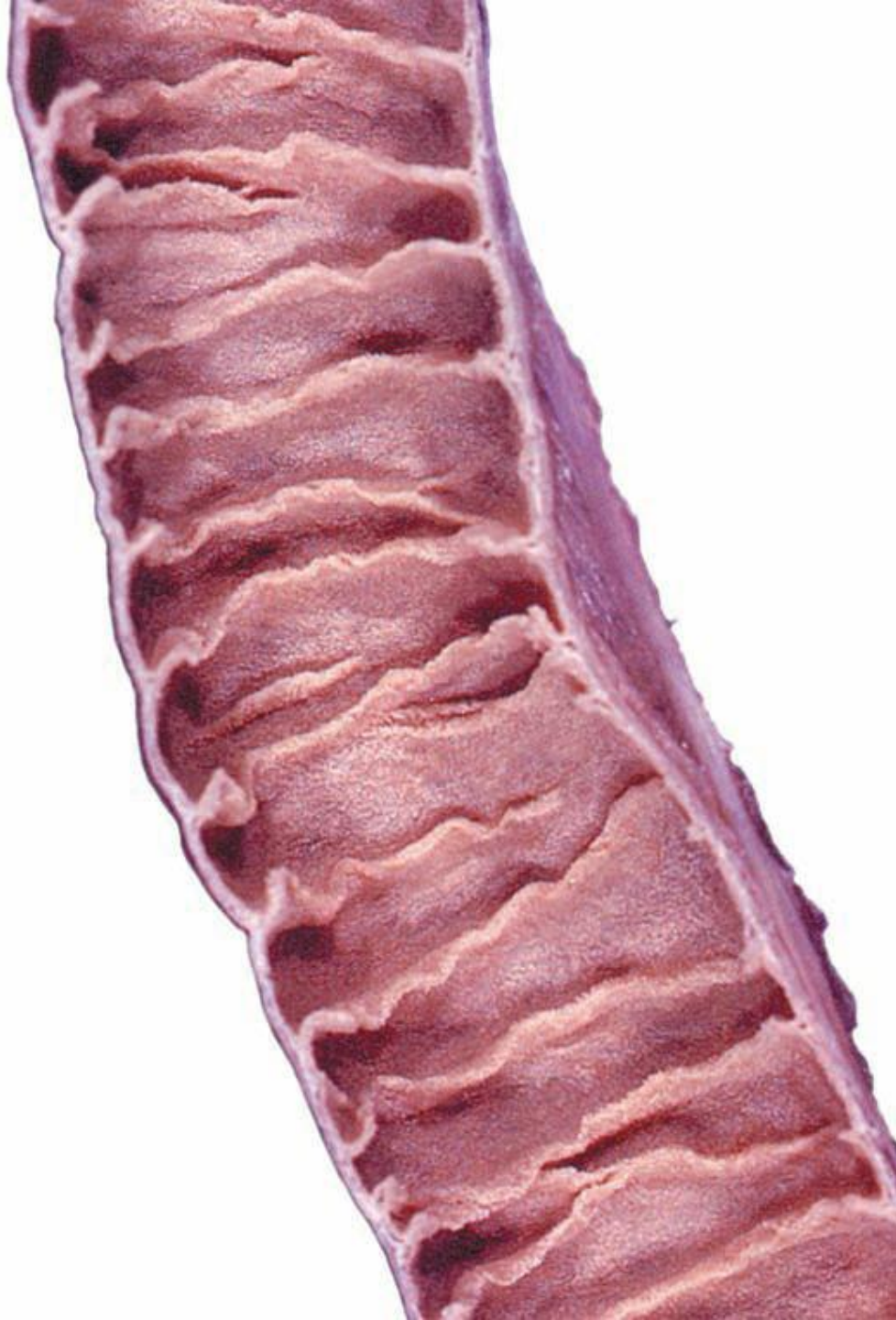
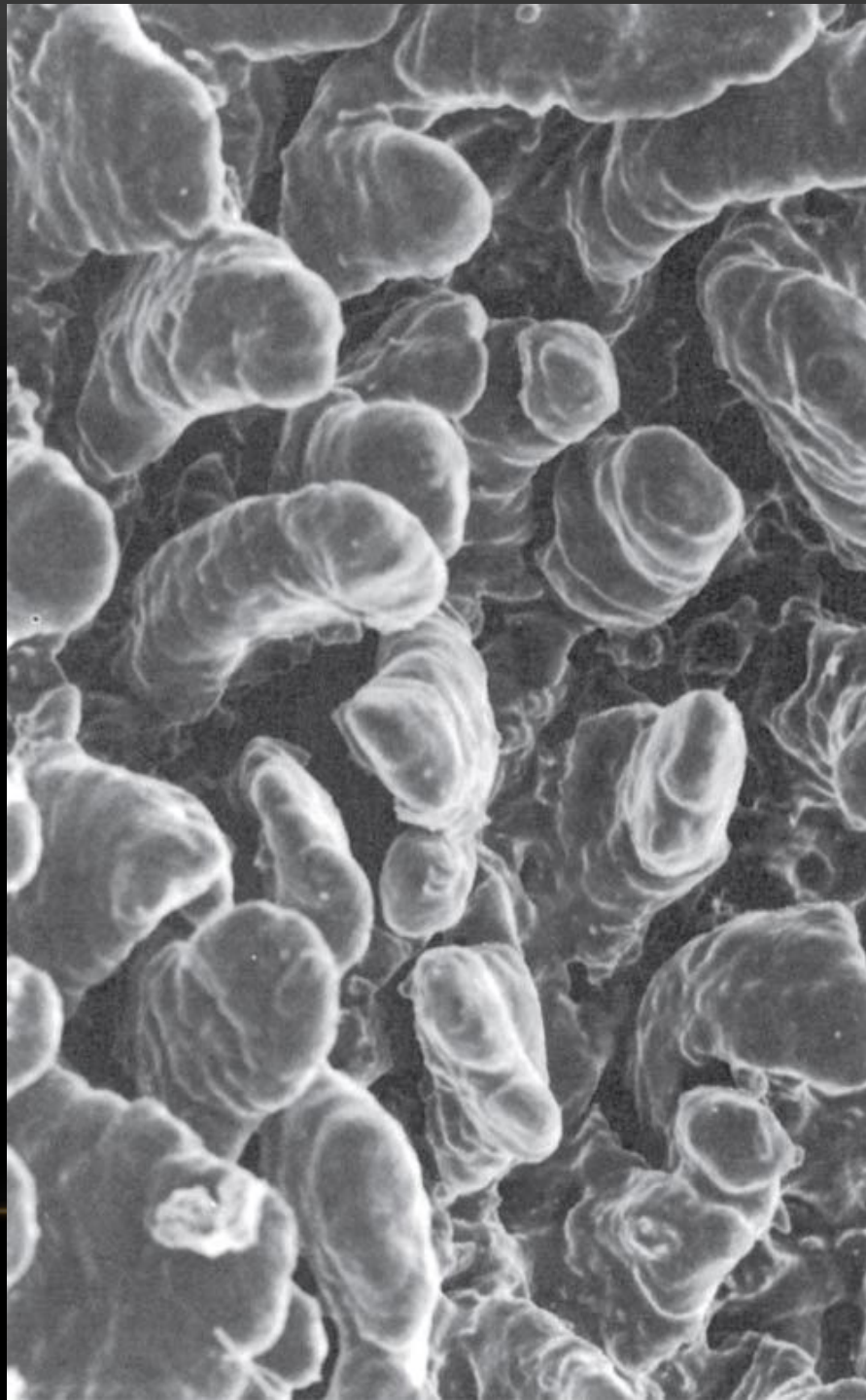
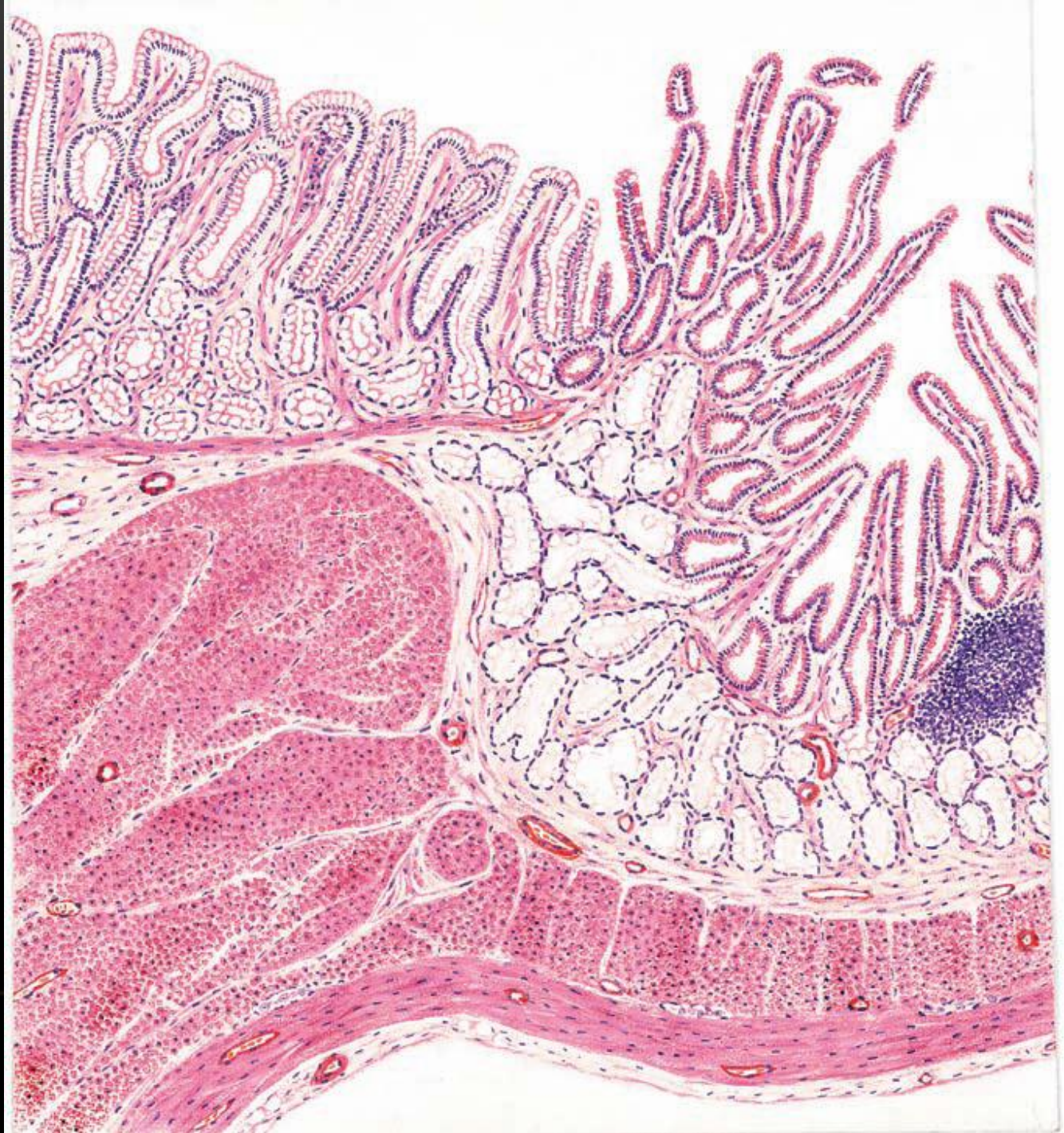


