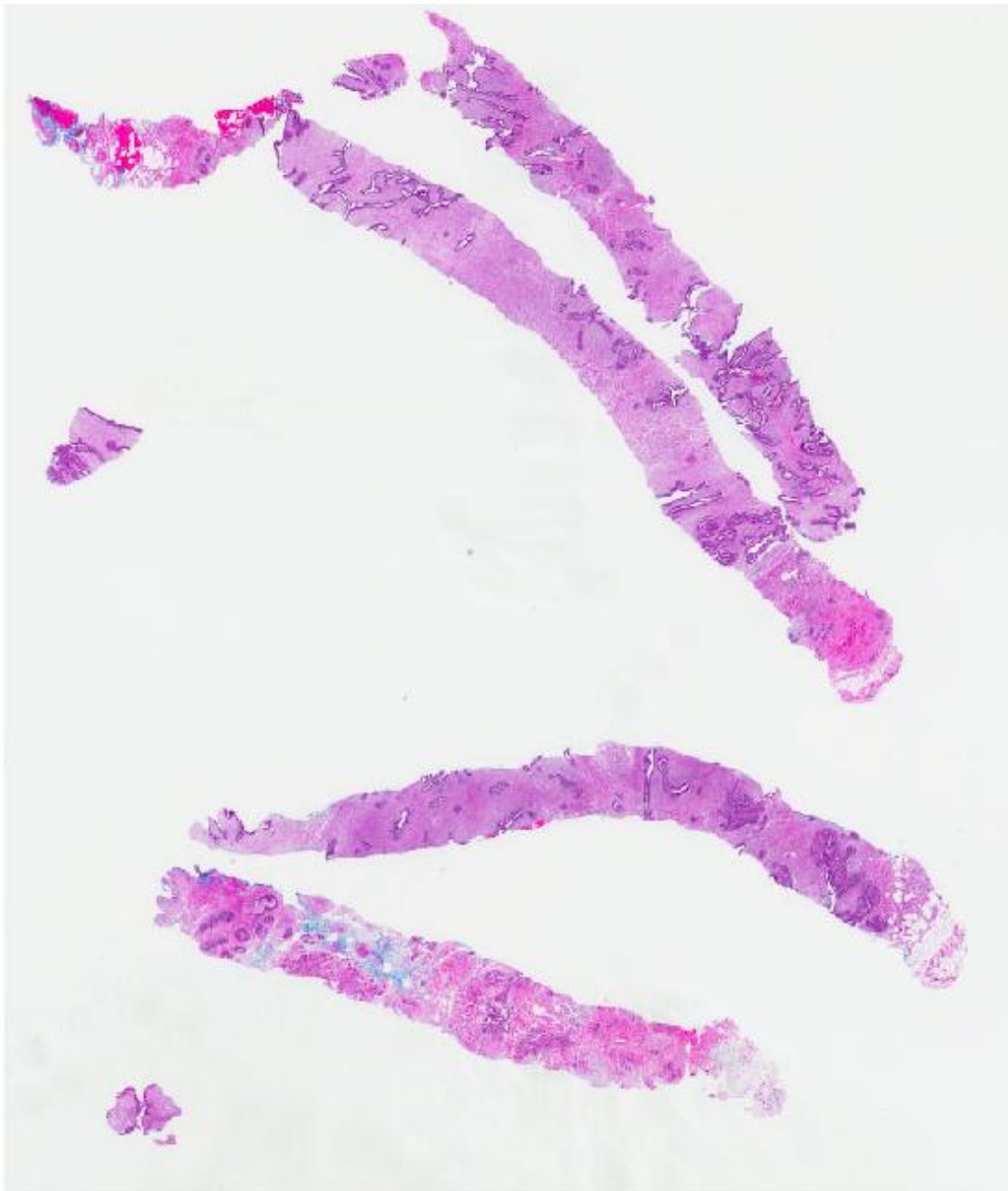
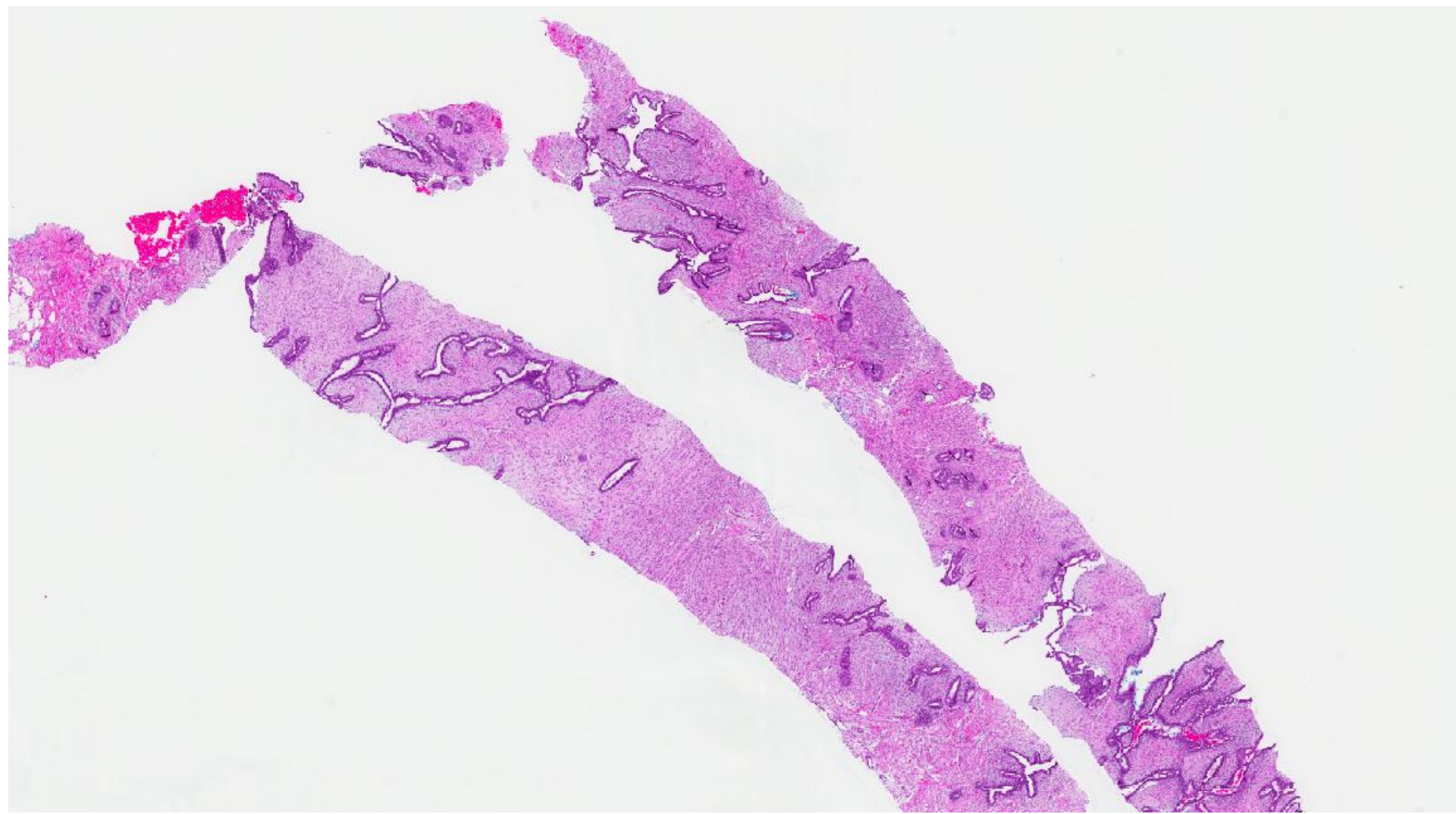


