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## **Endoscopic Snapshot**

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# Endoscopic Restoration of a Dehiscent Pancreatojejunostomy after Pancreatoduodenectomy

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#### **Keywords**

Postoperative pancreatic fistula · Endoscopic intervention · Pancreaticojejunal anastomosis

Restauração endoscópica da pancreatojejunostomia deiscente após pancreatoduodenectomia

#### **Palavras Chave**

Fístula pancreática pós-operatória · Intervenção endoscópica · Anastomose pancreaticojejunal

Postoperative pancreatic fistula is a potentially lifethreatening complication after pancreatoduodenectomy [1]. Disruption of the pancreaticojejunal anastomosis after pancreatoduodenectomy is reported to occur in as many as 15% of cases, and treatment of the dehiscent pancreatojejunostomy is through relaparotomy or catheter drainage [2]. Although a few recent reports have described the successful endoscopic ultrasound-guided internalization of external pancreatic fistula [3, 4], there has been no report to date of restoration of a dehiscent pancreaticojejunostomy. Here, we report a case of endoscopic restoration of a dehiscent pancreatojejunostomy after pancreatoduodenectomy.

A 72-year-old man, who underwent pancreatoduodenectomy 2 months earlier for cholangiocarcinoma, was

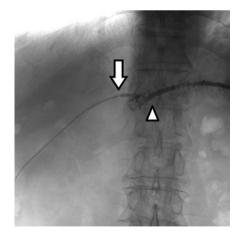
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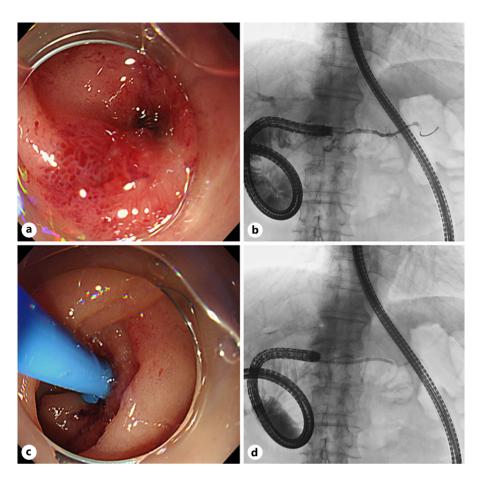
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This is an Open Access article licensed under the Creative Commons Attribution-NonCommercial-4.0 International License (CC BY-NC) (http://www.karger.com/Services/OpenAccessLicense), applicable to the online version of the article only. Usage and distribution for commercial purposes requires written permission. referred for treatment of an intractable external pancreatic fistula resulting from pancreatojejunostomy dehiscence. Fistulogram through a remaining surgical drainage tube demonstrated a pancreatocutaneous fistula connecting to the pancreatic duct (Fig. 1). Endoscopic treatment with a short-type single-balloon enteroscope (SIF-H290S; Olympus, Tokyo, Japan), which has a 1,520mm working length and a 3.2-mm working channel, was



**Fig. 1.** Fistulogram through a surgical drainage tube (arrow) showing a pancreatocutaneous fistula connecting to the pancreatic duct (arrowhead) in a 72-year-old man who presented with an intractable external pancreatic fistula resulting from pancreatojejunostomy dehiscence.

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**Fig. 2. a** Endoscopic image showing the pancreaticojejunal anastomosis. **b** Fluoroscopic image showing a catheter manipulated through the dehiscent anastomosis into the pancreatic duct with a retrograde filling of the bile duct through the hepaticojejunostomy. **c** Endoscopic image showing a 7-Fr, 5-cm straight stent placed across the dehiscent anastomosis for internal drainage. **d** Fluoroscopic image showing the pancreatic stent after endoscopic recanalization.

then undertaken to recanalize the dehiscent pancreatojejunostomy. A transparent cap was attached to the tip of the scope to facilitate insertion of the endoscope and cannulation through the anastomosis. After identification of the pancreaticojejunal anastomosis, a 0.025-in guidewire (VisiGlide 2; Olympus Medical Systems, Tokyo, Japan) was manipulated through the dehiscent anastomosis into the pancreatic duct, and a 7-Fr, 5-cm straight stent with proximal and distal flaps (Flexima; Boston Scientific Japan, Tokyo, Japan) was placed across the dehiscent anastomosis for internal drainage (Fig. 2; online suppl. Video 1, see www.karger.com/doi/10.1159/000516946 for all online suppl. material). The surgical drainage tube was removed 2 days after the endoscopic treatment, and the patient was discharged without further complications; on a follow-up CT performed 2 months after the endoscopic treatment, complete resolution of the pancreatic fistula with spontaneous dislodgement of the pancreatic stent was confirmed.

#### **Statement of Ethics**

Patient consent was obtained for publication of this report, including the images.

### **Conflict of Interest Statement**

The authors have no conflict of interests to declare.

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#### **Author Contributions**

S.K. is the article guarantor and wrote this paper.

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#### References

- Smits FJ, van Santvoort HC, Besselink MG, Batenburg MC, Slooff RA, Boerma D, et al.; Dutch Pancreatic Cancer Group. Management of severe pancreatic fistula after pancreatoduodenectomy. JAMA Surg. 2017 Jun;152(6):540–8.
- 2 Sheiman RG, Chan R, Matthews JB. Percutaneous treatment of a pancreatic fistula after pancreaticoduodenectomy. J Vasc Interv Radiol. 2001 Apr;12(4):524–6.
- 3 Haseeb A, Abu Dayyeh BK, Levy MJ, Fujii LL, Pearson RK, Chari ST, et al. Endoscopic ultrasound-guided treatment of pancreaticocutaneous fistulas. ACG Case Rep J. 2016 Aug;3(4):e105.
- 4 Jürgensen C, Distler M, Arlt A, Brückner S, Ellrichmann M, Matthes K, et al. EUS-guided drainage in the management of postoperative pancreatic leaks and fistulas (with video). Gastrointest Endosc. 2019 Feb;89(2):311–9. e1.