

Endoscopic Ultrasound-Guided Pancreatic Cyst-Duodenostomy via a Distal Trans-Duodenal Approach

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Introduction

Endoscopic Ultrasound (EUS) guided transmural drainage has become the first-line treatment of pancreatic fluid collections (PFC) [1,2]. In most cases, transmural drainage may be successfully performed from the stomach or duodenal bulb with the echo endoscope in a straight position. However, seldom the location of the PFC in relation to the luminal wall is in such a manner that a safe window for transmural drainage (≤ 1 cm from luminal wall) cannot be obtained unless the echo endoscope is positioned deeper in the duodenum. Endoscopic drainage from this position can be technically challenging as the torqued scope shaft and angulated tip of the echo endoscope results in poor maneuverability and difficulty advancing the needle for PFC puncture and stent placement. Here we report a case of a technically challenging EUS-guided PFC drainage (Figure 1).

from the distal 2nd portion of the duodenum, requiring considerable angulation of the echoendoscope tip. The PFC was punctured with the 19-gauge needle; followed by placement of the guide wire within the collection (Figure 2). The fistulous tract was dilated followed by placement of a transduodenal lumen-apposing stent (15 mm \times 10 mm; Boston Scientific, Marlborough, MA). There was immediate brisk flow of pus and solid debris (Figure 3a). Patient's symptoms resolved and repeat CT four weeks later revealed marked decrease in the PFC size (Figure 3b). This case demonstrates that while technically challenging, EUS-guided PFC drainage can be successfully completed even from the distal 2nd portion of the duodenum.



Figure 1: The head of the pancreas compressing the distal duodenum.

A 68-year-old man with a history of gallstone pancreatitis and laparoscopic cholecystectomy one-month prior, presented with early satiety, vomiting and abdominal pain. CT revealed an 11 cm \times 9 cm PFC at the head of the pancreas compressing the distal duodenum (Figure 1; arrows). On EUS, the PFC could only be safely accessed

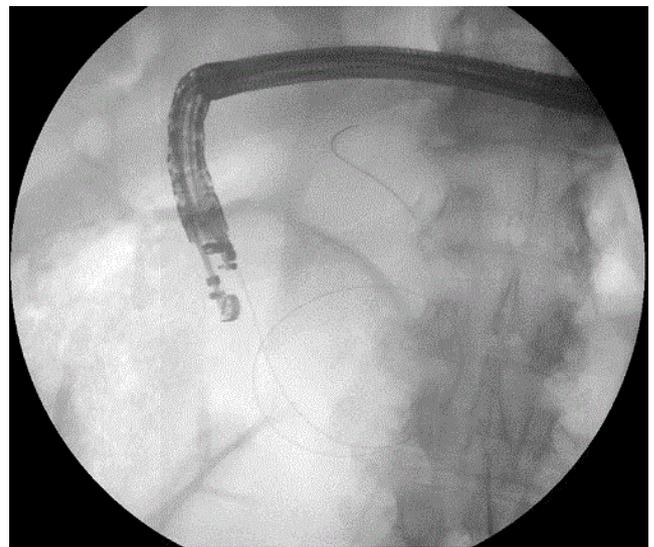


Figure 2a: The PFC was punctured with the 19-gauge needle; followed by placement of the guide wire within the collection.



Figure 2b: The PFC was punctured with the 19-gauge needle; followed by placement of the guide wire within the collection.

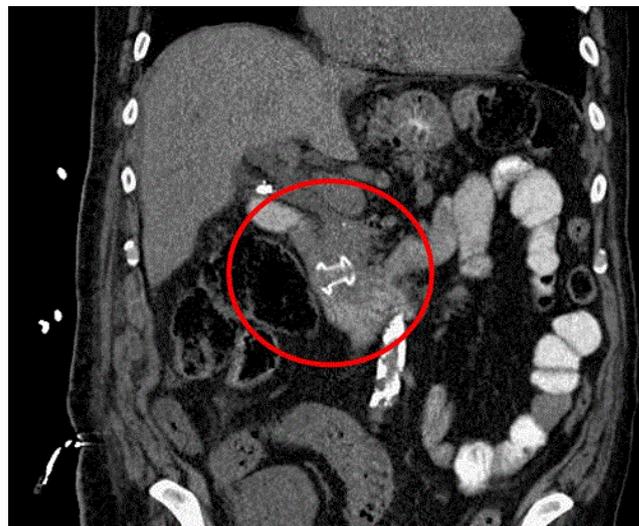


Figure 3b: Patient's symptoms resolved and repeat CT four weeks later revealed marked decrease in the PFC size.

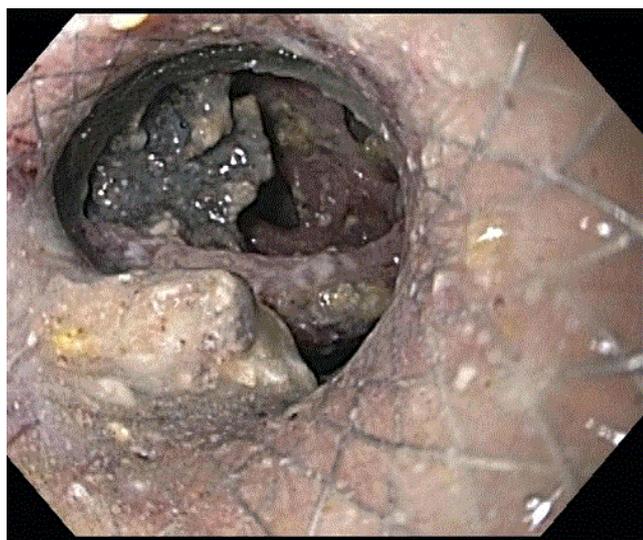


Figure 3a: Immediate brisk flow of pus and solid debris.

Conflict of Interest

Christopher J. DiMaio has a consultant relationship with Boston Scientific. Dennis Yang and Donevan Westerveld have no relevant competing interests to declare.

Contributors

Dennis Yang, Donevan Westerveld, Christopher J. DiMaio contributed to this project as a team; portions were written and edited by each member of the team multiple times. CD, the attending physician, gave the final approval to this work.

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