## ACG CASE REPORTS JOURNAL



IMAGE | PANCREAS

# Hemosuccus Pancreaticus From the Minor Papilla: A Rare Cause of Upper Gastrointestinal Bleed

Nikhil Reddy, MD<sup>1</sup>, Grace E. Kim, MD<sup>2</sup>, Mary Ryan, MD<sup>1</sup>, Sajan Nagpal, MD<sup>3</sup>, and Uzma D. Siddiqui, MD, FACG<sup>4</sup>

KEYWORDS: hemosuccus pancreaticus; upper gastrointestinal bleeding; minor papilla

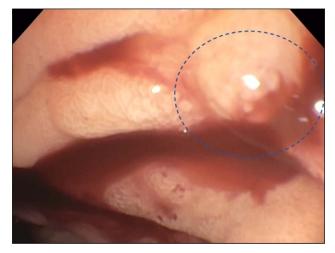
#### CASE REPORT

A 59-year-old man with alcohol-related cirrhosis and a previously seen pancreatic mass presented with coffee-ground emesis accompanied by stable hemoglobin at 8.4 g/dL. Upper endoscopy with a standard gastroscope visualized blood in the duodenum without a source. Afterward, a side-viewing duodenoscope visualized a normal major papilla (Figure 1). Subsequently, active bleeding from the minor papilla was identified (Figure 2). Computed tomography angiography revealed a bilobed hematoma and peripancreatic pseudoaneurysm extending from the splenic artery (Figure 3). Coil embolization resulted in near-complete resolution of flow on repeat angiogram (Figure 4).

Hemosuccus pancreaticus is a rare cause of upper gastrointestinal bleeding (1/1,500) defined by bleeding from the ampulla of Vater through the pancreatic duct and even more rarely emits from the minor papilla. Risk factors include chronic and recurrent acute pancreatitis, peripancreatic collections, and pancreatic malignancies. Clinical presentation often includes intermittent, repetitive hemorrhage, more frequently with melena than hematemesis. Endoscopy is crucial to rule out other causes of upper gastrointestinal bleeding and can infrequently identify hemorrhage from the duodenal ampulla, although angiography is the diagnostic gold



Figure 1. Side-viewing duodenoscope demonstrating the major papilla without bleeding (dotted blue circle).



**Figure 2.** Side-viewing duodenoscope revealing bleeding arising from the minor papilla (dotted blue circle).

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<sup>&</sup>lt;sup>1</sup>Department of Internal Medicine, University of Chicago, Chicago, Illinois, USA

<sup>&</sup>lt;sup>2</sup>Section of Gastroenterology, Hepatology, and Nutrition, University of Chicago, Chicago, Illinois, USA

<sup>&</sup>lt;sup>3</sup>MNGI Digestive Health, Minneapolis, Minnesota, USA

<sup>&</sup>lt;sup>4</sup>Center for Endoscopic Research and Therapeutics, University of Chicago, Chicago, Illinois, USA



**Figure 3.** Computed tomography angiography demonstrating a pseudoaneurysm originating from the splenic artery measuring  $2.4 \times 1.6$  cm (red arrow).

standard with a 96% sensitivity.<sup>2</sup> In hemodynamically stable patients, angioembolization is the preferred choice of therapy; although in cases of instability or failed embolization, patients should undergo hemostatic surgery.<sup>1-3</sup>

#### **DISCLOSURES**

Author contributions: N. Reddy authored and drafted the manuscript. G. Kim and U. Siddiqui edited critical aspects of the manuscript. N. Reddy, M. Ryan, S. Nagpal, and U. Siddiqui cared for the patient in the hospital and assisted with acquisition of data for the work. U. Siddiqui contributed to conception and design of the manuscript, interpretation of images, and final approval of the article. N. Reddy is the article guarantor.

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**Figure 4.** Postembolization angiogram demonstrating resolution of flow through the proximal splenic artery (red arrow).

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Informed consent was obtained for this case report.

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### REFERENCES

- Rammohan A, Palaniappan R, Ramaswami S, et al. Hemosuccus pancreaticus: 15-year experience from a tertiary care GI bleed centre. ISRN Radiol. 2013;2013:191794.
- Yashavanth HS, Jagtap N, Singh JR, et al. Hemosuccus pancreaticus: A systematic approach. J Gastroenterol Hepatol. 2021;36(8):2101–6.
- Kitano M, Gress TM, Garg PK, et al. International consensus guidelines on interventional endoscopy in chronic pancreatitis recommendations from the working group for the international consensus guidelines for chronic pancreatitis in collaboration with the International Association of Pancreatology, the American Pancreatic Association, the Japan Pancreas Society, and European Pancreatic Club. *Pancreatology*. 2020;20(6):1045–55.

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