Metachronous Metastasis to the Stomach from a Primary Colon Cancer in a Filipino Patient – A Case Report*

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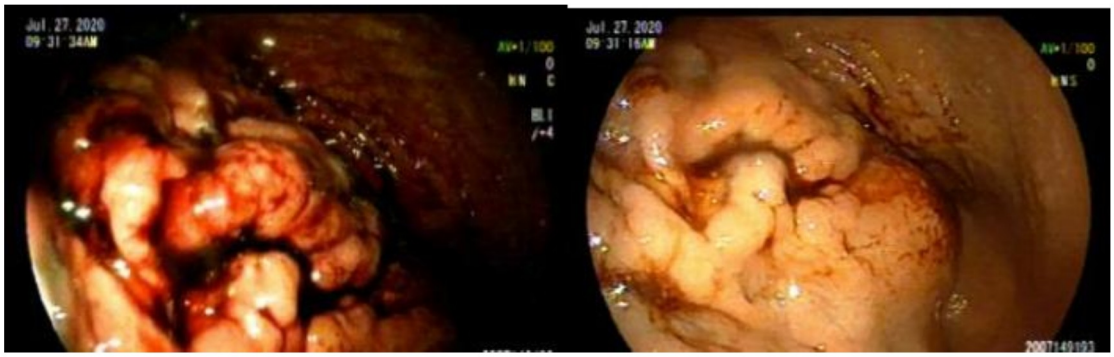
Case

We have a 55-year-old male, diagnosed case of Descending Colon Adenocarcinoma who underwent left hemicolectomy in 2018 and received chemotherapy with eight cycles of Capecitabine, Oxaliplatin in the same year who came in due to epigastric pain of 1 month duration. He described this as intermittent and pressure-like, graded 5/10, and non-radiating. This was accompanied with unquantified weight loss. He had no dysphagia but noted nausea and vomiting post-prandially. He had no fever, with no melena, hematochezia or changes in stool caliber. He noted early satiety as well and had bloatedness post-prandially. He was initially given PPI therapy, but persistence of symptoms prompted consult.

An Abdominal CT done a few months prior to his consult showed unremarkable results.

An Upper GI endoscopy and Surveillance Colonoscopy was done which showed a huge, fungating, and friable mass noted at the proximal corpus extending to the distal segment at around 40 cm down to 55 cm level. The antrum was not completely visualized during the study due to the mass, precluding the visualization of the pyloric ring. On retroflexion, the scope was tightly hugged by the cardia. On BLI, the mass showed an irregular surface vessel pattern. Multiple representative biopsies were then taken for histopathology.



The colonoscopy showed unremarkable results with no lesions observed.

Endoscopic ultrasound was also done to determine the depth of tumor involvement.

It showed a heterogenous lesion with central hypoechogenicity measuring 6 x 7 cm. This was noted externally and appeared to be encroaching into the the gastric wall. Multiple perigastric lymph nodes were appreciated as well.

Histopathology of the mass showed adenocarcinoma, and with the history of a previous malignancy in the colon, the question was whether this was a primary gastric malignancy or a recurrence/metastasis from the colon that was previously treated.

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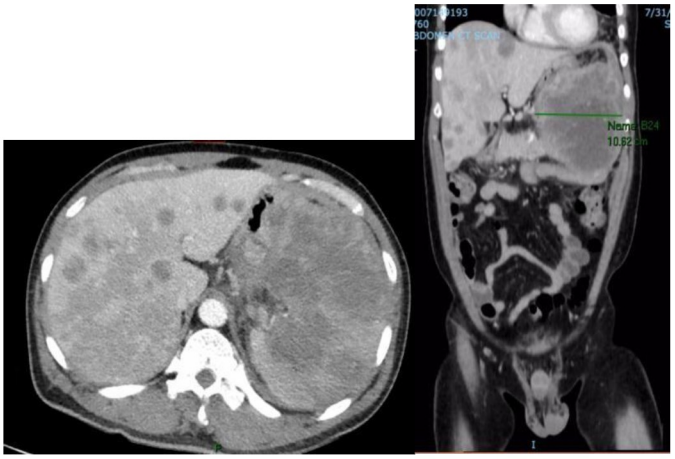
Immunohistochemical studies were done which showed a positive CK20, SATB2, CDX-2 and a negative CK7 and was signed out by the Pathologist as Metastatic Adenocarcinoma with a Colonic Primary

An abdominal CT was also done to further evaluate the lesion as well the surrounding structures which showed that at the level of the gastric fundus, a large mass with predominantly exophytic and necrotic components arising from the greater curvature was evident.

