Chapter 45
Case on Gastric Bleeding Caused by a Necrotizing Pancreatitis with Extensive Pseudocyst Formation

Rutger J. Lely and Miguel A. Cuesta

Keywords Pancreatitis • Pseudocyst • Pancreatitis • Pseudoaneurysm • Splenic artery • Gastroduodenal artery

Diagnosis and Indication for Surgery

A 32-year-old law student known with a severe systemic lupus erythematosus (SLE- like) disease had been treated with high doses of prednisone and supportive care. Now she was admitted in the hospital, at first on the gastroenterology Department and after on the Medium Care because of progressive abdominal pain, hypotension, elevated amylase, and lipase in serum. After fluid reposition, a CT scan with double contrast was performed showing an extensive acute necrotizing pancreatitis.

Course and Identification of the Complication

After conservative treatment, there initially was clinical improvement. Because no signs were seen of infection, she was conservatively treated by means of nasogastric tube, initially total parenteral nutrition, and broad-spectrum antibiotics. Situation of patient evolved unchanged for 4 weeks, with the usual ups and downs. Pneumonia

R.J. Lely, M.D. (✉)
Department of Radiology, VU Medical Center, Amsterdam, The Netherlands
e-mail: r.lelij@vumc.nl

M.A. Cuesta, M.D.
Department of Surgery, VU University Medical Center, Amsterdam, The Netherlands
e-mail: ma.cuesta@vumc.nl

M.A. Cuesta, H.J. Bonjer (eds.), *Case Studies of Postoperative Complications after Digestive Surgery*, DOI 10.1007/978-3-319-01613-9_45,

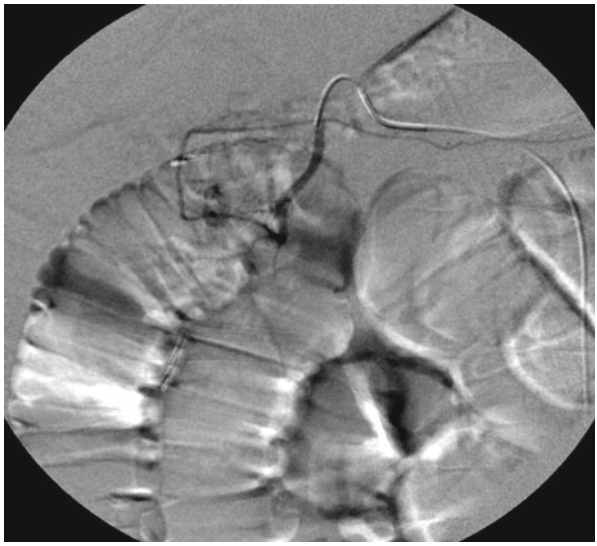


Fig. 45.1 Identification bleeding splenic artery during angiography

was diagnosed and consequently treated. Moreover, CT scans showed the necrosis with pseudocysts in lesser sac, along the pancreas in the direction of the spleen and descending colon. Abdomen of the patient was distended and many doctors involved with her treatment pushed surgeon and radiologist to drain the cysts because of mechanical complaints such as abdominal distention and threatening respiratory insufficiency. Pseudocysts were not drained, but 5 weeks after admission she developed an important hematemesis and melena with hypovolemic shock. Taking into regard gastric bleeding from a rupture of a pseudoaneurysm of the splenic artery, a CT angiography was performed, where a blush was seen at splenic artery and subsequently angiography was performed. A bleeding was observed at the middle level of the splenic artery with leakage of blood at the level of the greater curvature, thereafter being successfully coiled (Figs. 45.1, 45.2, 45.3, and 45.4; Illustration 45.1). Bleeding was under control, but patient stayed for 8 weeks, at first admitted on medium care, thereafter on intensive care because mechanical ventilation proved needed, and finally back to the ward. She went on for revalidation because of an important neuropathy. After 4 months, she was again admitted with recurrent acute pancreatitis. Currently, she can walk with crutches and she has partially reinitiated her activities, still following physiotherapy.

Discussion

The lesson in this case is the need to think immediately about this complication. Many times a warning bleeding will get ahead of the important bleeding. Whatever, in any upper gastrointestinal bleeding experienced by a patient having