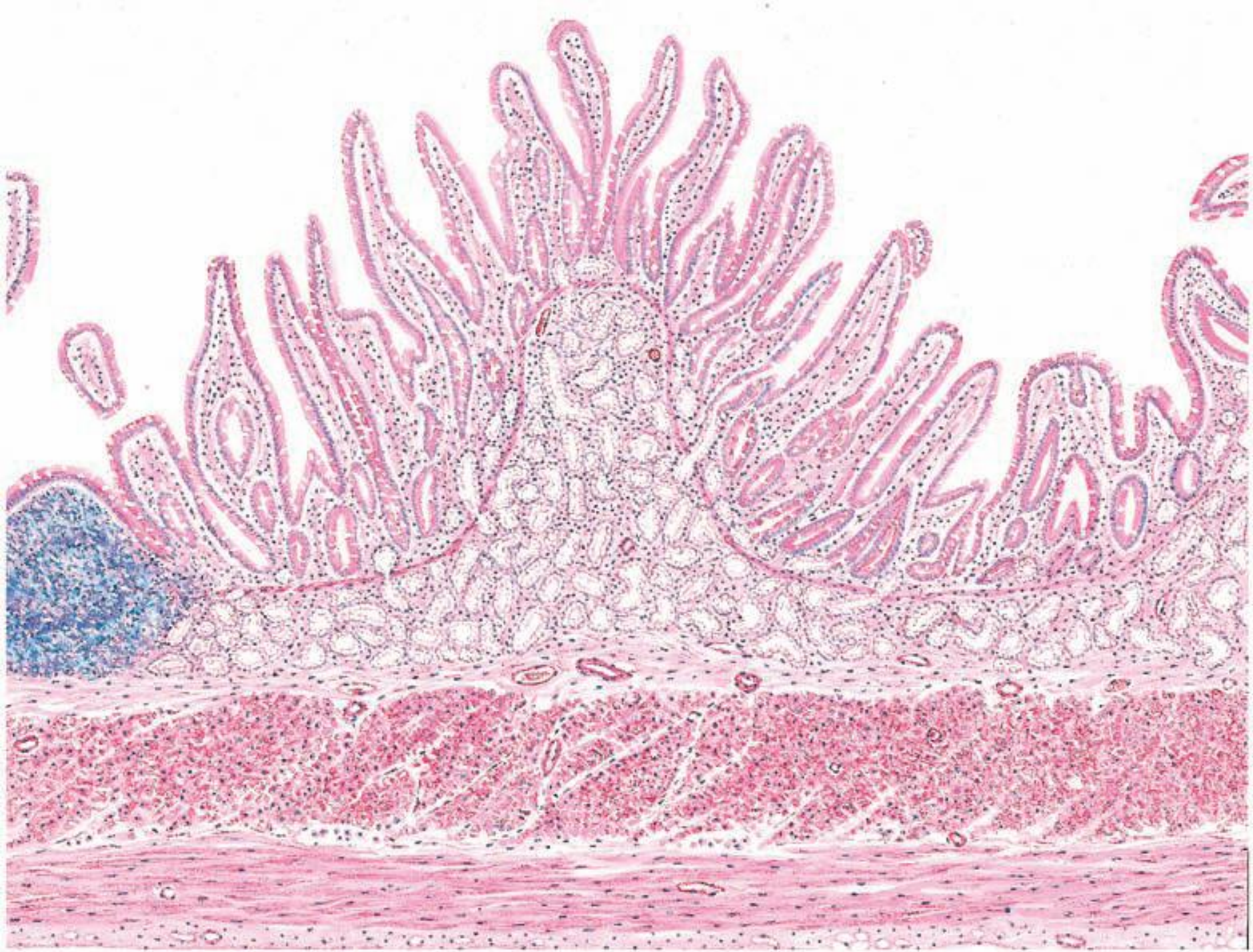
Histology of the intestines

SMALL INTESTINE











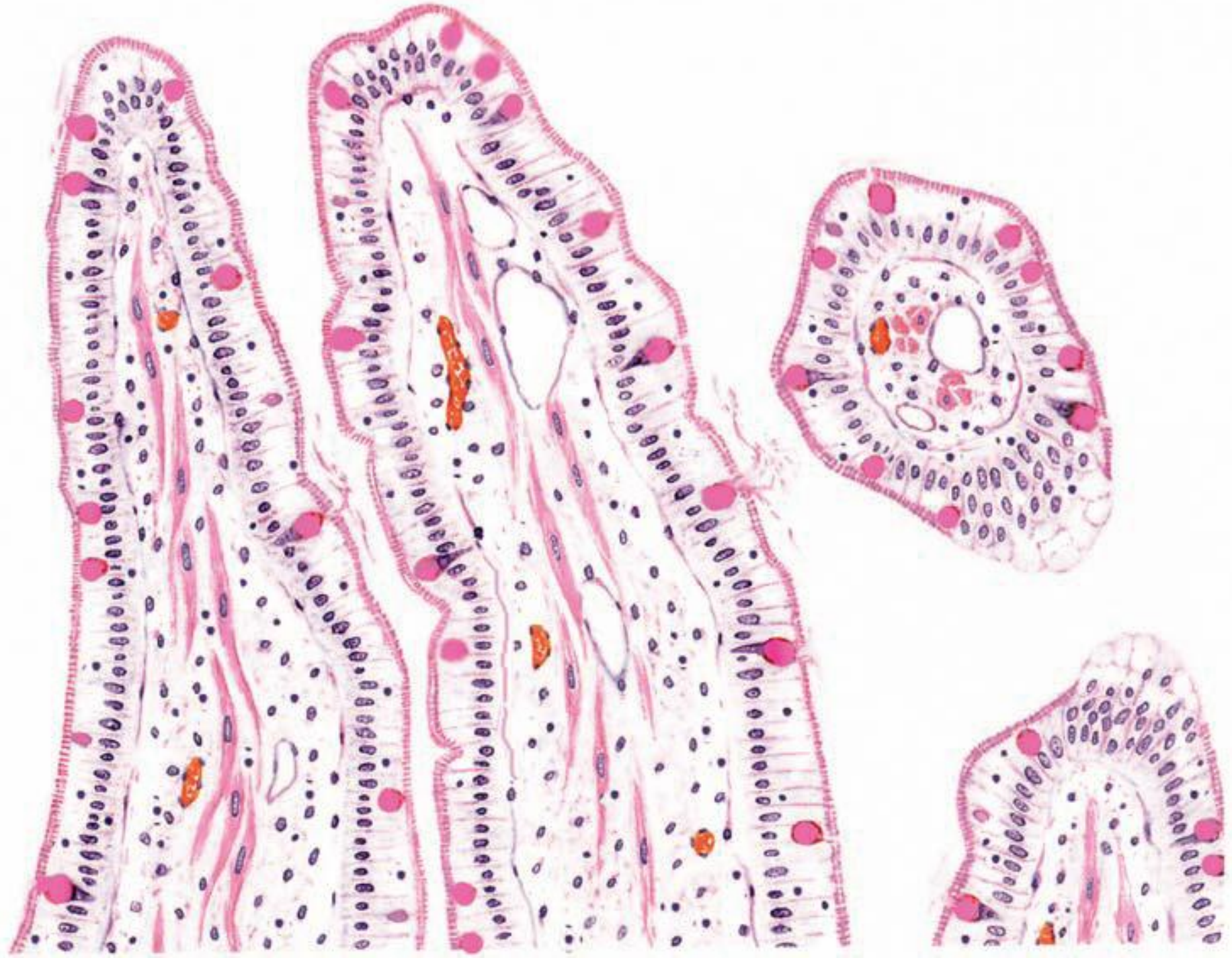
Intestinal villus

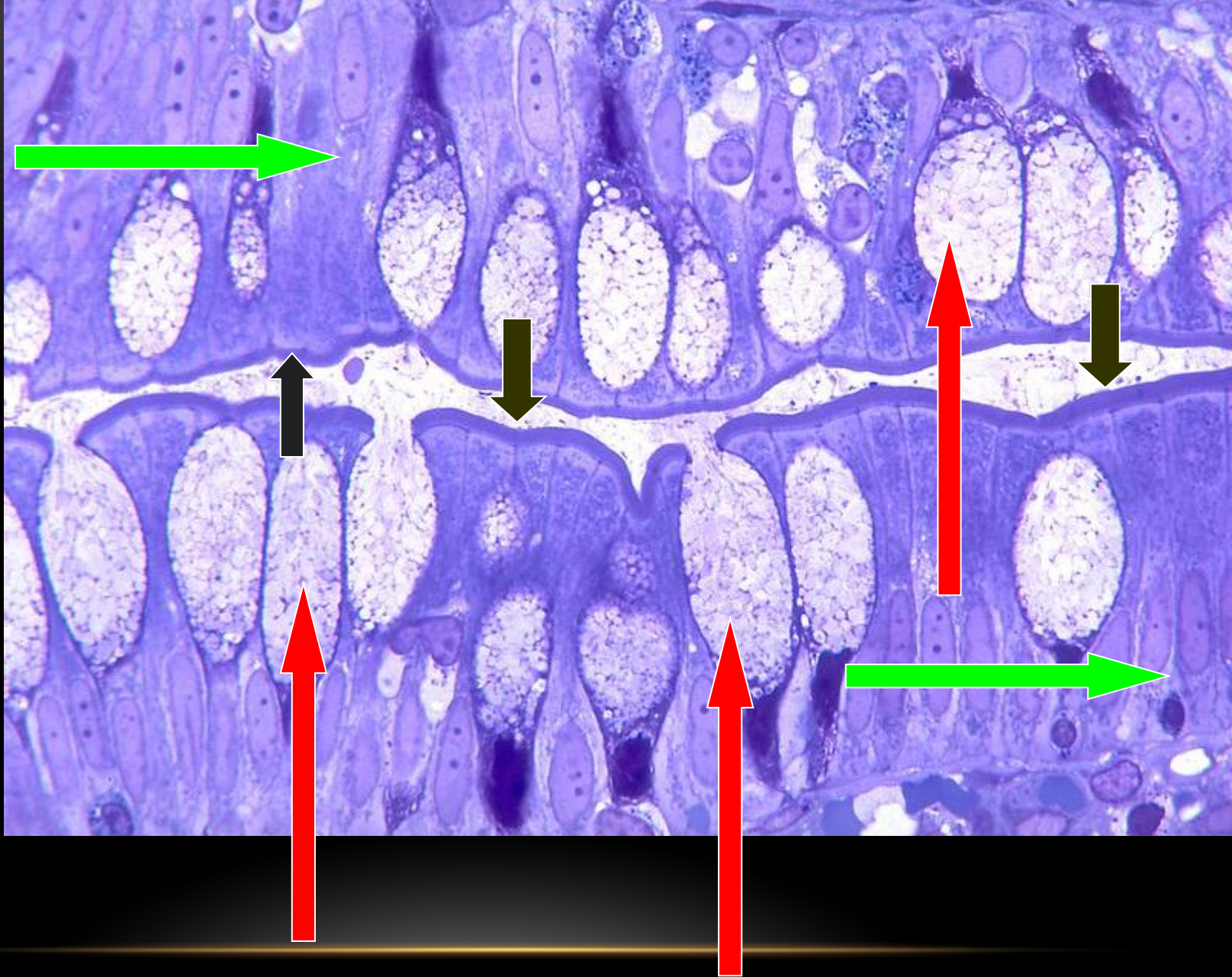


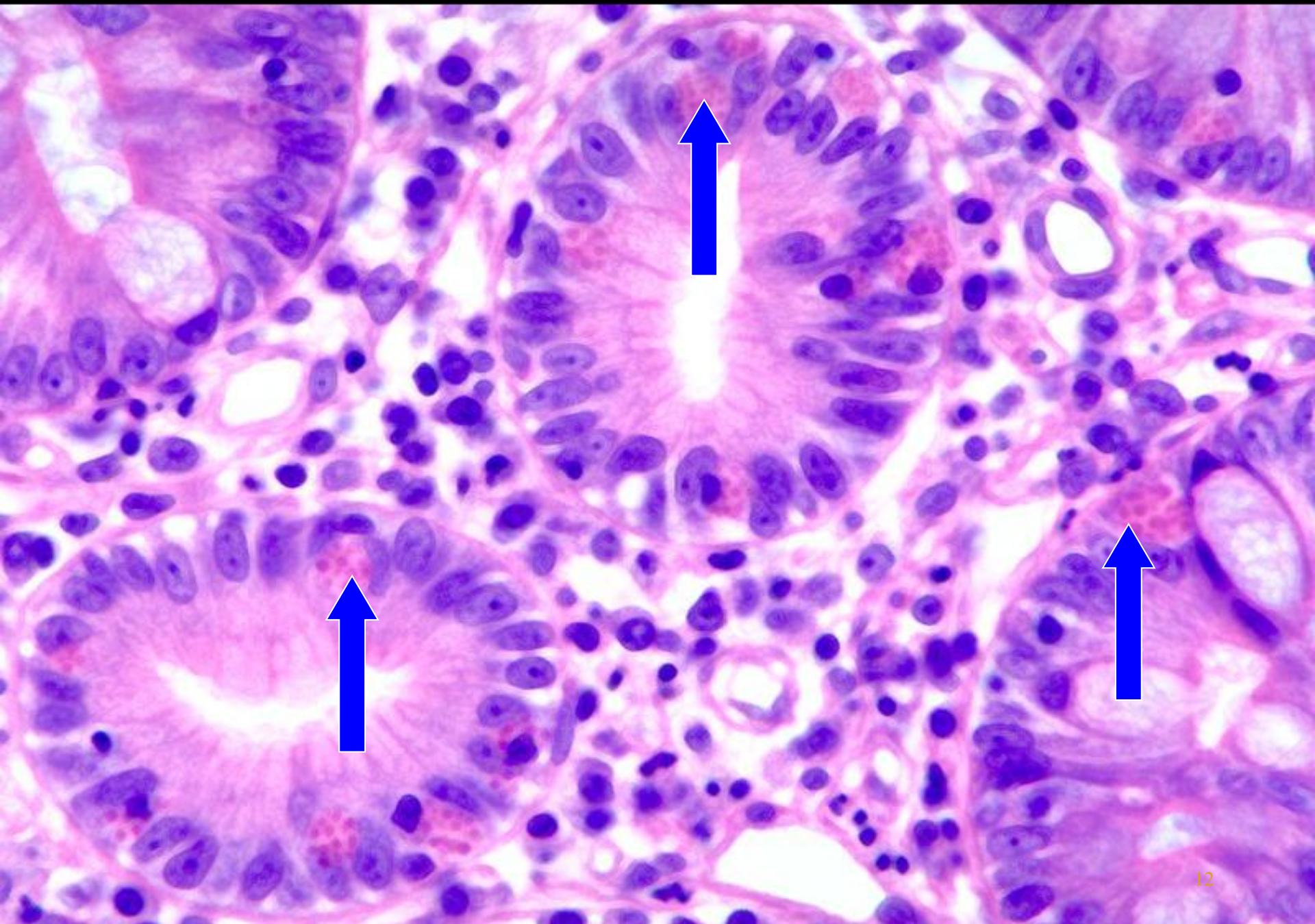
