

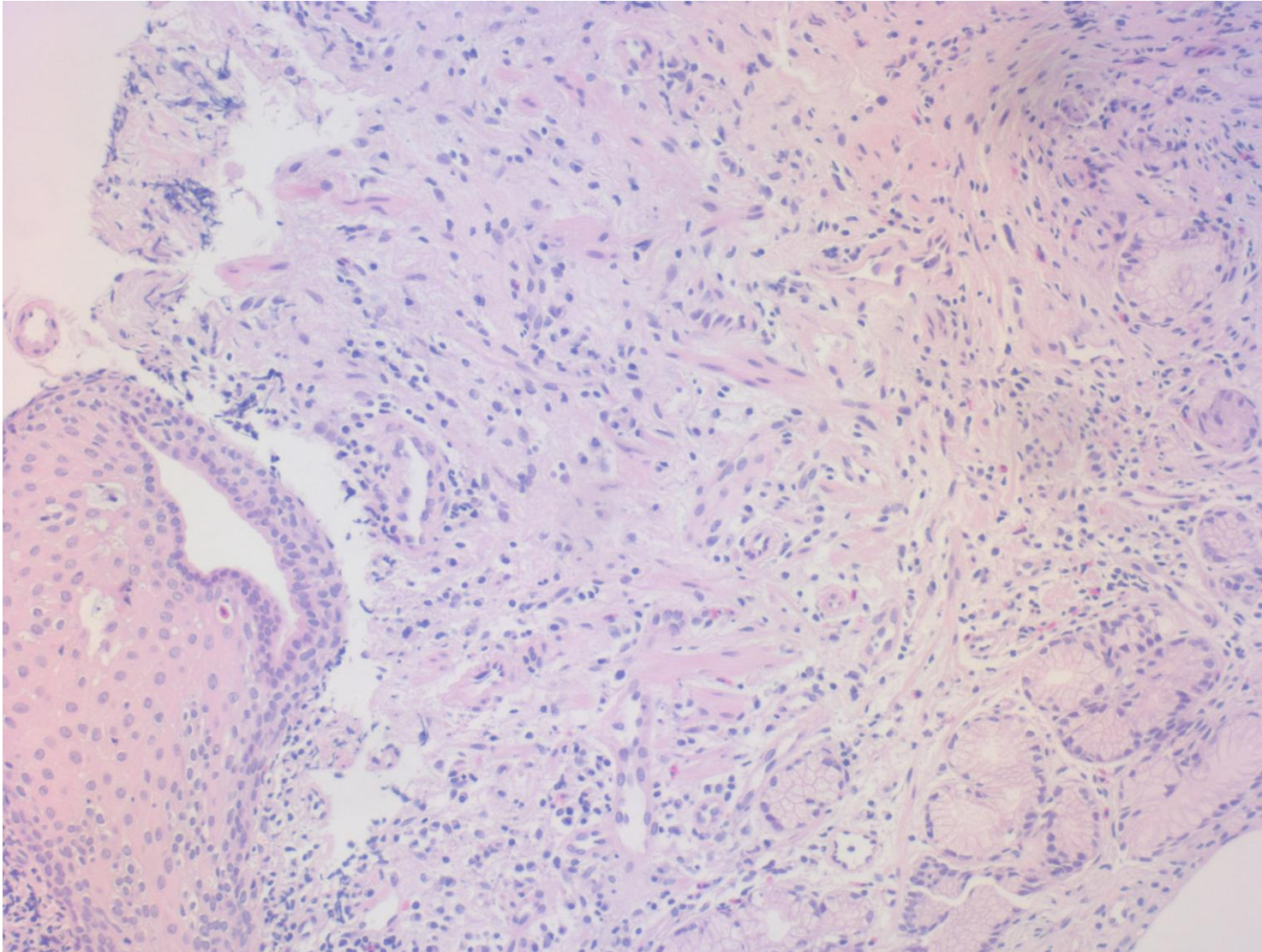
Fibroplasia of the tunica muscularis mucosae in the cardia

The tunica muscularis mucosae plays a crucial role in maintaining the mucosal surface and aiding in the expulsion of glandular contents. The muscularis mucosae is normally thicker in the cardia than in other parts of the stomach and lower esophagus. The thickened muscularis mucosae of the cardia often displays frayed muscle fibers with entrapped glands and lymphoid follicles. Fibroplasia of the muscularis mucosae may hamper its normal function.

