

Colon Polyp as a rare manifestation of Breast Cancer Metastasis

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Introduction

Breast cancer is the most frequently diagnosed cause of cancer in women worldwide, with distant metastases being the leading cause of death among these women. While metastasis to the brain, bones, lungs, liver and adrenal glands is usually seen, metastasis to the gastrointestinal tract is a rare pathology- with colorectal involvement being an even rarer entity. Colorectal metastasis can mimic a benign colon polyp and should be considered during the colonoscopy in patients with history of breast cancer.

Case Presentation

Patient is a 56-year-old female presented to ER with chief complaints of breast rash. Her past medical history was positive for schizophrenia. On examination a large hard mass in the supra-lateral quadrant of her left breast with diffuse lymphadenopathy in the cervical, axillary, and inguinal regions were noted. Given her increased risk for tuberculosis transmission for homelessness, PPD obtained, which was positive and was treated for latent tuberculosis. Biopsy of the left breast lesion revealed invasive ductal carcinoma which was ER/PR+ and HER2 (-) on immunohistology. PET/CT was done, which revealed diffuse bone metastasis. Contrast head CT and Contrast MRI Brain showed isolated cerebellar brain lesion suggestive of neoplasm, likely secondary to metastatic lesion. Neurosurgery was consulted and no emergent surgical intervention was indicated as lesion had no mass effect. Patient was evaluated by Radiation oncology and started on a 10-cycle-treatment. Patient was started on Letrozole 2.5mg PO to which she has been responding well with lesion shrinkage on repeat CT, however pathological fractures of the sacrum and left iliac bone and Interval worsening of the compression fracture at T12 were also noted on the repeat CT. During the hospital course she was noted to have a drop in HBG gradually from 11 down to 8.6. At this time fecal occult was negative, LDH was elevated, reticulocyte count was normal, and GI was consulted, EGD and colonoscopy was performed.

