





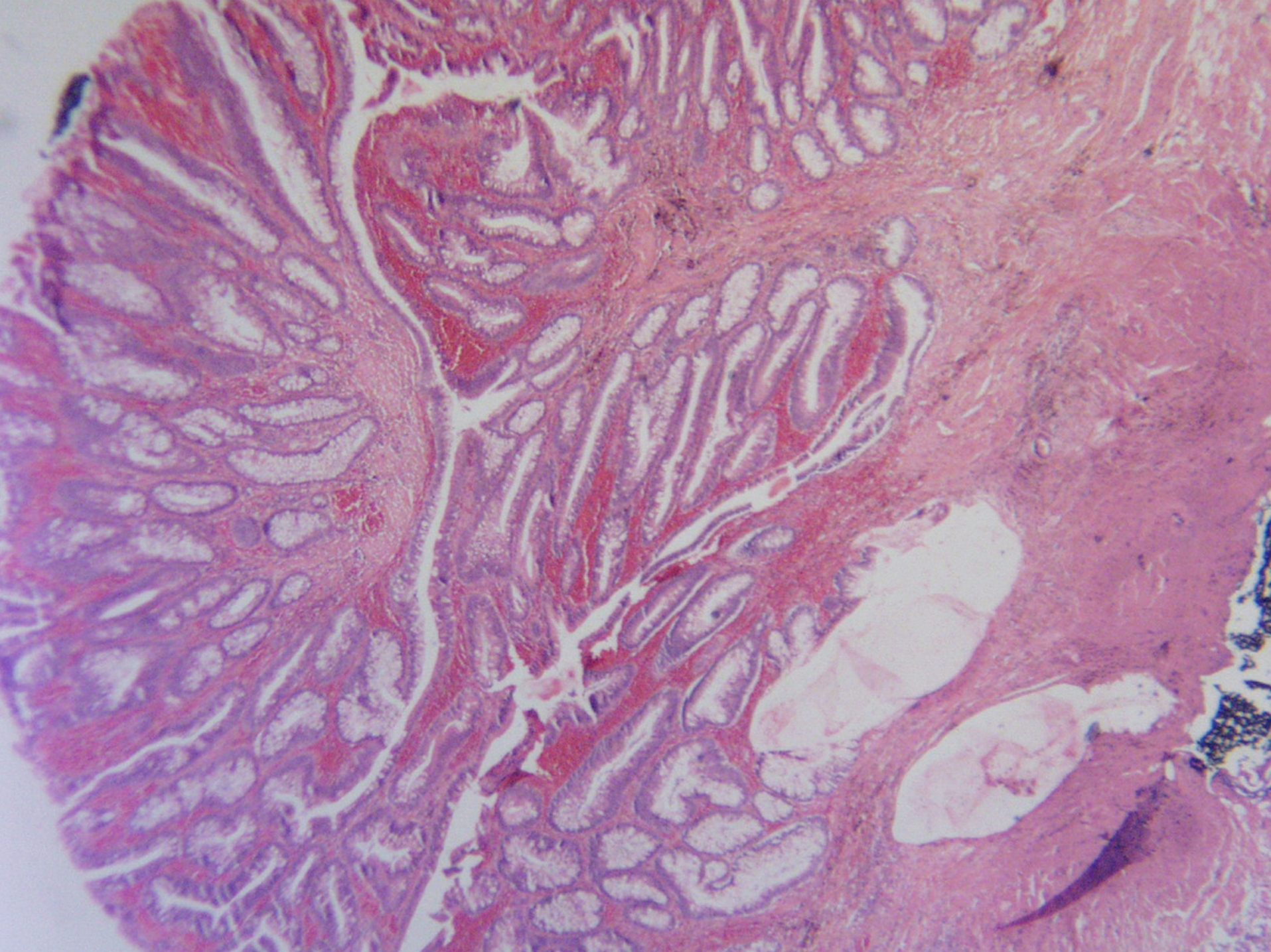


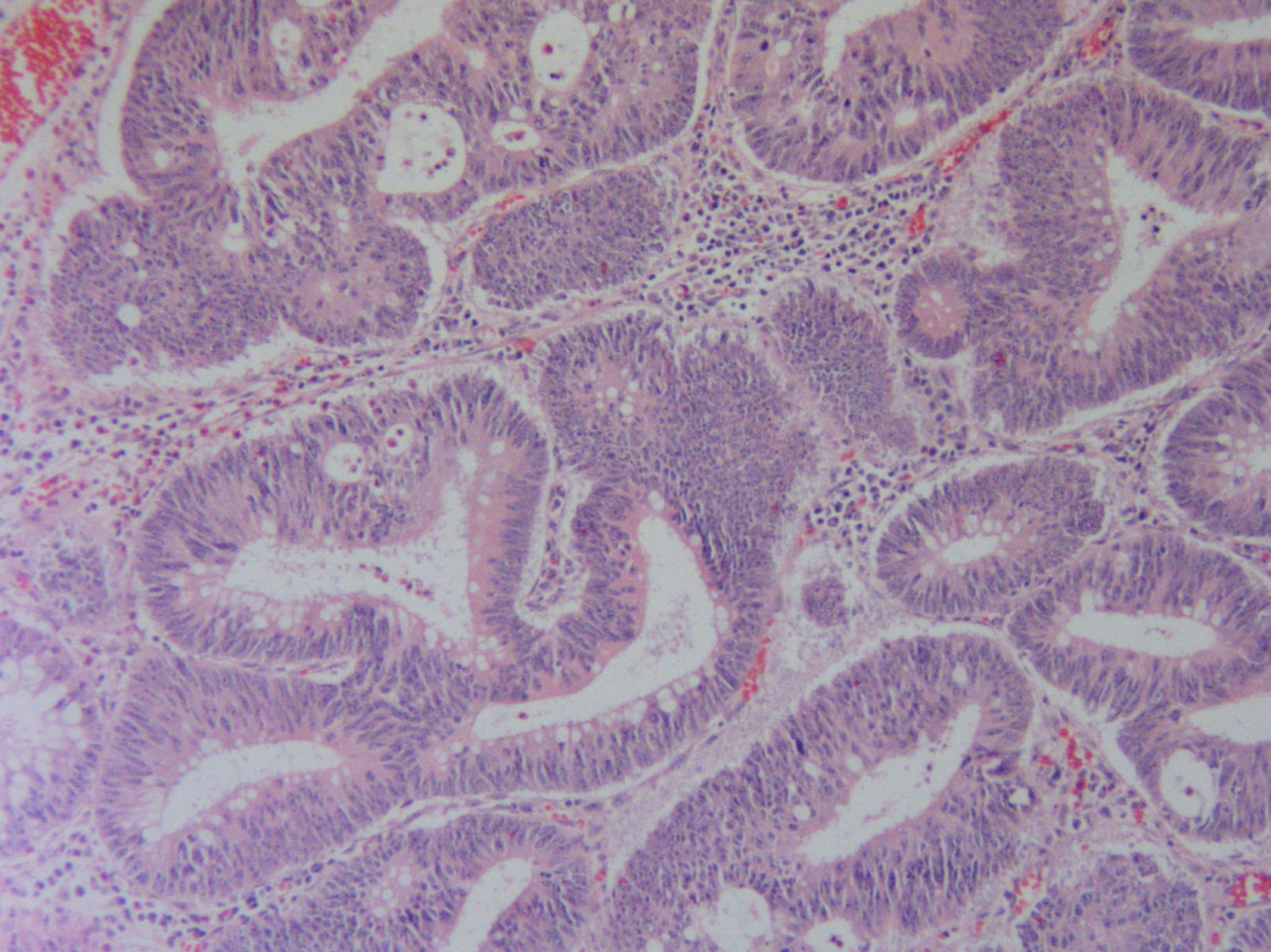
GI Pathology- Are We Speaking the Same Language?

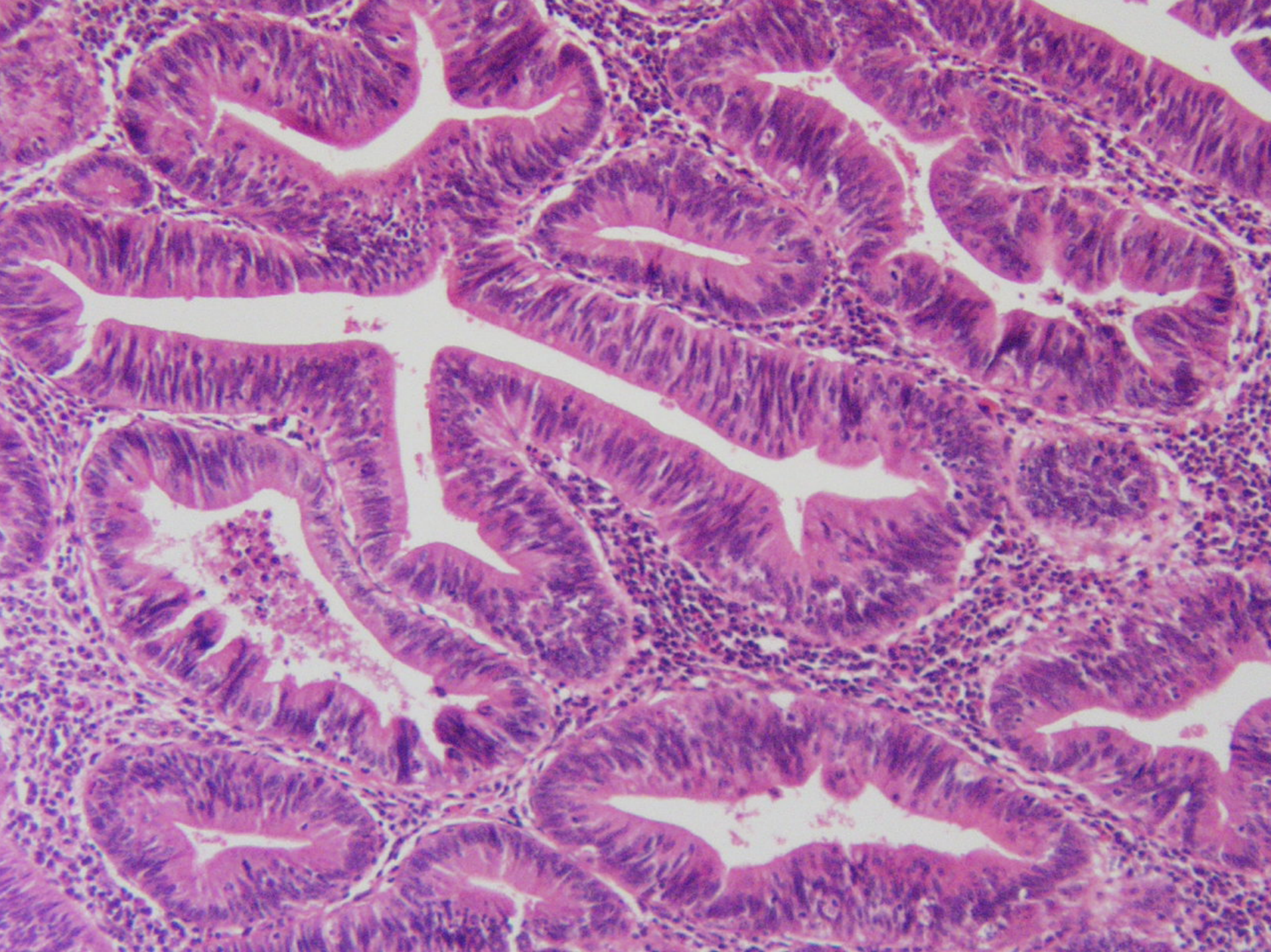
Paul K. Shitabata, M.D.

