

LETTER

Pancreatic Metastasis from Colon Carcinoma Treated with Radiotherapy with Palliative Benefit

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Dear Sir,

We read with great interest an interesting report of a pancreatic metastasis from colon carcinoma nine years after a hemicolectomy managed by distal pancreatectomy and review of the literature regarding the role and outcome of pancreatic resection for colorectal metastasis by Norman Oneil Machado *et al.* published in the 2010 July issue of JOP. J Pancreas (Online) [1]. We agree with the authors that pancreatic metastasis from colorectal malignancy is rare and accounts for less than 2% of all pancreatic metastases [2]. We would like to add another case of colonic metastasis to the pancreas seen at our institution and discuss radiation therapy as another modality to treat such patients.

Mr. J is a 51-year-old Ecuadorian male with a history of metastasis from colon carcinoma originally diagnosed in 2007 at which time he was resected and treated with oxaliplatin plus 5-fluorouracil plus leucovorin (FOLFOX-4) for 12 cycles completed in November 2007. In April 2009, he developed an intra-abdominal recurrence (confirmed by exploratory laparotomy and biopsy) which was treated with 5-fluorouracil plus leucovorin plus irinotecan (FOLFIRI) plus cetuximab completed in July 2009. Patient moved to our country and presented to emergency department in October 2009 with abdominal pain. He was found to have a recurrent lesion in the pancreatic head abutting the stomach measuring 3x5x5 cm. An EUS was performed and the biopsy was consistent with primary colorectal cancer. The patient was treated with

mitomycin C and 5-fluorouracil plus leucovorin at days 1, 2, 3 every 21 days for 2 cycles completed on December 2009 but he continued to have abdominal pain. Therefore, systemic chemotherapy was held and the patient was then treated with a palliative course of external beam radiation therapy to a total dose of 30 Gy in 10 fractions completed on February 2010 with significant improvement in his pain.

Due to improvement in his performance status secondary to better pain control, he was enrolled on a phase I study including irinotecan in combination with PHY906 [3], a Chinese herbal drug, but a repeat CT scan showed progressive disease at the end of 4 cycles (8 weeks) evidenced by increased size of pulmonary metastasis as well as increased size of the necrotic air containing mass in the head of the pancreas on June 2010.

Mr. J's chemo regimen was changed to panitumumab but prior to initiation on July 2010 the patient was admitted through emergency department after a CT revealed further enlargement of the abdominal mass measuring 6 cm, inseparable from the head of the pancreas causing large bowel and gastric outlet obstruction. He was evaluated for radiotherapy and surgical interventions which were not pursued due to risks. It was thought that radiotherapy may pose risk of possible necrosis of bowel, worsening of fistula present between pancreas and colon, while for surgery there was no clear indication for intervention at this time due to patient's relatively asymptomatic state and no need for percutaneous drainage was determined at this time. The gastric outlet and large bowel obstruction resolved with supportive care and patient wanted more treatment. By August 2010, the patient now has received 2 cycles of panitumumab with minimal toxicity except grade 1 rash. He has few complaints such as some gas, abdominal fullness, and moderate pain well-controlled with narcotics. His current Eastern Cooperative Oncology Group (ECOG) performance status is 2 (http://ecog.dfci.harvard.edu/general/perf_stat.html) [4].

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Our patient is quite different than the former case as he developed pancreatic metastasis late in the course of disease and was complicated with pain and then large bowel and gastric outlet obstruction. Radiotherapy definitely improved his pain.

Although 17% of patients could be asymptomatic, our patient had pain as his major symptom that led to the discovery of the pancreatic head mass. The time interval between the diagnosis of colorectal cancer and the detection of pancreatic metastasis was over 24 months, akin to the report by the review of literature by the authors [1, 2, 5]. Interestingly as noticed before [6], the CT scan of our patient also showed central necrosis. Endoscopic ultrasound can be particularly useful for diagnosing and evaluating lesions in the head of the pancreas. An accurate diagnosis is supported by careful evaluation of the clinical history, and pathology with immunohistochemical staining. Imaging modalities, especially a PET scan can add extra knowledge to detect such lesions, in addition to CT scan.

We conclude with authors that an aggressive multimodality approach may offer good palliation and better survival in these patients.

Conflict of interest The authors have no potential conflict of interest

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