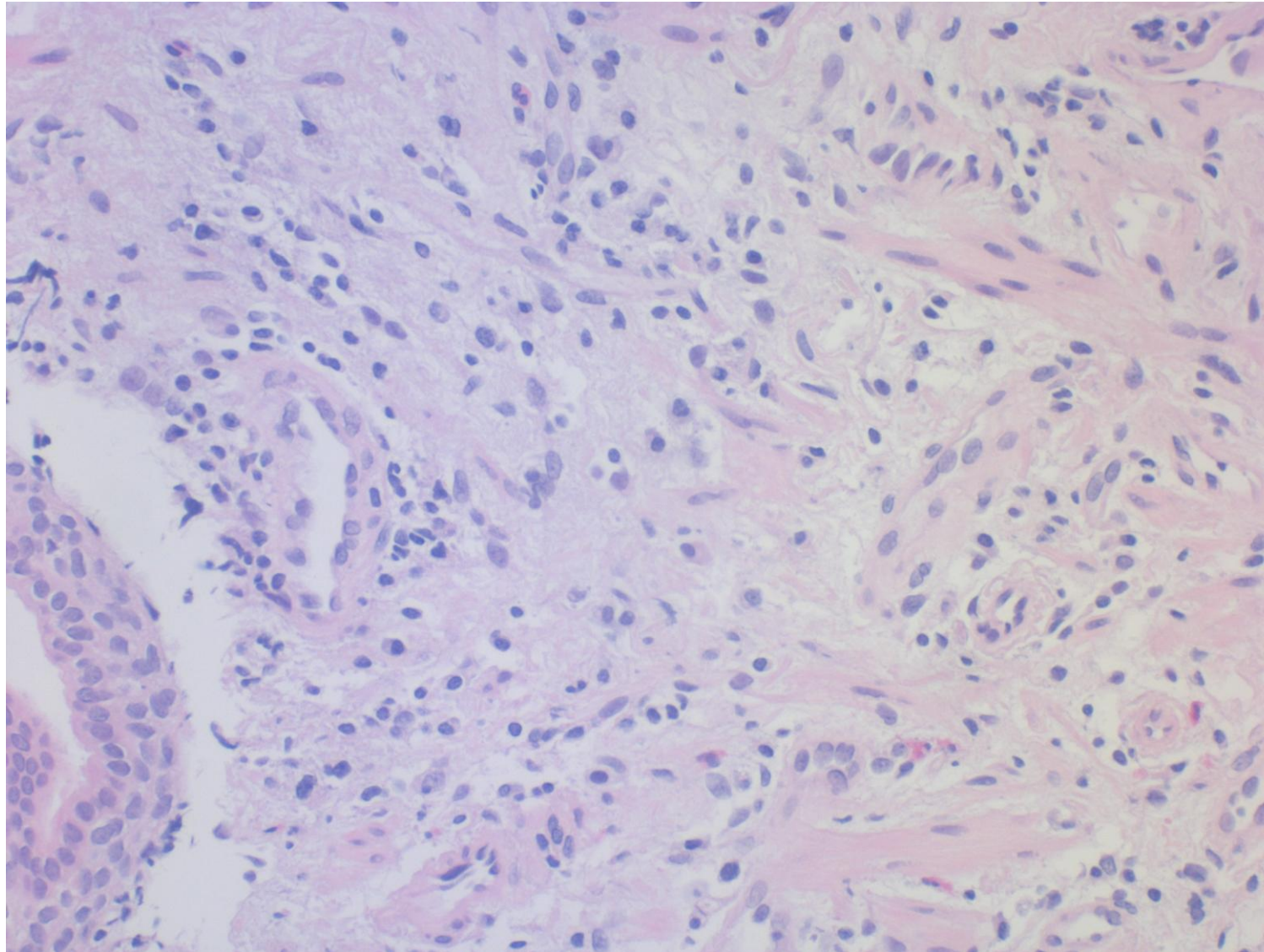
The thickened muscularis mucosae with fibroplasia in biopsy specimen may resemble spindle cell tumors, particularly gastrointestinal stromal tumor. Such an example in an aged patient is presented herein.

