

## Multiple metachronous metastasis of colon secondary to gastric adenocarcinoma

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### Abstract:

Gastric carcinoma is the fourth leading cause of death world wide. As the disease grows patient may develop synchronous or metachronous metastasis, the most common sites from gastric malignancy metastases is liver, peritoneum, lung and bone. Metachronous metastases from gastric carcinoma to colon is extremely rare. HIPEC chemotherapy is very useful in adenocarcinoma of stomach which is involving the serosa. HIPEC chemotherapy is very useful to combat with peritoneal metastasis and helped in prolonging survival.

### Case Report:

We report a case of 73-years old male, who presented to King Abdullah Hospital on 07-03-2015 with the history of malaise, epigastric pain. He underwent upper GI. Endoscopy which revealed superficial gastric adenocarcinoma.

He also underwent total gastrectomy with omentectomy, splenectomy and due to lymph node involvement, he had lymphadenectomy, cholecystectomy and appendectomy later on, he received HIPEC chemotherapy. He was remained alright for 24 months (2 years) then he was admitted again with abdominal pain, constipation and abdominal distension. On examination his abdomen was mildly distended, per rectal examination revealed a lesion 7cm from anal verge. He underwent lower G.I Endoscopy which revealed 2 lesion one in the rectum and another mass at hepatic flexure, biopsy were taken which showed recurrent gastric cancer.

**Keywords:** gastric carcinoma, metachronous metastasis to colon, total radical gastrectomy, HIPEC chemotherapy.

### Introduction:

Gastric carcinoma is the fourth leading cause of death world wide.<sup>1</sup> As the disease grows pt may develop synchronous or metachronous metastasis, the most common sites from gastric malignancy metastases is liver, peritoneum, lung and bone.<sup>2</sup> Metachronous metastases from gastric carcinoma to colon is extremely rare,<sup>3</sup> only few cases has been reported up till now.

### Case Report:

We report a case of 73-years old male, who presented to King Abdullah Hospital on 07-03-2015 with the history of malaise, epigastric pain. He underwent upper GI. Endoscopy which revealed superficial gastric adenocarcinoma.

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tectomy, splenectomy and due to lymph node involvement, he had lymphadenectomy, cholecystectomy and appendectomy. He received HIPEC chemotherapy. He was remained alright for 24 months (2 years) then he was admitted again with abdominal pain, constipation and abdominal distension. On examination his abdomen was mildly distended, per rectal examination revealed a lesion 7cm from anal verge. He underwent lower gastro intestinal endoscopy which revealed 2 lesion one in the rectum and another mass at hepatic flexure, biopsy were taken which showed recurrent metachronous gastric cancer. He was initially managed conservative lines, he showed little improvement in the beginning. He had CT scan abdomen with gastrograffin which showed huge dilated small bowel and large bowel loops, therefore laparotomy was

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Figure : CT scan finding suggestive of multiple liver secondaries found after two years of HIPEC chemotherapy

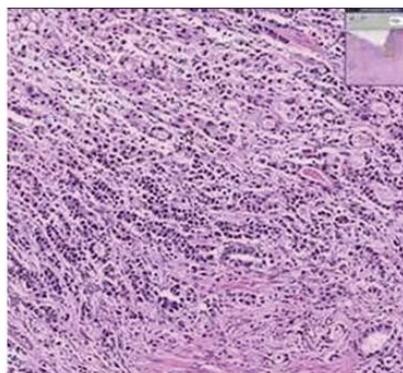


Figure : The histopathology of resected specimen of gastric adenocarcinoma showing poorly differentiated adenocarcinoma

performed, there was a tumor found at ileo-caecal junction with lots of adhesion, large bowel was also dilated due to lesion in the rectum, the tumor was unresectable therefore, loop-ileostomy was performed as a palliative procedure as major resection was impossible. Post-operatively patient was put on parental nutrition then he was started on fluid and soft diet as ileostomy started working. Patient remained well for 8 months than he slowly deteriorated and expired after 32 months of total gastrectomy.

#### Discussion:

The colon is a very rare site from gastric cancer. Metastases from gastric carcinoma rarely involve the intestinal tract; however, post-mortem studies suggest a much higher incidence.<sup>5</sup> Gut metastases have been extensively described for specific tumors such as melanoma, breast or lung cancer, and contagious spreading of ovarian carcinoma.<sup>6</sup> Intestinal metastases from gastric adenocarcinoma have been rarely reported.<sup>7-9</sup> Generally this unusual localization has been associated to Lauren's diffuse type histology, linitis plastica and peritoneal dissemination.<sup>10</sup> Nonetheless, gastric adenocarcinoma, especially if it is poorly differentiated or the signet ring cell type, should be considered as one of the common tu-

mors that have the propensity for rare intestinal metastases.

#### Conclusion:

Metachronous metastasis from adenocarcinoma of the stomach to the colon is extremely rare. Only few cases of intestinal metastases from gastric adenocarcinoma have been reported. Generally these kind of unusual metastasis has been associated to Lauren's diffuse type of linitis plastica and peritoneal dissemination. The clinician should have high index of suspicion of colonic metastasis if gastric adenocarcinoma patient presents with lower GI obstructive symptoms or lower GI haemorrhage.

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#### Role and contribution of authors:

Dr Saad Owdah Al-Sohail conceived the concept, did research search, collected the data, references and wrote the manuscript.

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