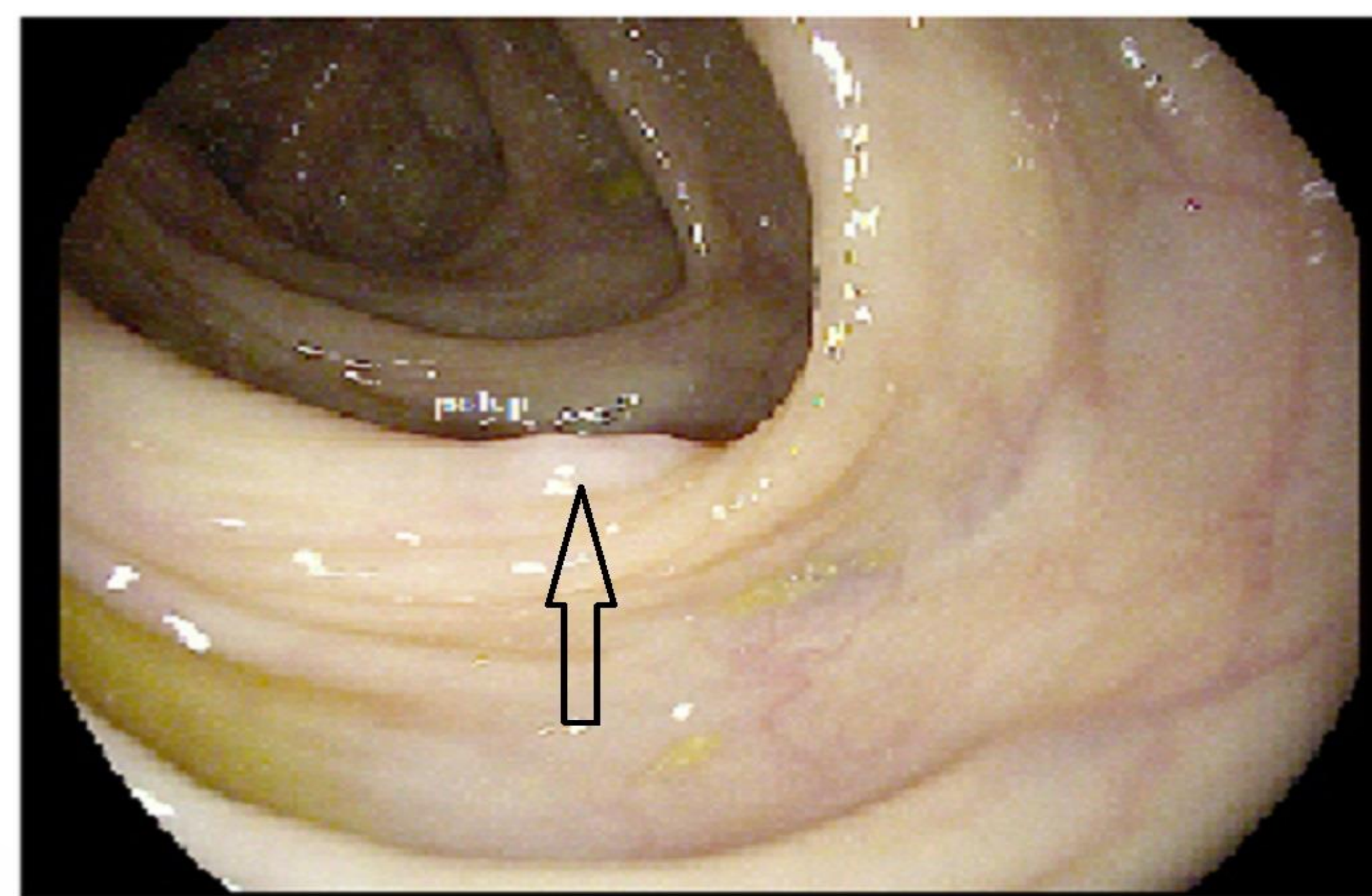
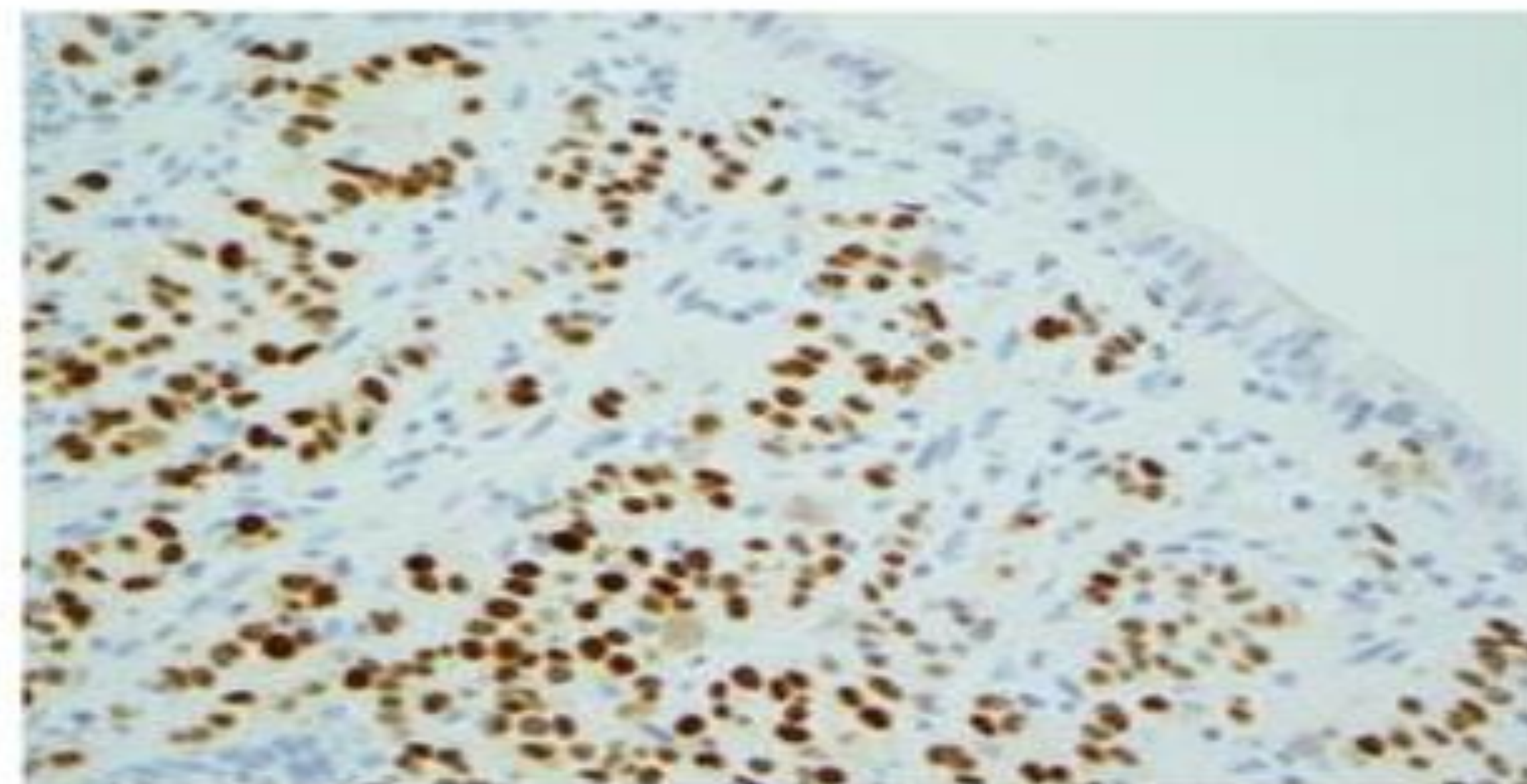
Case Presentation cont.