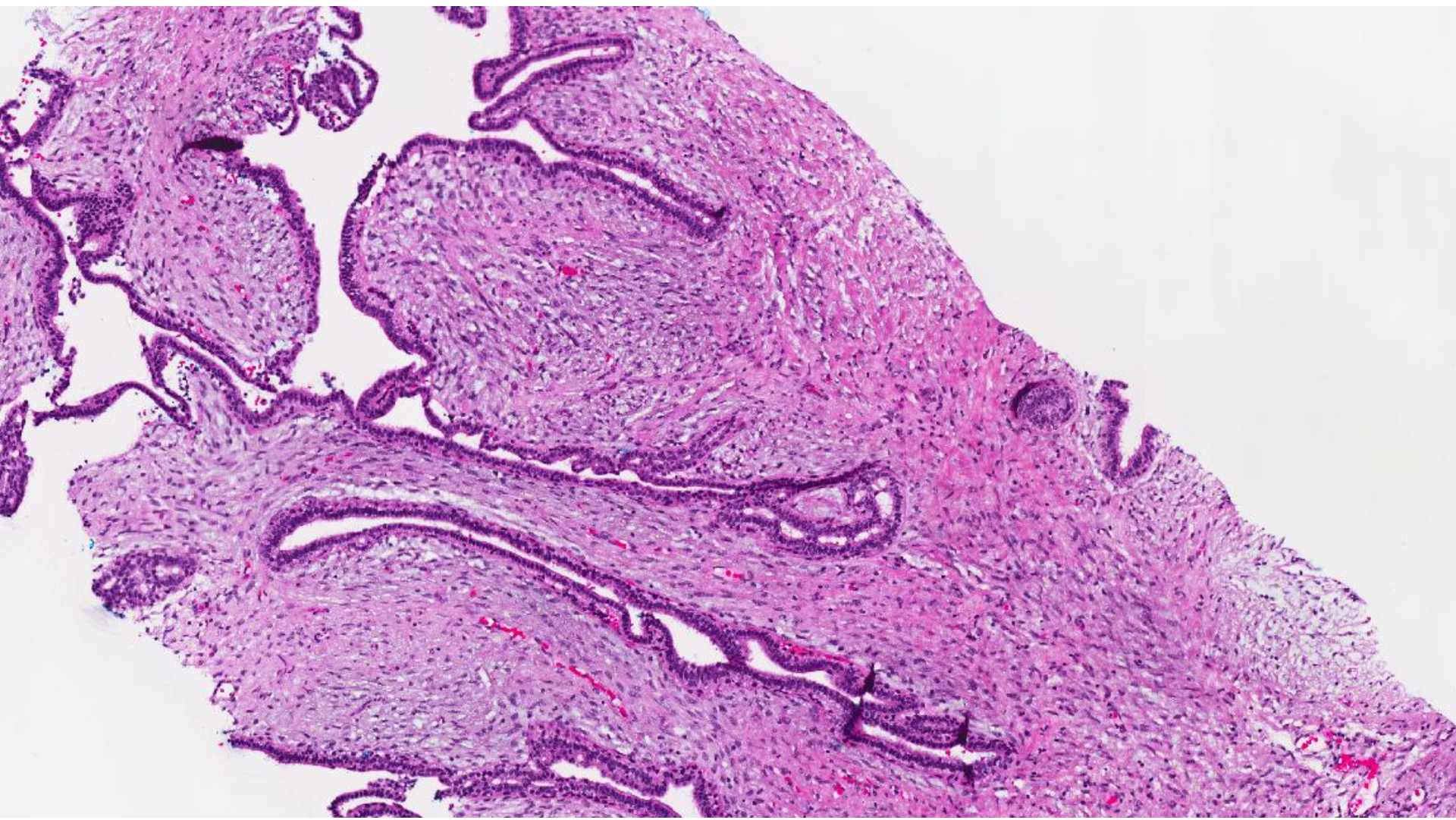
## CASE 28

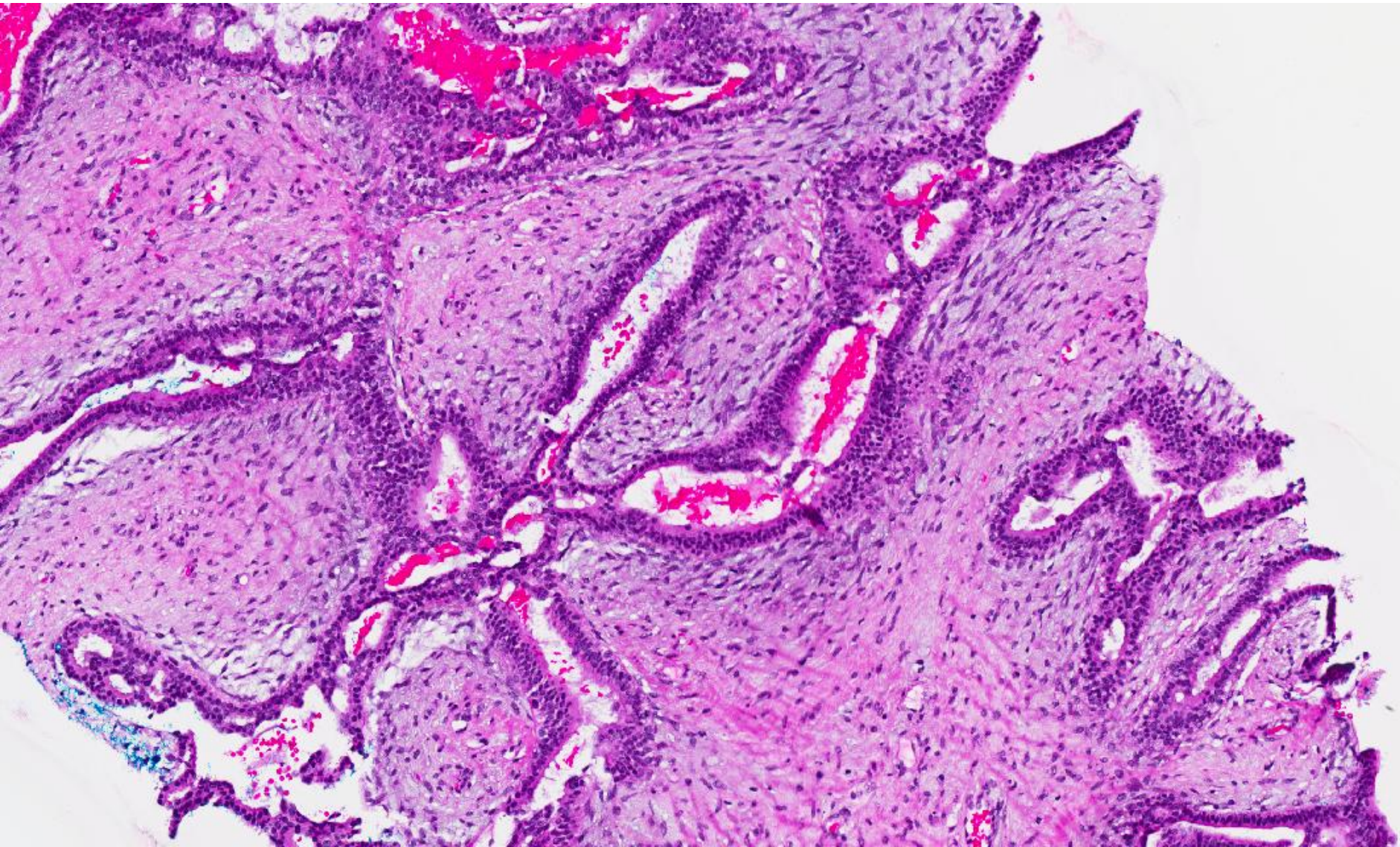
59 year old Chinese lady.

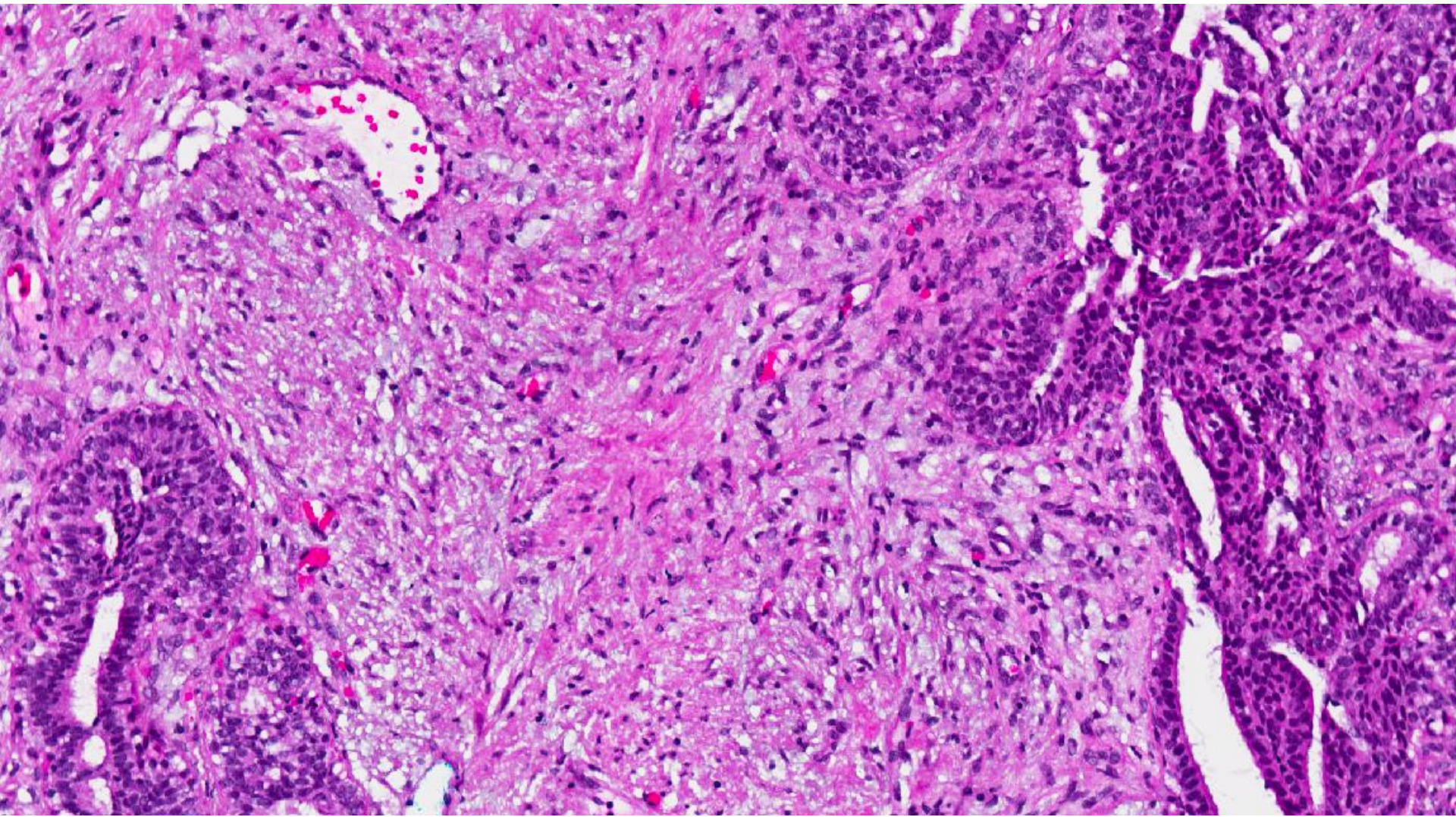
Discovered to have a left breast nodule at 0200 on screening mammography. An ultrasound guided trucut biopsy was performed.

