

Colonic Varices Due to Chronic Pancreatitis: A Rare Cause of Lower Gastrointestinal Bleeding

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Abstract

A 75-year-old man with chronic pancreatitis presented with painless bloody stool. Computed tomography revealed a splenic vein occlusion with several collaterals towards the descending colon. Colonoscopy showed tortuous varices in the descending colon, which suggested recent bleeding. Sinistral portal hypertension (SPH) due to chronic pancreatitis was diagnosed, so splenectomy and distal pancreatectomy were performed. Our case illustrates a rare complication of SPH.

Introduction

Sinistral portal hypertension (SPH) is caused by thrombosis or obstruction of the splenic vein, resulting in back pressure changes in the left portal system.¹ SPH is present in 7% of cases of chronic pancreatitis, and mostly leads to the formation of gastric varices.² Colonic varices are very rare condition, and extremely uncommon in SPH.

Case Report

A 75-year-old man with a 4-year history of alcoholic chronic pancreatitis presented with painless bloody stool. His abdomen was soft and non-tender, and he had no history of abdominal surgery or trauma. Laboratory tests showed marked anemia (hemoglobin 6.9 g/dL). An esophagogastroduodenoscopy (EGD) revealed gastric fundal varices without any signs of recent bleeding, but no esophageal varices.

Abdominal computed tomography (CT) was performed to rule out any other source of bleeding, and findings were consistent with chronic pancreatitis accompanied by splenic vein occlusion behind the tail of the pancreas, with severe collaterals toward the descending colon (Figure 1). CT revealed no signs of liver cirrhosis. A colonoscopy showed tortuous varices in the descending colon, and red dots, which suggested recent bleeding, were seen on their surface (Figure 2). Given the CT findings, we concluded that the varices were the source of the bleeding; therefore, splenectomy and distal pancreatectomy were performed to improve the SPH. The splenic vein was severely occluded, and liver cirrhosis was ruled out based on the laparotomy findings. The patient refused to have a postoperative colonoscopy; CT confirmed eradication of the varices without recurrence (Figure 3).

Discussion

SPH is a localized form of portal hypertension, accounting for less than 5% of cases of portal hypertension.³ SPH is commonly caused by thrombosis or obstruction of the splenic vein,¹ and mostly leads to the formation of gastric varices.⁴ As with our case, the most common etiology of the splenic vein thrombosis is acute or chronic pancreatitis.⁵ In chronic pancreatitis, the occlusion of the splenic vein was seen in 8%, and SPH was present in 7% of the cases.^{2,6}

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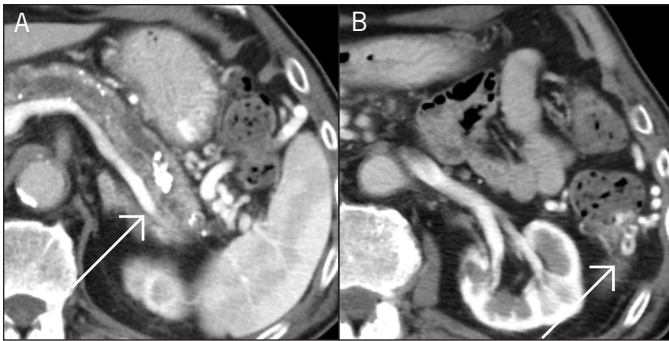


Figure 1. Abdominal CT showing (A) chronic pancreatitis with the splenic vein occlusion behind the tail of the pancreas, and (B) severe collaterals towards the descending colon.

Varices of the colon are very rare, and only 2 cases were reported among 2,912 consecutive adult autopsies.⁷ According to a nationwide survey in Japan, colonic varices account for 3.5% of all ectopic varices.⁸ The most common cause of colonic varices is portal hypertension.⁹ Colonic varices due to SPH are extremely rare, and have been described in 2 case reports.^{10,11} Colonoscopy is necessary to rule out these conditions. However, some reports indicate that colonoscopy is of limited value during the bleeding period, and the diagnostic rate of colonoscopy has been reported as 69%.^{12,13} Moreover, air insufflated through the scope collapses the varices, even when adequate preparation has been carried out.¹⁴ Hence, if SPH is suspected, contrast-enhanced CT should be performed to evaluate the varices and the collateral veins.

