ACG CASE REPORTS JOURNAL

IMAGE | ENDOSCOPY

Simultaneous Metastases of Adenocarcinoma of the Lung to the Small and Large Intestine

Darragh Storan, MB Bch, MRCPI[1,2], Aurelie Fabre, MB, FRCPath, PhD[2,3], and Glen Doherty, MB Bch, PhD[1,2]

[1]*Centre for Colorectal Disease, St. Vincent's University Hospital, Dublin, Ireland*
[2]*School of Medicine, University College Dublin, Dublin, Ireland*
[3]*Department of Histopathology, St. Vincent's University Hospital, Dublin, Ireland*

CASE REPORT

A 54-year-old man was referred for gastroscopy and colonoscopy because of iron deficiency anemia (hemoglobin 8.8 g/dL). He had a 30 pack-year smoking history and had been diagnosed with a metastatic poorly differentiated adenocarcinoma of the lung to the spleen, bilateral adrenals, peritoneum, pericardium, subcutaneous tissue, and bilateral cervical lymph nodes 1 month before his endoscopy. His medical history was otherwise unremarkable with no previous endoscopy. He declined systemic chemotherapy, and at time of endoscopy, he was taking oxycodone, naproxen, paracetamol, and esomeprazole which had been started because of painful subcutaneous nodules of metastatic origin. He denied abdominal pain, altered bowel habit, melaena, hematemesis, or hematochezia.

Esophagogastroduodenoscopy revealed a single, punched-out ulcer in D2 (Figure 1). Colonoscopy showed an ulcerated ileocaecal valve with a normal appearance of the terminal ileum and an ulcerated, inflammatory-appearing polyp in the sigmoid colon (Figures 2 and 3). Biopsies were taken from the ulcerated areas. All 3 biopsies demonstrated similar features with extensive infiltration of the submucosa and lamina propria by a metastatic poorly differentiated adenocarcinoma, consistent with the patient's known lung primary (Figure 4). He continued on proton pump inhibitor therapy and received further treatment from the palliative care team. He died 23 days after his endoscopy.

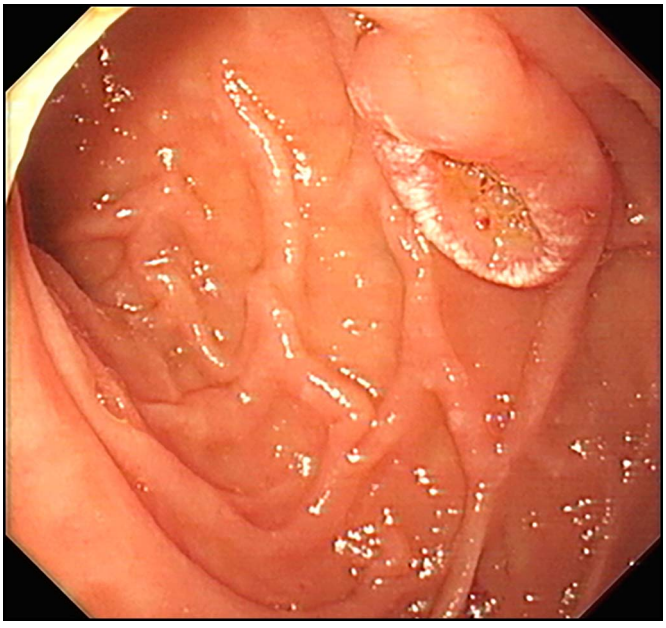

Figure 1. Esophagogastroduodenoscopy revealed a single, punched-out ulcer in D2.

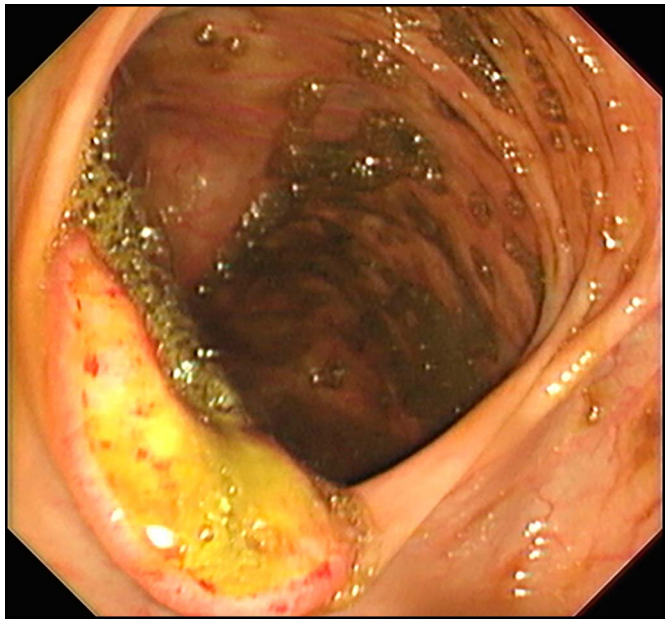

Figure 2. Ileocaecal valve ulcer.

