

Learning Objectives

- Metastatic disease to the stomach is rare and can present with nonspecific gastrointestinal symptoms
- Development of this finding portends a poor prognosis
- Management is treatment of the primary malignancy and palliative direct intervention if local complications occur

Case Presentation

A 75-year-old female with a past medical history of adenocarcinoma of the lung on carboplatin, pemetrexed, and pembrolizumab with known metastases to the brain and chest wall, gastroesophageal reflux disease, and prior

esophageal ring treated with dilation presented for frequent falls. During this hospitalization, the patient endorsed worsened dysphagia and solid food regurgitations. Barium swallow demonstrated delayed esophageal emptying and the test ended early due to patient discomfort. Given these findings and her history of dilation, gastroenterology was consulted. Upper endoscopy showed a non-obstructing Schatzki ring that was dilated to 20mm with a balloon dilator. An incidental single 9mm nodule in the gastric fundus was biopsied (Figure 1). Pathology reported moderately to poorly differentiated adenocarcinoma without immunohistochemical (IHC) evidence of microsatellite instability. There was no evidence of intestinal metaplasia or dysplasia in the overlying gastric epithelium. The IHC stains from the sample had findings similar to those of prior biopsies of the lung (Figure 2, Figure 3). After chemo-immunotherapy and radiotherapy, her metastatic masses improved on follow-up imaging.

Discussion

GI tract metastasis from lung adenocarcinoma is rare, 0.5% to 10% of cases; gastric metastasis is rarer, 1.7-3.4%, as the intestines are the more favored targets. Its rarity and lack of clinical symptoms or imaging findings until substantial growth makes detection difficult. In one study, only 2 of 16 gastric metastasis cases were diagnosed before autopsy despite adequate guideline based metastatic workup. Upper endoscopy can identify gastric metastasis earlier, provide key staging information, and prevent hemorrhage or perforation - respectively seen in 53% and 14% of gastric metastasis cases. Clinicians must have increased suspicion for gastric metastasis even when primary malignancy does not commonly go to the stomach or when there are no symptoms. Even incidental findings of gastric metastasis from routine upper endoscopy may be valuable.

