Hemosuccus pancreaticus due to a small arterial pseudoaneurysm detected by CE-EUS and successfully treated with angiographic coiling (with video)

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In hemosuccus pancreaticus,[1] potentially life-threatening bleeding into the pancreatic duct is usually caused by a large arterial pseudoaneurysm (average size of 52 mm) in chronic pancreatitis.[2] Bleeding from the papilla can be seen by endoscopy, and pseudoaneurysm can be detected by standard cross-sectional imaging. In this case report, a small pseudoaneurysm of the splenic artery with a fistula to the pancreatic duct could only be discovered by contrast-enhanced EUS (CE-EUS). A 54-year-old man with nonsteroidal anti-inflammatory drug intake and history of chronic alcohol pancreatitis was admitted for tarry stools. A cause for bleeding could not be identified by gastroscopy, ileocolonoscopy, abdominal ultrasound, and computed tomography [Figure 1]. However, the gastrointestinal bleeding continued. Small bowel video capsule endoscopy was performed and showed traces of blood in the duodenum. Repeated duodenoscopy presented a slight hemobilia from the papilla [Figure 2]. Therefore, hemosuccus pancreaticus was assumed, and CE-EUS indeed detected an arterial fistula to the pancreatic duct [Figure 3 and Video 1]. In the following, angiography showed a small pseudoaneurysm of the splenic artery [Figure 4], which was successfully treated by angiographic

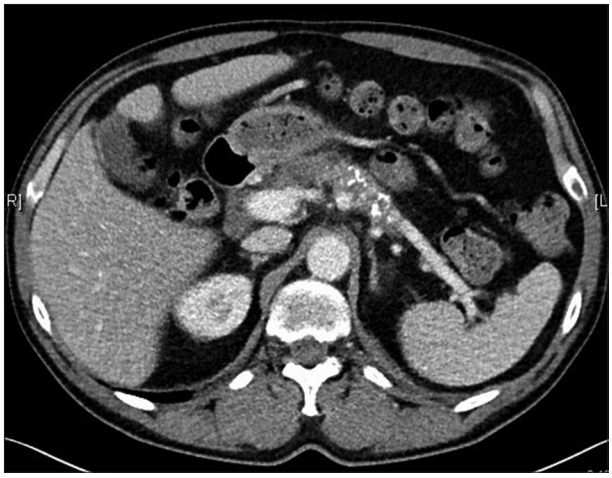

Figure 1. Computed tomography of the abdomen showing chronic pancreatitis with calcifications but cannot identify the source of gastrointestinal bleeding

Video Available on: www.eusjournal.com

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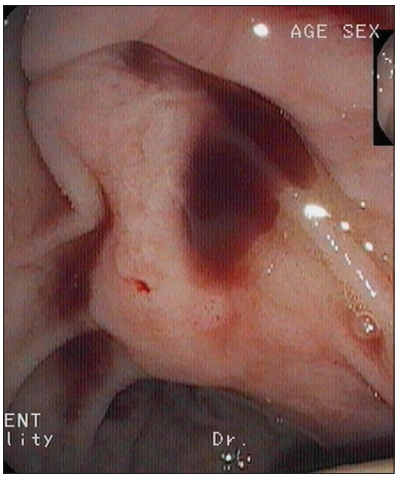

Figure 2. Slight hemobilia from the papilla is shown in repeated duodenoscopy

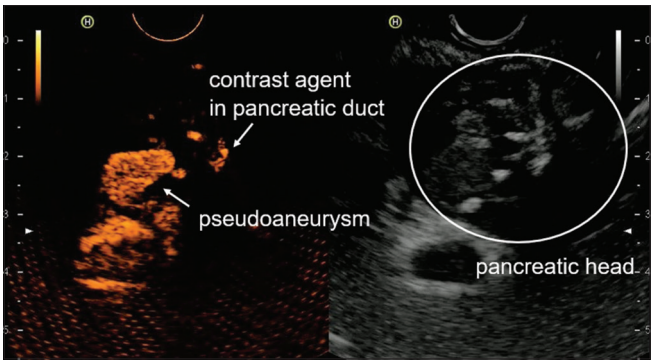

Figure 3. Selected image from Video 1 showing the fistula from the arterial pseudoaneurysm to the pancreatic duct

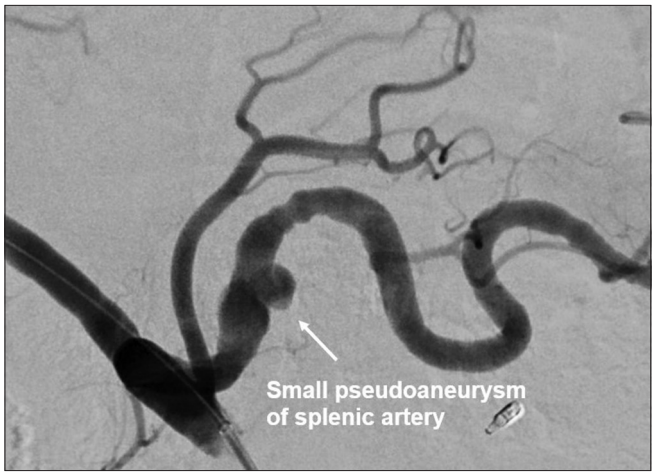

Figure 4. Selective angiography showing a small pseudoaneurysm (<20 mm) of the splenic artery. Fistula from the pseudoaneurysm to the pancreatic duct is not demonstrated

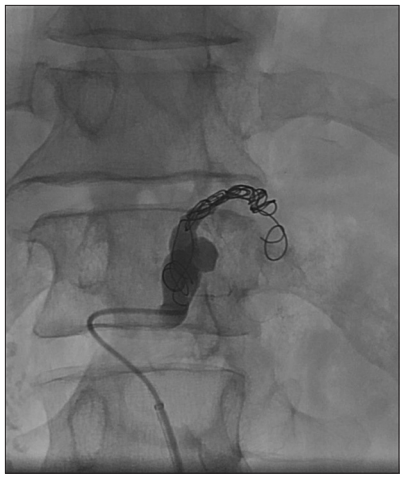

Figure 5. Successfully treated pseudoaneurysm of the splenic artery by angiographic coiling. Direct application of the coils into the pseudoaneurysm had to be avoided

coiling [Figure 5] according to common guidelines.[3] Bleeding stopped after transfusion of summed up 9 units of blood. In some cases, EUS combined with Doppler ultrasound might be sufficient for the detection of the fistula[4] but failed in this patient. The useful application of CE-EUS in hemosuccus pancreaticus was previously shown in only one case report, in which the feeding vessel of a large pseudoaneurysm (42 mm) could not have been detected by angiography.[5] In conclusion, CE-EUS might be useful to detect hemosuccus pancreaticus due to small arterial pseudoaneurysms in patients with occult gastrointestinal bleeding.

BRIEF DESCRIPTION

CE-EUS was helpful to detect hemosuccus pancreaticus due to a small arterial pseudoaneurysm of the splenic artery in a patient with chronic pancreatitis and on-going occult gastrointestinal bleeding. Hemosuccus pancreaticus was successfully treated by angiographic coiling.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initials will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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