Enterocytes and Goblet cells

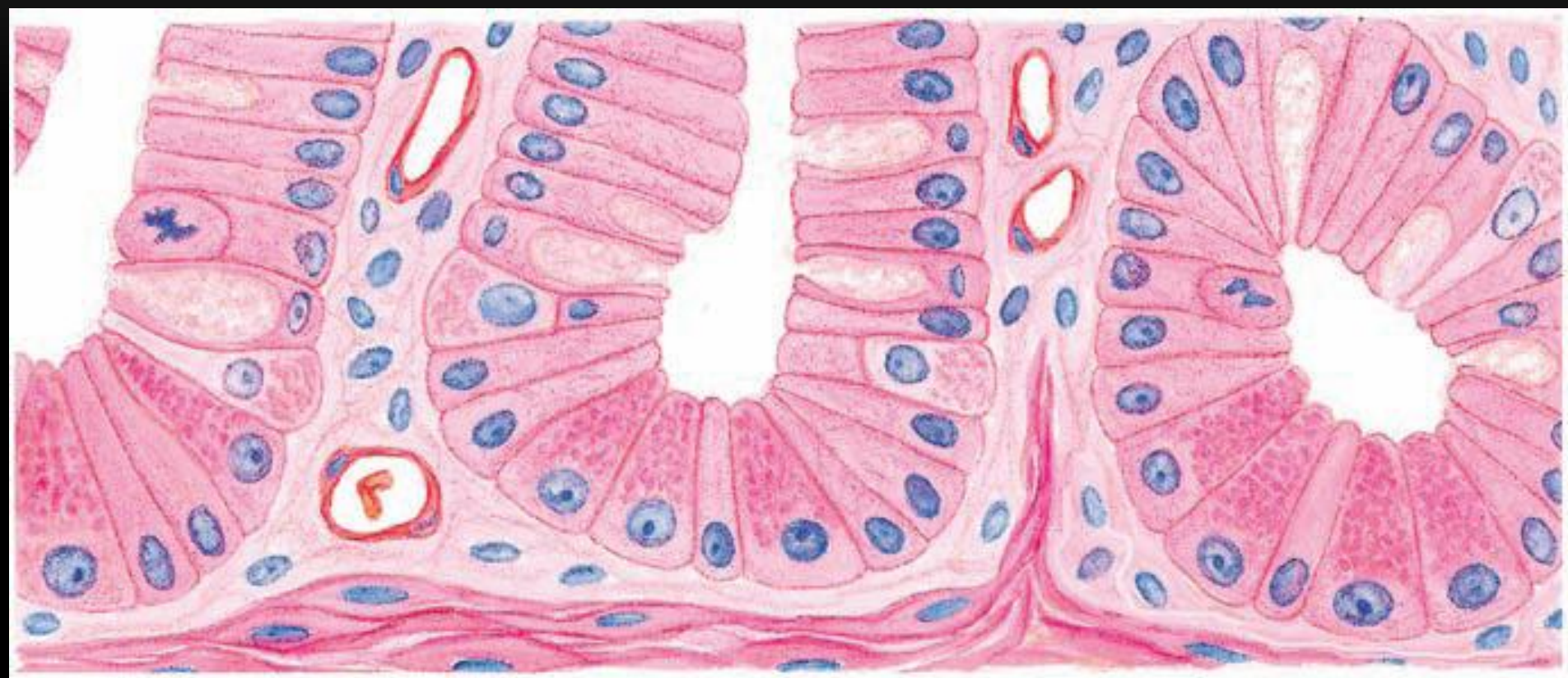
GOBLET CELL

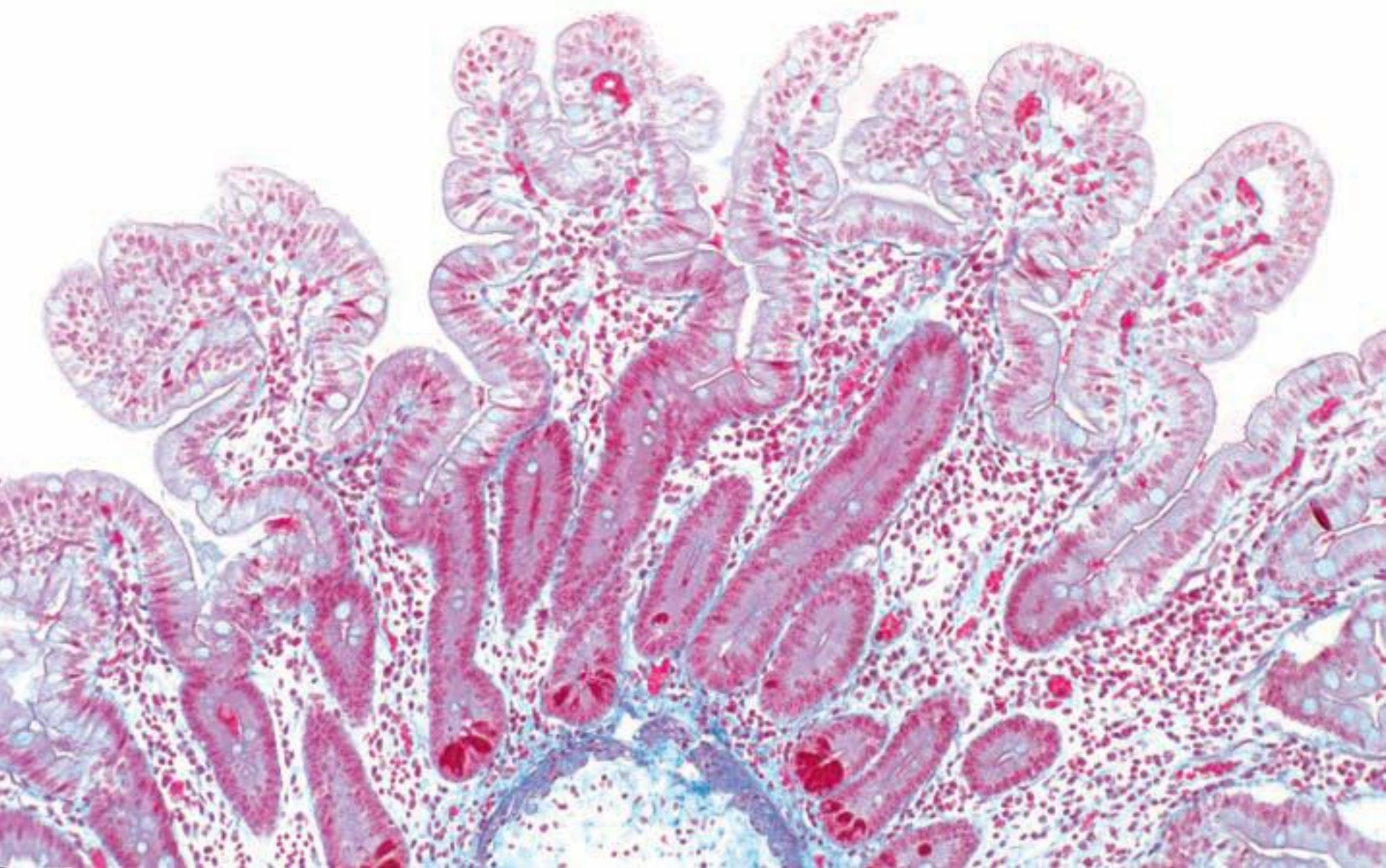










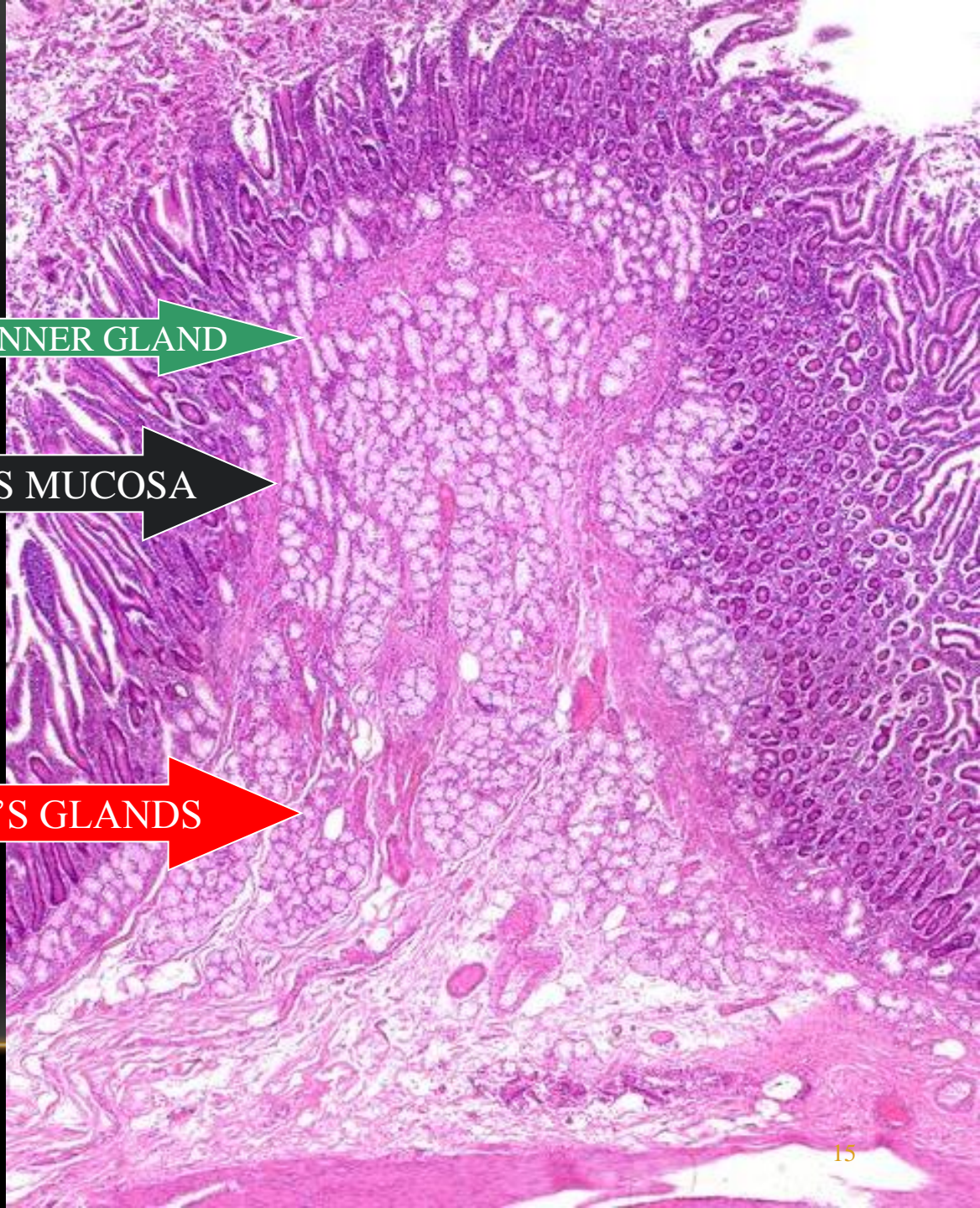


Plica circularis Duodenum