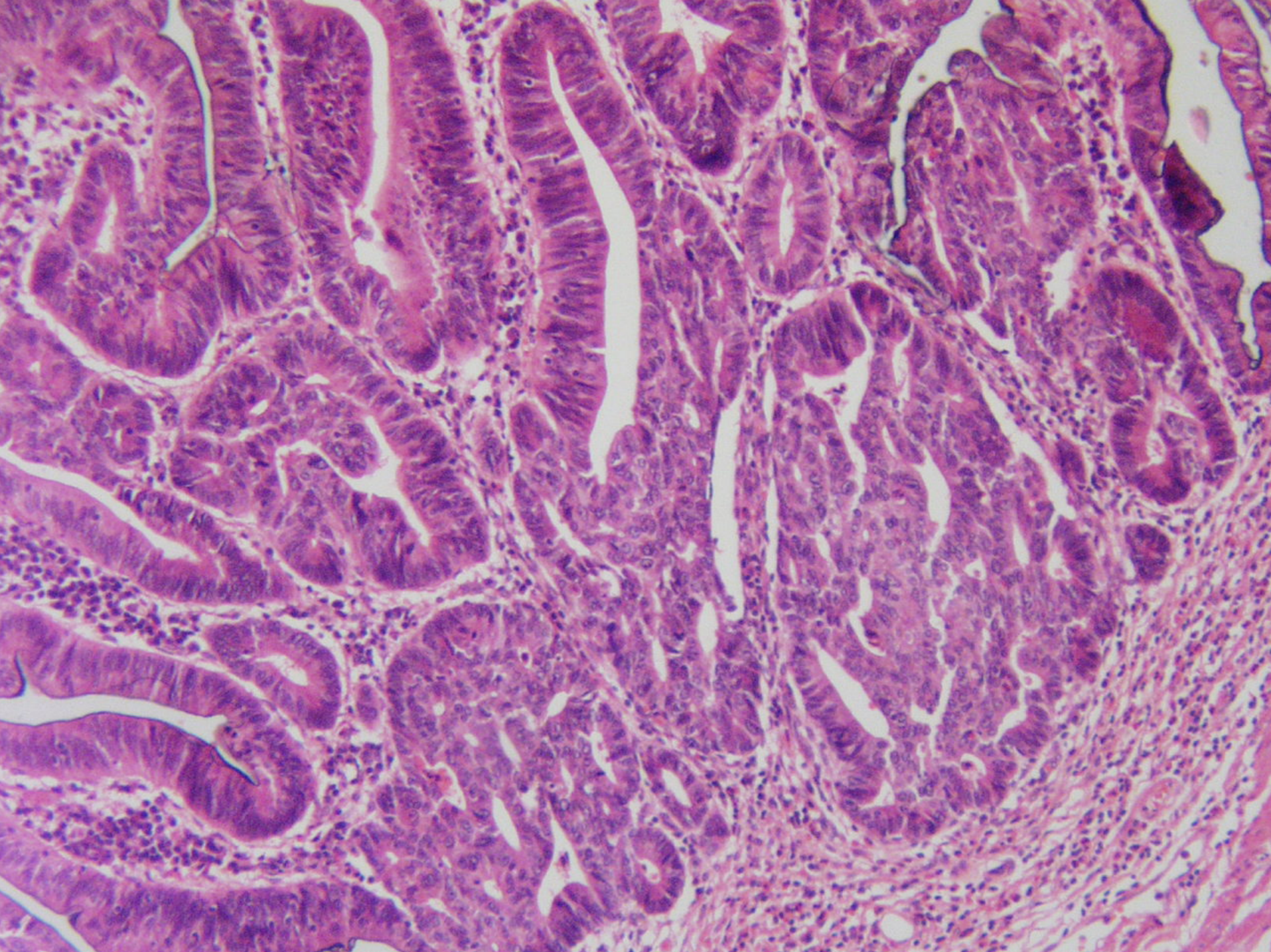
APMG

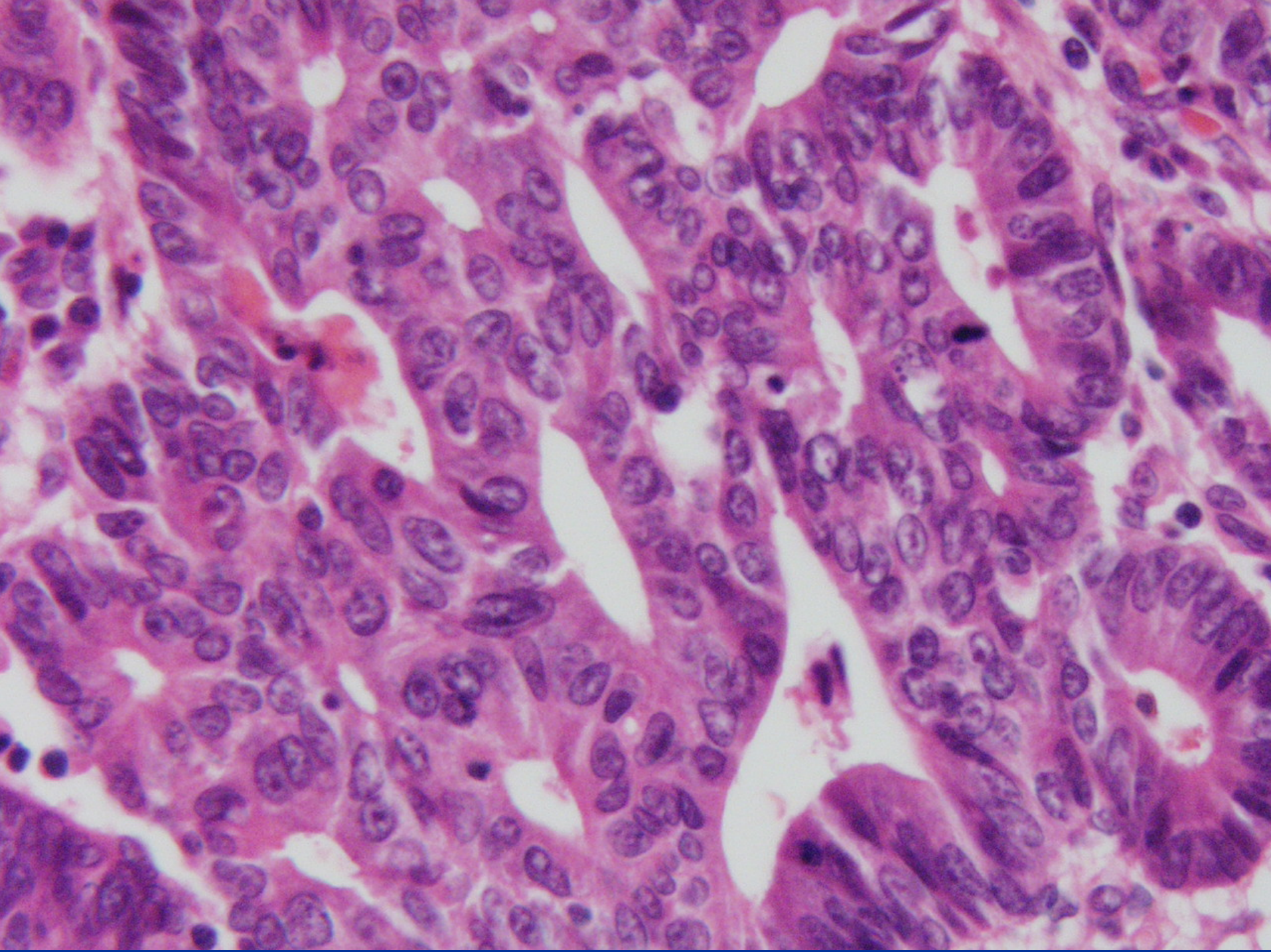
What is a malignant polyp?