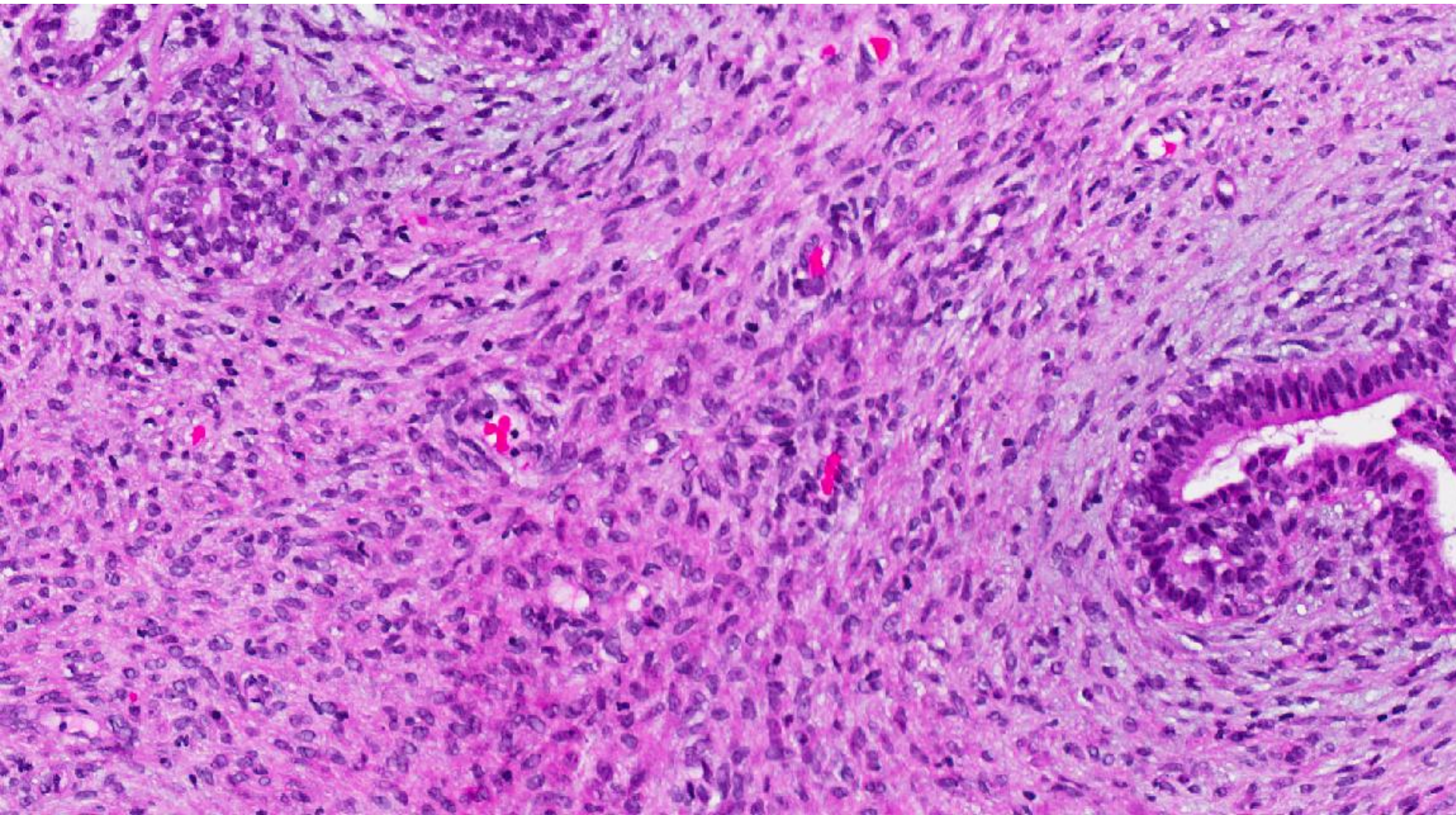










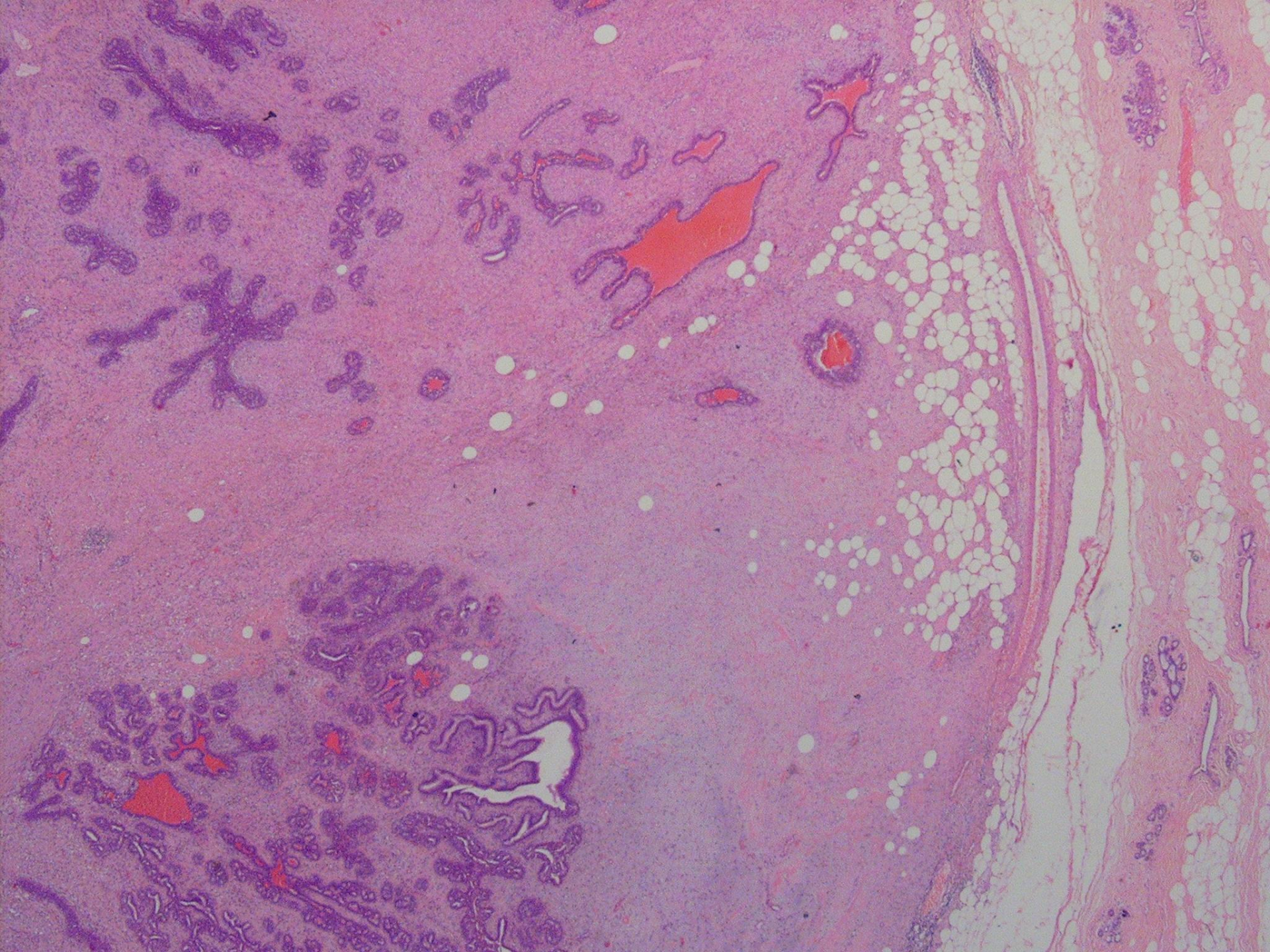


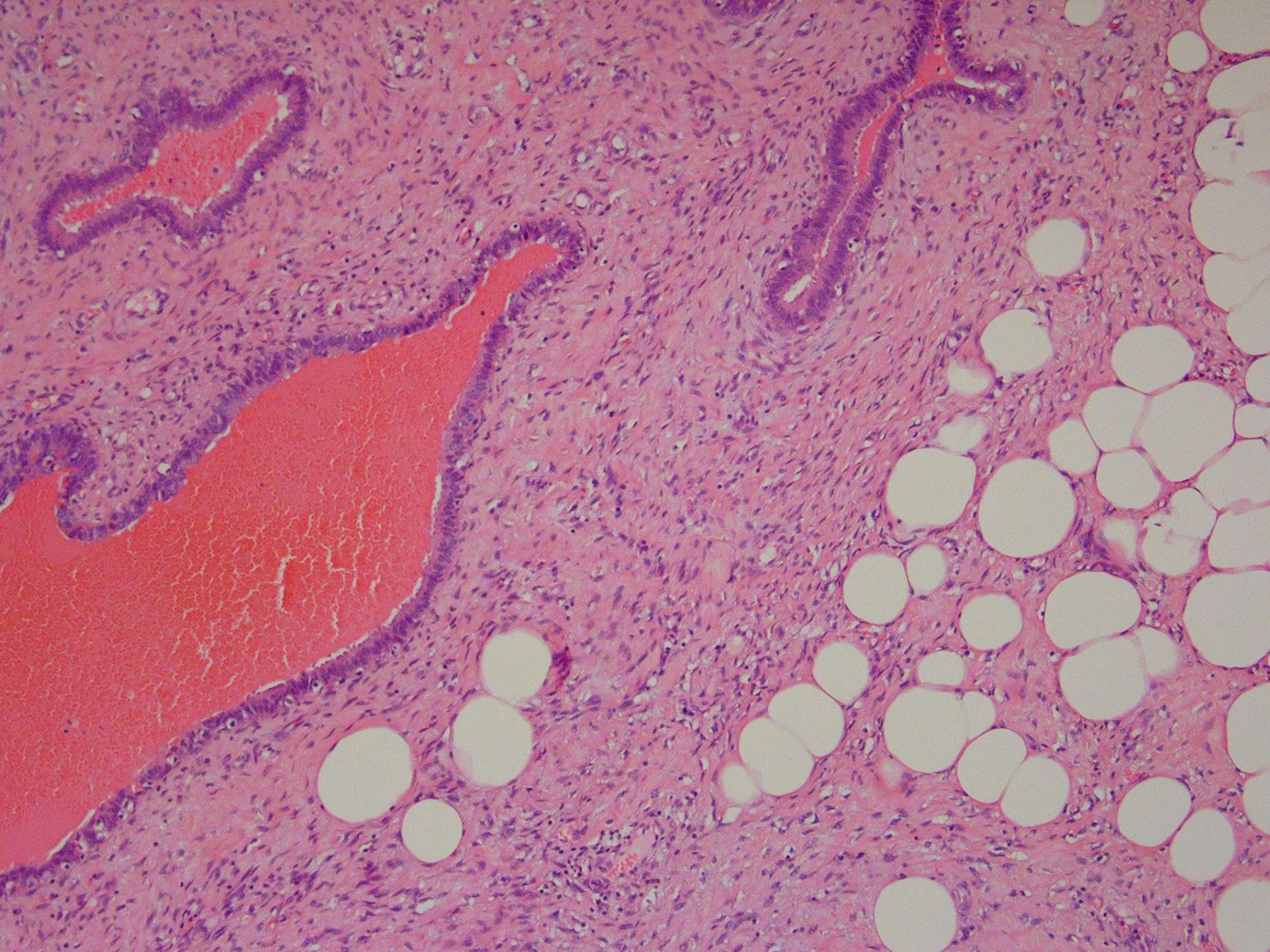
