

Successful endoscopic sclerotherapy for cholecystojejunostomy variceal bleeding in a patient with pancreatic head cancer

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Abstract

Variceal bleeding outside the esophagus and stomach is rare but important because of its difficult diagnosis and treatment. Bleeding from cholecystojejunostomy varices has been reported to be a late complication of palliative biliary surgery for chronic pancreatitis. Such ectopic variceal bleeding has never been reported after palliative surgery for pancreatic cancer, probably because of the limited lifespan of these patients. Herein, we report our successful experience using endoscopic cyanoacrylate sclerotherapy to treat bleeding from cholecystojejunostomy varices in a 57-year-old man with pancreatic head cancer. To our knowledge, this is the first case report in the literature of this rare complication.

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Key words: Ectopic varix; Pancreatic cancer; Cholecystojejunostomy; Sclerotherapy

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INTRODUCTION

Variceal bleeding outside the esophagus and stomach is rare but important because of its difficult diagnosis and treatment. These ectopic varices are usually associated with cirrhosis and, less often, may result from portal vein thrombosis, chronic pancreatitis, mesenteric venous thrombosis, or adhesion caused by prior surgery^[1]. Bleeding from cholecystojejunostomy varices has been reported to be a late complication of palliative biliary surgery for chronic pancreatitis^[1-4]. To our knowledge, such bleeding has never been reported after surgery for pancreatic cancer, probably because of the limited lifespan of such patients^[1]. Herein, we report our successful experience using endoscopic cyanoacrylate sclerotherapy to treat bleeding from cholecystojejunostomy varices in a 57-year-old man with pancreatic head cancer.

CASE REPORT

A 57-year-old man was admitted to our hospital because of tarry stool passage. His surgical history included a Billroth-II operation for peptic ulcer 30 years ago and cholecystojejunostomy for biliary palliation due to pancreatic head cancer diagnosed 6 mo before this admission. The tumor progressed with portal vein invasion and multiple hepatic metastases during this period despite chemotherapy.

Hemoglobin count was 60 g/L on presentation and his coagulation profiles were within normal limits. An upper endoscopy disclosed no hemorrhagic lesion in

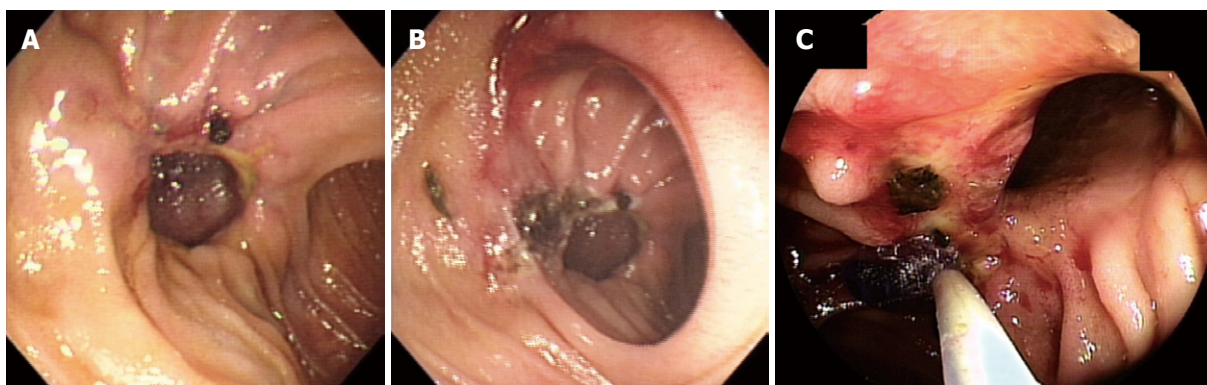


Figure 1 Endoscopic view. A: An anastomotic ulcer was observed in the cholecystojejunostomy; B: Anastomotic ulcer after argon plasma coagulation therapy; C: n-butyl-2-cyanoacrylate injection into the cholecystojejunostomy varices.



