ACG CASE REPORTS JOURNAL

IMAGE | PANCREAS

Pancreatic Colloid Carcinoma Presenting as a Duodenal Fistula

Arjun Chatterjee, MD[1], Lanisha Fuller, MD[2], Clifton Fulmer, MD[2], Samer Naffouje, MD[3], and Prabhleen Chahal, MD[4]

[1]*Department of Internal Medicine, Cleveland Clinic Foundation, Cleveland, OH*
[2]*Department of Anatomic and Clinical Pathology, Cleveland Clinic Foundation, Cleveland, OH*
[3]*Department of General Surgery, Digestive Disease Institute, Cleveland Clinic, Cleveland, OH*
[4]*Department of Gastroenterology and Hepatology, Digestive Disease Institute, Cleveland Clinic, Cleveland, OH*

CASE REPORT

A 67-year-old man with type 2 diabetes presented to the gastroenterology clinic with a 2-month history of epigastric pain and worsening diabetes. The abdominal computed tomography identified a 6.2 × 3.1 × 2.8-cm hypodense, bilobed pancreatic head mass arising from the main pancreatic duct and resulting in abrupt ductal cutoff with upstream ductal dilation up to 9 mm (Figure 1). Esophagogastroduodenoscopy revealed a visible 10-mm fistula with extrusion of papillary tissue and viscous secretions from the fistula (Figure 2). Endoscopic biopsies of the papillary tissue at the fistula mouth showed mucin and low-grade dysplastic mucinous epithelium, but no definitive evidence of carcinoma. Owing to the high-risk features of the mixed density mass, a collective decision was reached to proceed with the Whipple procedure. The patient underwent pancreaticojejunostomy, hepaticojejunostomy, gastrojejunostomy, and portal vein resection and reconstruction. Surgical pathology confirmed invasive colloid carcinoma (Figure 3) arising in association with an intraductal papillary mucinous neoplasm, predominantly intestinal-type, with high-grade dysplasia (Figure 4). Pathologic staging was T3N0. He was referred to oncology for adjuvant chemotherapy. Although rare, this image report emphasizes that pancreatic colloid carcinoma is often associated with intraductal papillary mucinous neoplasms which may present with duodenal fistula.[1,2]

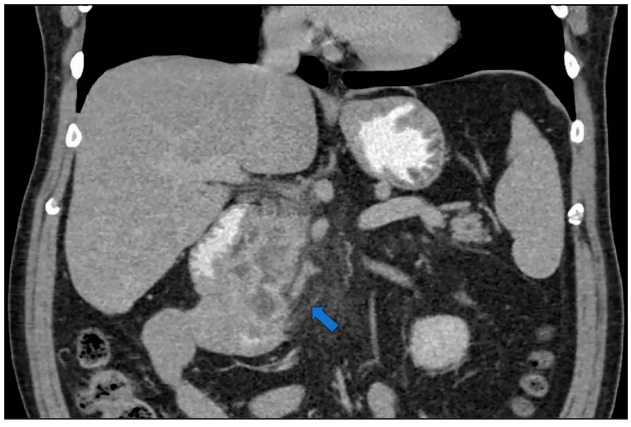

Figure 1. The abdominal coronal contrast enhanced computed tomography identified a 6.2 × 3.1 × 2.8-cm hypodense, bilobed pancreatic head mass (blue arrow) arising from the main pancreatic duct and resulting in abrupt ductal cutoff with upstream ductal dilation up to 9 mm.

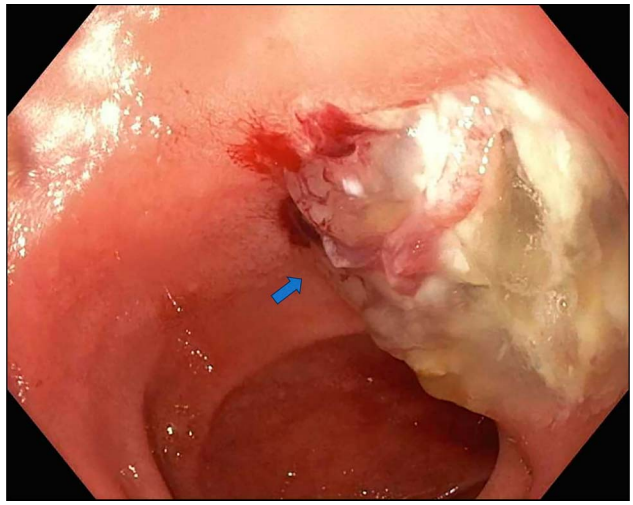

Figure 2. Esophagogastroduodenoscopy revealed a visible 10-mm fistula with extrusion of papillary tissue and viscous secretions from the fistula (blue arrow).