# Diagnosis

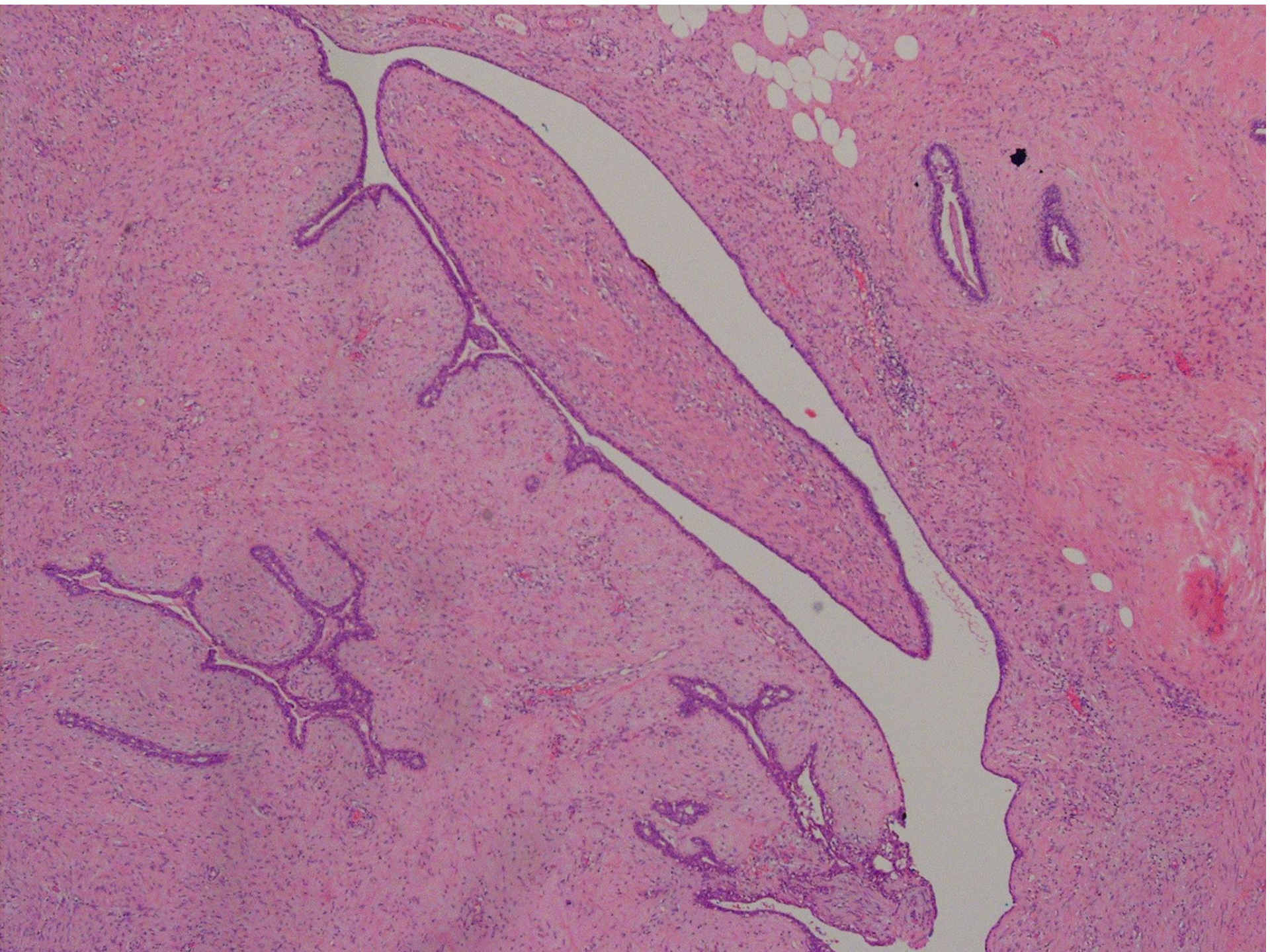
- Benign fibroepithelial lesion with stromal hypercellularity, cannot rule out phyllodes tumour.

