Endoscopically Performed Cystoduodenal Drainage of a Pancreatic Pseudocyst after Billroth II Gastrojejunostomy: A Case Report

Currently, pancreatic pseudocysts are preferentially treated nonsurgically, using ultrasound or endoscopically guided puncture and drainage (1,2). We report here the case of a 46-year-old man, in whom a symptomatic pancreatic pseudocyst developed as a result of an acute exacerbation of a chronic pancreatitis.

On admission, the patent was icteric, with marked elevated liver function tests suggesting cholestasis. On ultrasonography, a pseudocyst located at the head of the pancreas was detected, measuring 85 mm in diameter. The extrahepatic bile ducts were dilated, measuring 12 mm, with a slight dilation of the intrahepatic bile ducts. After a Billroth II gastrojejunostomy, the papilla of Vater was only cannulated using a pediatric colonoscope (Olympus PCF-20) via the afferent loop. The pancreatic pseudocyst was pressing on the duodenal stump. Endoscopic retrograde cholangiography revealed a distinct impression on the intrapancreatic portion of the common bile duct made by the pseudocyst, with prestenotic dilation. Endosonographically, the pancreatic pseudocyst was not visible via the gastric remnant.

The patient was treated primarily with repeated percutaneous puncture of the pseudocyst, leading to symptomatic relief. Refilling of the pseudocyst occurred within days, in spite of octreotide treatment to reduce secretion (0.1 mg b.i.d.). The pseudocyst was incised transduodenally using a fistulotome (Olympus). Emptying of clear fluid showed that the pseudocyst had been successfully punctured. Using guide wires (Corotec, Kleinwinkelheim, Germany; Terumo, Frankfurt, Germany), a 5-Fr double-pigtail catheter (Mandel and Rupp, Erkrath, Germany) was placed with the distal end in the pseudocyst, draining via the proximal end into the afferent loop (Figure 1). After the procedure, the pseudocyst was almost empty, and the previously dilated bile ducts returned to the normal size (Figure 2). The drain was removed after six months. The patient has remained asymptomatic, and there was no evidence that the pseudocyst was refilling during a three-month follow-up period.

This case report describes for the first time the successful endoscopic placement of a cystoduodenal drain in the afferent loop after a Billroth II gastrojejunostomy in a patient with a symptomatic pancreatic pseudocyst (3,4).

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Figure 1: The double-pigtail catheter in situ: radiological view.



Figure 2: Ultrasonography of the pancreatic pseudocyst one day after

References

- 1. Körner TH, Jaspersen D, Schorr W, Volmar J, Hammar CH. Endoskopische pseudocysto-gastrale Drainage in einem Magen nach Billroth II-Operation. Z Gastroenterol 1993; 31: 250-2.
- 2. Rapp K, Zundler J, Walker S. Nicht-operative Vertahren zur Behandlung von Pankreaspseudozysten. Dtsch Med Wochenschr 1995; 120: 1129-32.
- 3. Cremer M, Devière J, Engelholm L. Endoscopic management of cysts and pseudocysts in chronic pancreatitis: long-term follow-up after 7 years of experience. Gastrointest Endosc 1989; 35: 1-9.

4. Sahel J. Endoscopic drainage of pancreatic cysts. Endoscopy 1991; 23: 181-4.

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