ACG Case Rep J 2023;10:e01244. doi:10.14309/crj.0000000000001244. Published online: December 20, 2023

Correspondence: Prabhleen Chahal, MD (chahalp@ccf.org).

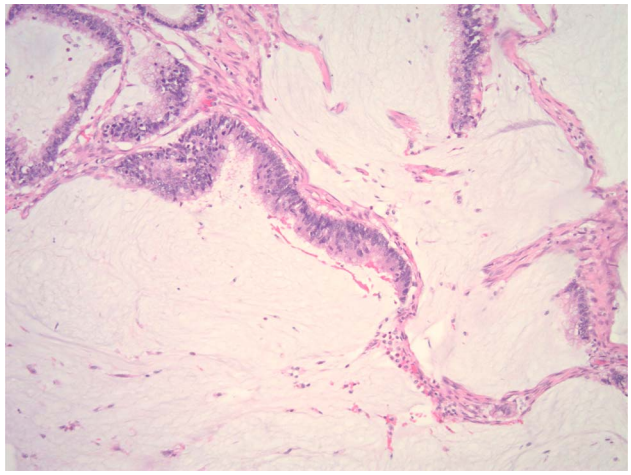

Figure 3. Hematoxylin and eosin, 40× magnification. Invasive colloid carcinoma arising in association with an intraductal papillary mucinous neoplasm, predominantly intestinal-type, with high-grade dysplasia.

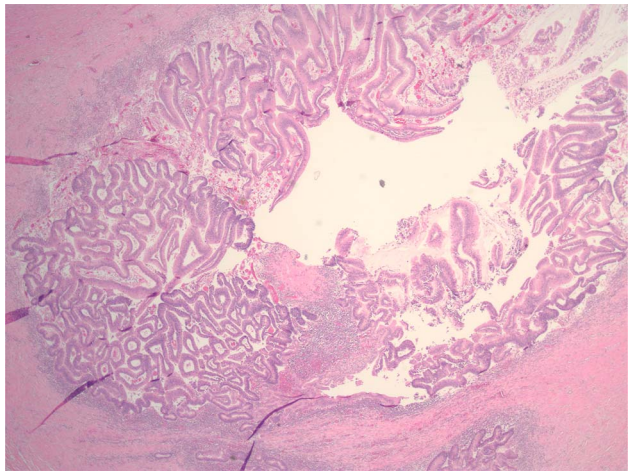

Figure 4. Hematoxylin and eosin, 200× magnification. Intestinal, intraductal papillary mucinous neoplasm precursor lesion.

DISCLOSURES

Author contributions: A. Chatterjee: drafting the article. L. Fuller, C. Fulmer, and S. Naffouje: data/image acquisition. P. Chahal: final approval of manuscript, and is the article guarantor.

Financial disclosure: P. Chahal is a consultant at Boston Scientific and Medtronic. The other authors declare no known conflicts of interest.

Informed consent was obtained for this case report.

Received October 9, 2023; Accepted November 21, 2023

REFERENCES

1. Seidel G, Zahurak M, Iacobuzio-Donahue C, et al. Almost all infiltrating colloid carcinomas of the pancreas and periampullary region arise from in situ papillary neoplasms: A study of 39 cases. *Am J Surg Pathol*. 2002;26(1):56–63.
2. Fouladi DF, Raman SP, Hruban RH, Fishman EK, Kawamoto S. Invasive intraductal papillary mucinous neoplasms: CT features of colloid carcinoma versus tubular adenocarcinoma of the pancreas. *AJR Am J Roentgenol*. 2020;214(5):1092–100.