DUCT OF A BRUNNER GLAND

MUSCULARIS MUCOSA

BRUNNER'S GLANDS

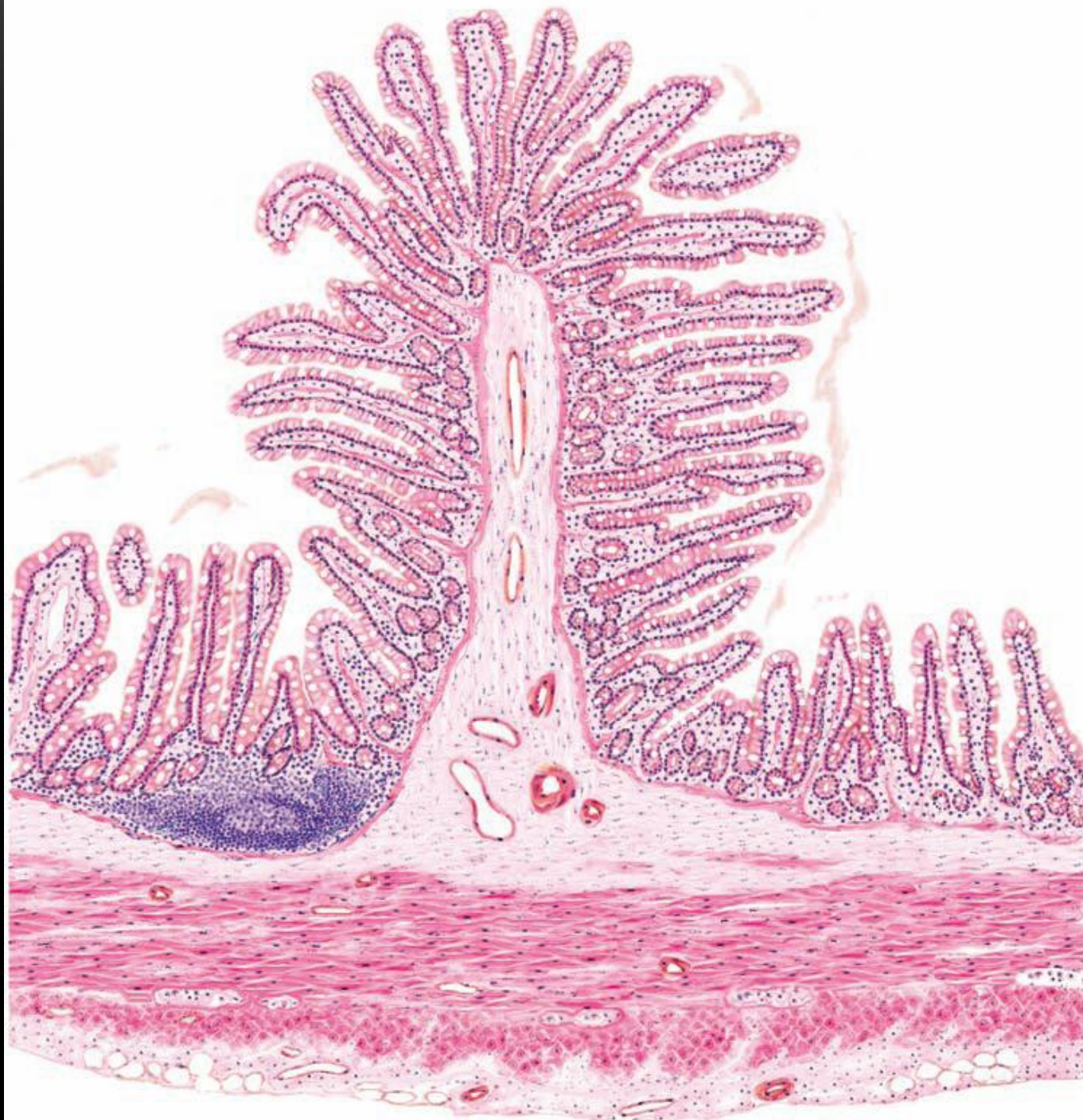


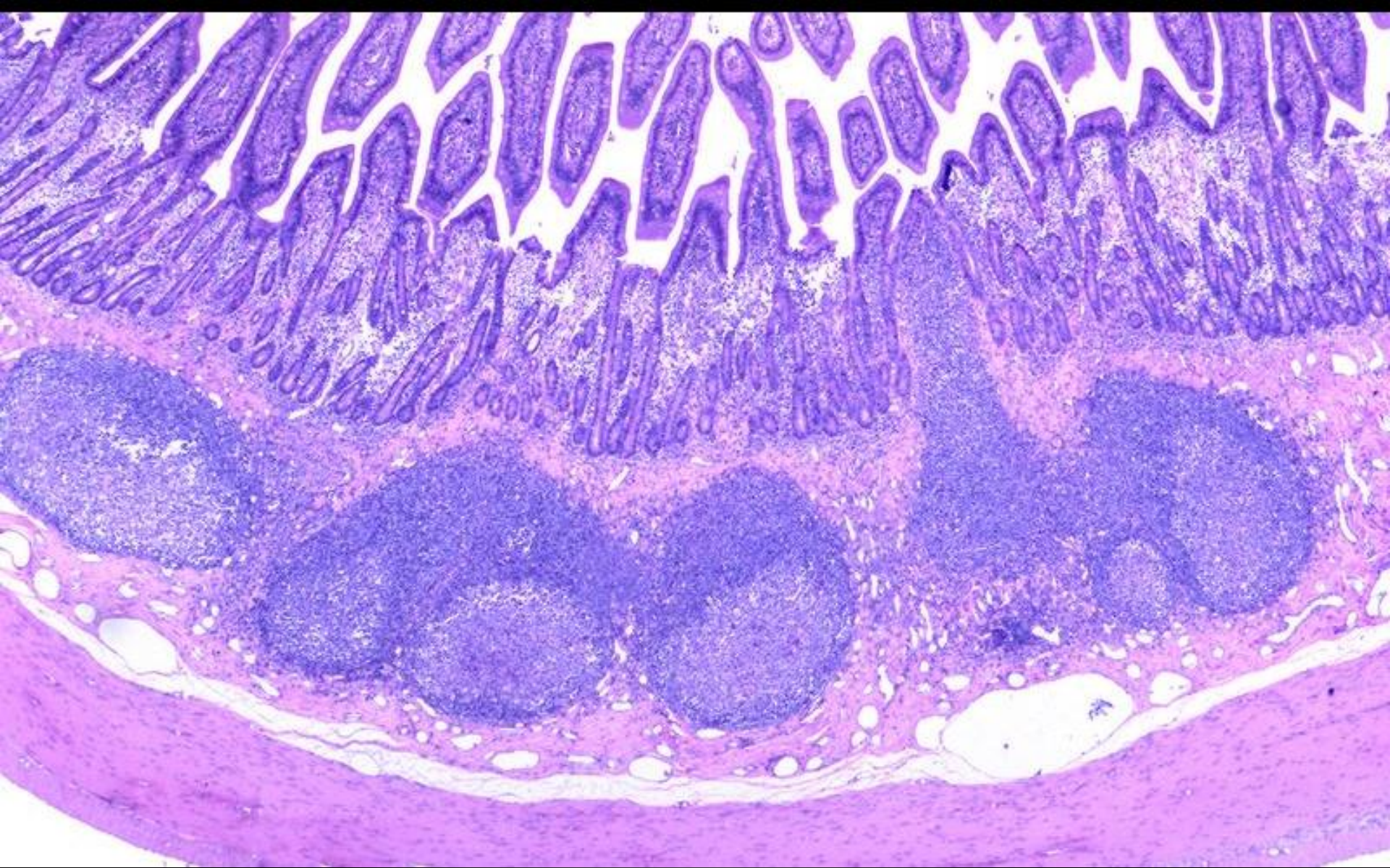
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MUSCULARIS MUCOSA

