

Breast Cancer with Synchronous Endoluminal Upper and Lower GI Metastases

Tiberiu G. Moga MD¹ and Kevin Robillard, MD²

¹Division of Gastroenterology, Hepatology and Nutrition, Jacobs School of Medicine and Biomedical Sciences, University at Buffalo, Buffalo, NY, USA

²Department of Gastroenterology, Roswell Park Comprehensive Cancer Center, Buffalo, NY, USA



Introduction

Breast cancer is the most common cancer of women and spreads commonly to organs such as the lungs, bones, brain and liver. We present a case of a 61 year-old woman who had isolated upper and lower GI endoluminal metastases from a primary breast lobular carcinoma in situ (LCIS) lesion.

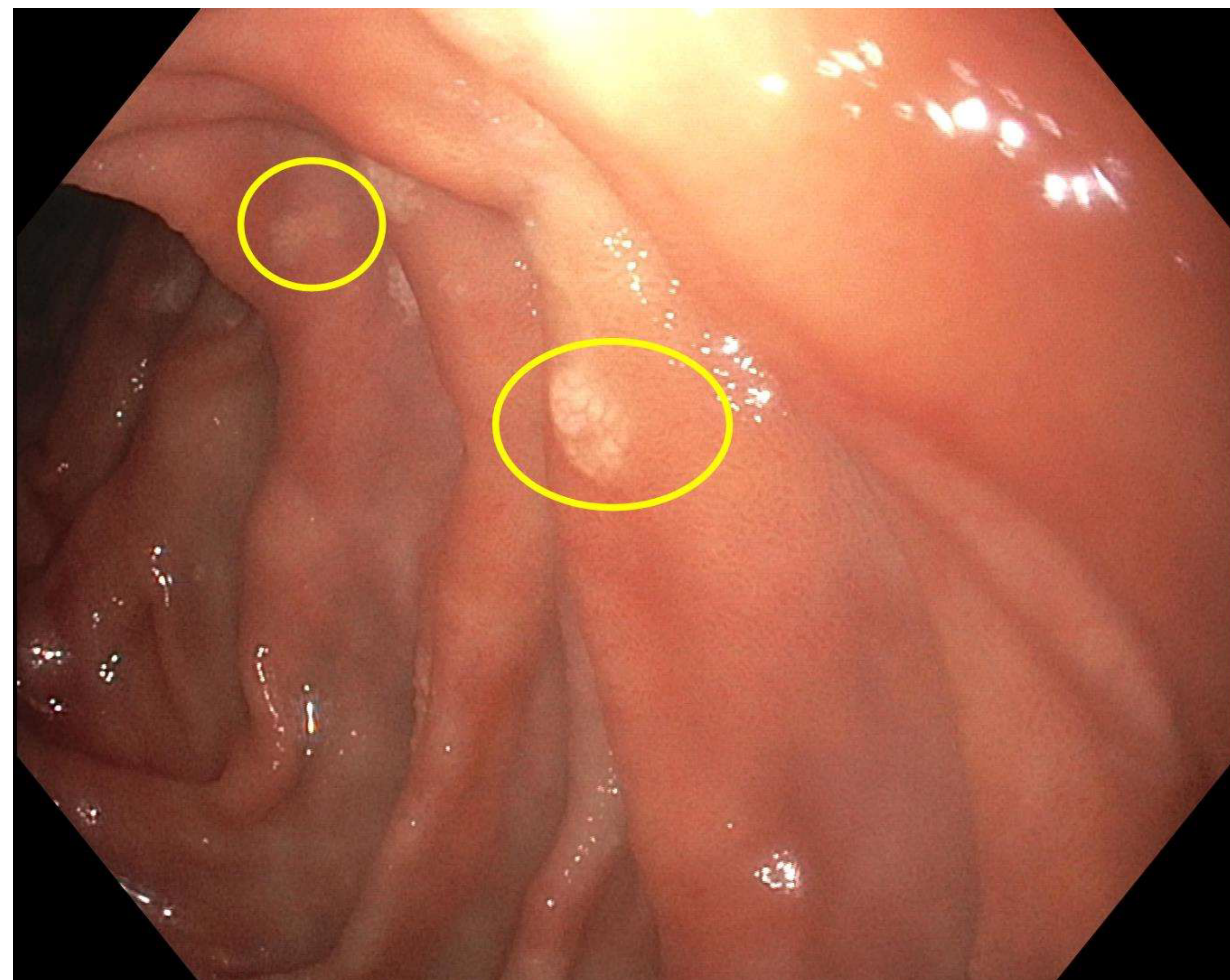


Figure 1: EGD image showing metastatic deposits (circled in yellow) in duodenum under high-definition white-light endoscopy.

