

Peroral antegrade pancreatoscopy for pancreaticolithiasis after endoscopic ultrasound-guided recanalization of a complete pancreaticojejunal stenosis

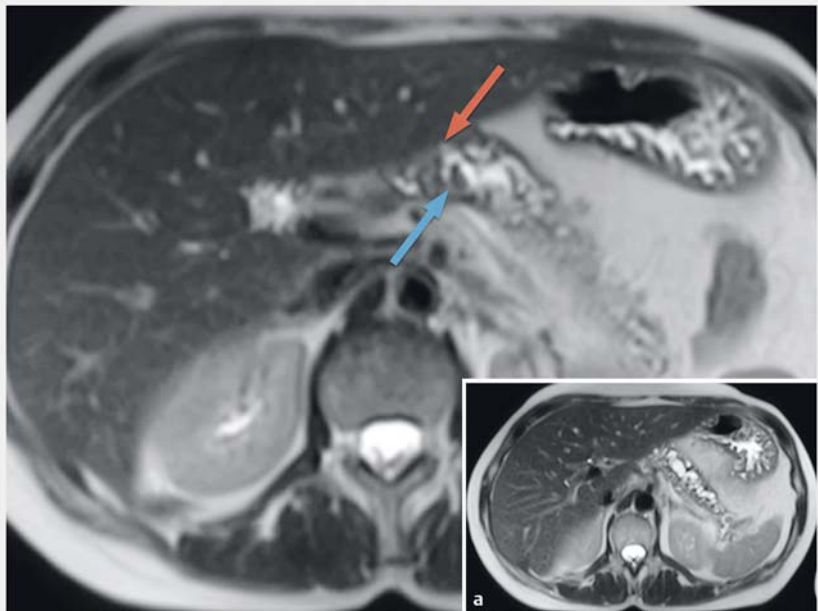
Pancreaticoduodenectomy may result in symptomatic pancreaticojejunal stenosis in 2%–10% of cases [1]. As an alternative to surgery, endoscopic pancreatic duct decompression may be performed by retrograde (enteroscopy) or antegrade (endoscopic ultrasound [EUS]-guided transgastric access) approach [2]. The latter is more likely to be technically successful (up to 70% of cases) [3], and also enables anastomotic recanalization [4]. For pancreaticolithiasis treatment, an antegrade pancreatoscopy procedure has been recently described as feasible and useful [5].

We herein describe the case of a 51-year-old woman who presented with abdominal pain and several episodes of mild pancreatitis in the preceding 12 months. Symptoms were due to a pancreaticojejunal stenosis and obstructing pancreatic ductal stones following a curative pancreaticoduodenectomy performed 8 years earlier (► **Fig. 1**). After a previous EUS-guided attempt failed because of complete pancreaticojejunal stenosis, a successful EUS-guided pancreatic recanalization was achieved in June 2017, which enabled the placement of a transgastric indwelling double-pigtail stent across the stenosis (► **Fig. 2**, ► **Fig. 3**, ► **Video 1**). The patient became asymptomatic.

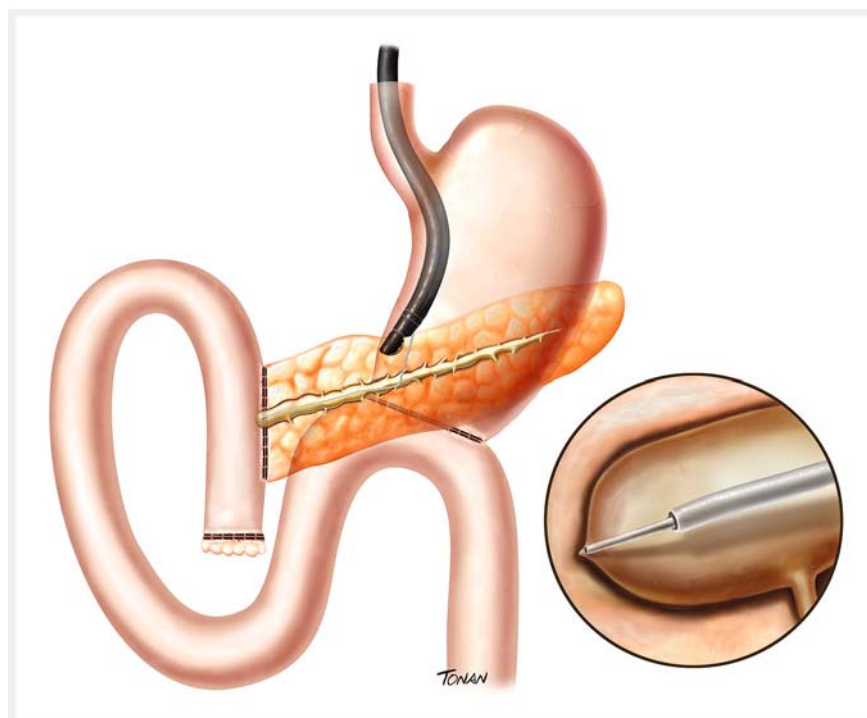
In March 2018, it was decided to perform a peroral transgastric pancreatoscopy to evaluate a persistent pancreaticojejunal stenosis and treat any remaining ductal stones. After stent removal and endoscopic dilation of the stenosis and gastric tract (► **Fig. 4**), a digital single-operator peroral cholangioscope (SpyGlass DS, Boston Scientific, Marlborough, Massachusetts, USA) was inserted through a standard therapeutic duodenoscope into the pancreatic duct until it reached



► **Video 1** Peroral antegrade pancreatoscopy for evaluating and treating pancreaticojejunal stenosis and pancreatic ductal stone.



