A Rare Case of Colon Cancer From an Esophageal Primary

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Esophageal cancer represents only 4% of all cancers in the United States but, has a 5-year-survival rate of less than 25%. A patient recently presented to us with an obstructing colonic mass that was then surgically resected. The mass was later pathologically staged and identified as a metastatic mass from an esophageal adenocarcinoma primary. This triggered our review of the literature for this rare form of metastasis.

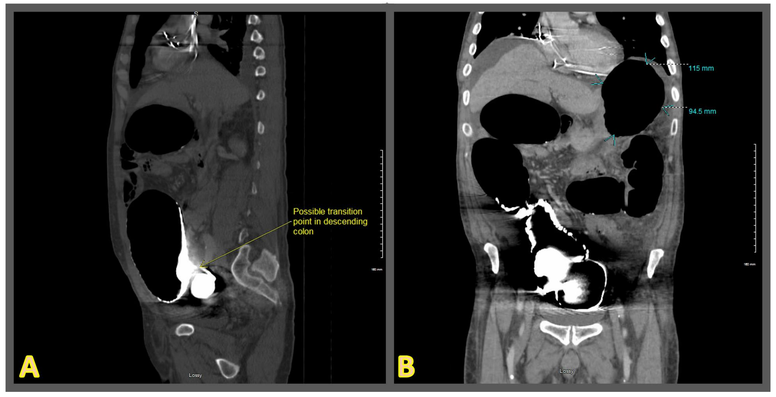
BACKGROUND

Of all cancers reported in the United States, esophageal cancer represents only four percent of that total number. Up to 40% of patients with this type of cancer present with locally advanced or metastatic disease(1), making this type of cancer clinically significant in terms of early detection. Esophageal adenocarcinoma has been steadily increasing in incidence, up to 50% of all esophageal cancers, as of 2014(2). Typical sites for esophageal carcinoma metastases include the liver, lungs, adrenal glands, and brain(3). While metastasis from primary colonic masses are common, metastasis to the colon is not commonly seen(4). In what follows, we report a case of a 65-year-old male patient who initially presented with symptoms of colonic obstruction and peritonitis. The patient was subsequently taken to the operating room, where he was found to have a mass obstructing the large intestine at the splenic flexure. Further pathologic workup of the mass identified it as a metastatic collection of cells that were consistent with esophageal adenocarcinoma. Maintaining a high index of suspicion for rare and distant metastases such as in this case, especially in patients with a history of esophageal adenocarcinoma, helps with early recognition and allows for the timely delivery of life-prolonging or palliative therapy(5).

PRESENTATION OF CASE

Our patient was a 66-year-old male who initially presented to the Emergency Department (ED) with a chief complaint of severe abdominal pain in the epigastrium which first began 6 weeks prior. The patient also reported a significant weight loss of 35 lbs over the past 3 months. His weight loss was accompanied by increasing dysphagia to both solids and liquids over this time, but he denied this being a cause for his weight loss. Subsequent Review of Symptoms and physical examination showed no additional pertinent findings.

The patient was also previously seen at a nearby ED, one month before his presentation to our facility. He was diagnosed with diverticulosis of the colon and given a prescription for omeprazole and sucralfate prior to discharge. Given his history and worsening symptoms, the patient was admitted for further workup, and Gastroenterology (GI) was first consulted at this time. EGD noted significant inflammation and ulceration from the mid-esophagus to the gastric antral mucosa. Multiple biopsies were taken at that time and sent to pathology.



The patient's abdominal tenderness continued to worsen over the following day, with increased distention and lack of flatus, with a repeat CT of the abdomen and pelvis showing significant colonic distention to a maximum of 11 cm at the splenic flexure, with a possible transition point in the descending colon (Figure). General surgery was immediately consulted at this time. The patient was then scheduled for an exploratory laparotomy the following morning. During the procedure, the cecum and transverse colon were both noted to be severely dilated, with focal areas of necrosis within the cecum. A large mass was also noted along the splenic flexure. Given these findings, the decision was made to proceed with a subtotal colectomy.

The pathology report from the previously mentioned biopsies taken during the EGD showed erosive gastritis within the gastric antrum, as well as a poorly cohesive adenocarcinoma with signet ring cell differentiation within the distal esophagus. Their report regarding the intraoperative colonic specimen described a metastatic signet-ring cell adenocarcinoma which extensively involved the pericolonic soft tissues of the splenic flexure and proximal descending colon. Comparing morphologic findings to those from the patient's prior biopsies, pathology confirmed that this obstructing mass was metastatic from the esophageal primary. The tissue resection margins all appeared to be free of neoplastic cells. This patient continued to recover uneventfully and was discharged to a tertiary care facility in stable condition on postoperative day six.

CONCLUSIONS

Using the NCBI PubMed Database, we searched for all previous publications which described metastasis of both esophageal adenocarcinoma and esophageal squamous cell carcinoma to the colon. This included case reports, case series, and meta-analyses published within the past 10 years (2010-2020).

We discovered that this type of metastatic mass was exceptionally rare, with only a total of five such cases reported in the literature. More typical sites for esophageal carcinoma metastases included the liver, lungs, skin, bones, adrenal glands, and brain.

Up to 40% of patients with this type of cancer present with locally advanced or metastatic disease, making this type of cancer clinically significant in terms of early detection. The very low number of reported cases could also be due to patients' late presentation and high mortality. Some cases, such as with our patient, would initially be thought to be a primary colon cancer mass until further pathologic workup is obtained. Maintaining a high index of suspicion for rare and distant metastases, especially in patients with a history of esophageal adenocarcinoma, helps with early recognition and allows for the timely delivery of life-prolonging

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