**Intramucosal Carcinoma Arising
within an adenomatous polyp of the
colon**

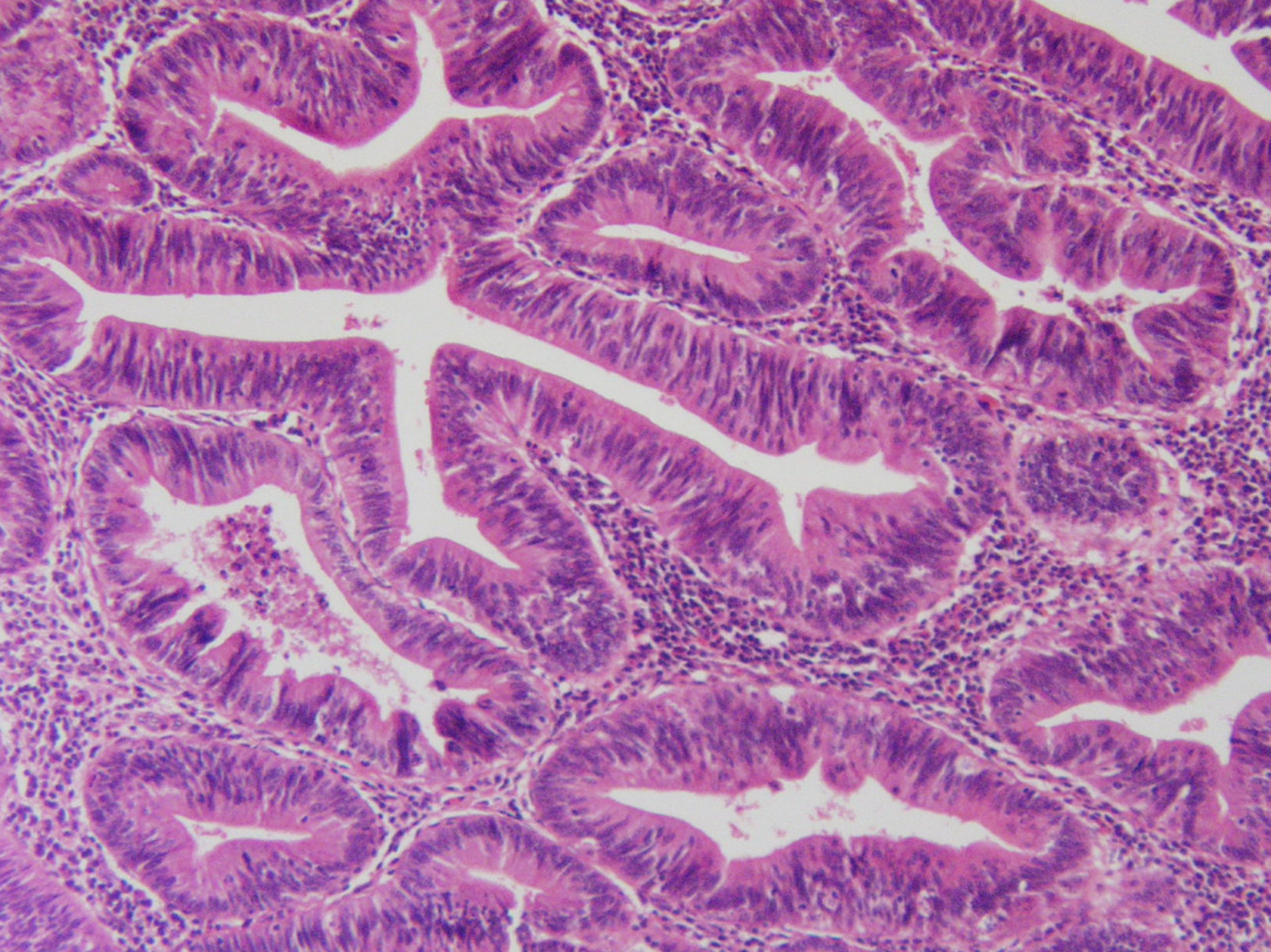
Terminology

- Adenomatous polyp with severe atypia
- Adenomatous polyp with severe dysplasia
- Adenomatous polyp with high grade dysplasia
- Intramucosal carcinoma
- Adenocarcinoma in situ
- Superficial adenocarcinoma

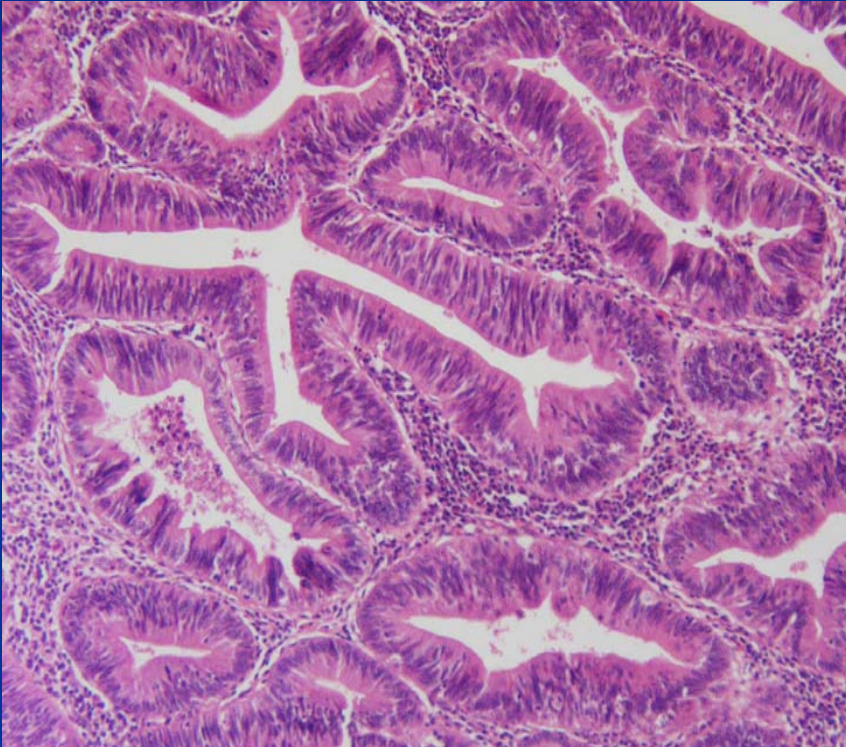
۲۰

WHO Classification

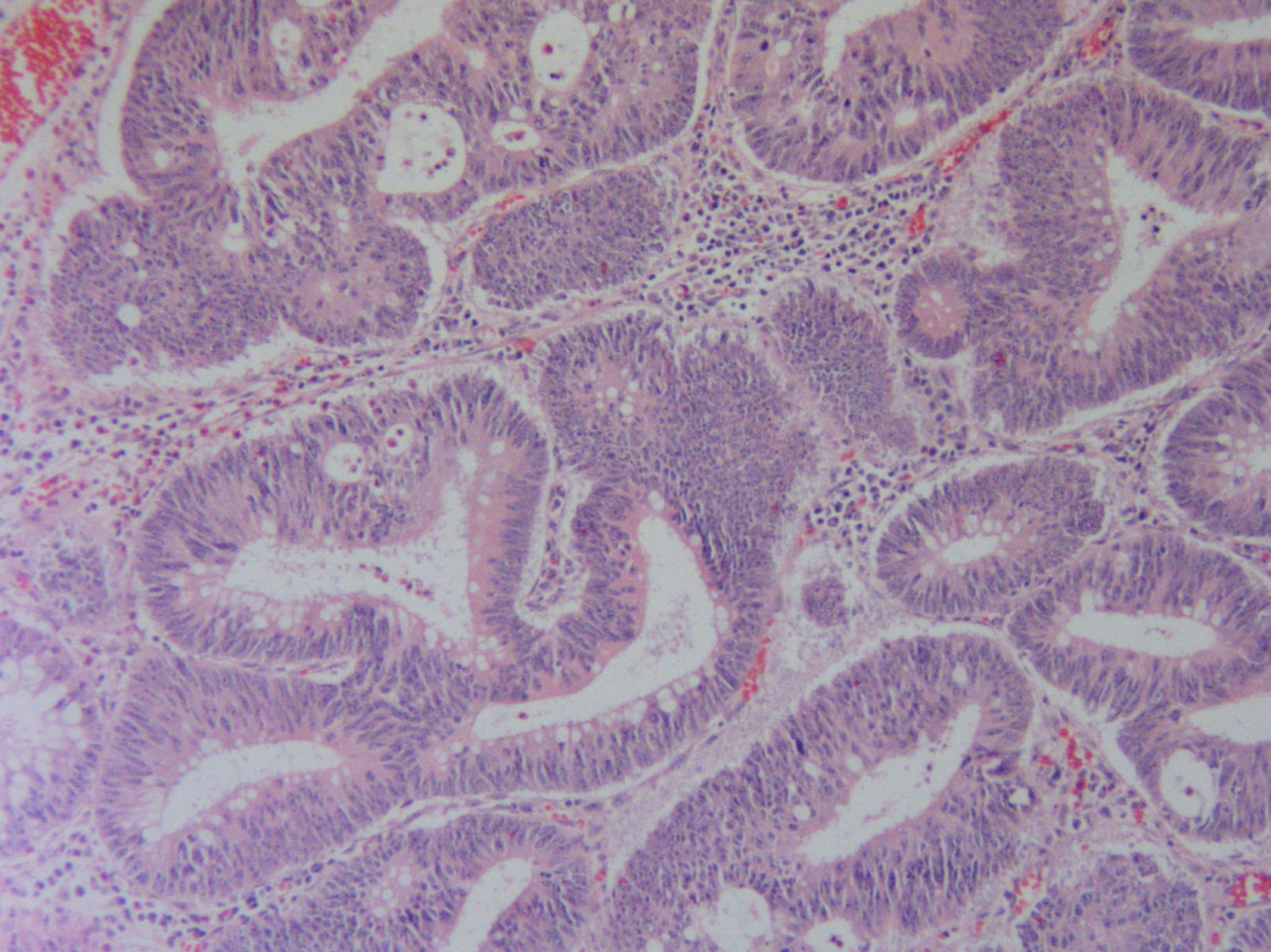
- Low-grade dysplasia
- High-grade dysplasia
- Intramucosal carcinoma
- Invasive adenocarcinoma

