

Acute necrotizing pancreatitis complicated by severe hemorrhage from the celiac trunk into walled-off pancreatic necrosis

Łukasz Rojek¹, Beata Drelich-Góreczna¹, Joanna Pieńkowska², Adam Zapaśnik³, Marian Smoczyński¹, Krystian Adrych¹

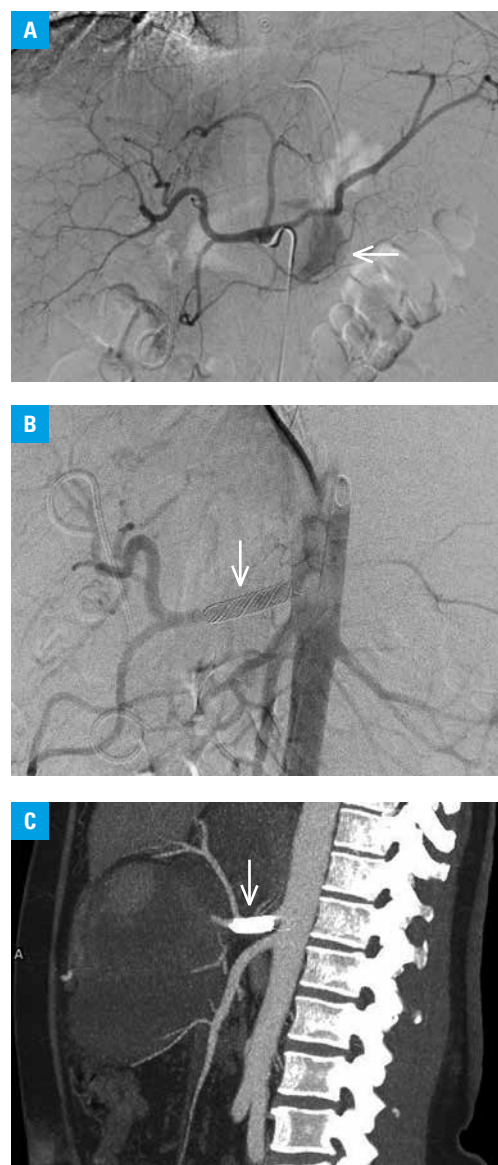
¹ Department of Gastroenterology and Hepatology, Medical University of Gdańsk, Gdańsk, Poland

² 2nd Department of Radiology, Medical University of Gdańsk, Gdańsk, Poland

³ Department of Radiology, Medical University of Gdańsk, Gdańsk, Poland

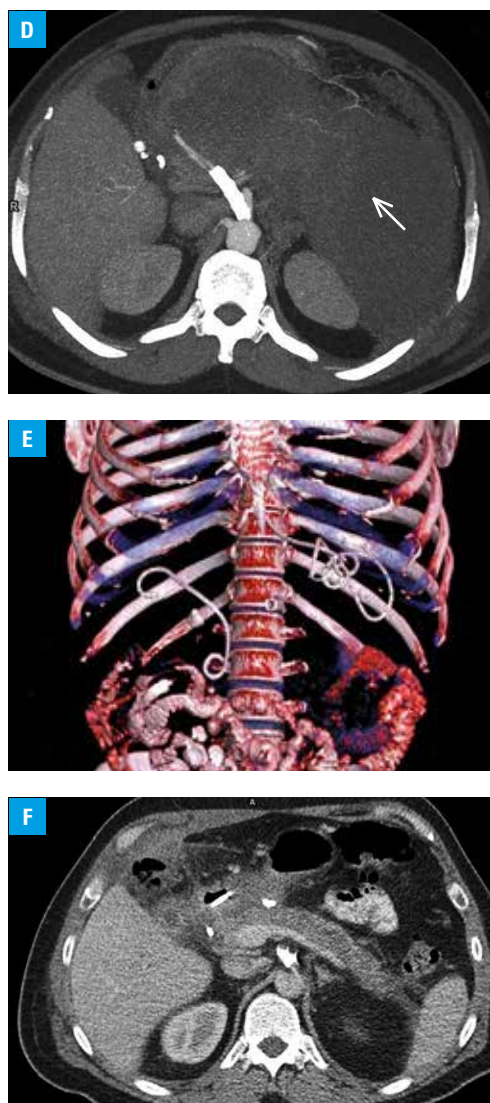
A 45-year-old male patient with no significant medical history was admitted to the Department of Gastroenterology and Hepatology, Medical University of Gdańsk, Poland, because of jaundice and right upper abdominal pain. Based on clinical, imaging, and biochemical tests, we suspected that his symptoms were caused by common bile duct stones. Endoscopic retrograde cholangiopancreatography (ERCP) revealed signs of spontaneous passage of gallstones; therefore, subsequent biliary sphincterotomy was performed. Considering the presence of stones in the gallbladder, a 7Fr stent (Biliary Stent Double Pigtail Marflow AG, Adliswil / Zurich, Switzerland) was placed in the bile duct. Epigastric pain worsened on the first day after the procedure. A diagnosis of post-ERCP pancreatitis was made on the basis of the elevated serum amylase and lipase activity (exceeding more than 3 times the upper limit of normal). Contrast-enhanced computed tomography revealed necrotizing pancreatitis.