Ref.-1: Uchida K, Kamikawa Y. Muscularis mucosae - the forgotten sibling. J Smooth Muscle Res 2007; 43(5): 157-77. doi: 10.1540/jsmr.43.157

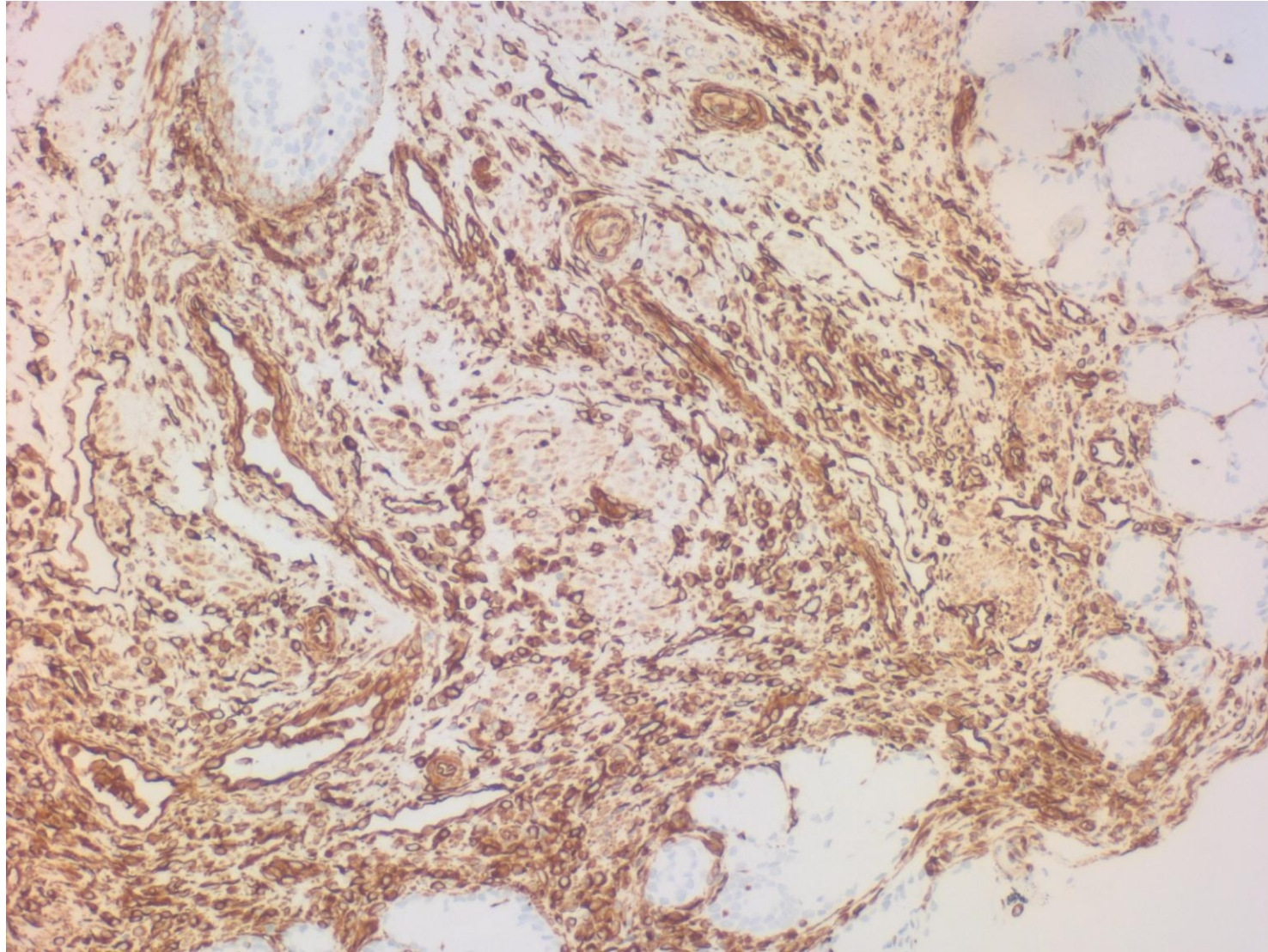
Ref.-2: Huang Q, et al. Marked thickening of muscularis mucosae and submucosa in the gastric cardia: A histopathological study of 110 surgical resection cases. J Digest Dis 2020; 21(4): 205-214. doi: 10.1111/1751-2980.12860