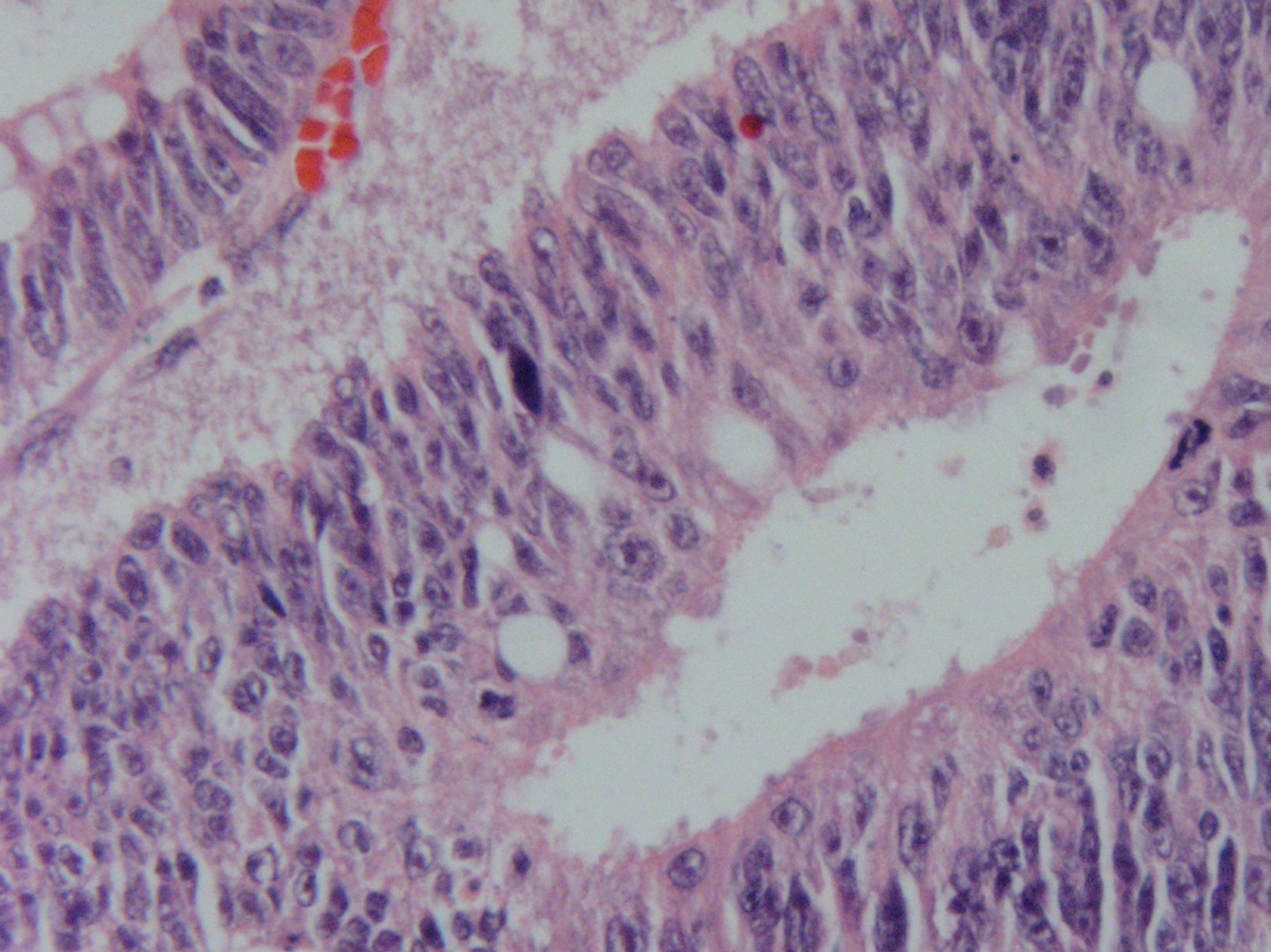


Low-Grade Dysplasia

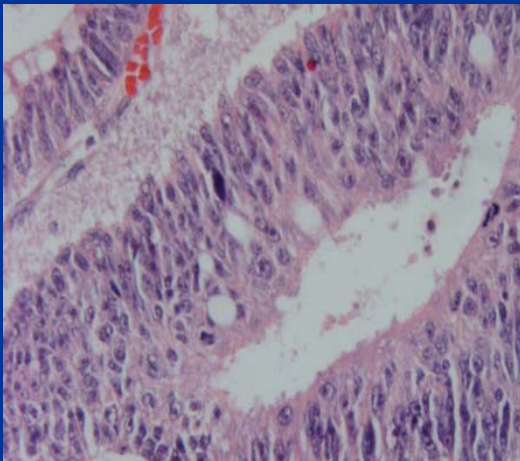
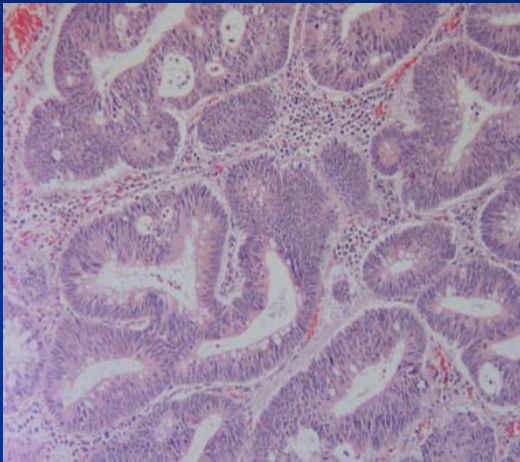


- Mild and mild-moderate dysplasia
- ALL adenomatous polyps by definition have a low grade of dysplasia
 - Slight decrease in intracellular mucin
 - Mild nuclear enlargement with hyperchromasia
 - Increased mitotic rate

