A 43-year-old man with chronic calcific pancreatitis presented with melena for 15 days. He received four units of a packed red blood cell transfusion before presenting at our center. On evaluation, investigations revealed anemia (hemoglobin 5.6 gm/dl) with tachycardia. After initial resuscitation, the patient was taken for esophagogastroduodenoscopy, which revealed no gastric or duodenal varices or any non-variceal source of bleeding. Computed tomography angiography (CTA) [arterial phase] revealed a contrast-filled bi-lobed outpouching from the gastroduodenal artery with no active contrast leak, suggestive of a pseudoaneurysm (size 1×1.2 cm) (▶Fig. 1). On the venous phase, the portal vein was partially thrombosed with multiple collaterals surrounding the pseudoaneurysm (▶Fig. 2). Because he was a poor candidate for radiological or surgical intervention, endoscopic ultrasound (EUS)-guided angioembolization was planned (▶Video 1).

EUS-guided localization of the pseudoaneurysm was done. In view of the multiple collaterals in a crowded peri-pancreatic location, it was difficult to identify the pseudoaneurysm up front. Thus, power Doppler was used sequentially for each dilated vascular channel to map the vessels by their flow pattern. This was done until the pseudoaneurysm could be
localized. Once that was accomplished and confirmed by the arterial flow pattern on power Doppler (▶Fig. 3), the pseudoaneurysm was punctured using a 19-G needle (EZ Shot3 Plus; Olympus Medical, Tokyo, Japan), aspiration of blood was performed to confirm the position, and subsequently one Nester coil (8 mm × 7 cm) was deployed (▶Fig. 4) followed by 2 ml of cyanoacrylate-glue injection, leading to complete obliteration. A follow-up EUS and CTA 48 hours later showed complete obliteration with no flow and a patent GDA (▶Fig. 5). At the 9-month follow-up, the patient was doing fine with no further bleeding episodes.

Co-existence of venous and arterial abnormalities within the same anatomical field is rare and can pose significant therapeutic challenge. EUS-guided angiography with power Doppler can be an effective option in complex situations in which radiological or surgical intervention is difficult.

Competing interests

The authors declare that they have no conflict of interest.

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Bibliography

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