The management of colonic variceal bleeding has not been established. In most cases, they have been treated with col-

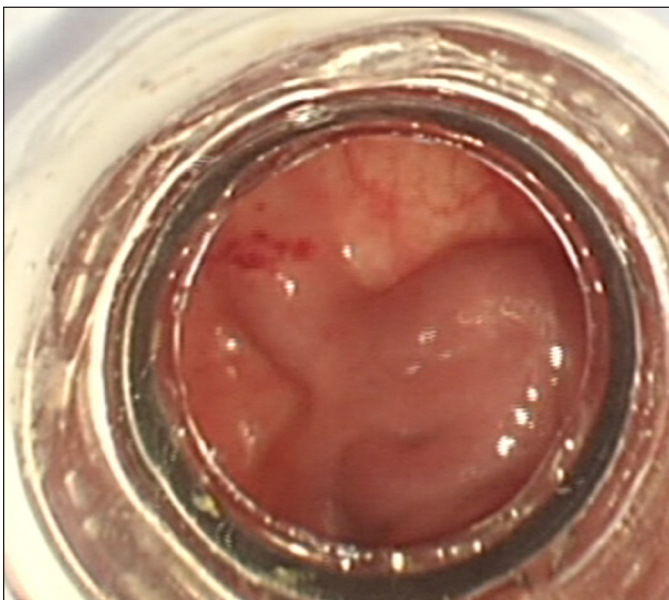


Figure 2. Endoscopic view of the descending colon showing tortuous varices with red dots on the surface suggesting recent bleeding.

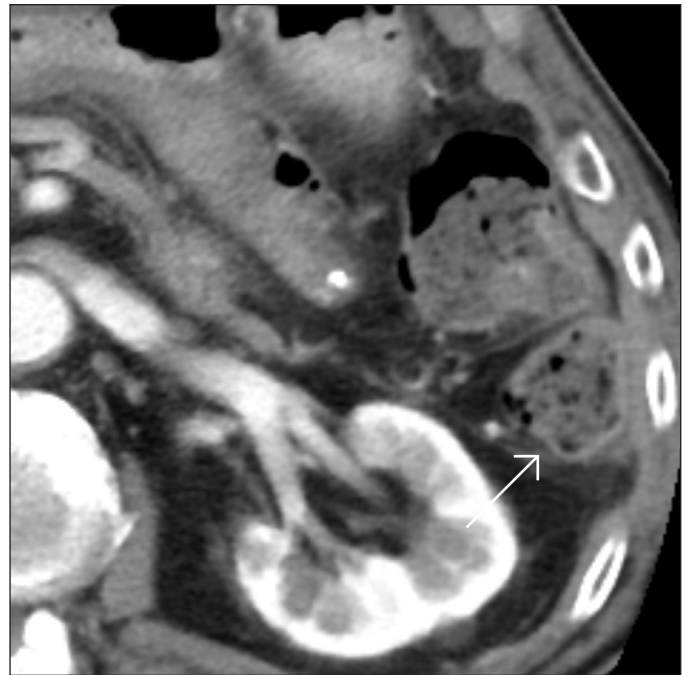


Figure 3. Postoperative CT showing eradication of the varices from the descending colon without recurrence.

ectomy and portosystemic shunt.^{9,12} Endovascular embolizations, with or without transjugular intrahepatic portosystemic shunt insertion, have also been reported.¹³ Endoscopic injection of cyanoacrylate has been reported, but failed to achieve complete hemostasis.¹⁵

Disclosures

Author contributions: S. Kitagawa wrote the manuscript and is the article guarantor. T. Sato and A. Hirayama wrote and edited the manuscript.

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