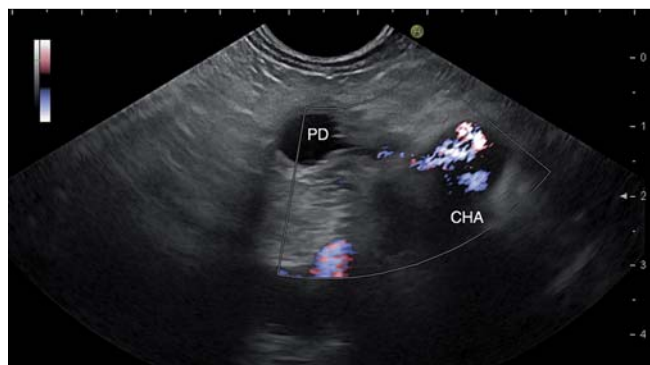


## Usefulness of endoscopic ultrasound for the diagnosis of hemosuccus pancreaticus



**Fig. 1** Computed tomography in a 62-year-old man with severe intermittent gastrointestinal bleeding showing the aneurysm of the common hepatic artery and dilated main pancreatic duct. CHA, common hepatic artery; PD, pancreatic duct.



**Fig. 2** Endoscopic ultrasound showing a fistula between the main pancreatic duct and common hepatic artery identified with power Doppler. CHA, common hepatic artery; PD, pancreatic duct.

Hemosuccus pancreaticus, hemorrhage from the papilla of Vater via the pancreatic duct, is a rare entity. It is the least frequent cause of upper gastrointestinal bleeding (1 in 5000) and is usually caused by chronic pancreatitis, pseudo-aneurysm, or pancreatic tumors [1]. Only 2% of HP involves the hepatic arteries [2]. HP is difficult to diagnose because the bleeding is intermittent and not always detectable with endoscopy. Other examinations used are computed tomography (CT), magnetic resonance imaging (MRI), selective angiography, and abdominal ultrasound. Endoscopic ultrasound (EUS) is not generally used in the diagnosis of HP. A 62-year-old man was admitted with severe intermittent gastrointestinal bleeding. He underwent gastroscopy, colonoscopy, and capsule endoscopy without signs of bleeding. The patient had no pre-

vious history of pancreatitis or infection. On CT and MRI scan with angiography, an aneurysm of the common hepatic artery (CHA) and dilatation of the main pancreatic duct towards the tail of the pancreas were found (● Fig. 1). There was no apparent source of bleeding. EUS was then performed, and showed a partially thrombosed CHA aneurysm of 5 cm. In addition, a fistula between the CHA and pancreatic duct could be identified with power Doppler (● Fig. 2). The subsequent operation revealed a thrombosed arteriosclerotic aneurysm in the CHA with a fistula to the pancreatic duct. The aneurysm was excluded and a reversed vein graft was implanted. The postoperative course was uneventful.

To the best of our knowledge, this is the third case report of severe gastrointestinal bleeding as a result of a fistula between

the CHA and pancreatic duct [3,4]. The use of EUS for the diagnosis of this rare condition has not been reported before, but seems feasible. Our case suggests that EUS could be advantageous when a vascular malformation is suspected.

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**Competing interests:** None

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