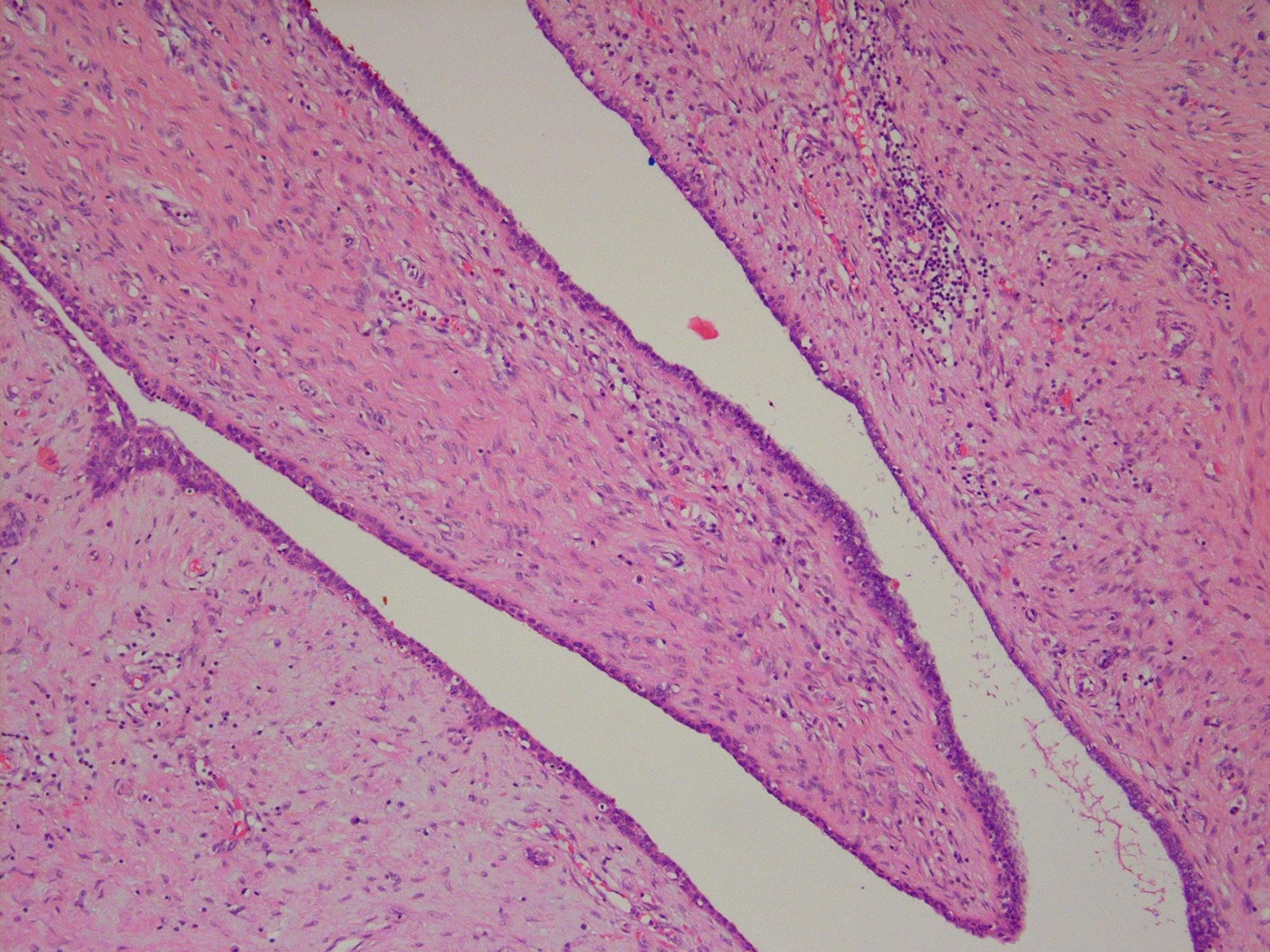


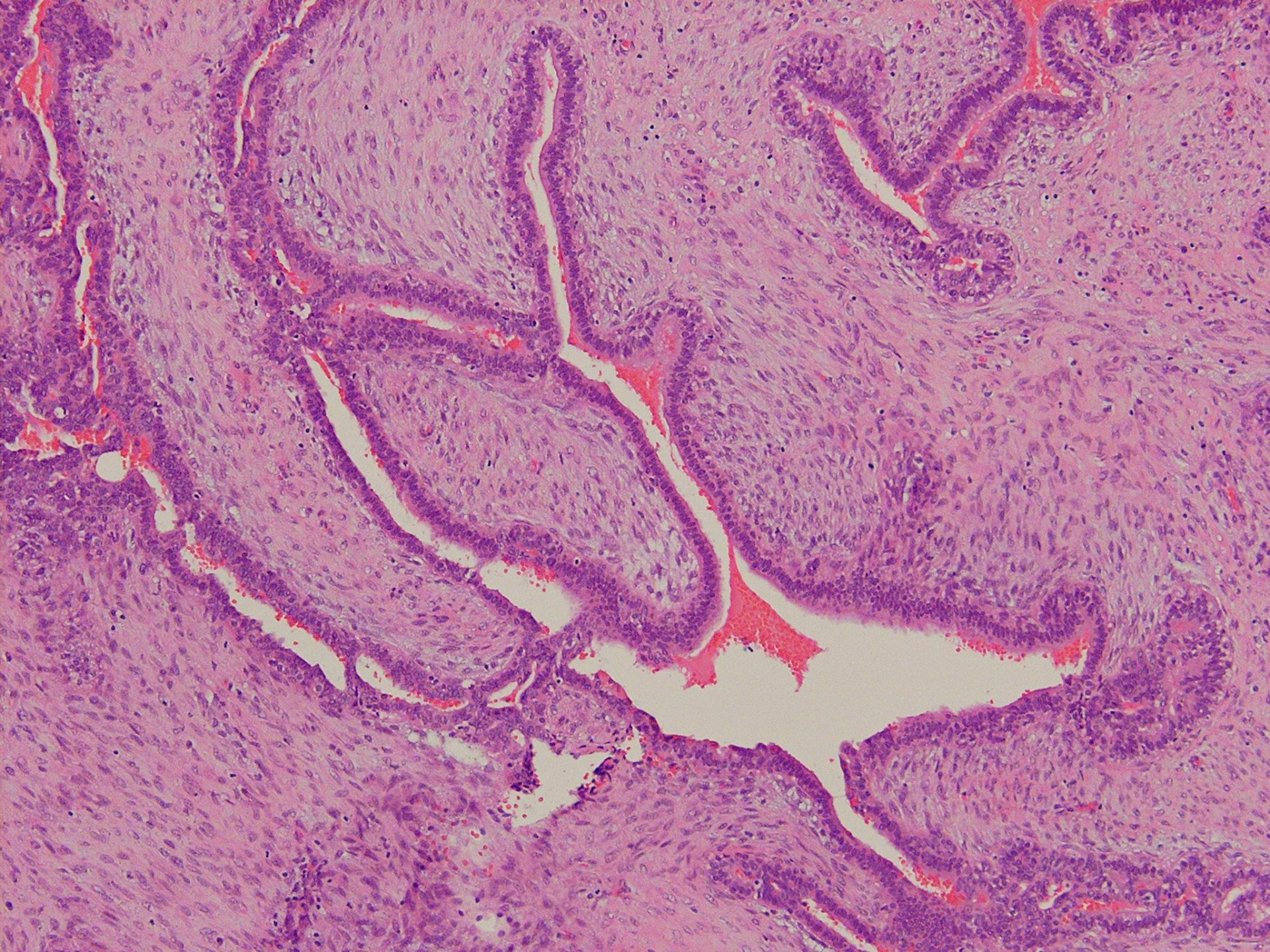
Wide excision



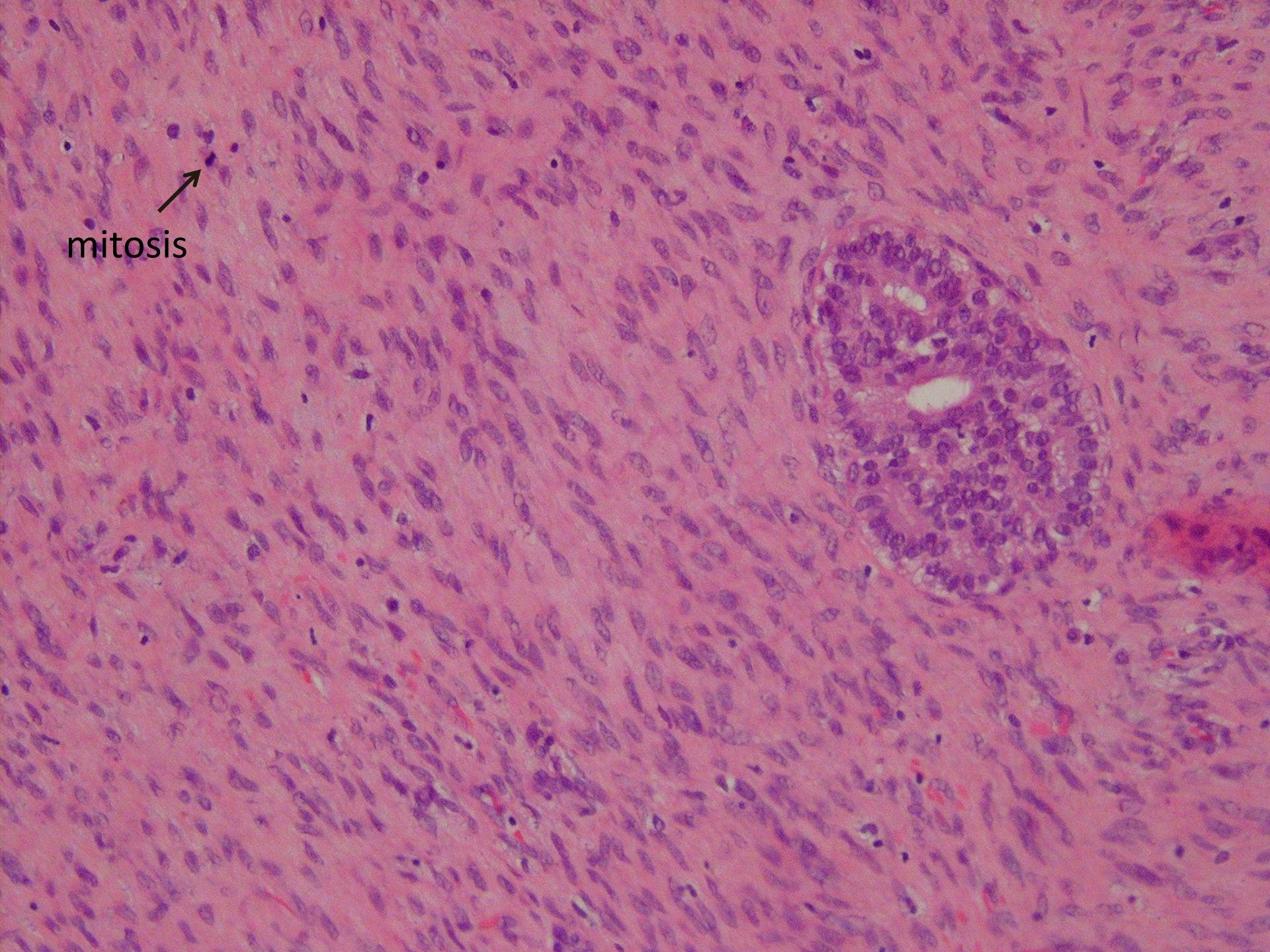


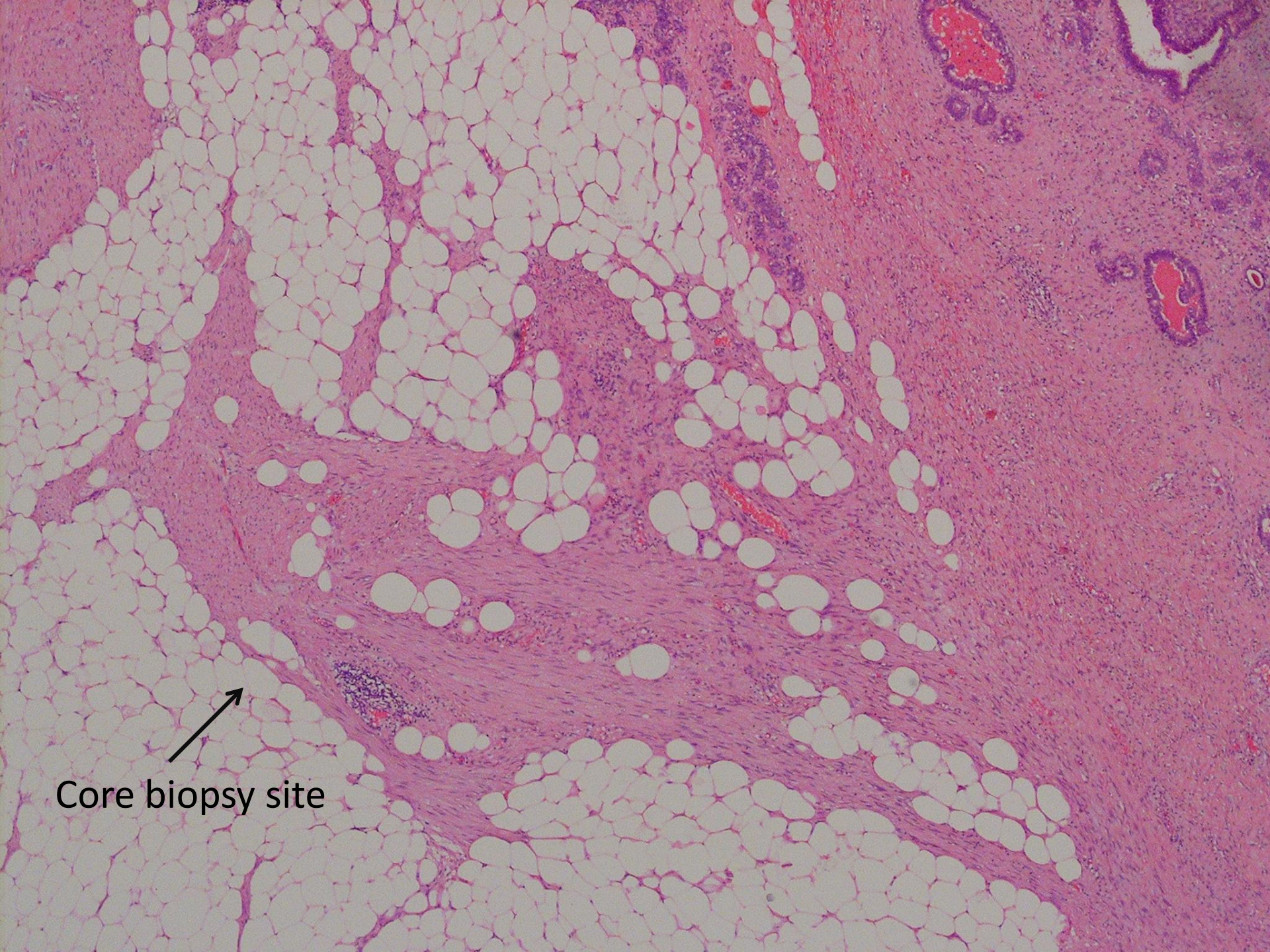






mitosis





Core biopsy site



# Diagnosis

- Phyllodes tumour, favour borderline features:
  - Focally permeative borders.
  - Mild to focally moderate stromal hypercellularity.
  - Mild cytologic atypia.
  - Mitoses generally scant, but number up to 7 per 10 high power fields in the most mitotically active zone.
  - No stromal overgrowth.
- 2.8 cm in size, completely excised.

Core biopsy diagnosis of fibroepithelial  
neoplasms:  
*fibroadenoma or phyllodes?*

# Core biopsy diagnosis of fibroepithelial neoplasms

- Komenaka et al:
  - 57 core biopsies with fibroepithelial neoplasms.
