Metastatic Breast Carcinoma Presenting as Gastric Outlet Obstruction

Shefali Amin, DO, MSEd[1], Anish Paudel, MD[1], Hira Hanif, MD[1], Aamir Shahzad, MD[1], Robert Libera, DO[1], John F. Altomare, MD[1]
[1]Reading Tower Health, Reading, PA

Introduction

Gastric outlet obstruction has many causes, including peptic ulcer disease, gastroparesis, and malignancy, typically primary gastric or pancreatic adenocarcinoma. It is uncommon for breast cancer to metastasize to the gastrointestinal tract as it often spreads to the bones, lungs, brain, and liver. Here we present a rare case of gastric outlet obstruction secondary to metastatic breast carcinoma.

Past Medical History

- Metastatic breast cancer to bone s/p mastectomy and chemoradiation
- Hypertension
- Chronic kidney disease
- Mild asthma

Home Medications

- Abemaciclib 100mg bid
- Aspirin 81mg daily
- Gabapentin 300mg tid
- Hydrocodone-acetaminophen prn
- Albuterol prn

Social History

- Alcohol use socially
- Former 30 pack year tobacco use

Family History

- Siblings with cancer

Case Presentation

The patient was a 67-year-old female with a history of hormone-positive breast cancer diagnosed ten years ago, post bilateral mastectomy and chemoradiation. She had known osseous metastatic involvement for the last five years maintained on Abemaciclib. She presented to the hospital for progressive nausea and coffee ground emesis over the last several weeks. Symptoms were associated with new onset heartburn and dysphagia to solid foods. She was hemodynamically stable upon presentation with a hemoglobin of 10.9 (N 12.0-16.0) g/dL which was her baseline. CT chest and abdomen with contrast showed new esophagitis, severe distal gastritis likely resulting in a partial outlet obstruction, and diffuse osseous metastatic disease. Abemaciclib was discontinued given its known side effect of causing mucositis. The patient underwent EGD, which showed severely ulcerated esophagitis, a large amount of retained food, and abnormal appearing diffusely thickened gastric antral folds causing luminal narrowing and narrowing of the pylorus, limiting further advancement of the scope into the duodenum. Biopsies taken during the procedure revealed metastatic breast carcinoma. The patient required placement of a Gastrostomy-Jejunostomy tube with improvement in her symptoms. She was briefly started on Abraxane chemotherapy but ultimately transitioned to home hospice.

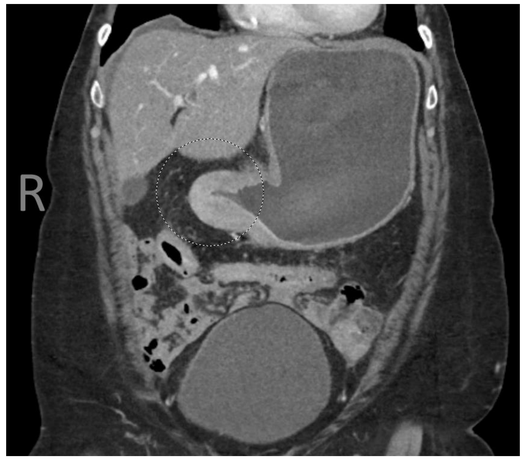

Figure 1. CT abdomen showing severe distal gastritis resulting in a partial outlet obstruction (circled)

Vitals

99.4 F | 100bpm | 18 breaths/min
166/84 mmHg | 97% O2 on room air

Laboratory Findings

6.8	10.9 / 32.3	299

138	102	17	83
3.6	16.2	1.23	

Imaging

CT chest/abd with contrast

- New esophagitis
- Severe distal gastritis resulting in partial outlet obstruction
- Diffuse osseous metastatic disease

Discussion

The gastric antrum is a rare site for breast cancer metastasis, having been identified in only 0.3% of all gastric resections.

Moreover, the mean time interval to gastric metastasis is approximately five years; however it presented in this patient more than ten years after her initial diagnosis.

Although some of her initial symptoms were attributable to the side effects of chemotherapy, the EGD with biopsy was diagnostic in this case.

Contact

Shefali Amin
Reading Tower Health
shefali.amin@towerhealth.org

References

Ogawa M, Namikawa T, Oki T, Iwabu J, Munekage M, Maeda H, Tamura T, Yatabe T, Kitagawa H, Dabanaka K, Sugimoto T, Kobayashi M, Hanazaki K. Gastric outlet obstruction caused by metastatic tumor of the stomach originating from primary breast cancer: A case report. Mol Clin Oncol. 2018 Nov;9(5):523-526.
Otjen JP, Iyer RS, Phillips GS, Parisi MT. Usual and unusual causes of pediatric gastric outlet obstruction. Pediatr Radiol. 2012 Jun;42(6):728-37.
Sarkut P, Ozer A, Gulcu B, Ozturk E, Gokgoz S, Ugras N. An extremely rare cause of gastric outlet: breast lobular carcinoma metastases to stomach. Breast J. 2014 May-Jun;20(3):312-3.
Ulmer LL, Cormier L, Jha LK, Singh S, Fisher KW, Hewlett AT. Use of Endoscopic Ultrasound in a Diagnostic Dilemma: Metastatic Breast Cancer to the Stomach. Case Rep Gastrointest Med. 2018 Apr 15;2018:2820352.