► **Fig. 1** A complete pancreaticojejunal stenosis (red arrow) and pancreatic ductal stone (blue arrow) was seen on magnetic resonance cholangiopancreatography, with a dilated mid-distal pancreatic duct (a).



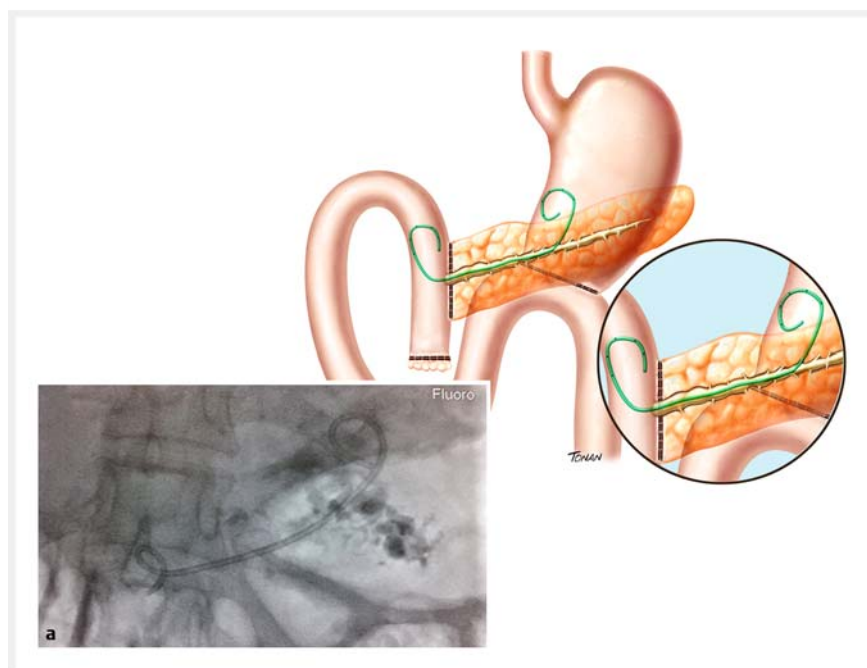
► **Fig. 2** An electrocautery needle-knife was inserted inside the pancreatic duct in order to traverse the pancreaticojejunal stenosis for jejunal access. Source: Rodrigo Ricieri Tonan.



► **Fig. 4** Endoscopic balloon dilation of the pancreatic stenosis using a 15 mm hydrostatic balloon.



► **Fig. 5** A peroral cholangioscope was inserted inside the pancreatic duct through the gastric tract.

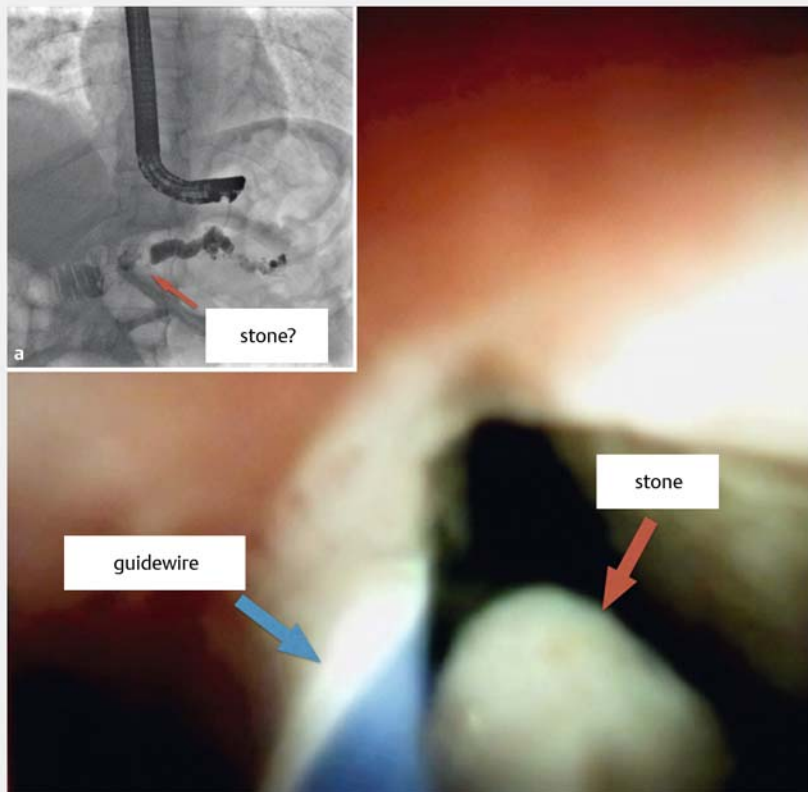


► **Fig. 3** A transgastric indwelling double-pigtail stent was placed across the stenosis, with fluoroscopic view (**a**). Source: Rodrigo Ricieri Tonan.

the jejunum (► **Fig. 5**, ► **Video 1**). This revealed a fibrotic pancreaticojejunal stenosis, 3 cm in length, and a persistent pancreatic ductal stone, 4 mm in size (► **Fig. 6**). Pancreatic ductal clearance was achieved using water irrigation and push-and-pull maneuver, with no need for intraductal lithotripsy. A 10Fr 12 cm transgastric plastic biliary stent was placed across the stenosis.

The patient was discharged the day after the procedure and continued to do well 60 days later. This patient will need further stent replacement until a desirable and stable pancreaticojejunal opening is achieved.

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► **Fig. 6** Pancreatotomy confirmed a persistent 4 mm pancreatic ductal stone (red arrow), which was suspected at pancreatography (a). A guidewire can be seen in the pancreatic duct (blue arrow).

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Competing interests

None

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