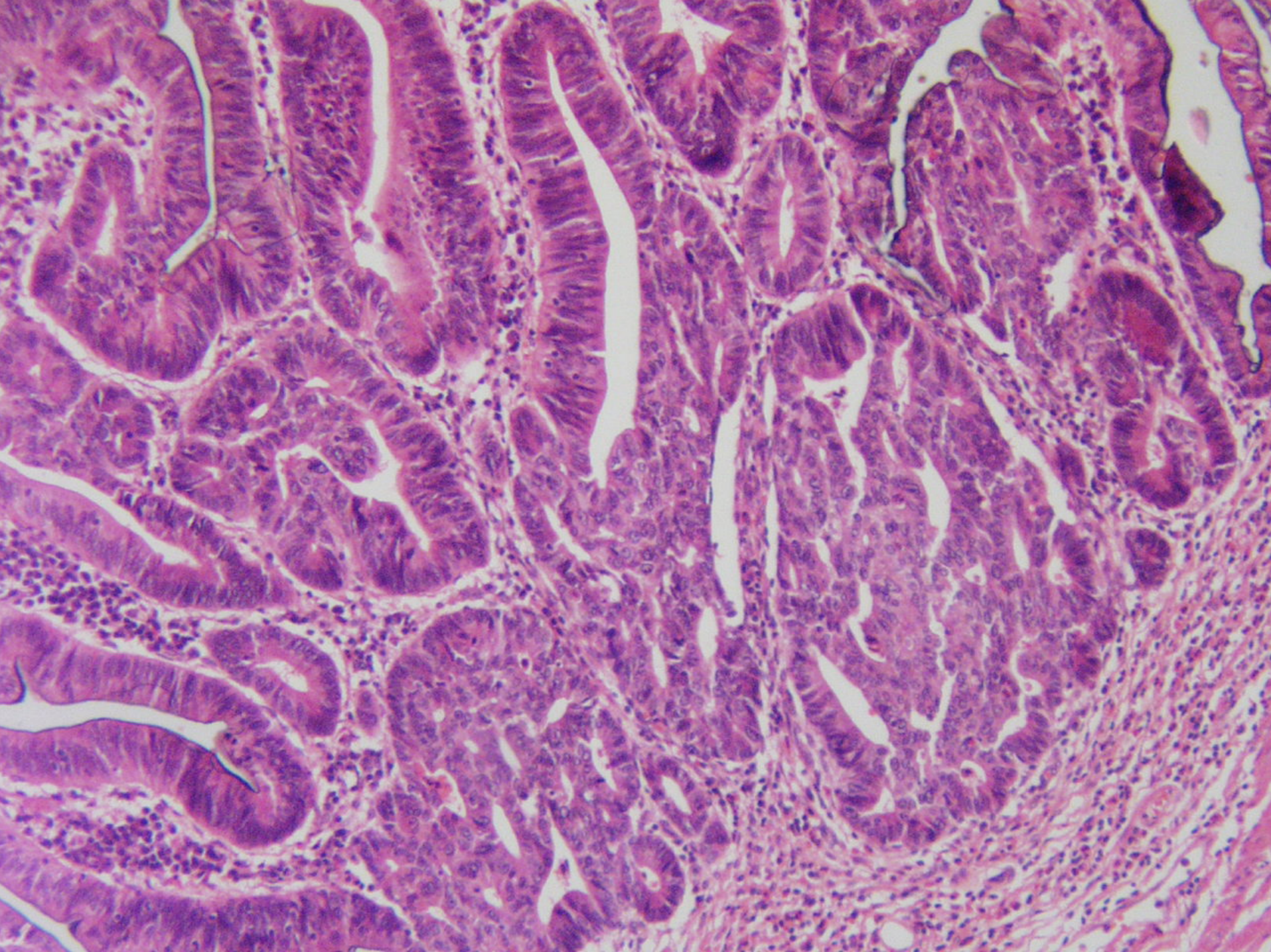


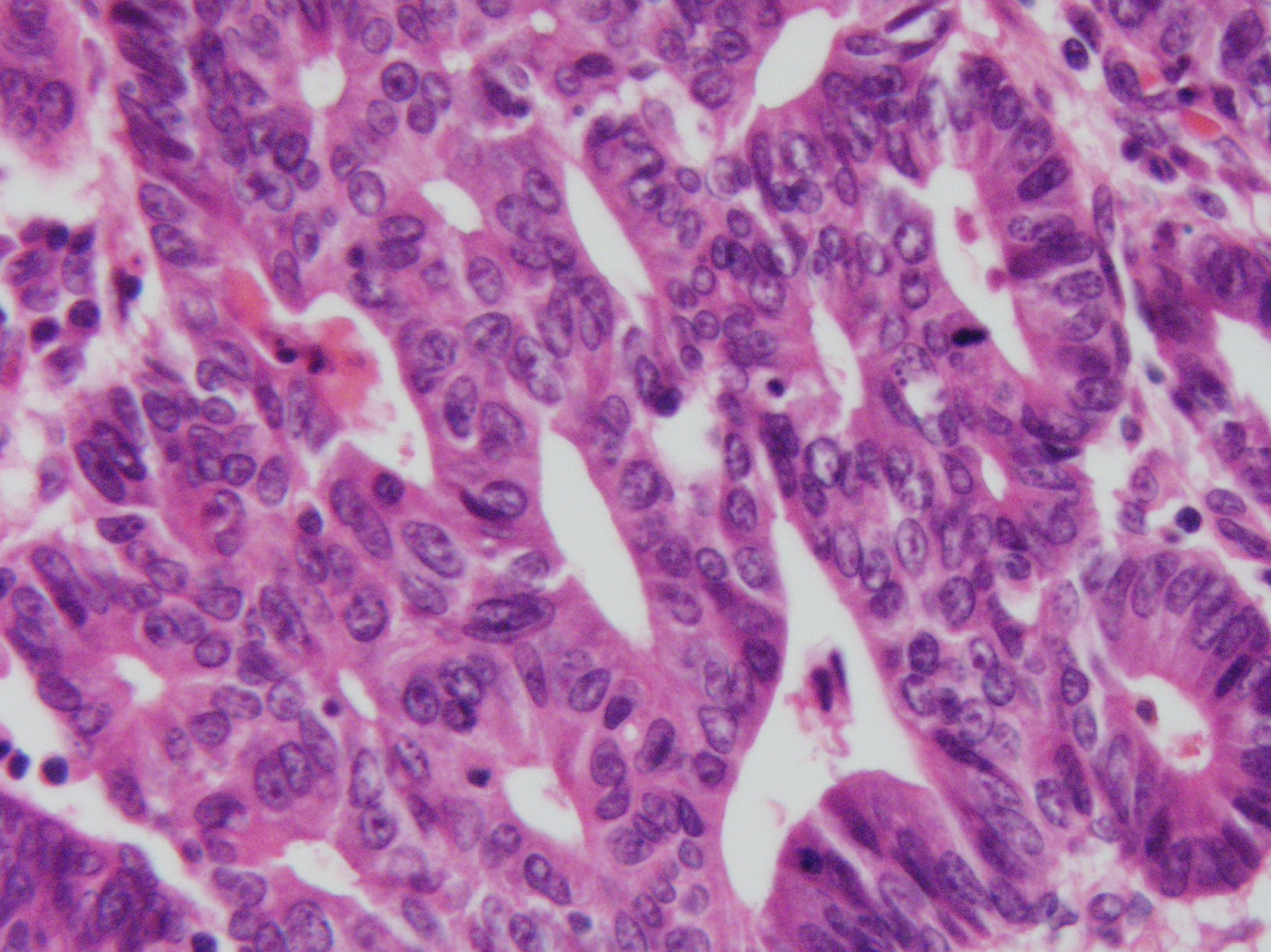


High-Grade Dysplasia

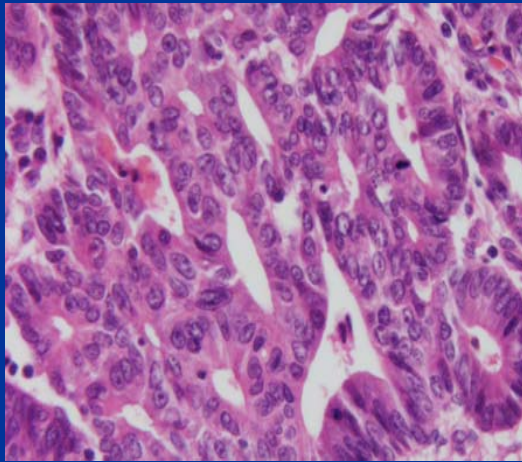
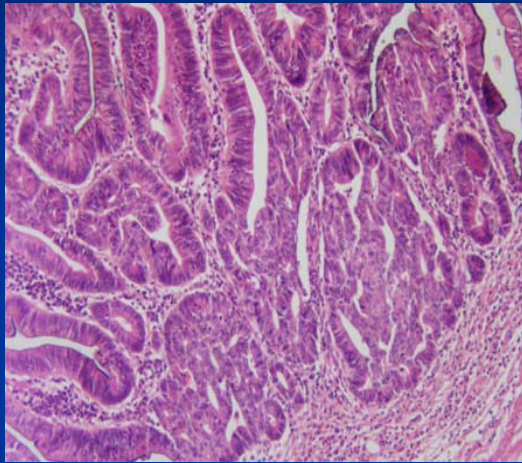


- Encompasses and replaces previous term in situ carcinoma
- Irregular branching, budding, and cribriform configurations
- Enlarged hyperchromatic nuclei or vesicular with prominent nucleoli
- Stratified nuclei extending to luminal border of cell