On the 22nd day after ERCP, the patient reported significant weakness and melena. Laboratory tests showed severe anemia. An urgent esophagogastroduodenoscopy did not allow to identify the cause of bleeding. Subsequent arteriography revealed bleeding from the celiac trunk, which was successfully treated with stenting (WallGraft, 9 mm/30 mm, Boston Scientific, Marlborough, Massachusetts, United States) (FIGURE 1A–C). Because of the clinical suspicion of infected necrosis (fever, worsening abdominal pain, increase in inflammatory parameters), endotherapy (endoscopic ultrasound-guided transmural transgastric drainage) of walled-off pancreatic necrosis was introduced (FIGURE 1D). After 46 days of drainage, necrosis resolved and the active part of treatment was completed (FIGURE 1F). During



Correspondence to:
Łukasz Rojek, MD, Katedra i Klinika
Gastroenterologii i Hepatologii,
Uniwersytet Medyczny w Gdańsku,
ul. Smoluchowskiego 17,
80-214 Gdańsk, Poland,
phone: +48-58-349-36-40,
fax: +48-58-349-36-50, e-mail:
lrojek@gumed.edu.pl
Received: June 5, 2014.
Revision accepted: June 11, 2014.
Published online: June 13, 2014.
Conflict of interest: none declared.
Pol Arch Med Wewn. 2014;
124 (10): 549-550
Copyright by Medycyna Praktyczna,
Kraków 2014

FIGURE 1 **A** – selective angiogram of the celiac trunk visualizing the hemorrhage (arrow); **B, C** – stent graft successfully deployed across the rupture of the celiac trunk (arrow); **D** – contrast-enhanced computed tomography of walled-off pancreatic necrosis (arrow) before the treatment; **E** – drainage system of walled-off pancreatic necrosis and biliary tree (3-dimensional computed tomography reconstruction); **F** – contrast-enhanced computed tomography after the treatment



103 days of hospitalization, the patient received 9 units of fresh frozen plasma and 15 units of packed red blood cells.

Since 1968, ERCP has evolved from a diagnostic to an almost exclusively therapeutic procedure for biliary and pancreatic disorders.¹ This procedure can be complicated by a variety of adverse events including acute pancreatitis, hemorrhage, cholangitis, cholecystitis, or perforation. In 1991, standardized consensus definitions for major complications of ERCP were introduced and are still widely used.² Of these complications, post-ERCP pancreatitis is the most frequent. It is usually clinically mild or moderate in severity but can be severe or even potentially fatal in about 10% of the cases.³ The 2012 Revised Atlanta Classification defined acute pancreatitis as well as systemic and local complications of pancreatitis (eg, walled-off pancreatic necrosis).⁴ In 2013, the International Association of Pancreatology and American Pancreatic Association recommended image-guided percutaneous (retroperitoneal) or endoscopic transluminal drainage as the optimal intervention for patients with suspected or confirmed infected necrotizing pancreatitis.⁵

Our case is a reminder that a therapeutic ERCP may be the cause of severe acute necrotizing pancreatitis associated with a clinically significant complication such as massive hemorrhage and infection of pancreatic necrosis.

REFERENCES

- 1 McCune WS, Shorb PE, Moscovitz H. Endoscopic cannulation of the ampulla of Vater: a preliminary report. *Ann Surg.* 1968; 167: 752-756.
- 2 Cotton PB, Lehman G, Vennes J, et al. Endoscopic sphincterotomy complications and their management: an attempt at consensus. *Gastrointest Endosc.* 1991; 37: 383-393.
- 3 Dumonceau JM, Andriulli A, Deviere J, et al. European Society of Gastrointestinal Endoscopy (ESGE) Guideline: prophylaxis of post-ERCP pancreatitis. *Endoscopy.* 2010; 42: 503-515.
- 4 Banks PA, Bollen TL, Dervenis C, et al. Classification of acute pancreatitis – 2012: revision of the Atlanta classification and definitions by international consensus. *Gut.* 2013; 62: 102-111.
- 5 IAP/APA evidence-based guidelines for the management of acute pancreatitis. *Pancreatol.* 2013; 13 (4 Suppl 2): e1-e15.