Figure 2 Abdominal computed tomography. A: Prominent vessels (arrow) formed around the gall bladder; B: Obliterated varicose vein (arrow).

the esophagus or stomach. The endoscope was then advanced to the cholecystojejunostomy area where shallow ulcers over the anastomosis were found (Figure 1A). The patient was administered intravenous proton pump inhibitor and blood component replacement therapy. The bleeding persisted and colonoscopy subsequently revealed a bleeding point above the terminal ileum. Therefore, a decision was made to perform local therapy for the anastomotic ulcer with argon plasma coagulation (Figure 1B).

The patient continued to bleed despite endoscopic therapy. abdominal computed tomography (CT) was performed, which revealed portal vein tumor invasion with collateral circulation formation. Prominent varices were found around the gall bladder and cholecystojejunostomy (Figure 2A). No tumor invasion to the bowel was noted. Retrospective review of the endoscopic images revealed that the folds were mildly engorged with mild blue color, which suggested underlying varices.

After discussion, the patient agreed to endoscopic therapy with n-butyl-2-cyanoacrylate for these varices on the 12th d of hospitalization. Endoscopic ultrasound with miniprobe was used to confirm the presence of varices beneath the anastomotic ulcer, and injection therapy with n-butyl-2-cyanoacrylate was carried out smoothly (Figure 1C). A follow-up CT revealed successful obliteration of the collateral circulation (Figure 2B). The patient died of his disease 4 mo later and had no recurrent gastrointestinal bleeding during the intervening period.

DISCUSSION

Esophageal or gastric variceal bleeding is a common cause of severe gastrointestinal bleeding. Ectopic variceal bleeding from the duodenum^[5-7], jejunum^[8], ileum^[9], and colon^[10,11] have been reported in the literature as a diagnostic and therapeutic challenge to clinicians. This ectopic variceal bleeding usually results from portal hypertension, portal vein thrombosis, mesenteric vein thrombosis, chronic pancreatitis, adhesion after surgery, or inflammatory bowel disease^[1,12]. Our reported case, suffering from cholecystojejunostomy variceal bleeding, is even rarer and such bleeding has been reported to be associated only with chronic pancreatitis^[1-4] in the literature. This is probably because these cancer patients have a limited lifespan, dying before such varices can develop^[1].

The diagnosis of ectopic varices is usually made after endoscopic examination: mesenteric venography^[1,12], abdominal ultrasound^[13], enteroclysis^[3], or CT^[14]. In our case, the diagnosis was difficult to make during the initial endoscopic examination because the varicose vein was not prominent and was masked by an overlying anastomotic ulcer. A careful review of the CT and endoscopic images in this case suggested the presence of varices in the cholecystojejunostomy and led us to approach the case with different endoscopic measures. Consequently, we suggest that endoscopic ultrasound is mandatory, as in our case, to confirm the presence of varices prior to endoscopic therapy. Alternatively, needle aspiration or

injection of contrast may prove useful for diagnosis.

Unlike esophageal and gastric varices, the treatment options for ectopic varices have varied in the literature. Surgical resection^[1] or radiological methods to decrease portal hypertension^[15] have previously been reported. Both endoscopic band ligation^[10] and sclerotherapy^[15] have been successfully used to treat such ectopic varices. Endoscopic cyanoacrylate sclerotherapy was chosen in this patient with advanced cancer because it is minimally invasive and has previously been used to treat gastric varices endoscopically^[16]. A follow-up CT demonstrated successful obliteration of the varices and thus, permanent hemostasis was achieved for our case.

In conclusion, we report a case of pancreatic cancer with bleeding from cholecystojejunal varices. The diagnosis was made by CT, endoscopy, and endoscopic ultrasound. Cyanoacrylate sclerotherapy was a successful method to achieve hemostasis in this case.

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