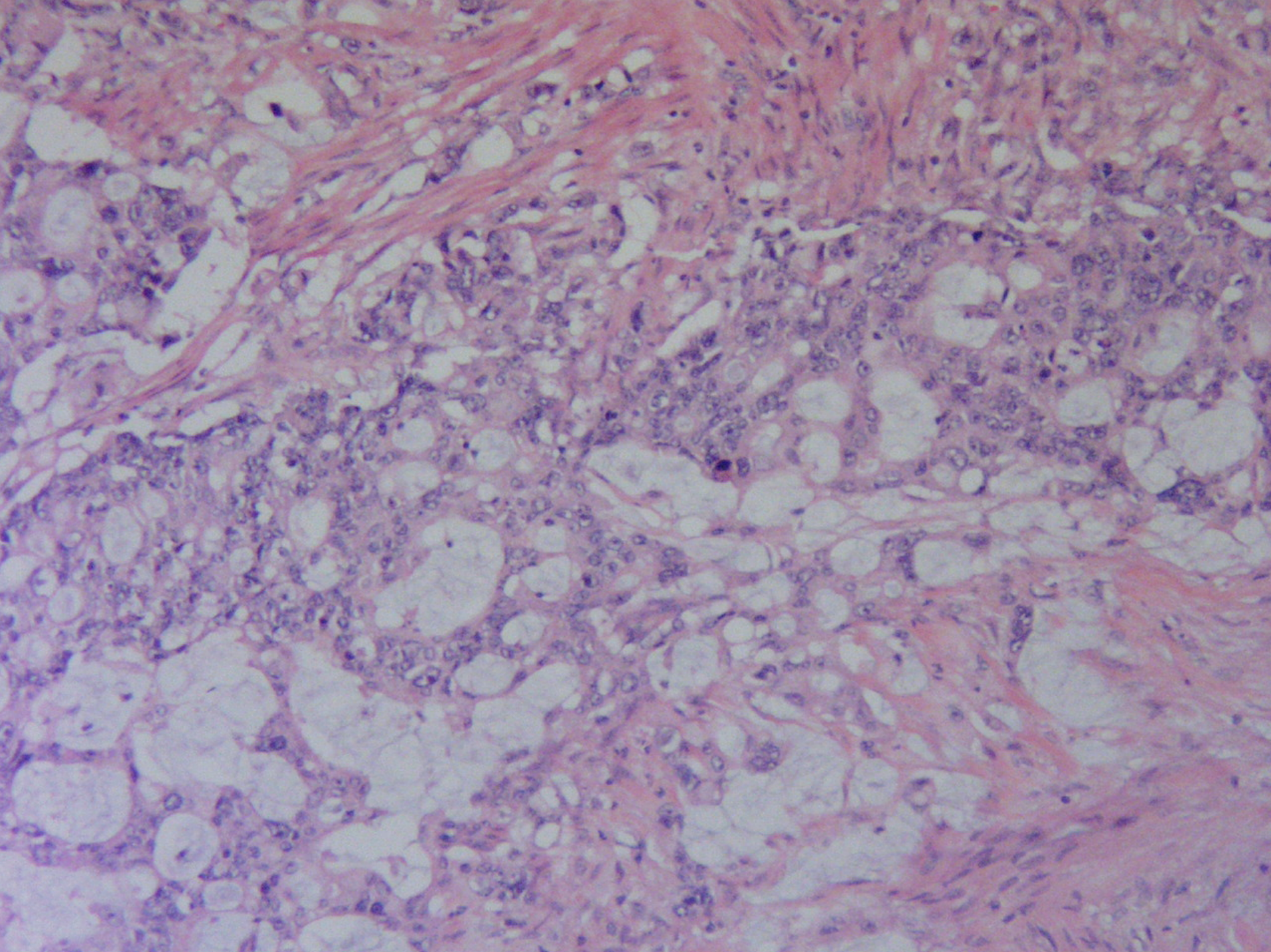


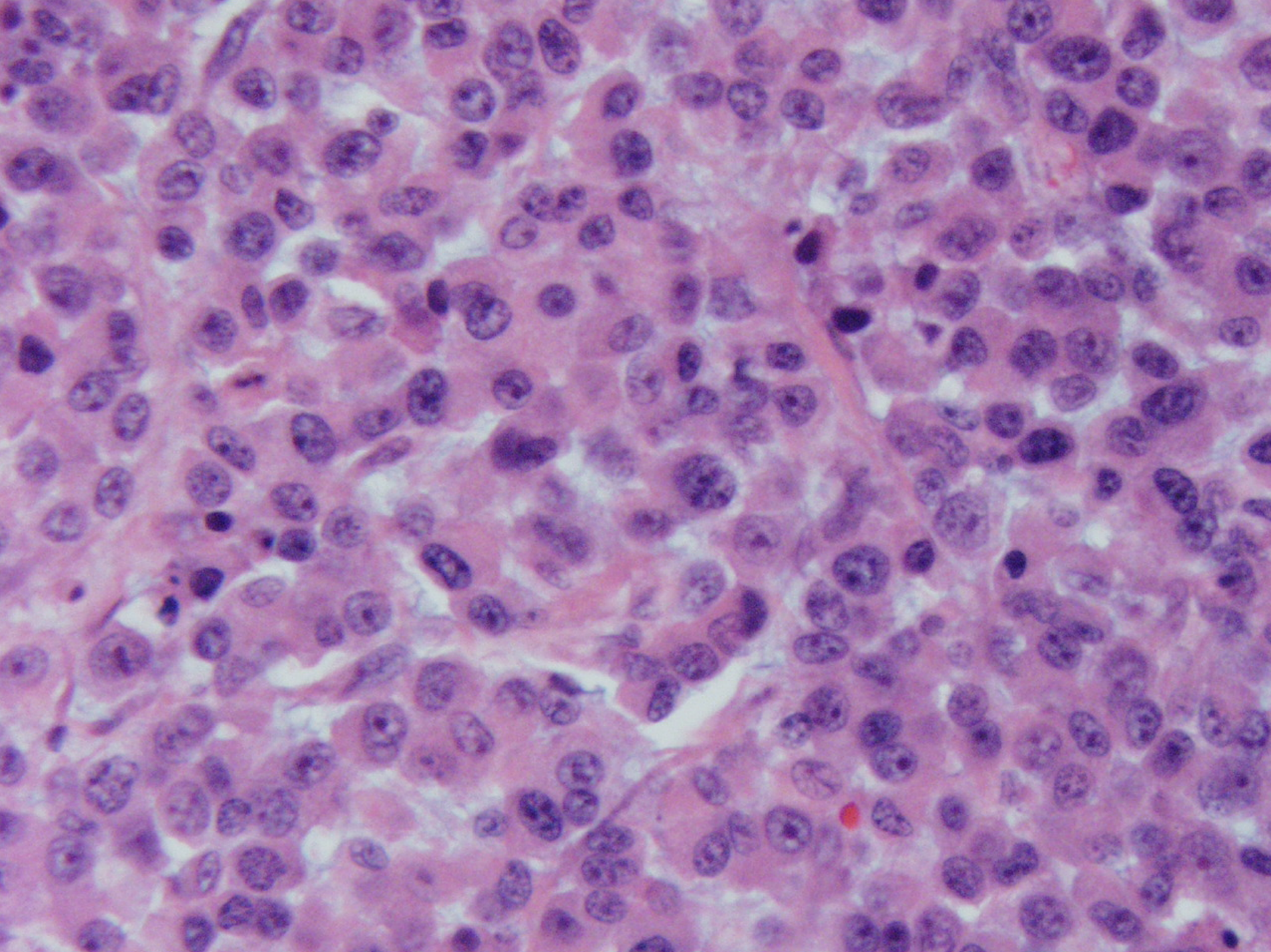


Intramucosal Adenocarcinoma

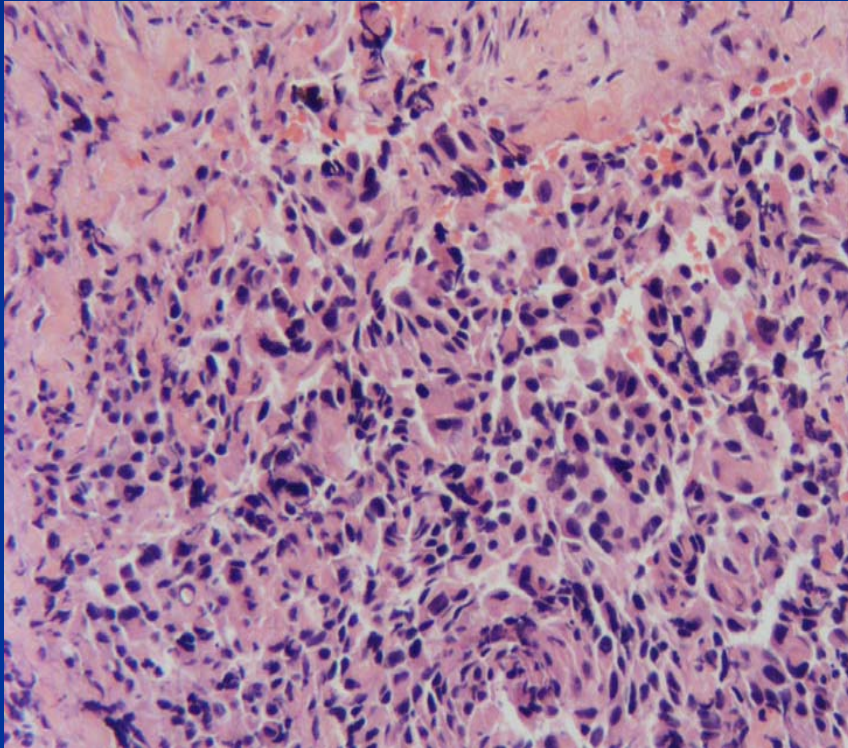


- Individual carcinoma cells infiltrate beyond the basement membrane into the lamina propria and/or muscularis mucosa only





Invasive Adenocarcinoma



- Carcinoma invades submucosa and beyond
- Desmoplastic stroma
- Designate grade

Reporting of Malignant Polyps

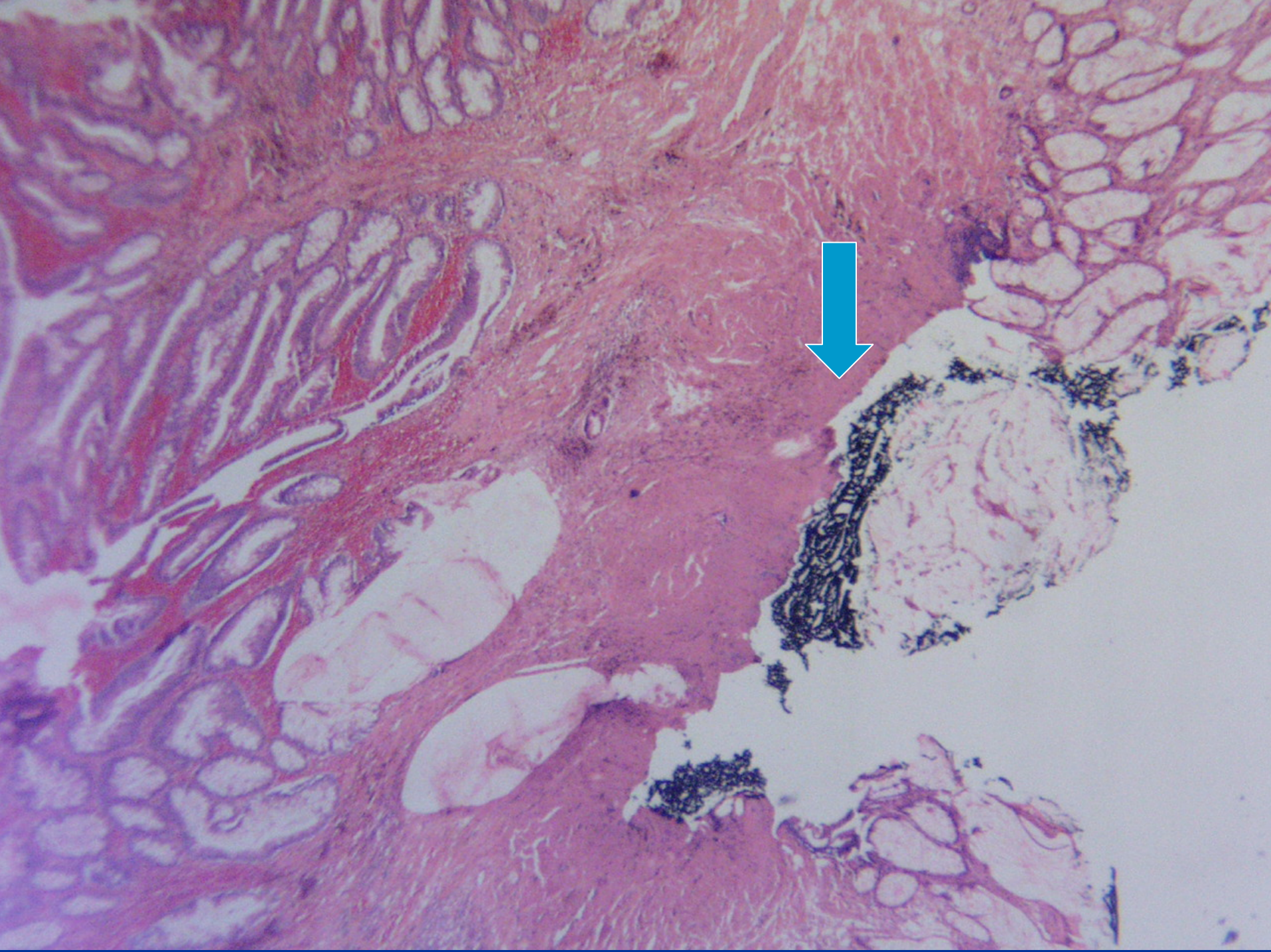
- Status of margins
- Grade
- Lymphovascular invasion

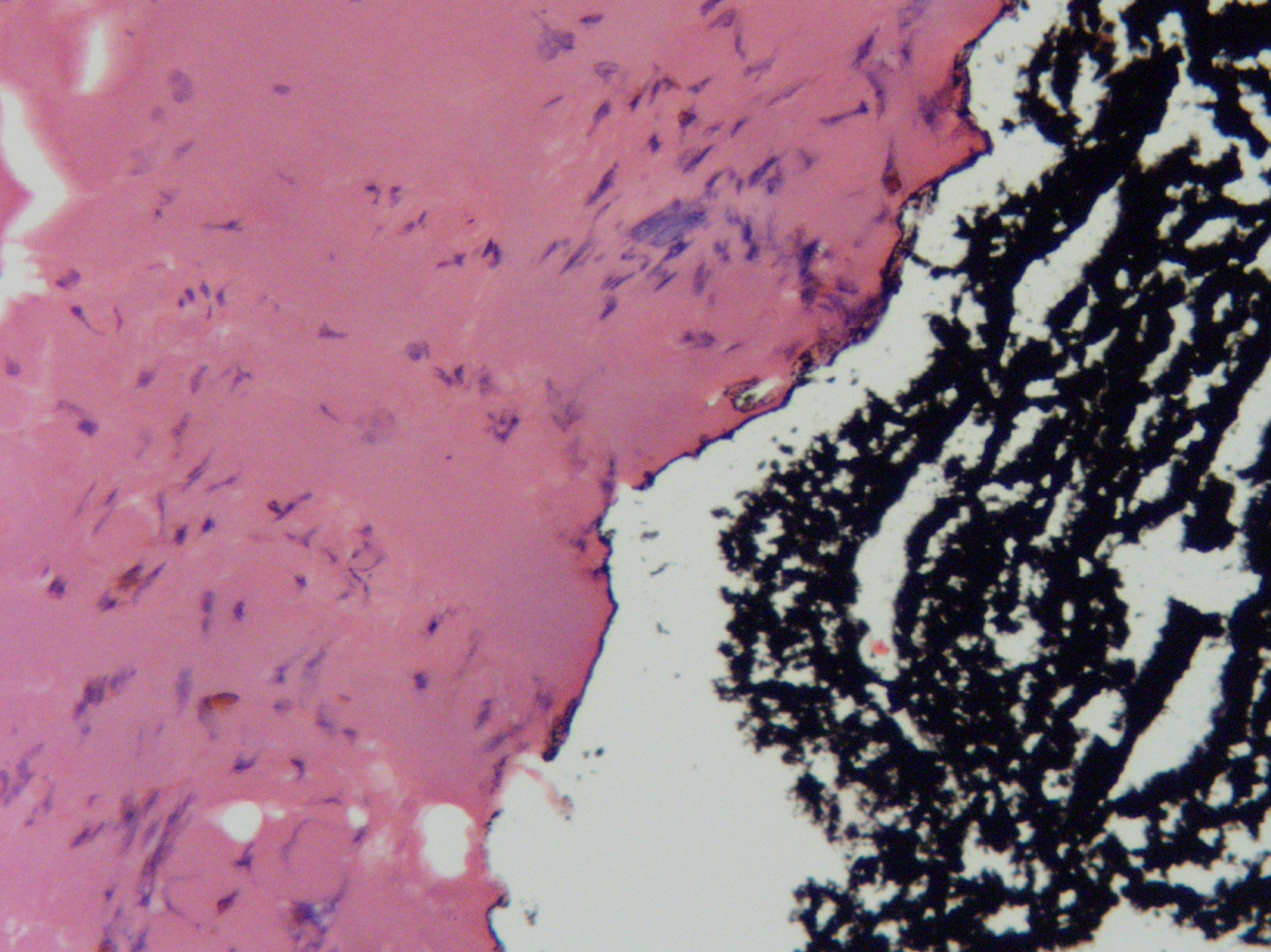
Positive Margin

Tumor cells in the actual free edge of the submucosal transection point that shows diathermy artifact