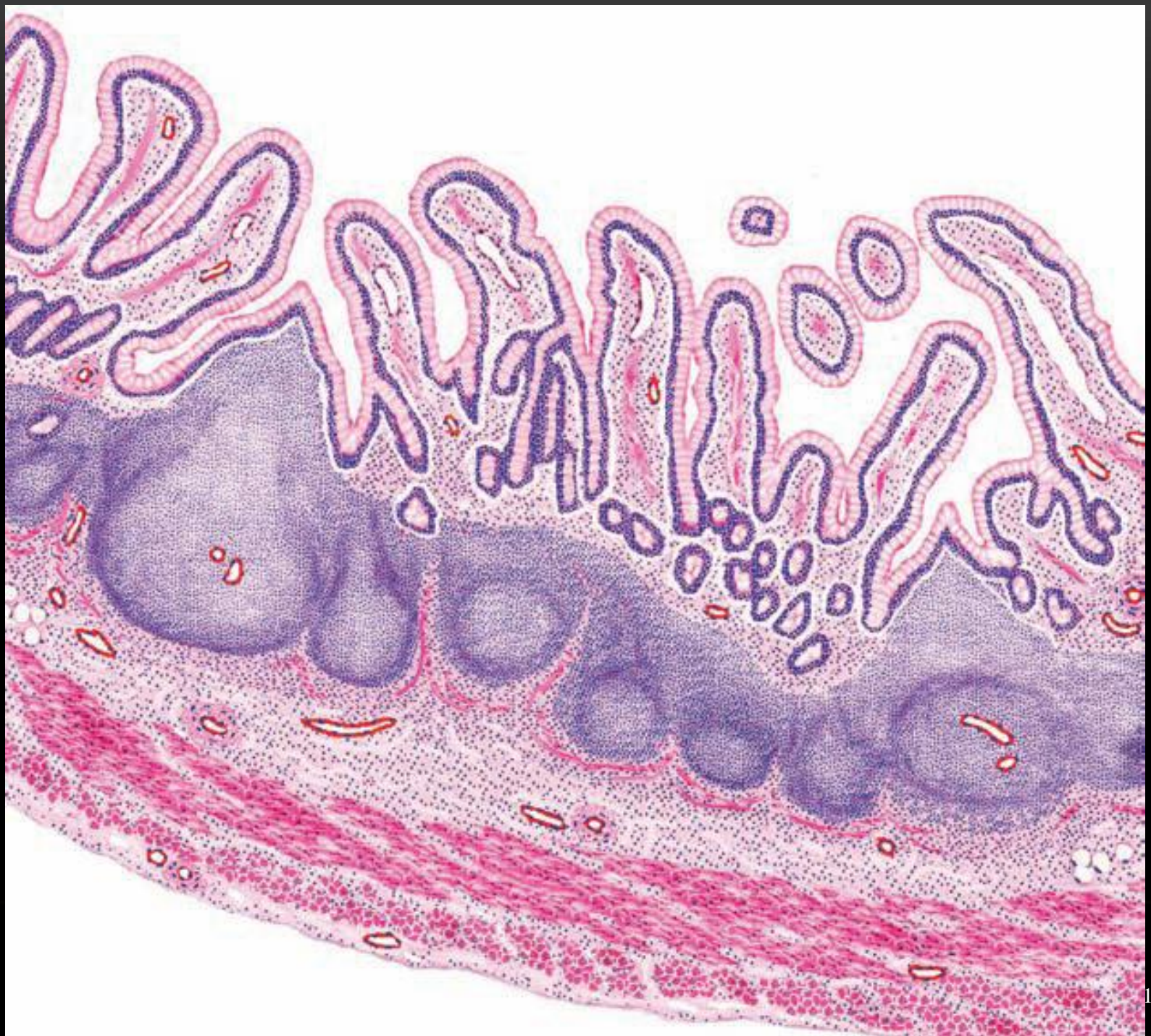
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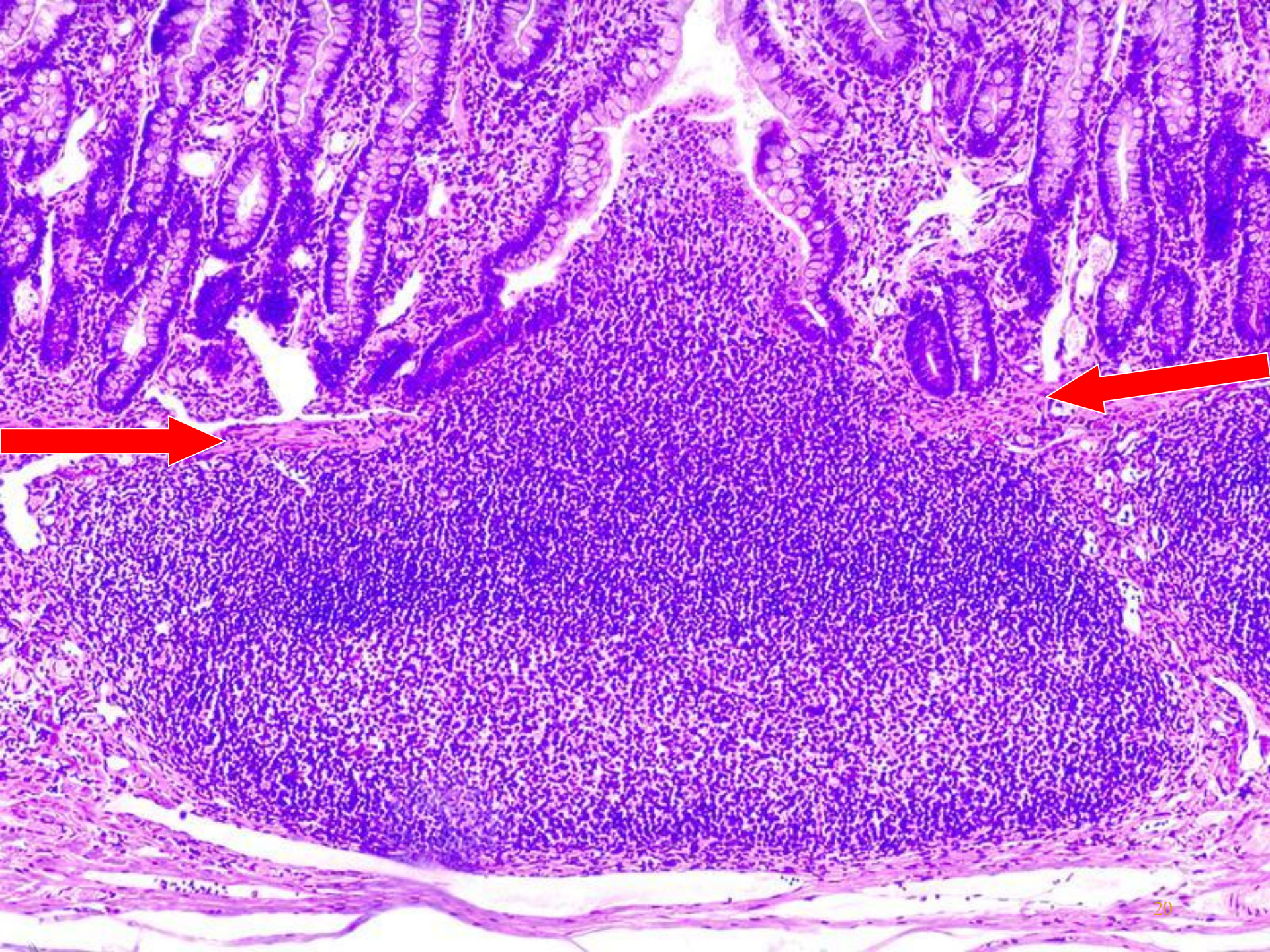
BRUNNER'S GLANDS





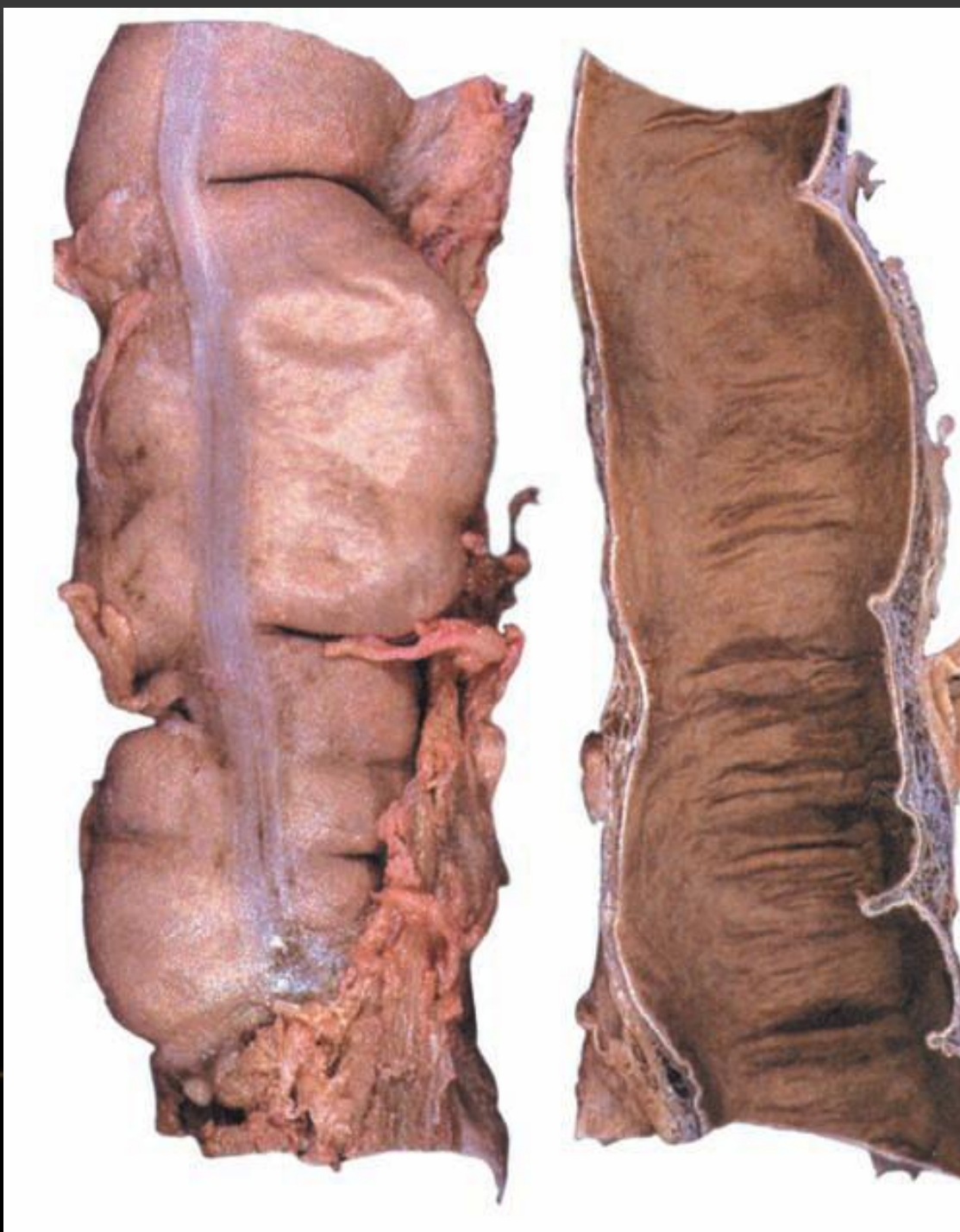
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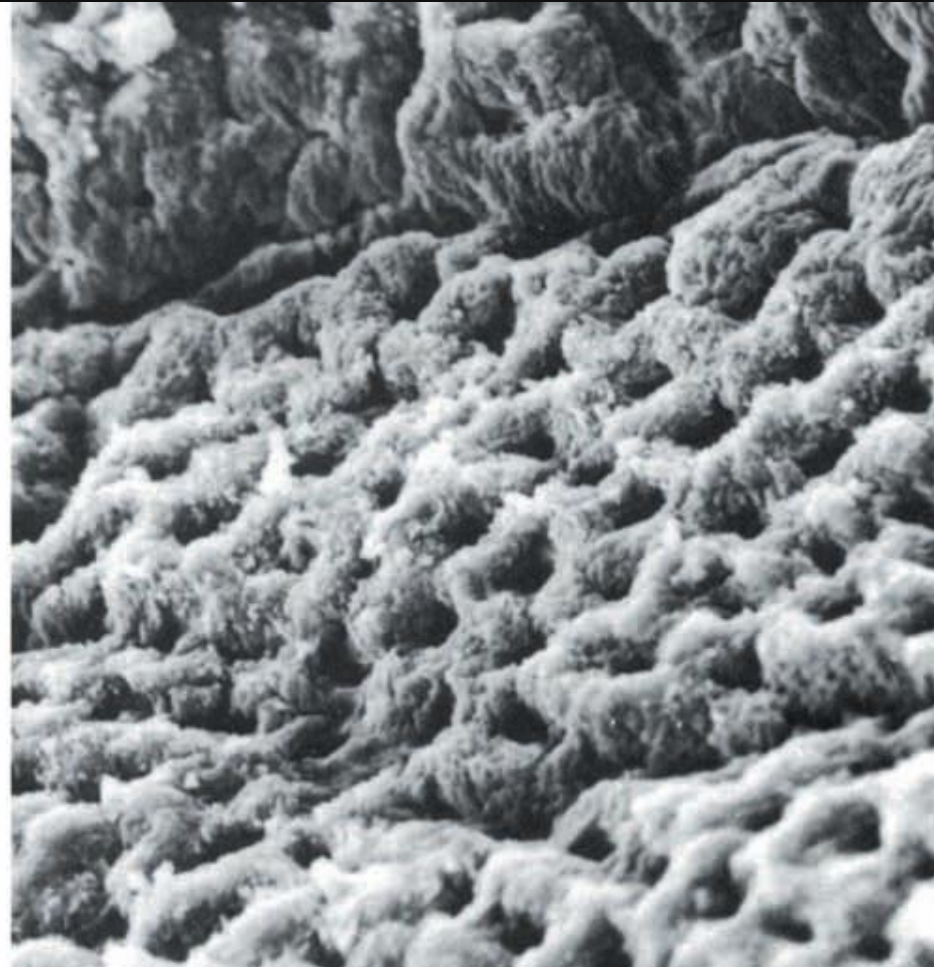


