## Pancreatic-colonic fistula successfully treated with endoscopic transpapillary nasopancreatic drainage

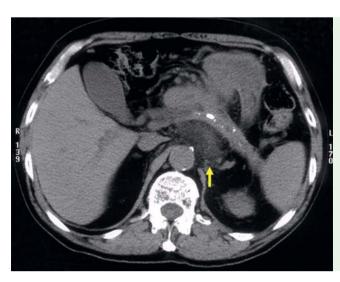
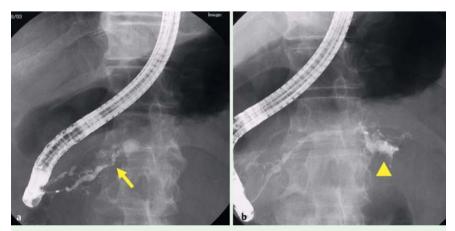


Fig. 1 Abdominal computed tomography (CT) scan showing atrophy and calcification of the pancreas and fluid collection in the anterior pararenal space (arrow).



**Fig. 2 a, b** Endoscopic retrograde pancreatography showing irregular stenosis of the main pancreatic duct (arrow) and fluid collection in the tail of the pancreas (arrowhead).

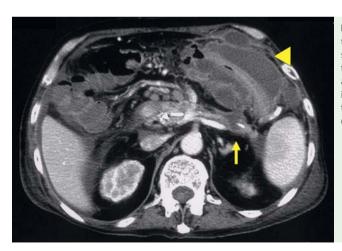


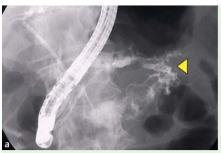
Fig. 3 Computed tomography (CT) scan showing dilatation of the distal main pancreatic duct (arrow) and inflammation around the transverse colon (arrowhead).

A 70-year-old man with upper abdominal pain was diagnosed as having an acute exacerbation of chronic pancreatitis. He was a heavy drinker, with a history of severe acute pancreatitis at 68 years of age. Abdominal computed tomography (CT) showed atrophy and calcification of the pancreas and fluid collection in the anterior pararenal space (> Fig. 1). Initial treatment comprised total parenteral nutrition and antibiotics, which led to improvement in symptoms and laboratory data. However, the pancreatitis relapsed after food intake was started. Endoscopic retrograde pancreatography (ERP) showed irregular stenosis of the main pancreatic duct (MPD) and fluid collection in the tail of the pancreas ( Fig. 2). Hence, endoscopic pancreatic stent drainage was carried out. After 2 weeks, the patient developed fever accompanied with mucobloody stool. However, the bleeding point was not detected on endoscopy. CT showed dilatation of the distal MPD and inflammation around the transverse colon ( Fig. 3). The muco-bloody stool improved gradually with total parenteral nutrition and blood transfusion, in addition to antibiotic treatment. ERP after another 2 weeks revealed a colonic fistula at the distal MPD ( Fig. 4 a). Therefore, an endoscopic transpapillary nasopancreatic drainage (ENPD) tube was placed in the distal MPD. After 10 days, there were no signs of the fistula at scanning with a contrast medium ( Fig. 4b), and the inflammation around the transverse colon had resolved ( Fig. 5).

Pancreatic-colonic fistula is an uncommon but potentially lethal complication of severe acute pancreatitis. Because of its frequent association with sepsis or bleeding, appropriate operative intervention is necessary [1,2]. Although successful endoscopic interventions such as endoscopic pancreatic stent or transgastric nasocystic drainage catheter placements have been reported [3–5], the successful use of transpapillary nasopancreatic drainage alone has not been reported previously. Here, we present a case of a pancreatic-colonic fistula associated with pancreatitis that was successfully treated with ENPD.

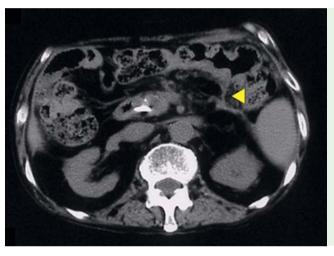
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Competing interests: None





**Fig. 4** a Endoscopic retrograde pancreatography performed after 2 weeks showing a colonic fistula at the distal main pancreatic duct (MPD) (arrowhead). **b** Contrast-enhanced scan after 10 days showing no evidence of the fistula.



**Fig. 5** Resolution of inflammation around the transverse colon with a fistula scar (arrowhead).

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## **Bibliography**

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