Case Presentation

A 61 year-old woman underwent screening mammogram that demonstrated focal asymmetry in the right upper outer quadrant. Breast US showed a BIRADS-4 lesion. Nodal biopsy was positive for Pleiomorphic LCIS Nuclear Grade 2 without invasive component. She then had lumpectomy. The LCIS was 0.1cm from the margin without invasive carcinoma present. She started raloxifene and underwent surveillance MRI and mammogram at regular intervals. Two years after diagnosis, she had a screening colonoscopy that showed a single hepatic flexure polyp. Pathology showed poorly-differentiated metastatic adenocarcinoma (GATA3+, CK+, ER weakly positive 2-5%, CK20-, TTF1-, PAX8- and CD56-), suggesting breast cancer origin. CT chest/abdomen/pelvis, bone scan, CT brain, breast MRI and PET scan were all negative for apparent metastatic disease. She then started letrozole and pablociclib. Repeat colonoscopy after 6 months did not show any change in the lesion. EGD was performed 3 years after first diagnosis and discovered white patches in the stomach and duodenum (Figures 1-3). Biopsies showed metastatic adenocarcinoma of breast origin.

She continued letrozole and pablociclib. Serial CT scans and bone scans remained negative for metastatic disease. Surveillance EGD was repeated every 6 months and showed gastric and duodenal lesions that were biopsy-proven metastatic breast cancer. The lesions remained stable on treatment over a follow-up period of more than 3 years.