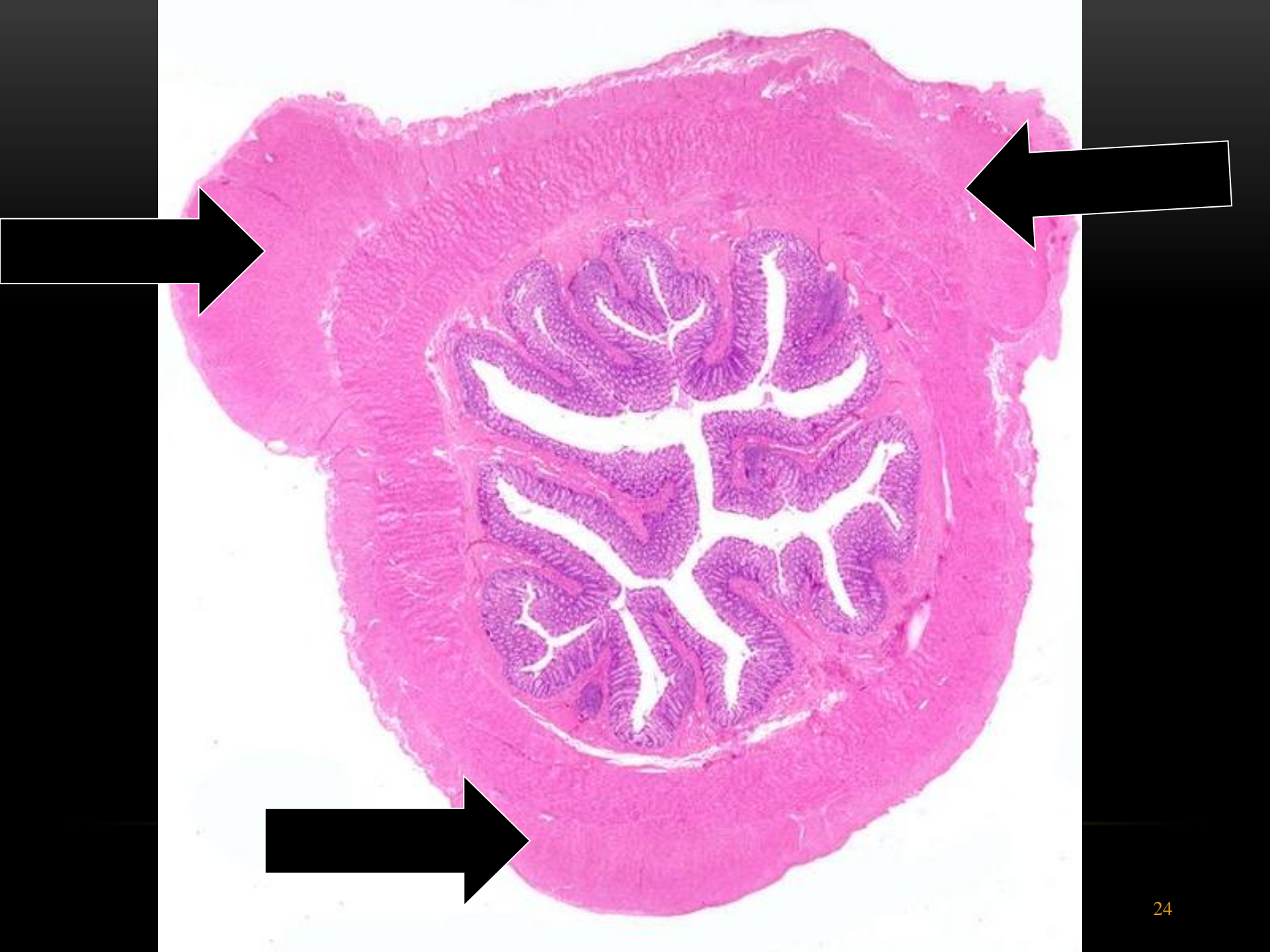


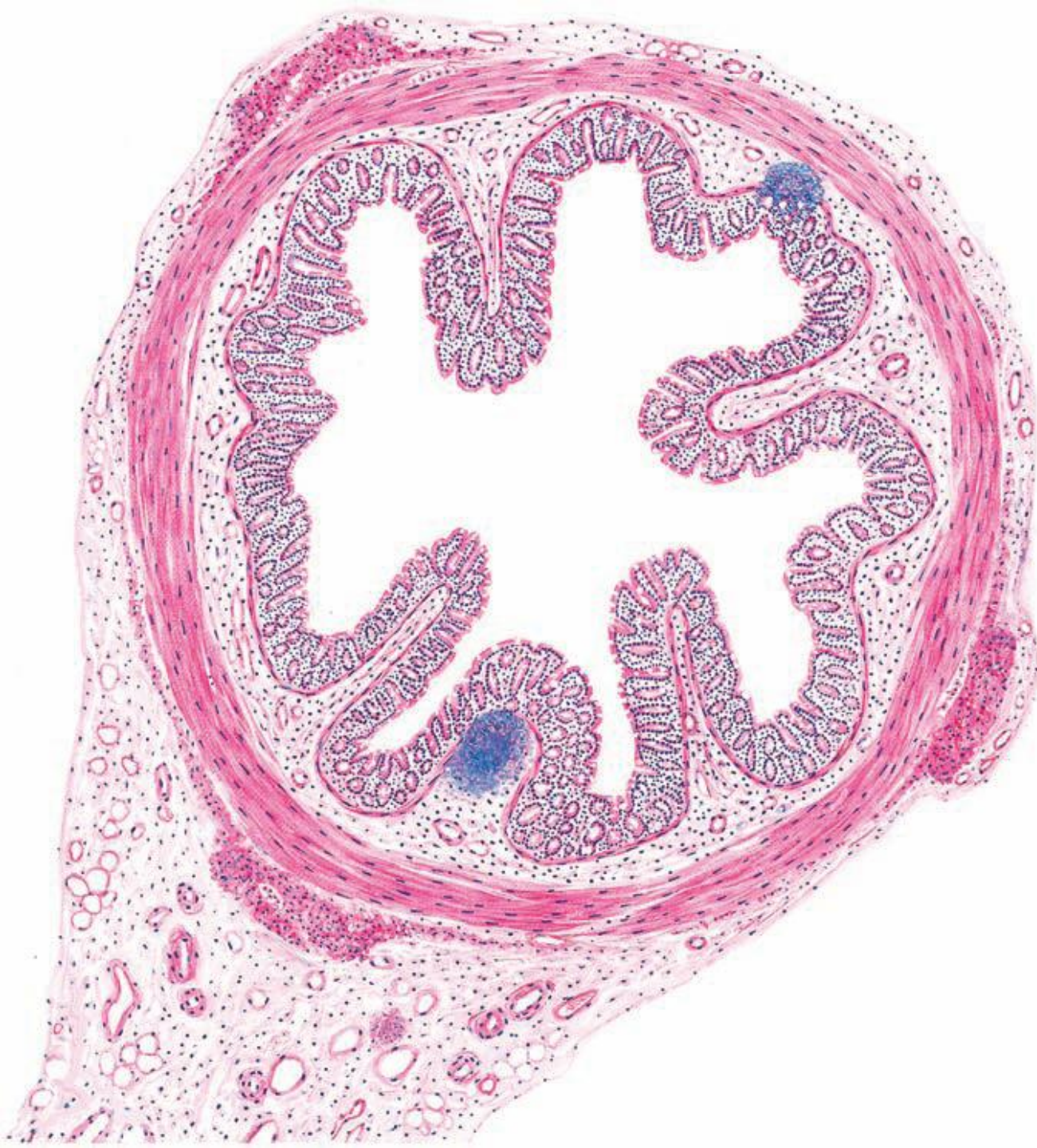


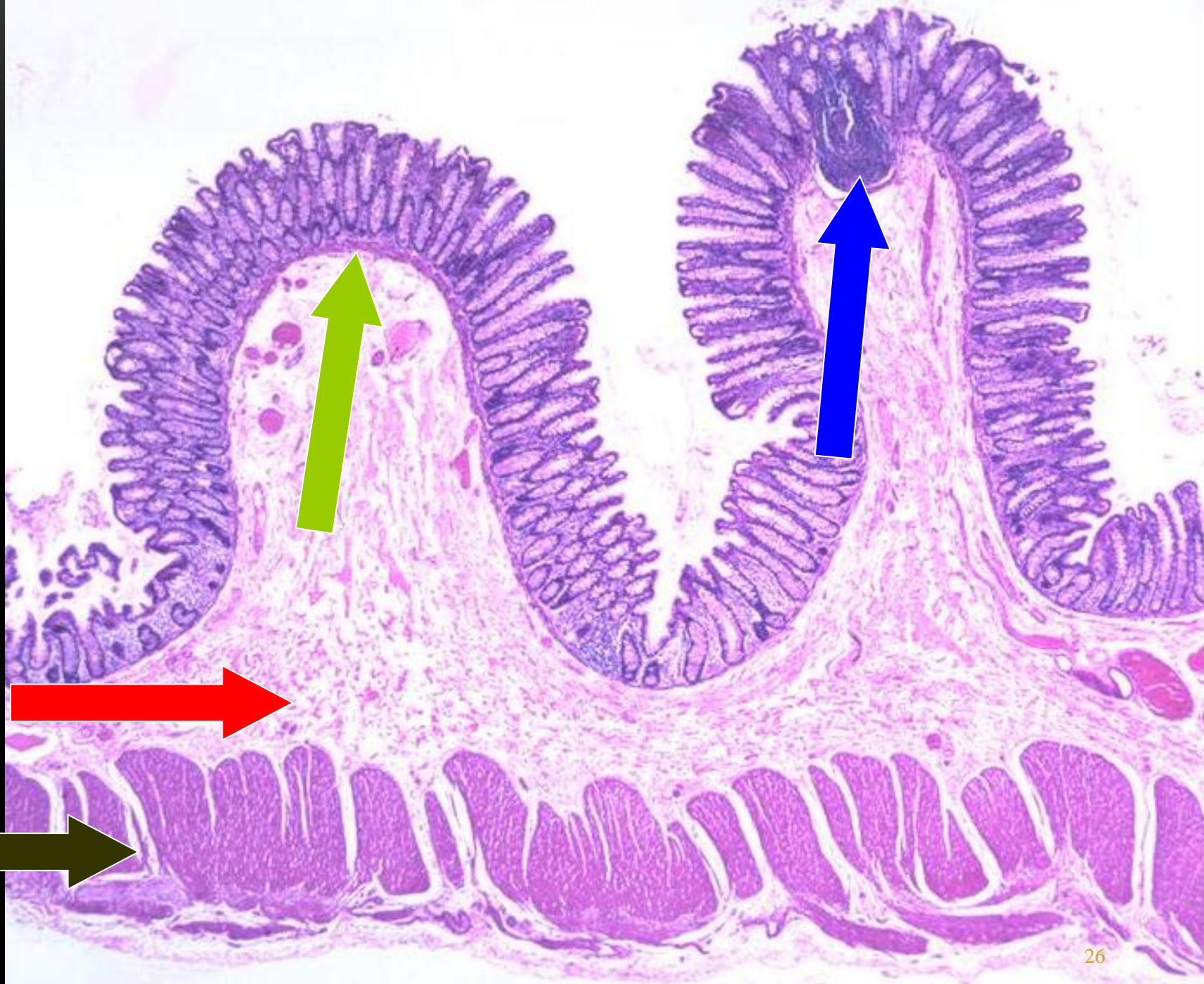
COLON



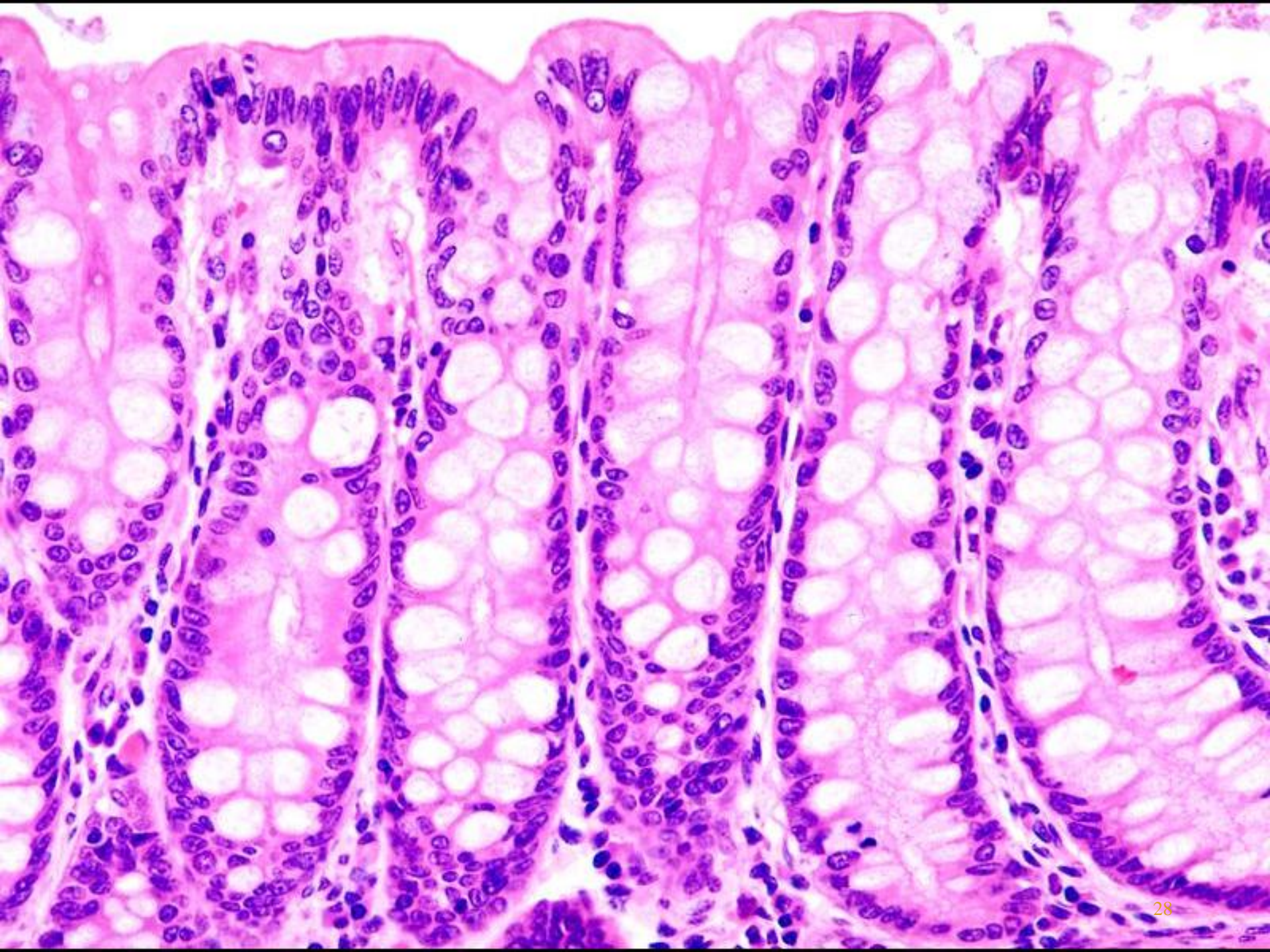






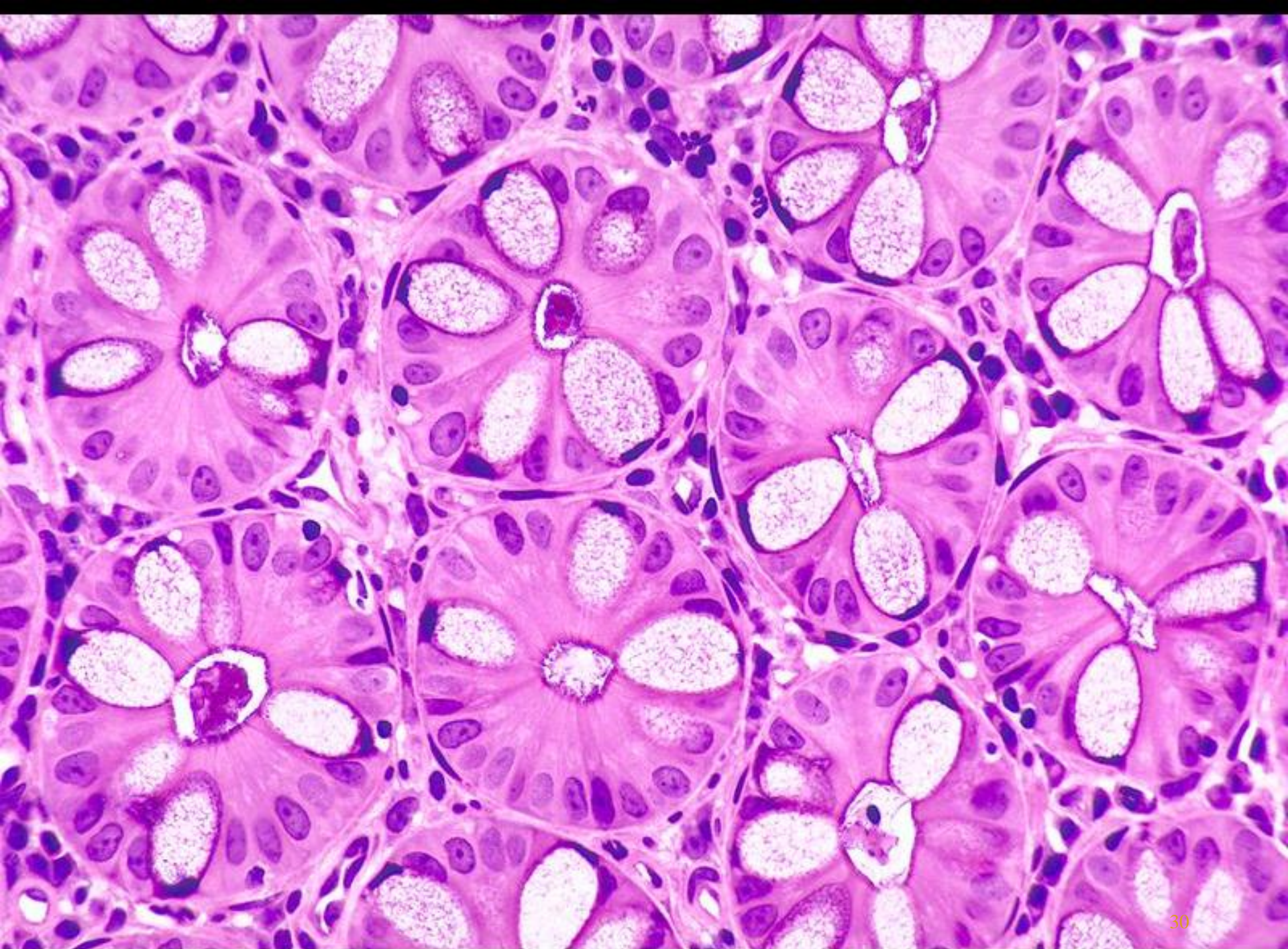


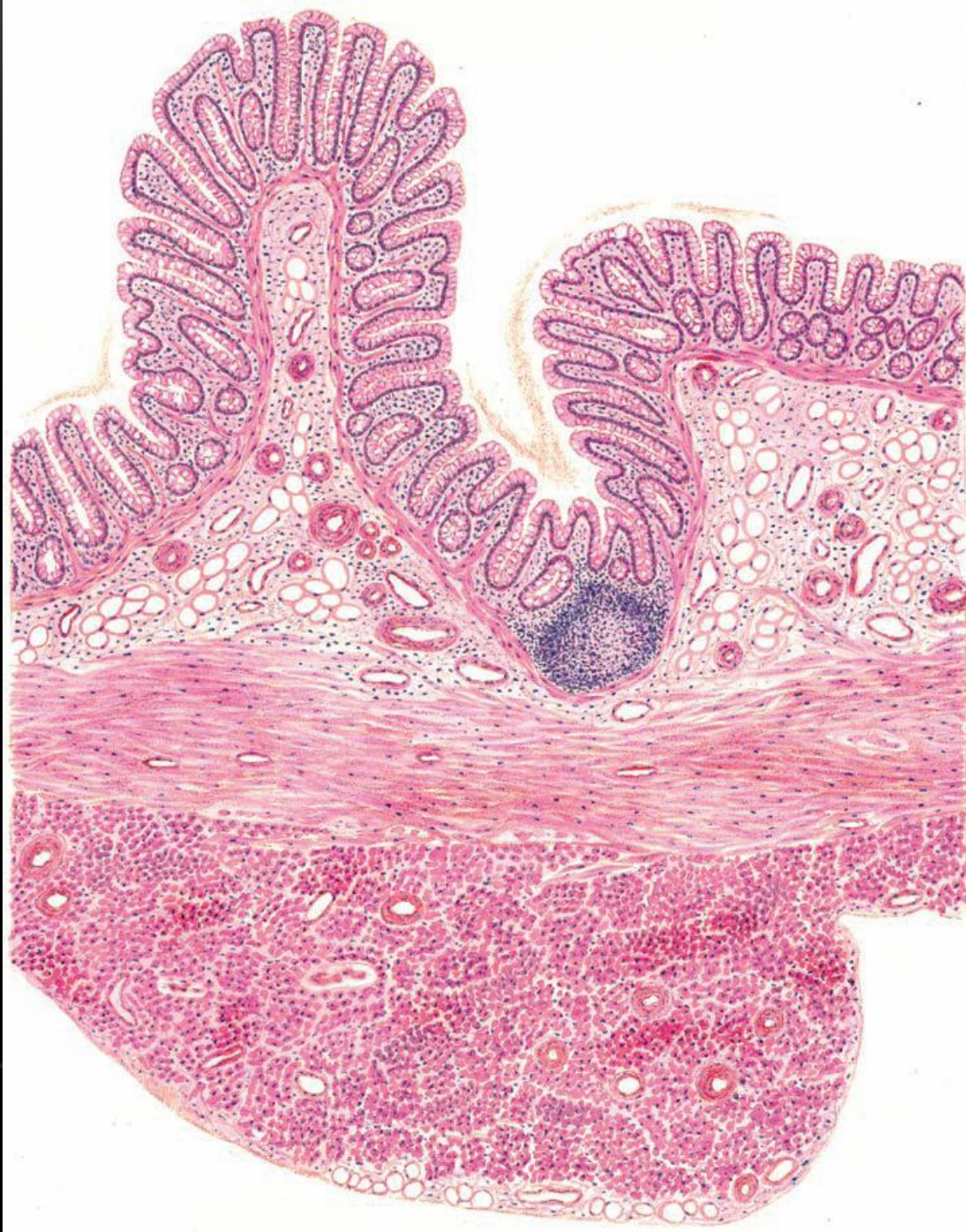




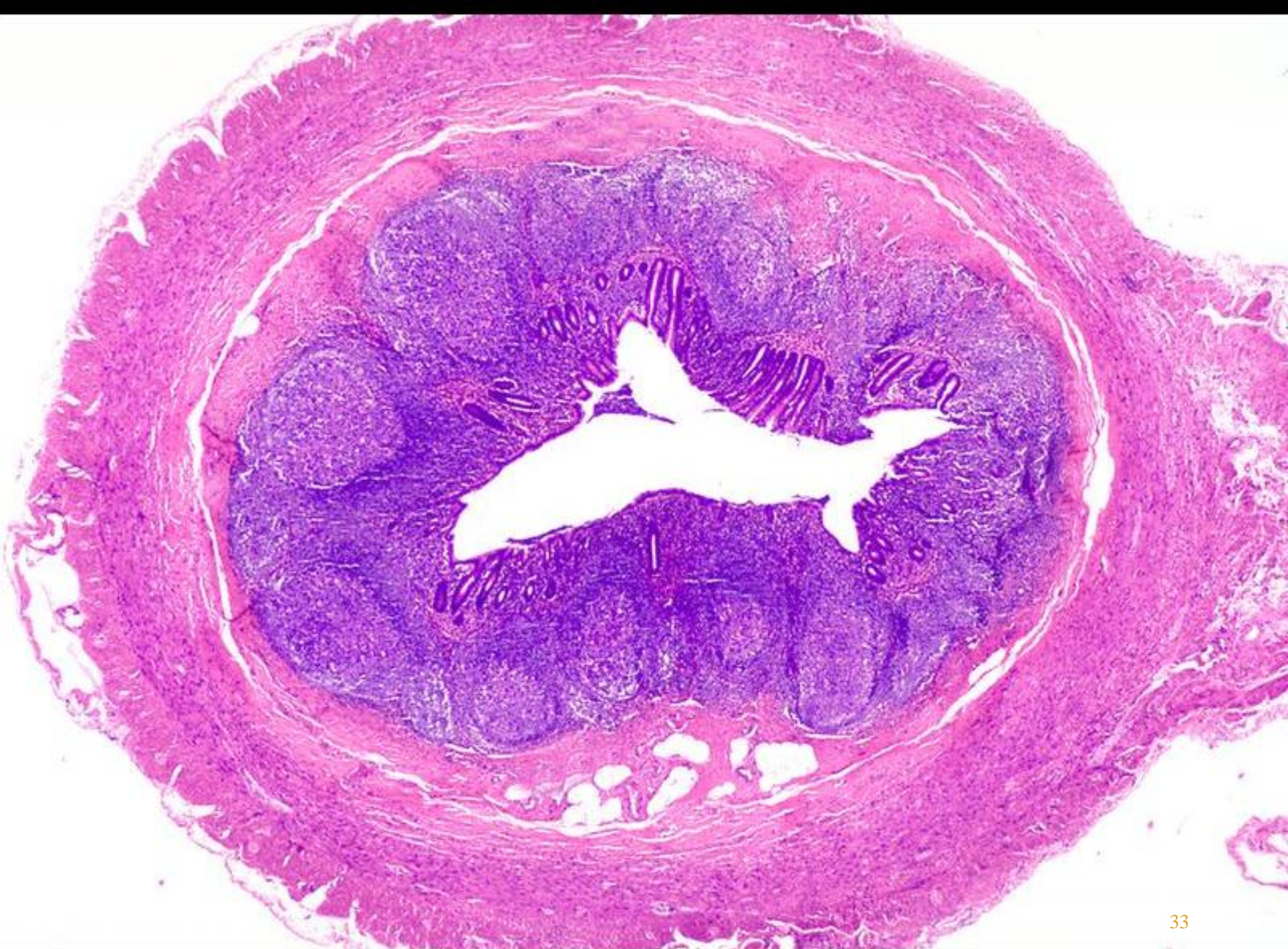
A histological section of intestinal mucosa stained with hematoxylin and eosin (H&E). The image shows several crypts and villi. The crypts are lined by a simple columnar epithelium. Within the crypts, numerous goblet cells are visible, appearing as large, pale, oval-shaped structures. These cells are responsible for the production and secretion of mucus. The nuclei of the epithelial cells are stained blue, while