A large, lobulated, heterogeneously enhancing mass with areas of necrosis along the posterolateral gastric wall with an approximate measurement of 16.3 x 10.6 x 13.7 cm. The mass showed no clear plane of cleavage and displaced the spleen, pancreatic tail, left adrenal gland and kidney. The mass was also noted to be closely related to the abdominal wall. The liver was enlarged with a craniocaudal length of 17.1 cm along the midclavicular plane. There were multiple, varisized, ill-defined hypo-enhancing foci with peripheral enhancement scattered in the parenchyma. This was thus signed out as Progressive disease and palliative treatment was recommended.



The patient was admitted, a jejunostomy tube was inserted for nutritional buildup and a plan for chemotherapy was made.

The hospital course was stormy, with the patient developing Pneumonia, tumor bleeding and

eventually deep jaundice. The family decided to take the patient home for palliation. Patient expired a few days after discharge from the hospital.

DISCUSSION

Colorectal Cancer is the 4th most common newly diagnosed internal cancer overall in the USA and third most common cancer worldwide. The risk of development depends on demographic and environmental factors and approximately 20%, or 2 in 10 patients with CRC have metastasis at diagnosis. Spread can be either hematogenous or lymphatic.

Colon cancers can invade transmurally and involve regional lymphatics and then distant lymph nodes. The liver is the most common site of hematogenous spread (via the portal venous system) from colon tumors, and pulmonary metastases from colon cancer usually result from hepatic metastases.

Metastatic neoplasms in the stomach from remote primary tumors are uncommon, and gastric metastases of colorectal origin are rare. These Metastases from Colorectal cancer to the stomach is extremely rare with only a few cases described in medical literature. In one post- mortem study, only 0.8% of colon cancer metastasized to the stomach. Most commonly, these are metastases from Melanoma, Breast and Lung Cancer.

Published data is scarce, with few case reports showing this type of presentation. A 2008 report showed a similar presenting subject, High-risk stage II Colon Cancer who underwent 12 cycles of chemotherapy post-resection. 4 years after, she came in with abdominal symptoms with a CT showing a gastric mass with immunohistochemistry showing Colon adenocarcinoma as well. She underwent resection and subsequent chemotherapy.

Visually, the endoscopic appearance of gastric metastases is variable. Gastric involvement may be characterized by a single lesion or by multiple lesions. The metastases may have the clinical appearance of a primary stromal gastric tumor as in this case. Metastasis to the stomach can be mistaken for a primary gastric cancer and this happens when the primary site is not present at the time of finding a gastric lesion.

Based on a report published in 2019, only 14 cases, excluding this one has been reported worldwide. Analysis done by Terashima et al showed that the mean age was 61.6 and the cases involved 7 males and 7 females. The most common primary site was the transverse colon (n=4) and in all cases, on gross examination, gastric metastases had a submucosal tumor-like appearance which was also seen in our case. Additional sites of metastasis included lung, liver, bone marrow and lymph nodes, with nodal metastasis most prominent (n=5). Ten patients underwent surgical resection with 8 receiving postoperative chemotherapy. Among those who did not receive these interventions, all died within 2 years.

Management of these lesions based on recommendations lean towards operative if feasible. Termed Gastric metastasectomy, selected patients may undergo this surgical procedure with concurrent chemotherapy.

CONCLUSION

Gastric Metastases from Colon Cancer is a rare occurrence with less than 20 cases reported worldwide. Diagnosis includes imaging and possibly endoscopy to evaluate these lesions especially when they present in a solitary manner after successful resection of a primary malignancy. A high index of suspicion and the help of immunohistochemistry can guide the Gastroenterologist in the diagnosis. Management is dependent on a holistic approach, with a median survival of 21 months.

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