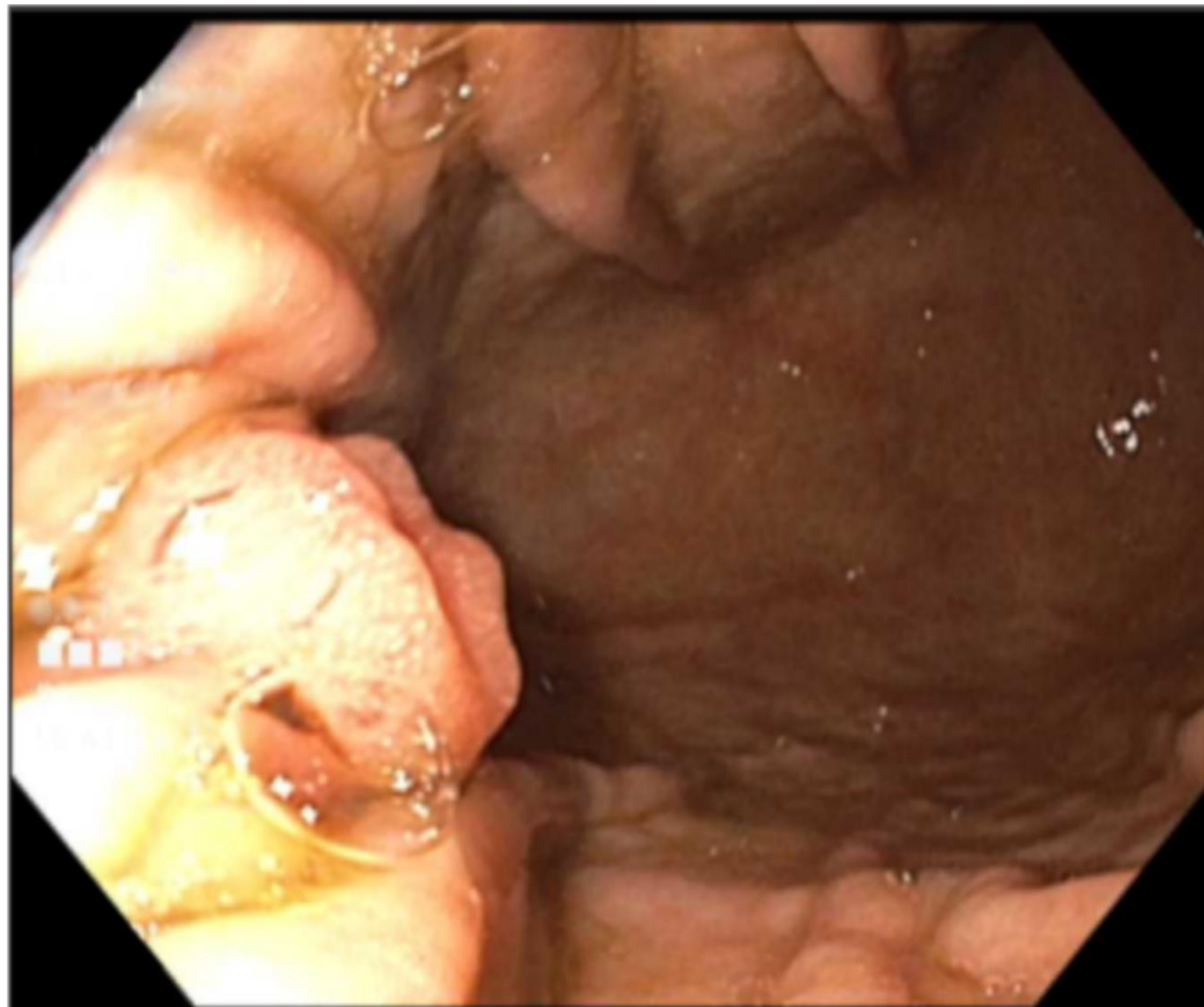


Figure 1. Endoscopic view of the incidentally found gastric mass in the fundus.

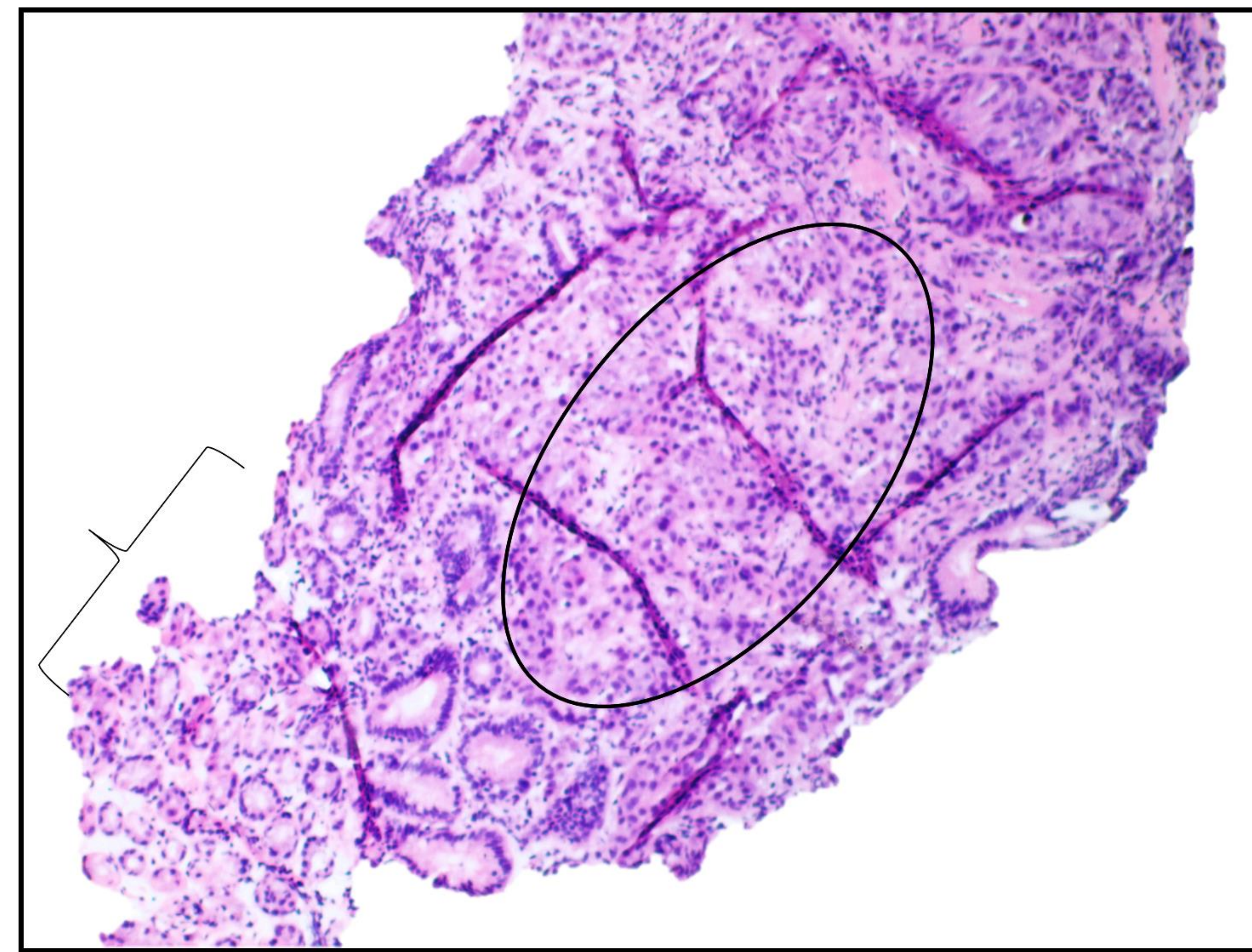


Figure 2. Superficial gastric antral/oxynitic mucosa (bracket) with sheets of pleomorphic cells within the lamina propria (within the round box).