ACG Case Rep J 2020;7:e00331. doi:10.14309/crj.0000000000000331. Published online: February 24, 2020

Correspondence: Darragh Storan, MB Bch, MRCPI (d.storan@svhg.ie).

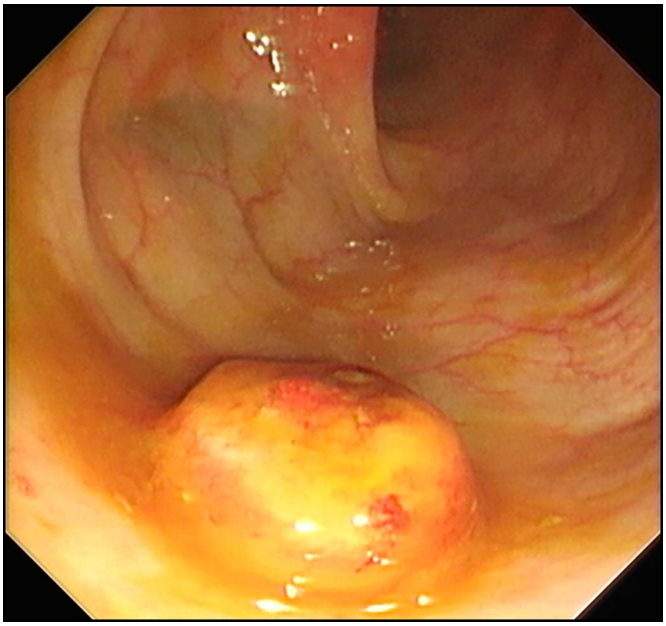

Figure 3. Sigmoid ulcer.

The brain, liver, adrenal glands, and bone are the most common sites for distant metastasis from lung cancer, although gastrointestinal metastasis is rare with autopsy studies reporting occurrence in 0.19%–11.9% of cases.[1,2] The small intestine is the most frequent site for gastrointestinal metastasis based on a small number of published reports, whereas metastasis to the colon is rarely described. Most cases are asymptomatic with the reported incidence of symptomatic gastrointestinal metastasis only 0.2%–0.5%.[3,4] Possible symptomatic manifestations include bleeding, anemia, obstruction, intussusception, and perforation. There is limited evidence to support the routine use of proton pump inhibitor therapy in the management of malignant gastrointestinal ulcers, with 1 study showing no significant difference in the rate of tumor bleeding from gastric malignancies with the use of lansoprazole compared with the placebo.[5] This is the first case we are aware of that describes simultaneous lung metastases to both the small intestine and the colon.

DISCLOSURES

Author contributions: D. Storan wrote the manuscript and is the article guarantor. A. Fabre revised the manuscript for intellectual content. G. Doherty revised the manuscript for intellectual content and approved the final manuscript.

Financial disclosure: None to report.

Informed consent was obtained for this case report.

Received September 10, 2019; Accepted December 19, 2019

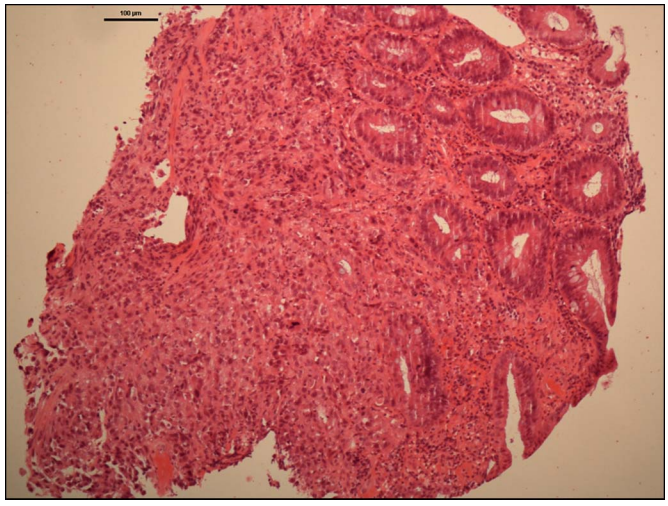

Figure 4. Histology slide showing metastatic poorly differentiated adenocarcinoma.

REFERENCES

1. Yoshimoto A, Kasahara K, Kawashima A. Gastrointestinal metastases from primary lung cancer. *Eur J Cancer*. 2006;42(18):3157–60.
2. McNeill PM, Wagman LD, Neifeld JP. Small bowel metastases from primary carcinoma of the lung. *Cancer*. 1987;59:1486–9.
3. Kim MS, Kook EH, Ahn SH, et al. Gastrointestinal metastasis of lung cancer with special emphasis on a long-term survivor after operation. *J Cancer Res Clin Oncol*. 2009;135:297–301.
4. Berger A, Cellier C, Daniel C, et al. Small bowel metastases from primary carcinoma of the lung: Clinical findings and outcome. *Am J Gastroenterol*. 1999;94:1884–7.
5. Kim YI, Kim MJ, Park SR, et al. Effect of a proton pump inhibitor on tumor bleeding prevention in unresectable gastric cancer patients: A double-blind, randomized, placebo-controlled trial. *J Gastric Cancer*. 2017;17(2):120–31.