

EUS-guided pancreatic duct drainage: Approach to a challenging procedure

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Endoscopic removal of pancreatic stones is challenging because pancreatic stones tend to be spiculated and hard and are impacted behind strictures in most cases.^[1] Success rate of stone retrieval by standard endoscopic retrograde cholangiopancreatography (ERCP) is only about 50%. Adding shockwave corporeal lithotripsy or ESWL increases the success rate to 60%–70%, but this is not always available. Unlike in the bile duct where percutaneous salvage is readily available, no alternative sort of surgery exists for pancreatic drainage. Therefore, endoscopic ultrasound-guided pancreatic duct drainage (EUS-PDD) has been gaining popularity because of reasonably high technical success rate and a favorable safety profile in expert hands.

The current indications of EUS-PDD include chronic pancreatitis with pancreatic duct obstruction such as due to strictures or stones, disconnected pancreatic duct, and inaccessible major and minor papilla by ERCP such as in surgical postanatomical alteration, malignant pancreatic duct obstruction, and postsurgical pancreaticoenterostomy stricture.^[2]

EUS-PDD can be performed into two ways: EUS-guided rendezvous of the pancreatic duct or EUS-guided pancreaticogastrostomy or antegrade stenting.^[3] We have thus far performed four cases of EUS-PDD in

our center, all with good clinical outcome. Two of which were for obstructing pancreatic duct stones with recurrent pancreatitis post-Whipple's and one for obstructed pancreatic duct due to pancreatic head cancer who failed ERCP. The fourth patient is presented in this video, which shows the case of a 75-year-old male who presented with chronic pancreatitis with obstructing calculi



Figure 1. A 75-year-old male who presented with chronic pancreatitis with obstructing calculi in the head and dilated pancreatic duct in the neck, body, and tail for which eus-guided pancreatic duct drainage was performed.

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in the head and dilated pancreatic duct in the neck, body, and tail. ERCP for stone removal was unsuccessful, and ESWL was not available. Due to his comorbidities, the patient was deemed as a poor surgical candidate. Hence, EUS-PDD was performed successfully [Figure 1]. This video demonstrates EUS-PDD, which has been shown to be safe and effective in our small case series.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient has given his consent for his images and other clinical information to be reported in the journal. The patient understands that his name and initial will not be published and due efforts will be made to conceal his identity, but anonymity cannot be guaranteed.

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Conflicts of interest

There are no conflicts of interest.

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