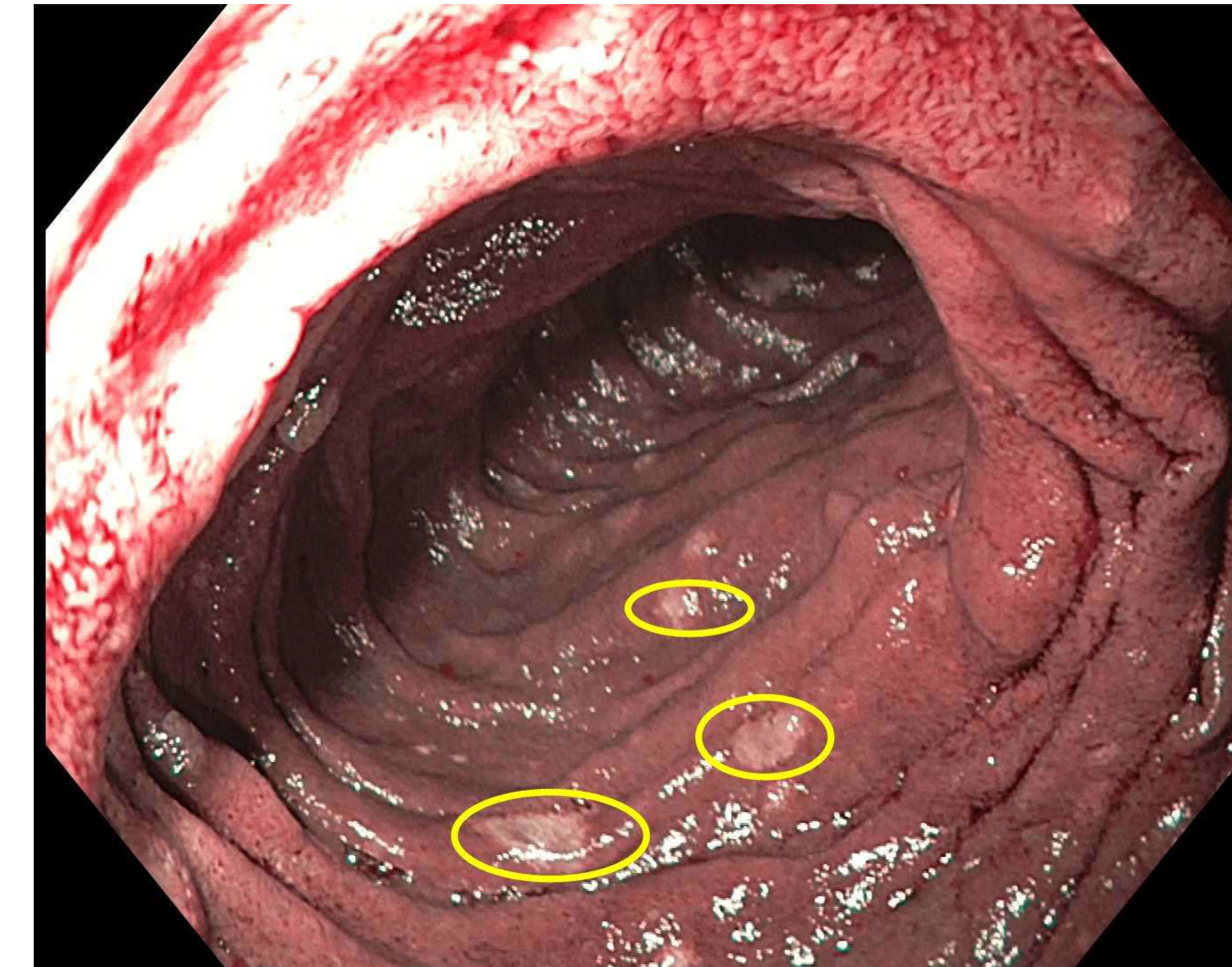


Figure 2: EGD image showing metastatic deposits (circled in yellow) in duodenum under narrow-band imaging.