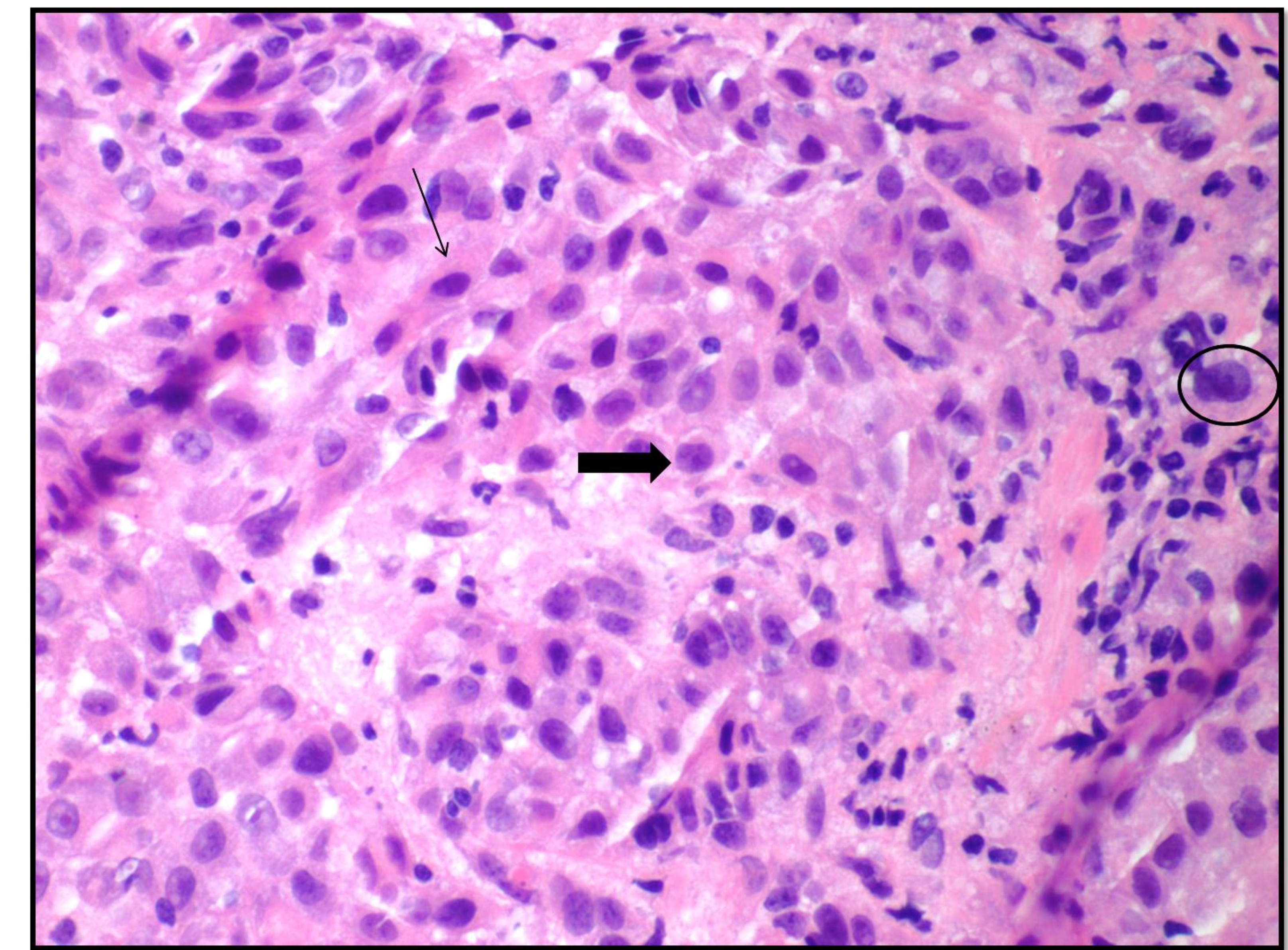


Figure 3. High power of the sheets of large cells seen in the lamina propria with eosinophilic cytoplasm (thin arrow), high nuclear to cytoplasmic ratio (thick arrow) and pleomorphism.