EGD revealed edematous mucosa and gastritis, multiple biopsies were taken on the gastric mucosa which revealed inflammatory gastritis. Colonoscopy revealed polyp in the transverse colon polyp. Biopsy of the colon lesion revealed adenocarcinoma that was ER/PR+ and HER2 (-) on immunohistology. With strong nuclear staining of tumor cells with breast markers including ER, mammoglobin, and GCDFP-15, metastatic breast cancer was highly suggested.

Patient was discharged and was started on outpatient Palbociclib and bisphosphonate therapy.

Unfortunately, the patient succumbs to the burden of her metastatic disease and passed away.

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Discussion

Only 5-15% of Patients with colon cancer have metastasis at the diagnosis with the most common location for metastasis are being lymph nodes, lung, liver, bones and brain and involving GI tract very rarely reported. In a review of cases reporting primary breast cancer with metastasis to the gastrointestinal tract, invasive lobular carcinoma of the breast is much more frequently represented. In our case presented above, the diagnosis was invasive ductal carcinoma of the breast with metastasis to the transverse colon. The clinical presentation may point towards a second primary cancer. However, positive breast markers on immunohistologic study of colon biopsy indicates a primary breast cancer. This has been seen in various reports of the literature- a primary breast cancer with an incidentally diagnosed colonic metastatic tumor featuring similar immunohistochemical markers. The typical tumor markers seen in metastatic breast cancers are CK7, ER and PR. Diagnosis of metastasis to the colon may be difficult, as symptoms may be nonspecific. Due to this, patients with this entity often present late in disease progression. Similar cases have presented with anemia, change in bowel habits or bowel obstruction. PET/CT did not show metastasis to the colon. A review of the literature shows that in similar cases, some patients were treated with palliative surgical resection in order to relieve obstruction and bleeding. In some instances- chemotherapy, radiotherapy and hormonal therapy have been used alone or with surgical intervention in order to alleviate tumor burden and spread. Prognosis is variable, but median duration of survival after the diagnosis of gastrointestinal spread was 16 months. In conclusion, while gastrointestinal, especially colorectal, metastasis is rare, it must be suspected in patient with metastatic breast cancer.

References

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