

Successful retrograde and antegrade passage of narrow and complete pancreatic strictures using a cystogastrostome

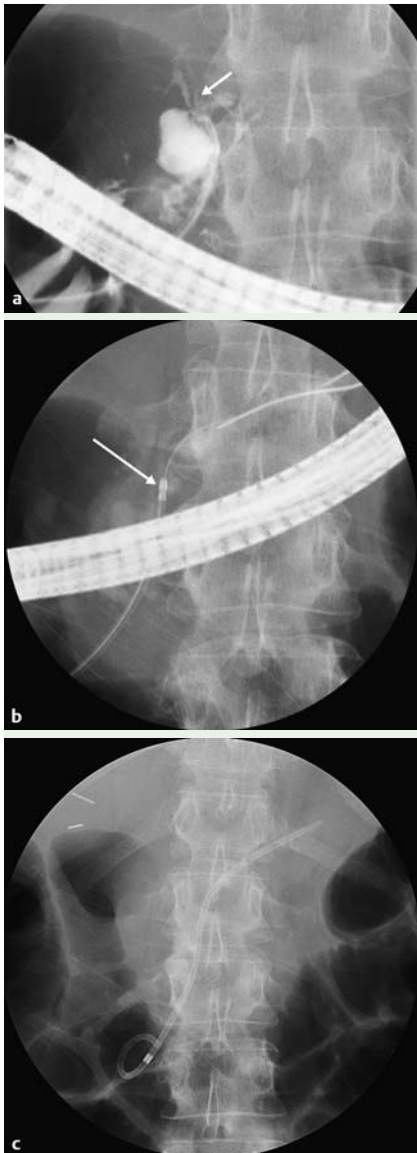


Fig. 1 Endoscopic retrograde cholangiopancreatography (ERCP) in a patient with tight main pancreatic duct stricture. **a** Site of connection with main pancreatic duct (arrow). **b** Retrograde recanalization with a 6-Fr cystogastrostome (arrow). **c** Successful placement of a 7-Fr pigtail pancreatic stent.

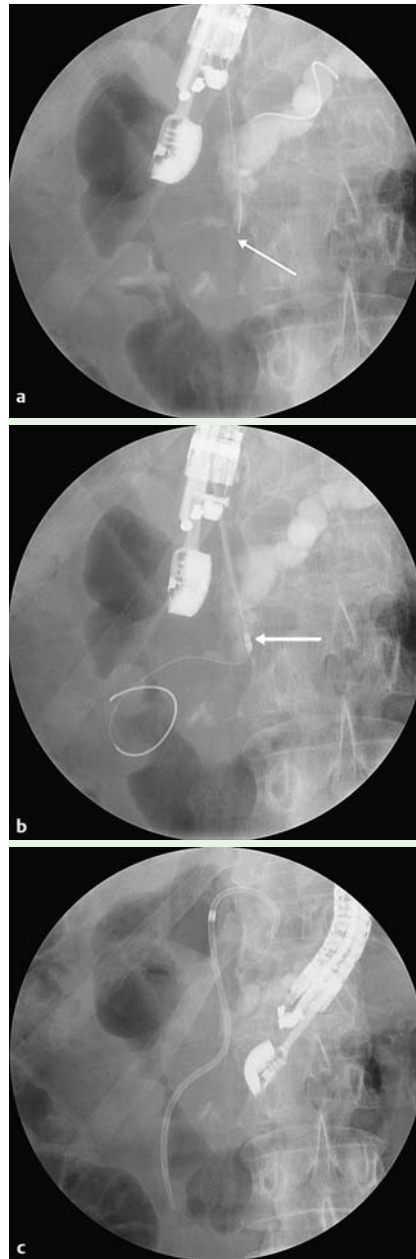


Fig. 2 **a** Endoscopic ultrasound (EUS)-guided antegrade opacification with complete stop (arrow) in head of the pancreas. **b** EUS and fluoroscopy-guided antegrade recanalization with 6-Fr cystogastrostome (arrow indicates the tip) through the duct of Santorini, minor papilla, and the duodenum. **c** EUS-guided antegrade placement of a pigtail 7-Fr pancreatic stent.

Pancreatic duct strictures may be due to acute or chronic pancreatitis, pancreatic neoplasms, or anastomotic stenosis. Some of these strictures may be almost complete and only traversable with hydrophilic guide wires. When the passage of tapered catheters, Soehendra or balloon dilators is not possible, appropriate endoscopic drainage of the pancreatic duct may fail. Blind passage of a needle knife [1] or endoscopic ultrasound (EUS)-guided antegrade drainage may be helpful [2–4].

The Cremer cystogastrostome was particularly developed for transmural cystgastrostomy or cystduodenostomy, and has been recently used for transmural biliary and pancreatic EUS-guided drainage [4,5]. The 6-Fr diameter version, with cutting current settings, is known for its high traversability, even through hard tissue.

We describe the successful use of the 6-Fr cystogastrostome (EndoFlex, Boucart Medical, Brussels, Belgium) in two patients with extremely tight pancreatic strictures. The first patient was 53 years of age and had chronic pancreatitis with a severe stricture of the main pancreatic duct (MPD), measuring 15 mm in length. After several failed attempts to pass the stenosis using a variety of catheters, recanalization was finally carried out using the 6-Fr cystostome on a 0.035 Jagwire (Boston Scientific Benelux, Diegem, Belgium), with pure cutting current (effect 4, 40 W, Vio300D, Erbe Belgium, Diegem, Belgium). This was followed by successful stenting with a plastic 7-Fr Zimmon ZPSOF (Cook, Limerick, Ireland) (● Fig. 1).

In the second case, we used the cystostome via an antegrade approach after endoscopic retrograde pancreatography (ERCP) to access the pancreatic duct failed due to a complete block of the lumen within the head of the pancreas. EUS-guided, 19-gauge puncture of the pancreatic duct allowed positioning of a 0.035 Jagwire through the stricture in the duodenum. After numerous attempts to pass tapered catheters failed, deep MPD cannulation was achieved using the cystogastrostome with cutting current. Balloon dilation (Hurricane RX, Boston Scientific, Diegem, Belgium) and stenting with a plastic 7-Fr stent were thereafter carried out successfully (● Fig. 2). We have used a similar cystostome approach in various biliary and pancreatic strictures in another three patients, including a patient with a tight hilar biliary stricture following right hepatectomy. There were no

complications or evidence of post-procedural pain in these cases.

In conclusion, the cystogastrostome, with pure cutting current, allows adequate endoscopic drainage, including dilation and stent placement, and can be safely used in those pancreatic and biliary strictures that are not traversable with conventional methods.

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Competing interests: None

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