  - Positive predictive value 83%.
  - Negative predictive value 93%.

*Arch Surg 2003;138:987-990*

# Core biopsy diagnosis of fibroepithelial neoplasms

- Jacobs et al:
  - 29 cases of fibroepithelial lesions with cellular stroma on core biopsies.
  - Histologic features, proliferation indices, p53.
  - Mildly increased stromal cellularity: FA.
  - Markedly cellular stroma: PT.
  - Moderate stromal cellularity: mitoses.
  - Ki67 & topoisomerase II $\alpha$  indices.

*Am J Clin Pathol 2005; 124: 342-354*

# Core biopsy diagnosis of fibroepithelial neoplasms

- Lee et al:

Features useful for diagnosis of PT on core biopsies:

- Stromal cellularity increased in at least 50% of the stroma.
- Stromal overgrowth (x10 field with no epithelium).
- Fragmentation.
- Adipose tissue within the stroma.

*Histopathology 2007; 51: 336-344*

# Core biopsy diagnosis of fibroepithelial neoplasms

- Jara-Lazaro et al:

Features exclusively predicting PT on core biopsies:

- Marked stromal cellularity.
- Marked nuclear atypia.
- Stromal overgrowth.
- Mitoses  $\geq 2$  per 10 hpf.
- Ill-defined lesional borders.

Immunohistochemical markers:

- Ki67  $\geq 5\%$ .
- Topoisomerase II $\alpha$   $\geq 5\%$ .
- Reduced or patchy CD34 staining.

*Histopathology 2010; 57: 220-232*

# Practical points

- Core biopsies of fibroepithelial neoplasms:
  - Benign, consistent with FA ~ may leave alone.
  - Benign, favouring or unable to rule out phyllodes tumour ~ excise.
  - Benign, 2 cm or larger ~ consider excision.
  - Benign, but patient experiences rapid tumour growth ~ excise.
  - Malignant ~ resection.