Endoscopic Drainage of a Pancreatic Abscess with a Transduodenal Nasopancreatic Catheter

Up to 9% of patients with acute pancreatitis suffer from a pancreatic abscess (1). In addition to surgical therapy, which still has a high mortality rate (2), percutaneous abscess drainage has been shown to be an effective alternative therapeutic option in some selected cases (3).

A case of a pancreatic abscess is presented which was treated successfully by the placement of a transduodenal nasopancreatic drainage. A 51-year-old patient developed a pancreatic abscess six weeks after the onset of an acute biliary necrotising pancreatitis. Despite elevated body temperature, the patient appeared to be in a relatively good physical and mental state, which justified continuation of nonoperative conservative treatment. A CT scan at that time showed newly formed necrotic areas with liquefaction in the head and body of the pancreas as well as evidence of air accumulation in these areas. During ERCP the papilla of Vater could not be identified due to massive duodenitis and duodenal stenosis. The duodenal wall appeared congested with multiple yellow-white pus leakages. At one of these purulent sites, the duodenal wall was intentionally perforated with a standard ERCP catheter (Figure 1) resulting in a burst of pus from the duodenal wall. Filling of the abscess cavity with contrast agent showed further spontaneous fistulas entering the duodenum. A nasopancreatic catheter, 7 Fr in diameter, was placed across the duodenal wall into the pancreatic head until several loops had formed. This was followed by continuous irrigation with saline for 20 days (Figure 2). Twenty-four hours after the drainage procedure, the patient's body temperature returned to normal. After termination of irrigation, CT demonstrated that the abscess cavity had shrunk to a small air-filled hole. Pus penetrating the duodenal wall appears to be a prerequisite for successful and safe placement of a nasopancreatic catheter across the duodenal wall into the abscess cavity.

We suggest that an endoscopic transduodenal drainage procedure represents a valuable therapeutic alternative in the treatment of pancreatic abscess in a few highly selected patients.

References

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H. Messmann¹, A. Holstege¹, H.-G. Leser¹, H. Zirngibl²,

J. Gmeinwieser³, J. Schölmerich¹

¹ Department of Internal Medicine I

² Department of Surgery

³ Institute of Radiology, University of Regensburg, Regensburg, Germany

Figure 1: The ERCP catheter (black arrow) was used to perforate the duodenal wall on the sites of yellow-white pus leakages (black-white arrow).

Figure 2: The nasopancreatic catheter (arrow) was placed into the abscess of the head of the pancreas which was continuously irrigated with an isotonic saline solution.

Corresponding Author

H. Messmann, M.D.
Department of Internal Medicine I
University of Regensburg
93042 Regensburg
Germany