the cytoplasm and surrounding connective tissue are stained pink. The overall structure is organized into a regular, repeating pattern of crypts and villi.

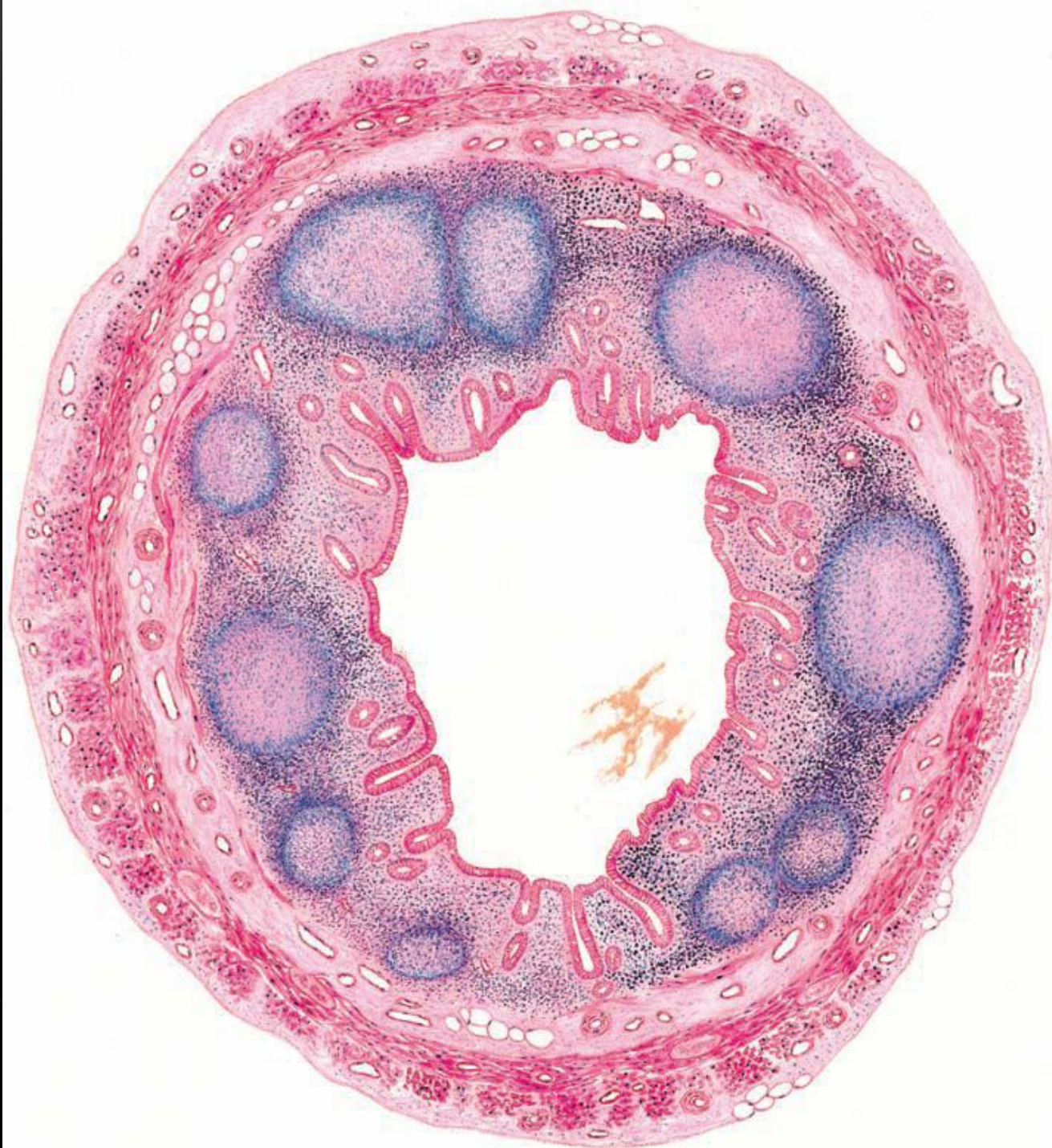
Goblet cells





Vermiform Appendix





Regional differences of small and large intestines

Mucosa

| | Duodenum | Jejunum | ileum | Colon |
|------------------------|-------------------------------------|-----------------------------|--------------------|---|
| Enterocytes | Simple columnar - striate border | Same | Same | Reduced microvilli |
| Goblet | + | ++ | +++ | ++++ |
| Paneth | + | ++++ | +++ | ± |
| DNES | Scattered | Scattered, more numerous | Same as jejunum | Common in appendix, few elsewhere |
| Crypts of Liberkuhn | Very abundant, all cell types | Same | Same | Longer and more closely packed |

Regional differences of small and large intestines

| | Duodenum | Jejunum | ileum | Colon |
|--------------------|--|---------------------|-----------------|---------------------------------|
| Submucosal glands | Brunner's | Absent | Absent | Absent |
| Lymphoid tissue | Diffuse | Increase in nodules | Peyer's patches | Many nodules |
| Plica circularis | ± | ++++ | ++ | Plica semilunaris |
| Muscularis externa | Well developed inner circular and outer longitudinal | Same | Same | Taenia coli |
| Serosa | Serosa at beginning and end | Present | Present | Present anteriorly and on sides |
| Villi | Lowest | Tallest | Medium | absent |