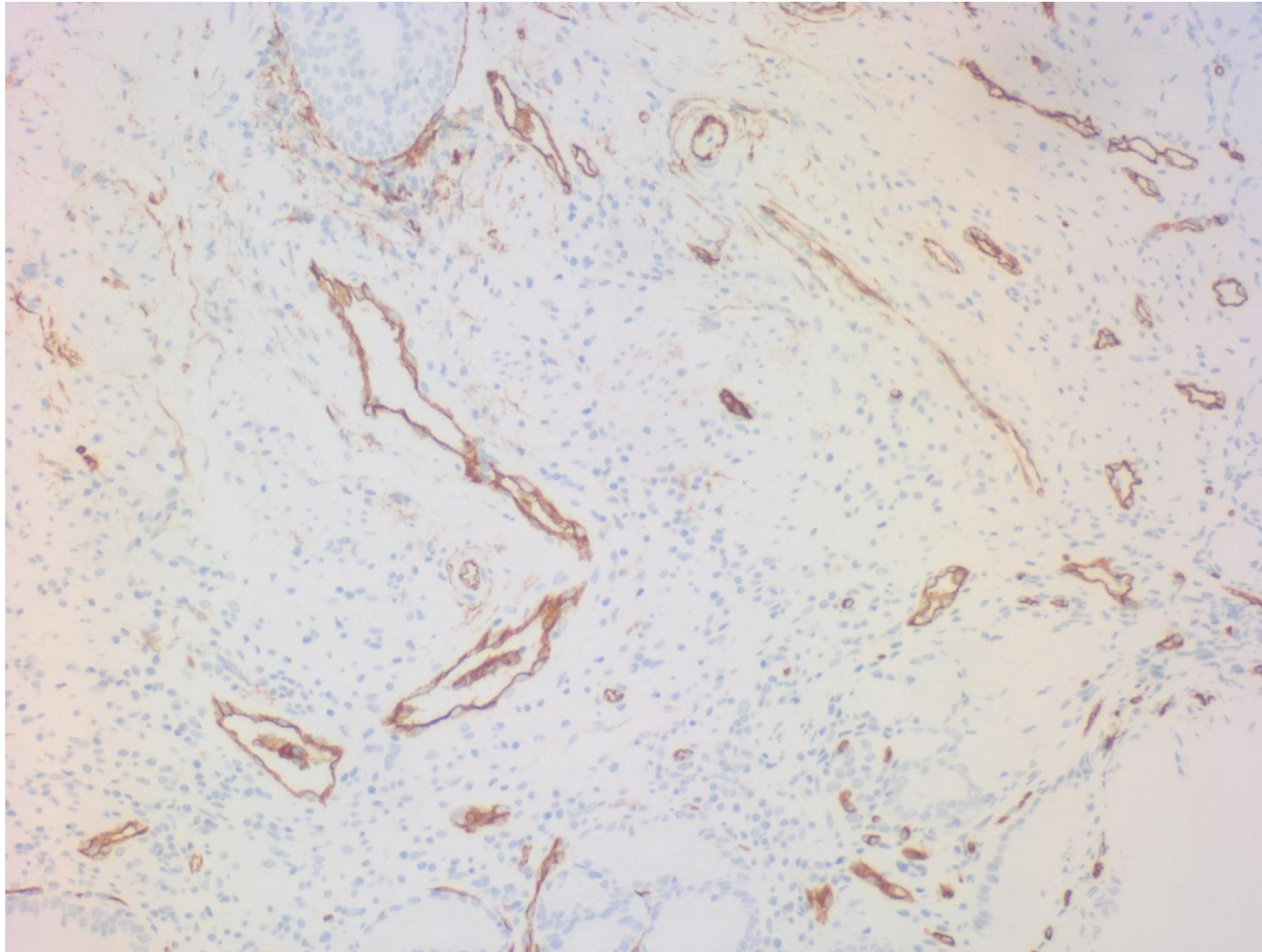
Biopsy taken from the cardia of an 85-year-old male patient. The tunica muscularis mucosae at the squamocolumnar junction is thickened. The spindle cell growth needs the exclusion of the possibility of gastrointestinal stromal tumor (GIST). H&E-1