Margins Close

- Cancer within diathermy
- One hpf from diathermy
- <1mm from transected margin



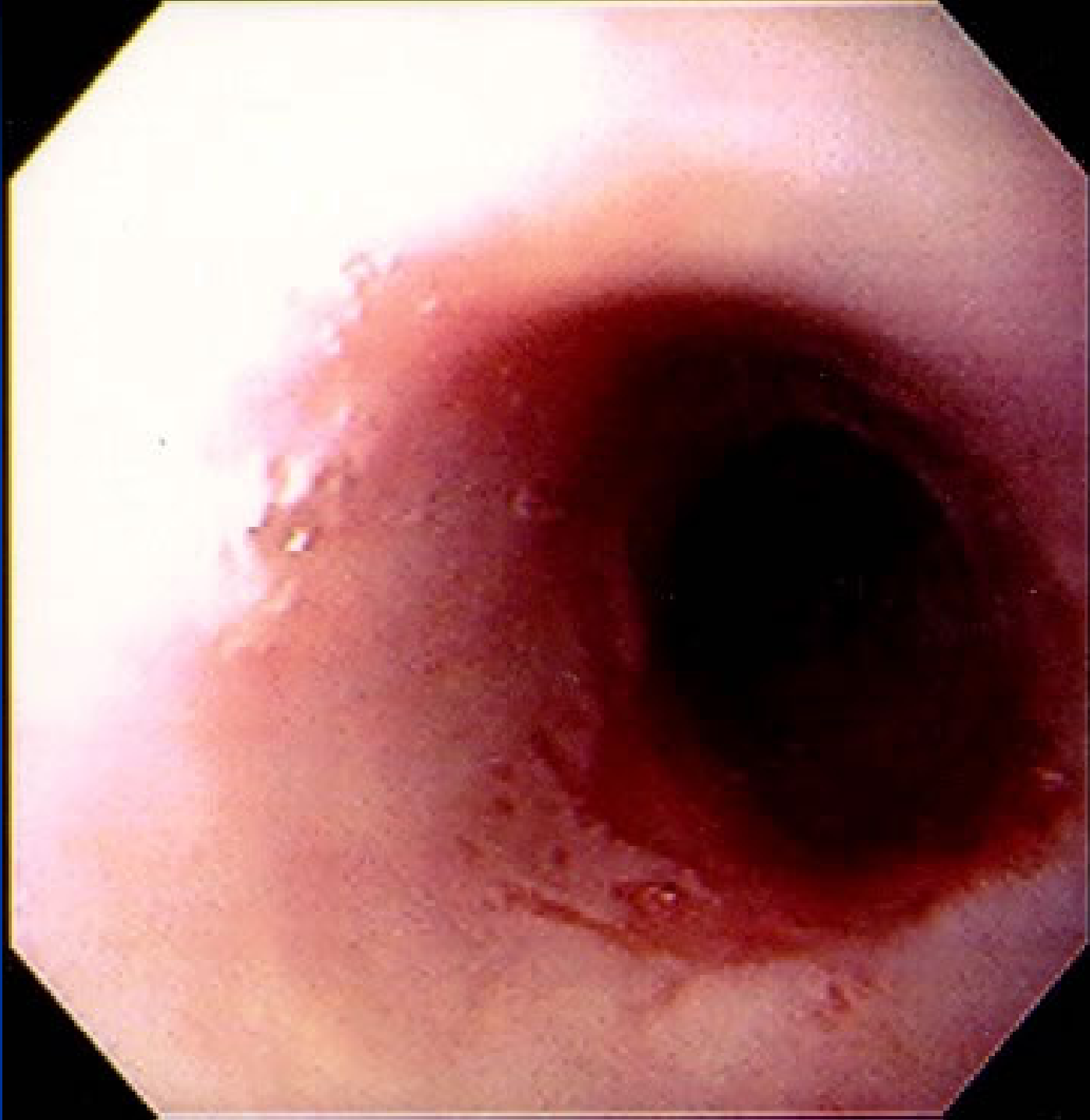


Questions

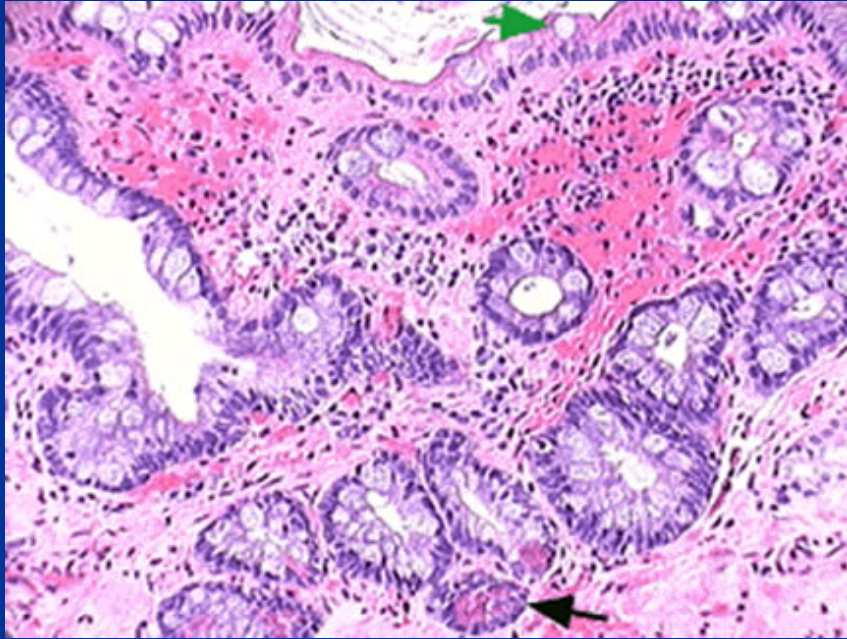
Goblet cell metaplasia

Reactive carditis with intestinal metaplasia

Cardiofundic type mucosa with goblet cells



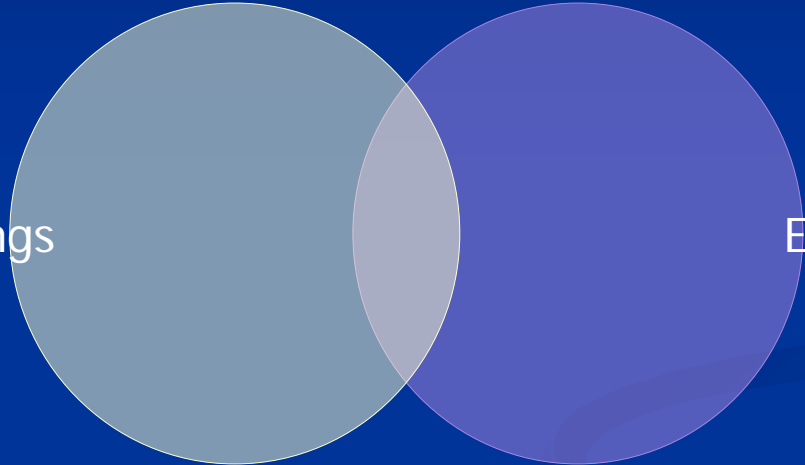
**Does the Pathologist definition of
Barrett's concur with the
Gastroenterologist?**



What is Barrett's?

A change in the ESOPHAGEAL epithelium (lining) of ANY LENGTH that can be recognized at upper endoscopy and is confirmed to have intestinal metaplasia by biopsy

- Sampliner RE. Practice guidelines on the diagnosis, surveillance, and therapy of Barrett's esophagus. The Practice Parameters Committee of the American College of Gastroenterology. Am J Gastroenterol 1998; 93(7):1028-32.



