Invasive Lobular Carcinoma of the Breast with Gastric Metastases

Stefan Canacevic, MD; Anjali Raj, MD; Brandee Albert, DO

HAMILTON HEALTH CARE SYSTEM

Hamilton Medical Center
Internal Medicine Residency Program

INTRODUCTION

- Gastric metastasis from breast cancer is a rare phenomenon with an incidence rate of approximately 0.3%. It is important to be able to distinguish primary gastric carcinoma from metastasis of other primary malignancies which are infrequently known to metastasize to the stomach. Initial presentations vary and are non-specific – dyspepsia, dysphagia and hematemesis should raise suspicion in the correct clinical context. We present a case of a patient with a prior history of invasive lobular carcinoma status post lumpectomy and radiation therapy 3 years prior undergoing esophagogastroduodenoscopy revealing gastric metastasis from invasive lobular carcinoma.

CASE PRESENTATION

- 82-year-old female with a history of decompensated liver cirrhosis secondary to non-alcoholic steatohepatitis, invasive lobular carcinoma of the left breast status post lumpectomy and radiation therapy 3 years prior presented to the emergency department with worsening dysphagia to liquids and abdominal pain with distension. Pertinent labs revealed alkaline phosphatase of 308, AST 132, ALT 63, total bilirubin of 1.1, albumin 2.7 and creatinine of 2.6 (baseline of 1.2). Abdominal ultrasound demonstrated cirrhosis with large amount of perihepatic ascites. EGD was performed revealing diffuse gastritis with a few gastric erosions. The antral area of the stomach was notable for the mucosa taking on a thickening of the folds particularly in the prepyloric antrum. This area was biopsied. A 4mm sessile gastric polyp along the lateral wall/greater curvature of the body of the stomach was identified and biopsied. The duodenum had normal appearing mucosa. Biopsy results of the gastric polyp and thickened antral folds were consistent with metastatic lobular carcinoma of the breast which were CK7 and GATA3 positive by immunohistochemistry. The tumor was found to be ER+, PR-, HER2-.

DIAGNOSTICS

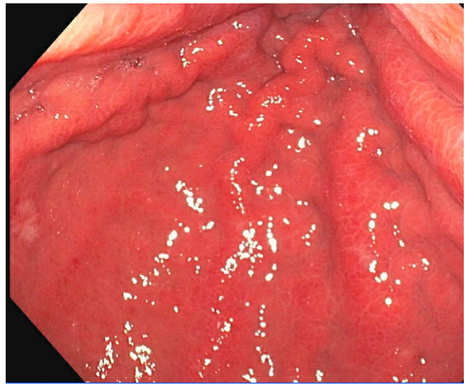

Figure 1: Gastritis and thickened antral folds

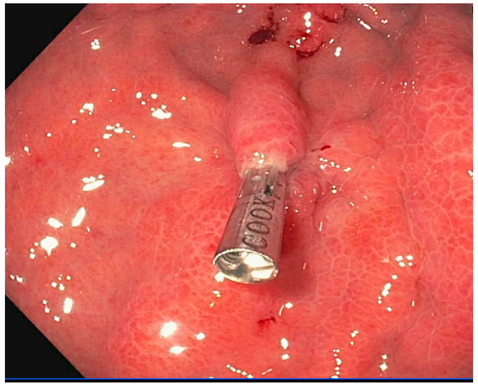

Figure 2: Post hemostatic therapy at biopsy site of thickened antral folds

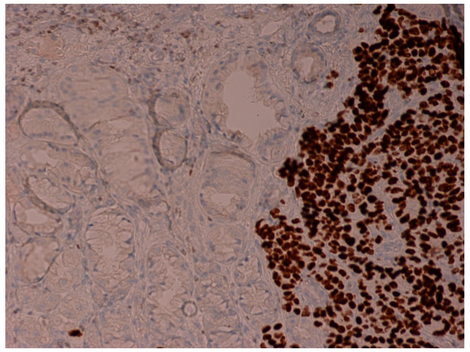

Figure 3: CK7 positive immunohistochemical staining

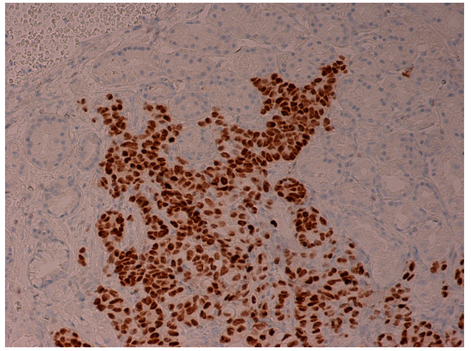

Figure 4: GATA-3 positive immunohistochemical staining

DISCUSSION

- Breast cancer is the most common malignancy in women in the United States with the exception of skin cancer. Invasive lobular carcinoma commonly metastasizes to bone, lung and liver. There are three theorized pathways by which metastatic spread of breast cancer to the stomach occurs which include: direct tumor invasion, lymphatic and hematogenous dissemination.
- Although gastric metastasis of invasive breast cancer is relatively rare, non-specific gastrointestinal symptoms in any patient with a prior history of breast cancer should raise suspicion. Gastroenterologists should be mindful of subtle changes in mucosal appearance during endoscopic evaluation and consider a biopsy of the area of concern to rule out metastatic breast cancer.
- It would be difficult to discern a primary gastric cancer and a metastatic foci based on gross findings during endoscopy which is why biopsy is the gold standard. Despite taking biopsies, there have been instances that the biopsy itself was not taken deep enough into the mucosal layers causing delays in diagnosis and repeat endoscopies for similar complaints.

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