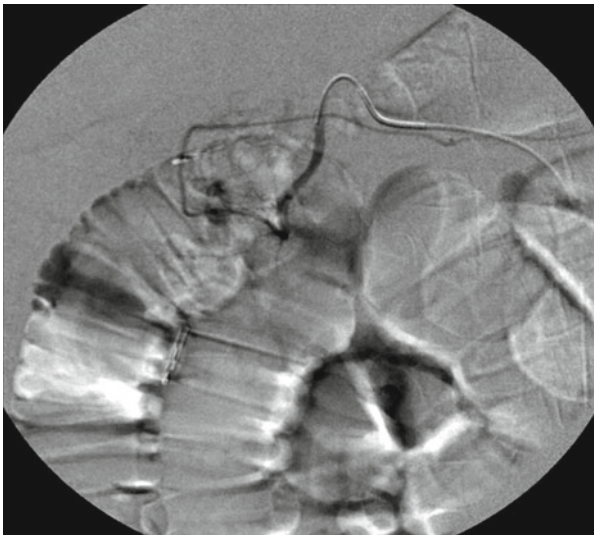


Fig. 45.2 Blush splenic artery

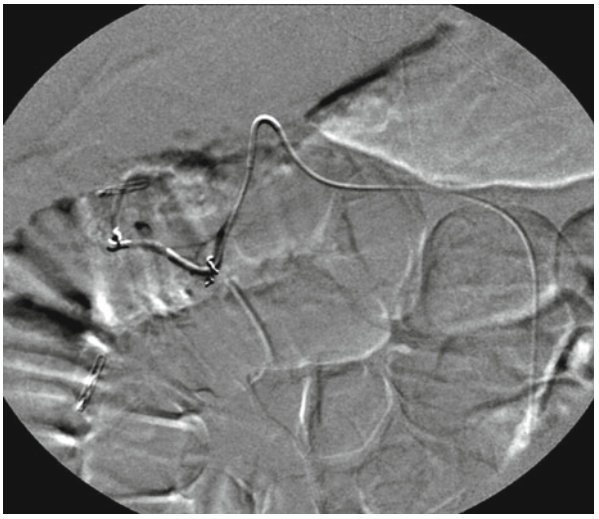
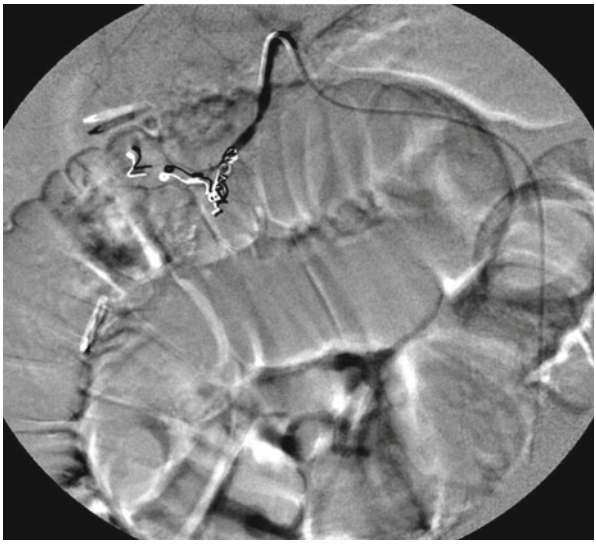


Fig. 45.3 Starting coiling

an acute necrotizing pancreatitis, interventionist radiologists and surgeons have to consider the likelihood of a rupture of a pseudoaneurysm at the level of splenic artery or gastroduodenal artery. The role of the intervention radiologist is quite crucial here. Identifying the blush and using coils to occlude the corresponding artery will control the bleeding. If coiling is not possible, surgical intervention will be necessary. Using packing and to identify bleeding point after suturing should—if possible—come to form the treatment. Postoperative follow-up will be very complicated.

Fig. 45.4 Artery coiled



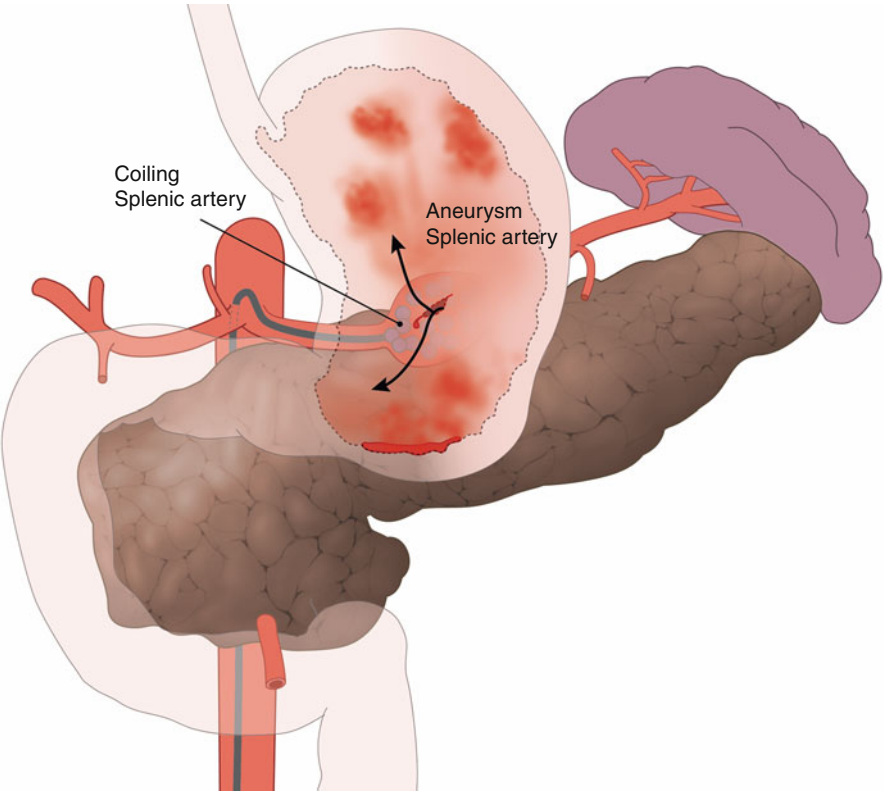


Illustration 45.1 Splenic artery pseudoaneurysm will cause bleeding thorough gastric erosion. Angiography after identification of the blush will fix the complication by successful coiling of the artery