Histopathological Findings

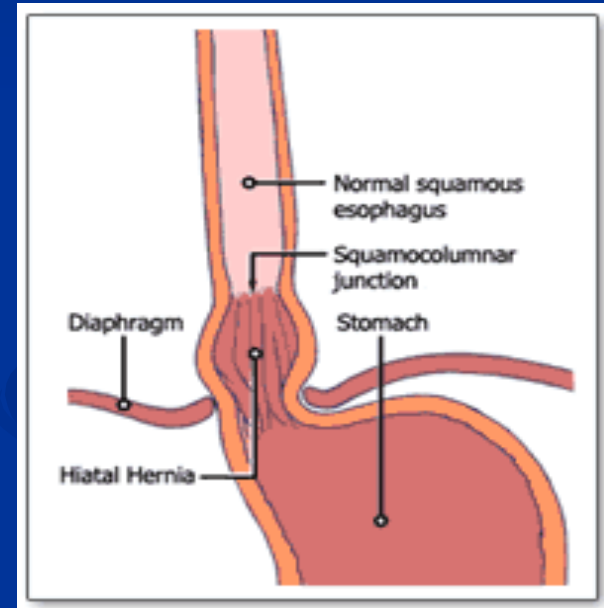
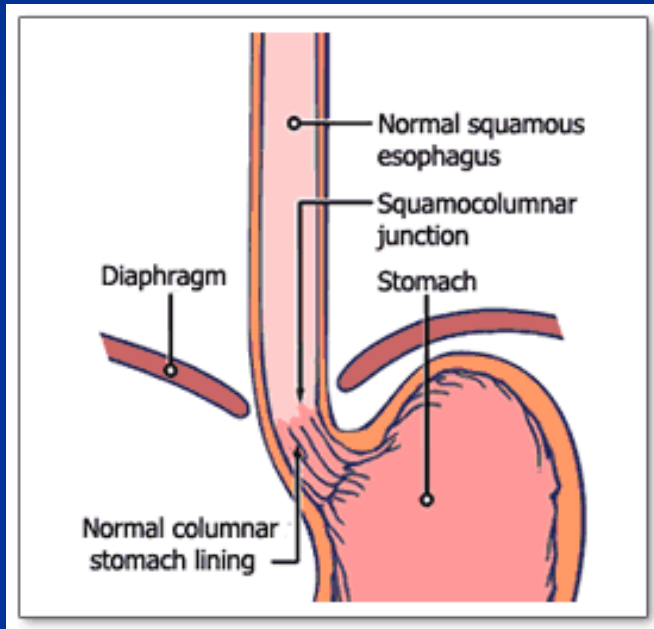
Endoscopic Appearance

**Intestinal metaplasia of gastric
cardia is NOT Barrett's**

Endoscopic Difficulties

- EGJ biopsy with intestinal metaplasia
 - Barrett's *or*
 - Intestinal metaplasia of the most proximal portion of the stomach
- Hiatal hernia makes identification of muscular EGJ difficult
 - Frequently present in Barrett's
 - No anatomic landmarks that clearly define region of LES

Hiatal Hernia and Anatomy





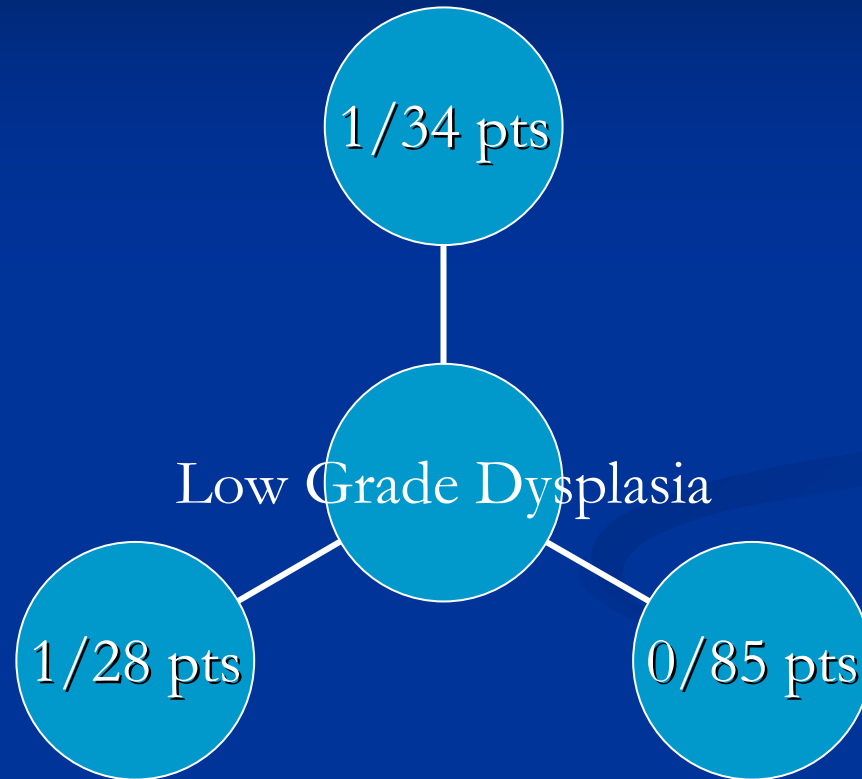
Trojans vs. Buckeyes!

Gastric cardia is present from birth as a normal structure but cardiac-type mucosa can arise in the distal esophagus as a metaplastic phenomenon

Carditis-GERD?

- 95-97% of carditis pts. with infection had non-cardiac gastric infection
- Carditis related to both H. pylori infection and GERD
- Small group of patients who have no H. pylori infection or GERD (~20%)

Cardiac Intestinal Metaplasia- Dysplasia Risk?

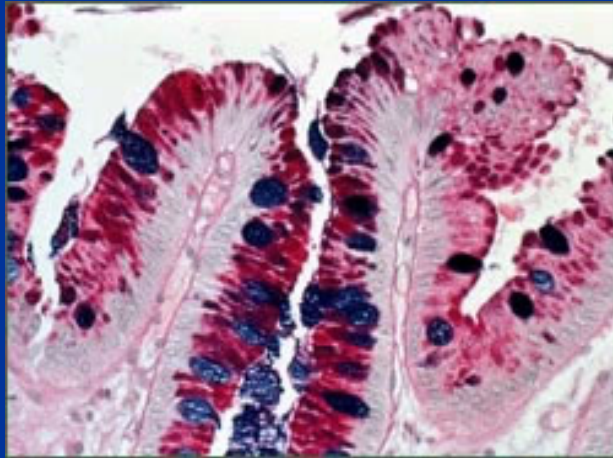
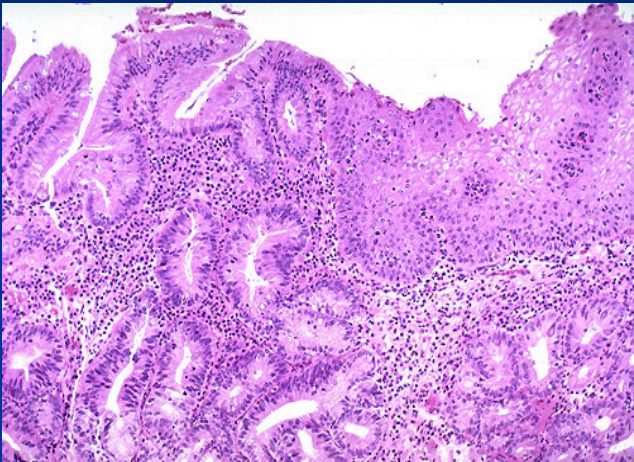


Adenocarcinoma

Cancer	LOH	Overexpression
Barrett's	p53 common (17p13.1)	Her2-neu 11-70%
Gastric Non-cardia	p53 less common	Her2-neu 9-38%
Gastric Cardia	p53 common	MDM2 gene amplification Microsatellite instability

**Specialized columnar epithelium
with acid mucin-containing goblet
cells**

BE Histopathology



- *Fundic type
- *Cardiac type (Junctional)
- Specialized columnar
 - Goblet cells
 - Acid mucins, sialo and sulfated (AB/PAS + at pH 2.5)
 - Normal gastric foveolar cells contain neutral mucin (AB/PAS-)-Not considered diagnostic for BE

*Not diagnostic

CK7/CK20

DIAGNOSIS	CK7	CK20
Barrett's	Superficial and deep	Superficial
Gastric IM	Negative	Superficial

*Use of Hollande's fixative may give a weak and patchy CK7 staining pattern

*Are We Speaking the Same
Language?*

**A change in the ESOPHAGEAL
epithelium (lining) of ANY
LENGTH...**

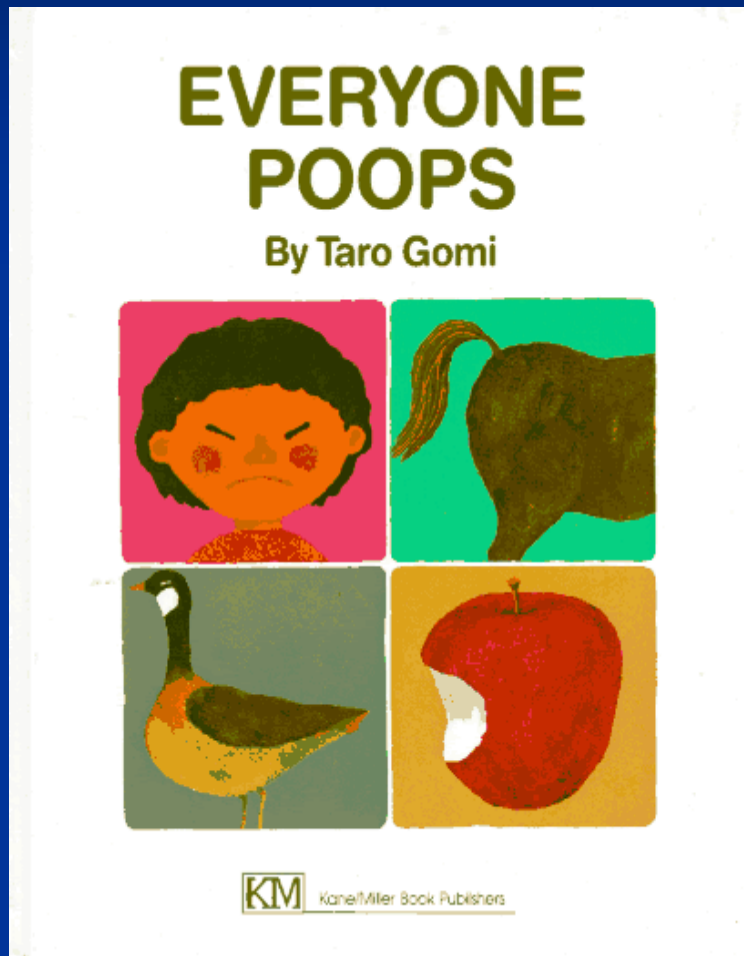
**Recognized at upper endoscopy and
confirmed to have intestinal
metaplasia by biopsy**

Biopsy from distal esophagus
showing either fundic or cardiac type
is **NOT** diagnostic of BE...
both types are commonly found
in the absence of intestinal
metaplasia

If the endoscopic impression is clearly BE, then the absence of intestinal metaplasia may be a sampling error...



Questions



- I feel a very unusual sensation - if it is not indigestion, I think it must be gratitude.

Benjamin Disraeli(1804 - 1881)