Gastric Outlet Obstruction from Metastatic Breast Carcinoma 25 Years after Initial Diagnosis: A Mimic of Primary Gastric Carcinoma

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INTRODUCTION

- Breast cancer is the most common cancer in women.
- While bone, lung, liver, and brain are the most common sites of distant metastasis, gastric metastasis is exceedingly rare.
- This case of breast carcinoma metastatic to the stomach occurred 25 years after initial diagnosis- a length of time not previously documented in the literature.

Endoscopic Images

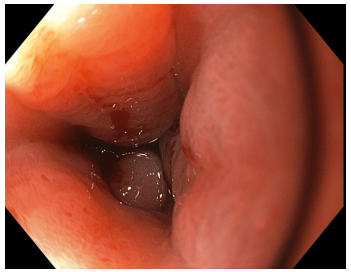


Image 1: shows the gastric outlet obstruction at the level of the antrum.

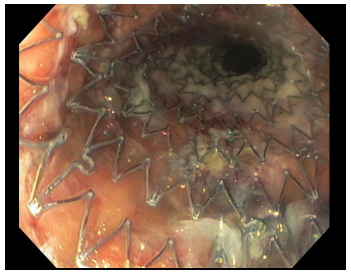


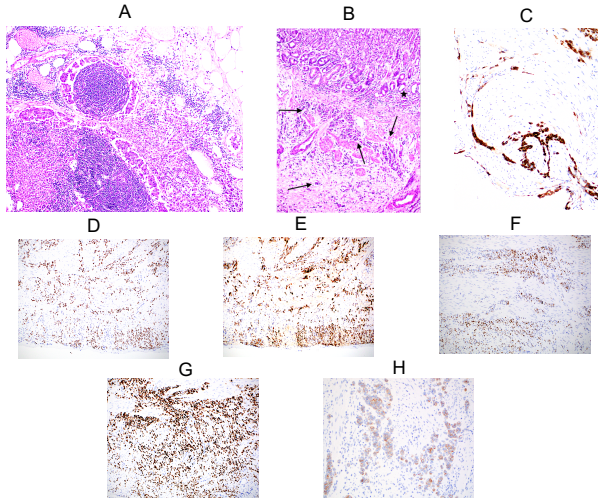
Image 2: shows status post placement of gastric stent for treatment of gastric outlet obstruction.

Images A-H: Histopathological specimens obtained surgically from the patient's stomach. A: (H&E 10X magnification) Breast carcinoma located in the subcapsular space of lymph node. B: (H&E 10X magnification) Poorly cohesive breast carcinoma in the submucosa splitting the muscularis mucosa (arrows) and very focally in the mucosa (star). C: (H&E 20X magnification) Carcinoma in muscularis propria positive for keratin Cam 5.2. D: (10X magnification) Positive staining for GATA3. E: (10X magnification) Positive staining for mammaglobin. F: (10X magnification) Positive for estrogen receptor. G: (10X magnification) Positive for progesterone receptor. H: (20X magnification) Positive for E-Cadherin.

Case Report

- A 71-year-old female with history of breast cancer, diagnosed 25 years prior and treated with mastectomy and adjuvant tamoxifen chemotherapy, was considered disease-free.
- She presented with nausea, vomiting and weight loss.
- CT revealed a gastric mass and subsequent endoscopy revealed circumferential thickening at the antrum.
- A pyloric stent was placed as a bridge to surgery and endoscopic mucosal resection (EMR) specimen revealed poorly hyperchromatic cells with irregular nuclear profiles.
- Surgical pathology from billroth II gastrojejunal reconstruction showed a poorly cohesive carcinoma involving all stomach layers with lymph node metastasis (Images A-H).
- The specimens were negative for makers of primary gastrointestinal or gynecologic malignancy, but was positive for GATA3, mammaglobin, estrogen receptor, progesterone receptor, and E-cadherin supporting a diagnosis of poorly cohesive breast ductal carcinoma.
- The immunoprofile and description matched that of the patient's previous primary breast cancer. With no concurrent primary breast cancer site found, the patient was diagnosed with chronologically late metastasis of breast cancer to the stomach.
- Following this diagnosis, the decision was made to pursue palliative care.

Histopathology



CONCLUSION

- Although EMR was utilized, it had limited diagnostic utility since there were no malignant cells in the mucosa, submucosa, and muscularis mucosa; thus a surgical specimen was required.
- Since breast cancer accounts for over ¼ of gastric metastasis, physicians should have a high level of clinical suspicion.[2]
- Literature review revealed that at 25 years, this is the longest time from initial diagnosis to distant metastasis documented.[3]

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