A Rare Case of Iron Deficiency Anemia Due to Lung Cancer Metastasis to Small Bowel

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Case Report



Introduction

- Lung cancer remains the leading cause of cancer related death in the United States, likely due to its high malignant potential
- While the brain, bone, liver, and adrenal glands are common sites of metastasis for lung cancer, metastasis to the GI tract remains rare
- Here we present a rare case of primary lung cancer with symptomatic metastasis to the small bowel

Case Report

- A 48-year-old Caucasian male was referred to the Gastroenterology clinic for iron deficiency anemia and abdominal pain
- A year prior, he was diagnosed with CK7 positive poorly differentiated adenocarcinoma of the lung. He underwent local radiation and chemotherapy followed by immunotherapy. Follow up imaging in the interim showed excellent response to therapy
- A month prior to presenting to the GI clinic, he developed recurrent mid abdominal pain associated with food intake
- Labs revealed iron deficiency anemia with Hemoglobin 5.2 g/dL, MCV 64.5 um³, and serum Iron 9 mcg/dL
- Patient denied overt GI bleeding



Figure 1: Ulcerated mucosa in jejunum seen on enteroscopy

Clinical Course

- EGD and colonoscopy were negative for malignancy
- Subsequent small bowel video capsule endoscopy showed areas of mucosal ulceration throughout the middle of the exam
- Small bowel enteroscopy redemonstrated mucosal changes in the jejunum
- Pathology from jejunal biopsies identified CK7 positive carcinoma, consistent with lung metastasis to the small bowel
- Follow up PET scan disclosed diffusely metastatic disease
- Unfortunately, no treatment options remained, and patient died shortly thereafter

Discussior

- Symptomatic disease to the small bowel in lung cancer has been estimated to be 1.8%¹, however autopsy studies have indicated rates of up to 11.9%². This discrepancy is likely due to minimal symptom burden associated with small bowel metastasis
- In addition, small bowel metastasis is often an extremely late presentation of disease, as nearly all patients with small bowel metastasis are found to have additional sites of metastasis, thus lending to an extremely poor prognosis
- This case was particularly interesting in that this patient's only indicators for any metastasis were iron deficiency anemia and abdominal pain
- A high index of suspicion is needed for patients with a history of lung cancer who develop iron deficiency anemia or abdominal pain for the detection of metastasis



Figure 2: PET scan with metastatic lesion in small bowel

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