

Introduction

- According to the American Cancer Society, colorectal cancer is the third leading cause of cancer-related deaths in men and in women, although the death rate continues to decrease due to the increased rate of colon cancer screening.
- Non-invasive colon cancer screening is continuing to become more prominent in preventative medicine with Cologuard noting a sensitivity of 92% for colorectal cancer (CRC) at specificity of 87% for negative samples confirmed by colonoscopy.

Case Presentation

- A 74-year-old woman with past medical history of invasive ductal carcinoma of the right breast s/p lumpectomy and chemoradiation therapy, Grave's disease, and former smoker presents for an annual health maintenance visit.
- Of note, the patient's last colonoscopy was 12 years ago and unremarkable. Due to her age and previous benign screenings, her primary care physician opted for Cologuard for continued colorectal cancer screening, which returned positive.
- At this examination, the patient complained of mild reflux disease symptoms. The patient stated her appetite was normal and denied weight loss.
- Physical exam was unremarkable. Due to her mild reflux symptoms and positive Cologuard, her primary care physician prompted her to see a gastroenterologist for evaluation.
- The gastroenterologist performed a colonoscopy and an endoscopy (EGD) due to the patient's symptoms and Cologuard results. The colonoscopy revealed a solitary diminutive polyp. However, the EGD demonstrated a near circumferential adenomatous lesion in the first portion of the duodenum.

Images

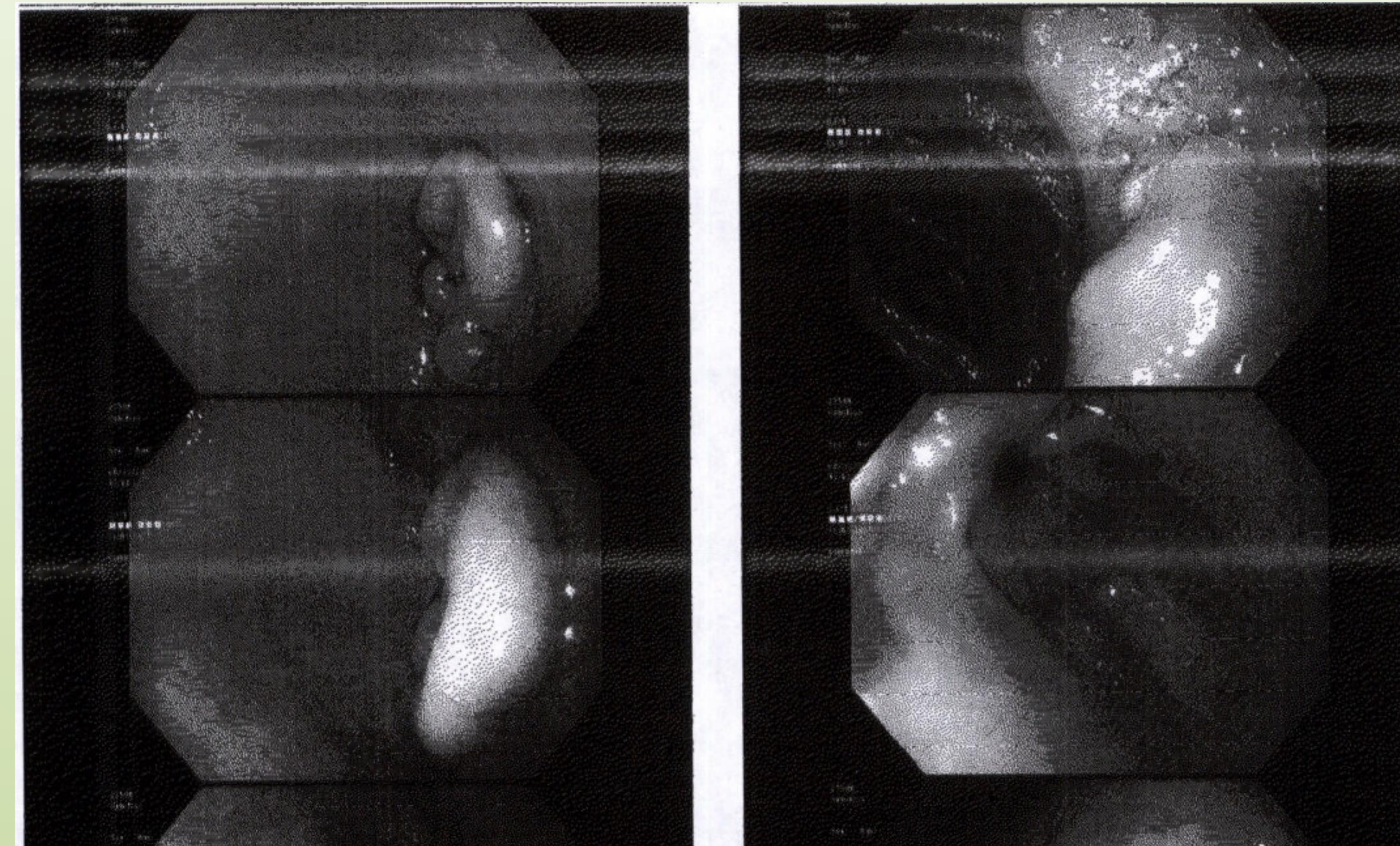


Figure 1. Duodenal mass found on endoscopic evaluation.

Management

- Due to the size and extent of the lesion, endoscopic resection was not an option. Instead, a biopsy was performed and sent to pathology for evaluation.
- The pathology evaluation revealed that the duodenal mass was 1.8 cm well differentiated duodenal adenocarcinoma with invasion into the submucosa. The results prompted further imaging to reveal the extent of the mass and referral to a general surgery for surgical evaluation.
- Due to the pathology results, endoscopic evaluation, and imaging, the general surgeon opted for surgical resection.
- The first portion of the duodenum was dissected free of the surrounding tissues, which revealed a palpable adenoma that was not close to the pyloric region. The adenoma was large, firm, and extended beyond the first portion of the duodenum. The distal edge of adenoma was well into the second portion.
- Ultimately, based on the anatomy of the patient and the mass, the surgeon opted for pylorus preserving pancreaticoduodenectomy.

Discussion

- Cologuard is an FDA approved form of colon cancer screening that tests for blood and atypical DNA within stool; it is a non-invasive first line form of screening for colon cancer that is recommended yearly. Following any abnormal results with this initial screening, it is recommended that the patient undergo a colonoscopy.
- There is minimal literature regarding Cologuard and small bowel carcinomas. As such, this finding makes this a particularly unique case and raises the possibility for future study of Cologuard's ability to be expanded to detection of carcinoma of the small bowel.