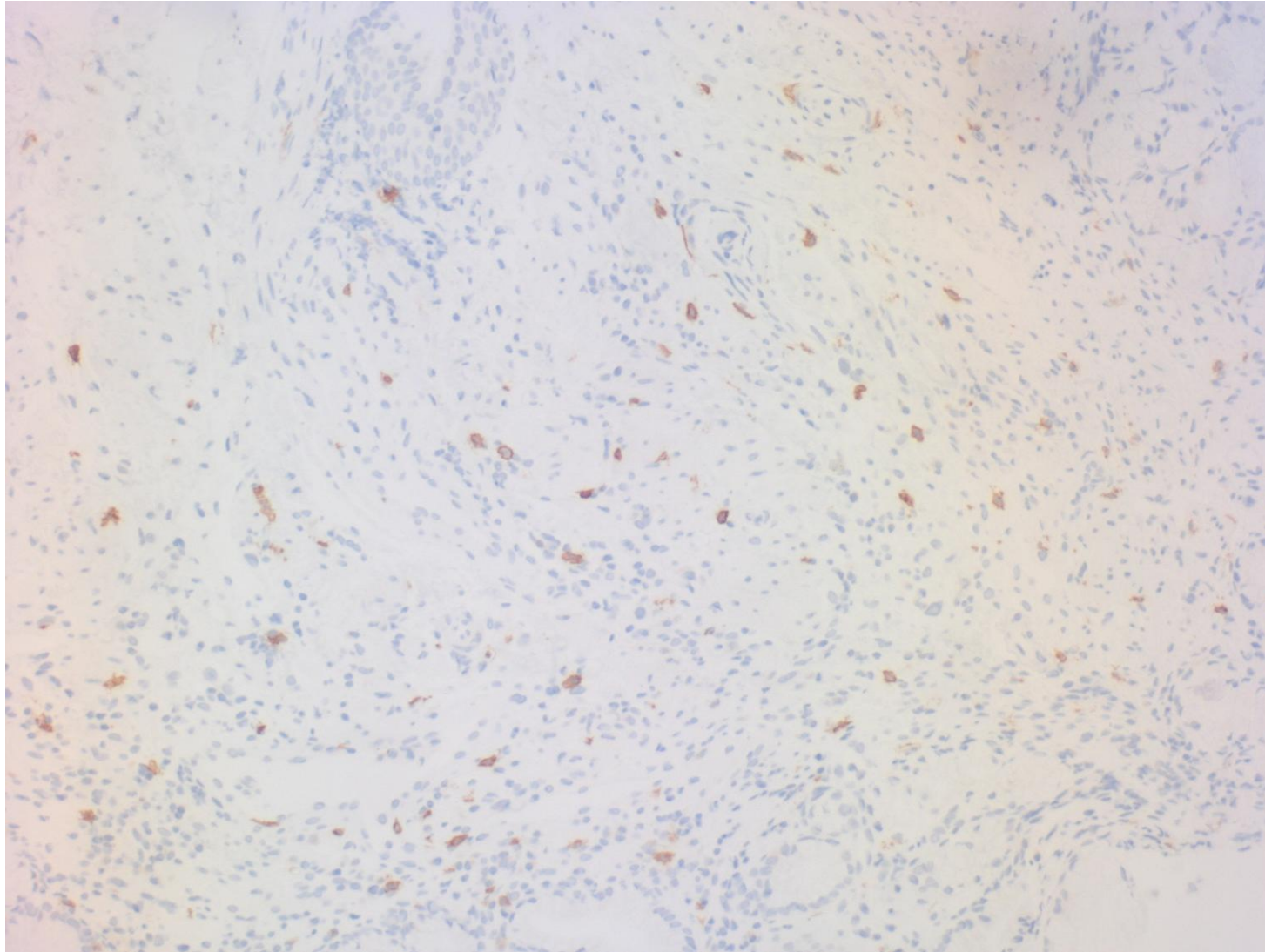
Biopsy taken from the cardia of an 85-year-old male patient. The tunica muscularis mucosae at the squamocolumnar junction is thickened. The spindle cell growth needs the exclusion of the possibility of gastrointestinal stromal tumor (GIST). H&E-2



Biopsy taken from the cardia of an 85-year-old male patient. The tunica muscularis mucosae at the squamocolumnar junction is thickened. The growing spindle cells are strongly immunoreactive for vimentin, indicating fibroplasia instead of smooth muscle hyperplasia. Immunostaining for vimentin



Biopsy taken from the cardia of an 85-year-old male patient. The tunica muscularis mucosae at the squamocolumnar junction is thickened. The growing spindle cells are negative for CD34. Endothelial cells are labeled for CD34. The possibility of GIST can be excluded. Immunostaining for CD34



Biopsy taken from the cardia of an 85-year-old male patient. The tunica muscularis mucosae at the squamocolumnar junction is thickened. The growing spindle cells are negative for c-kit (CD117). Mast cells are labeled for CD117. The possibility of GIST can be excluded. Immunostaining for c-kit (CD117)