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Unit of Gastroenterology (1), Department of Medicine, Kantonsspital St. Gallen, St. Gallen, Department of Medicine (2), Kantonsspital St. Gallen, Rorschach, Department of Gastroenterology (3), University Hospital Basel, Basel, Department of Pathology (4), Kantonsspital St. Gallen, St. Gallen, Switzerland.

Reprint requests: Mikael Sawatzki, MD, Department for Gastroenterology/Hepatology, Kantonsspital St. Gallen, Rorschacherstrasse 95, 9007 St. Gallen, Switzerland.

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First report of celiac plexus block for refractory abdominal pain secondary to peripancreatic colon cancer metastasis

Mehmet Bektas, MD, Muslim Atiq, MD, Manoop S. Bhutani, MD

Houston, Texas, USA

Intractable abdominal pain is common in carcinoma of the pancreas.^{1,2} EUS-guided celiac plexus block (CPB) and neurolysis (CPN) have been performed successfully to reduce chronic abdominal pain in patients with pancreatic cancer or chronic pancreatitis.^{3,4} We present the first case of effective pain relief after CPB for intractable abdominal pain related to peripancreatic colon cancer metastasis.

CASE REPORT

A 46-year-old woman with CT-guided biopsy-proven peripancreatic metastatic colon adenocarcinoma (Fig. 1)



Figure 1. Axial contrast enhanced CT scan of the abdomen at the level of the pancreas (*arrowheads*). There are numerous hypovascular metastatic masses in the peripancreatic region (*arrows*).

presented with severe abdominal pain rated as 9 of 10 despite taking methadone 40 mg 3 times a day and Hydromorphone 4 to 8 mg every 4 hours. The patient was admitted for pain control necessitating intravenous hydromorphone transitioned to morphine sulfate controlled release (MS-CR) 90 mg orally every 12 hours, intravenous hydromorphone 4 mg every hour, and morphine sulfate immediate release (MS-IR) every 2 hours. EUS-guided CPB was performed after informed consent (patient refused a CPN with alcohol). By using a midline approach, we injected a mixture of 0.25% 10 mL bupivacaine/1 mL triamcinolone (40 mg/mL) into a periceliac space with a 20-gauge CPB needle (EchoTip, Cook; Winston-Salem, NC). There was significant improvement in pain symptoms (pain score 0-1/10) at days 1 and 9. The patient was discharged home taking MS-CR 90 mg twice daily and MS-IR 15 mg every 2 hours as needed. Pain was rated as 1 to 2 of 10 at 1, 2, 3, and 4 months of follow-up. At 2 months of follow-up, the patient was weaned down to MS-CR 30 mg twice daily only. At 4 months of follow-up, the dose of MS-CR was increased to 45 mg 3 times daily, with MS-IR as needed for breakthrough pain. This was thought to be secondary to progression of the disease process.

DISCUSSION

Peripancreatic metastasis from colon cancer is a rare occurrence. On CT scan, one-third of these masses are lobulated and appear to engulf the pancreas, rendering them indistinguishable from peripancreatic nodal disease.⁵ Pain symptoms in these patients may be the result of an

inflammatory process involving the pancreatic bed stimulating nociceptive sensitive nerve endings. To our knowledge, there are no prior reports describing the efficacy of CPB or CPN for pain control in patients with peripancreatic metastasis. We believe that the pathways of pain in patients with peripancreatic metastasis are similar to those in patients with pancreatic cancer. CPB and CPN may be useful adjuncts in the management of pain symptoms in other patients with metastases to the pancreas (eg, from primary tumors in kidney, lung, skin, liver, stomach)⁶ as well.

DISCLOSURE

All authors disclosed no financial relationships relevant to this publication.

Abbreviations: CPB, celiac plexus block; CPN, celiac plexus neurolysis; MS-CR, morphine sulfate controlled release; MS-IR, morphine sulfate immediate release.

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Department of Gastroenterology, Hepatology and Nutrition, University of Texas M.D. Anderson Cancer Center, Houston, Texas, USA.

Reprint requests: Manoop S. Bhutani, MD, Department of Gastroenterology, Hepatology and Nutrition, University of Texas, M.D. Anderson Cancer Center, 1400 Pressler St, Unit 1466, Houston, TX 77030.

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Endoscopic submucosal dissection of solitary duodenal somatostatinoma (with video)

Inês Marques, MD,¹ Mário Dinis Ribeiro, PhD,² Pedro Pimentel-Nunes, MD,² António Pereira Coutinho, MD,¹ Analisa Ribeiro, MD,¹ Luis Afonso, MD,² Margarida Caldas, MD,² Luis Moreira-Dias, MD,² Beatriz Costa Neves, MD¹

Lisbon, Porto, Portugal

Somatostatinomas are extremely rare neuroendocrine tumors of the GI tract, commonly found in the pancreas.¹ In contrast to its pancreatic counterpart, the duodenal somatostatinoma is frequently associated with von Recklinghausen disease and is seldomly associated with a recognizable “somatostatin syndrome.”² Endoscopic resection can be performed for small (<20 mm) tumors as long as there is no evidence of infiltration of the tunica muscularis or of local lymph node metastasis.³ Pretherapeutic echoendoscopy (EUS) is vital for decision making concerning the indication for an endoscopic approach.⁴

A 69-year-old man is seen for an outpatient upper endoscopy because of iron deficiency anemia. His medical history was relevant for coronary artery disease and chronic cardiac insufficiency. An upper GI endoscopy was performed and revealed a small (15 mm) submucosal tumor in the second portion of the duodenum (Fig. 1). On microscopic examination, the tumor consisted of uniform

cells arranged in solid nests. Immunohistochemical profile was positive for chromogranin A and somatostatin. Our diagnosis was a primary duodenal somatostatinoma.

EUS revealed a hypoechoic mass in the submucosal layer (Fig. 2). Neither lymph node nor liver metastasis was seen. Octreoscan scintigraphy showed an area of intense uptake localized to the upper abdomen, without extraduodenal involvement. The patient had neither neurofibromatosis nor somatostatinoma syndrome. The somatostatin, gastrin, glucagons, serotonin, vasoactive intestinal peptide, and calcitonin plasma levels were normal.

Endoscopic resection was decided on considering his comorbidities and tumor features. Endoscopic submucosal dissection (ESD) was therefore performed (Fig. 3) (Video 1, available online at www.giejournal.org). Resection was done using an IT knife, and en bloc R0 resection was feasible. The procedure was performed with the patient