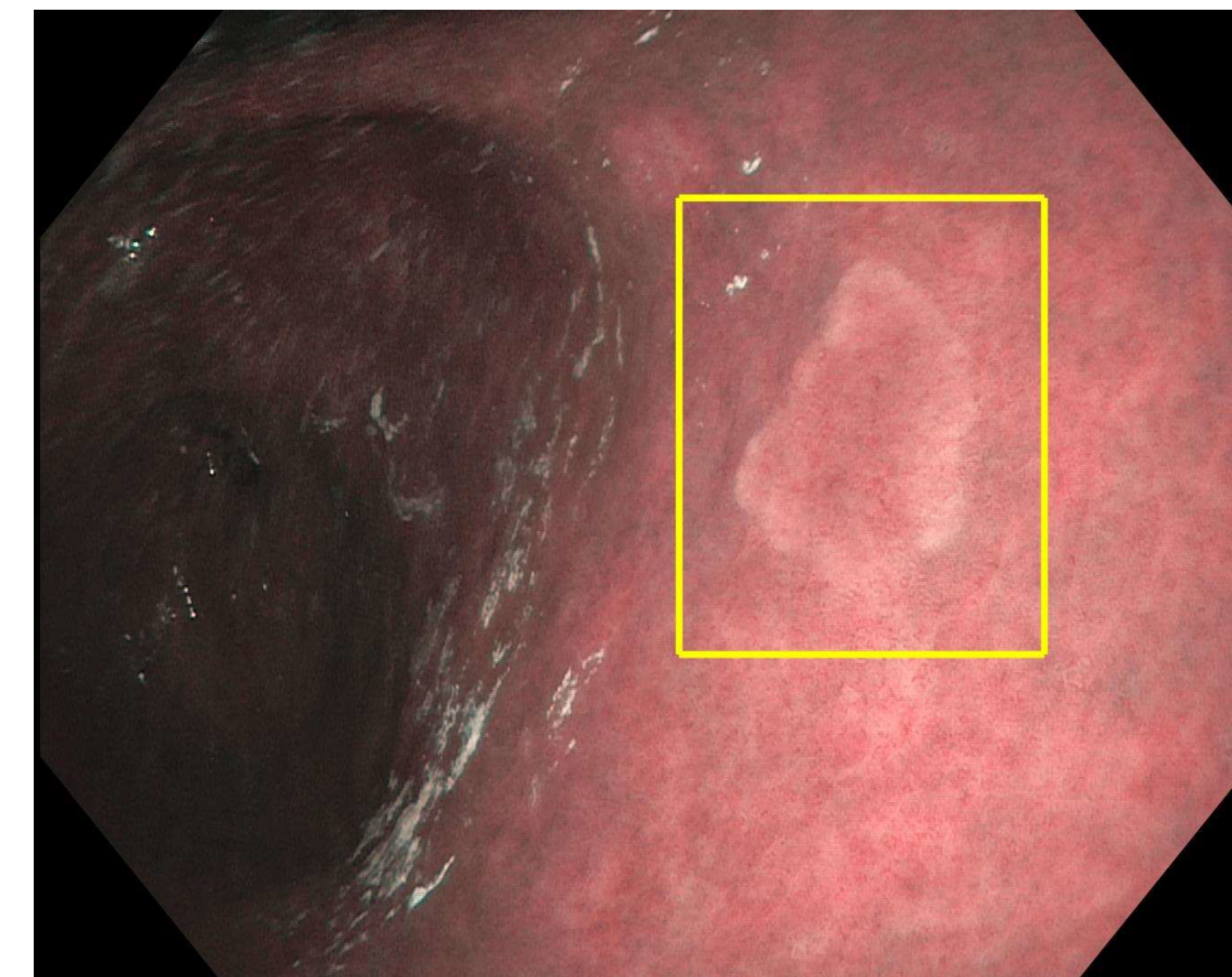


Figure 3: EGD image showing metastatic deposit (yellow box) in the pre-pyloric stomach under narrow-band imaging.

Discussion

Breast cancer is the most common cancer affecting women and is also the second most common cause of cancer death in women. Metastases to the gastrointestinal tract are rarely seen in clinical practice and when these are present, the stomach is the most common site of metastasis. Most patients (81%) with endoluminal GI metastases usually have other apparent metastatic disease. Isolated synchronous endoluminal GI metastases of both the small and large bowel are very rare with only one other case identified in the literature. Breast cancer with gastric metastases has a median survival of 24-36 months. Our patient survived and had stable disease for more than 3 years.

References

1. Nazareno J, Taves D, Preiksaitis HG. Metastatic breast cancer to the gastrointestinal tract: a case series and review of the literature. *World J Gastroenterol.* 2006;12(38):6219-6224.
2. Ambroggi M, Stroppa EM, Mordenti P, et al. Metastatic breast cancer to the gastrointestinal tract: report of five cases and review of the literature. *Int J Breast Cancer.* 2012;2012:439023.
3. Kaneko Y, Koi Y, Kajitani K, Ohara M, Daimaru Y. Asymptomatic solitary metastasis to the stomach from breast cancer: A case report. *Mol Clin Oncol.* 2020;13(6):75.
4. Eo WK. Breast cancer metastasis to the stomach resembling early gastric cancer. *Cancer Res Treat.* 2008;40(4):207-210.
5. D'Angelo F, Rampini A, Cardella S, et al. Breast cancer metastasis to the stomach. *Journal of Cancer Metastasis and Treatment.* 2019;5(30):1-18.
6. Liu M, Zhang L, Guo L, Lv J, Shi W, Liu B. Intestinal metastasis from breast invasive ductal carcinoma after a long latency: case report and literature review. *Onco Targets Ther.* 2018;11:8599-8603.
7. Fousekis FS, Tepelenis K, Stefanou SK, et al. Gastric metastasis from breast cancer presenting as dysphagia. *J Surg Case Rep.* 2022;2022(3):rjac080.
8. Anbarasu A, Iyer MS, Mahadevan P, et al. Synchronous Small and Large Bowel Metastasis from Lobular Carcinoma of the Breast: Immunohistochemistry is the Key to Diagnosis. *ACS Case Reviews in Surgery.* 2018;2(2):24-28.