

Supplementary Table 1. The detailed features for procedure-related perforation

	Procedure type			Type of perforation
	Procedure	Indication	Technical details	
Case 1	ERCP	CBD cancer	EST and EPBD	Periampullary perforation
Case 2	ERCP	Small CBD stone	EST	Periampullary perforation
Case 3	ERCP	CBD stone	EST	Periampullary perforation
Case 4	EUS-FNA	Pancreas head cancer	Mechanical injury by scope	Duodenal wall perforation
Case 5	ERCP	CBD stone	EST and fistulotomy	Periampullary perforation with severe PEP
Case 6	ERCP	CBD stone	EST and precut-EST	Periampullary perforation with severe PEP
Case 7	ERCP	CBD stone	Mechanical injury by scope for the patient with STG-BII state	Small bowel wall perforation
Case 8	ERCP	CBD stone	Mechanical injury by scope	Duodenal wall perforation
Case 9	ERCP	CBD stone	EST and precut-EST	Periampullary perforation with severe PEP
Case 10	ERCP	CBD stone	EST and precut-EST	Periampullary perforation
Case 11	ERCP	Pancreas duct stone	EST and precut-EST	Periampullary perforation
Case 12	ERCP	Hilar cholangiocarcinoma	14 cm, 7 Fr straight plastic stent	duodenal retroperitoneal perforation
Case 13	ERCP	CBD stone	Mechanical injury by scope	duodenal wall perforation
Case 14	EUS-FNA	GB cancer	Mechanical injury by instrument	GB micro-perforation

ERCP, endoscopic retrograde cholangiopancreatography; CBD, common bile duct; EST, endoscopic sphincterotomy; EPBD, endoscopic papillary balloon dilatation; FNA, fine needle aspiration; PEP, post-ERCP pancreatitis; STG-BII, subtotal gastrectomy with Billroth II; GB, gallbladder.