

Chronic Pancreatitis-Induced Colonic Obstruction Mimicking a Stenosing Neoplasm at the Proximal Descending Colon: Treatment by Diverting Colostomy and Serial Pancreatic Duct Stenting

Case Report

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Abstract

Large bowel obstruction mimicking colon cancer is a rare complication of acute or chronic pancreatitis. We present a case of a 42-year-old male patient with chronic alcoholic pancreatitis presenting with abdominal distension for two months. Computed tomography showed an obstructive mass-like stricture at the proximal descending colon. A diverting transverse colostomy was done followed by serial pancreatic duct stenting. The colonic stricture resolved after six months of treatment.

Keywords

Pancreatitis, Pancreatic pseudocyst, Colon obstruction, Colostomy, Pancreatic duct stenting

Abbreviations

CT: Computed Tomography

ERCP: Endoscopic retrograde cholangiopancreatography

Introduction

Colonic involvement in pancreatitis is rare and typically occurs in the setting of acute pancreatitis. Continuous inflammation, leakage of autodigestive enzymes or dissection of a pseudocyst or abscess may affect the colon causing obstruction, perforation, fistula, hemorrhage, ischemia or necrosis. Colonic obstruction mimicking a stenosing colon neoplasm in chronic pancreatitis is an even rarer occurrence [1-3].

Case Presentation

A 42-year-old male with a history of chronic alcoholic pancreatitis presented with abdominal fullness and poor diet intake for two months while drinking a bottle of liquor daily. He also had intermittent epigastric pain with radiation to his back. Abdominal examination showed distention and tenderness without rebound tenderness or muscle guarding. Laboratory studies revealed slightly elevated amylase and lipase (133U/L and 92U/L). Contrast abdominal computed tomography (CT) revealed the

patient had proximal colon distension with an obstructive mass-like stricture at the proximal descending colon with severe regional adhesion. Colonic cancer with or without prior tumor rupture was suspected (cT4N0M0) [Figure 1A and 1B]. Chronic pancreatitis related main pancreatic duct dilatation, main pancreatic duct disruption and pancreatic juice leakage with left upper quadrant pseudocysts was also noted [Figure 1B and 1C].

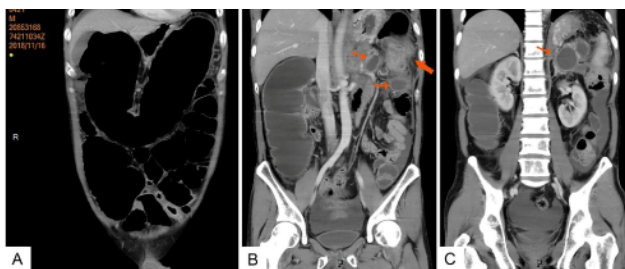


Figure 1: Pre-operative abdominal CT. A: Proximal colon with severe distension; B: Obstructing descending colon mass (broad arrow); B and C: Several pancreatic pseudocysts (thin arrows) causing mass effect displacing left kidney inferiorly.

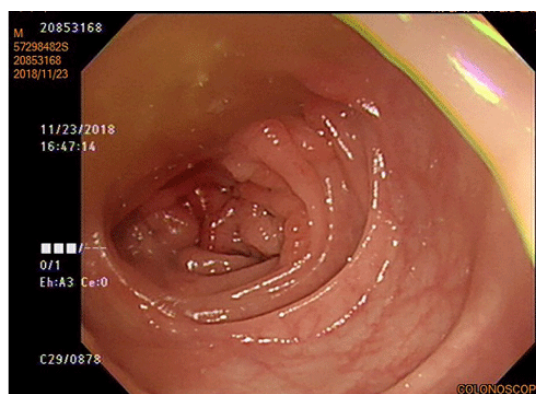


Figure 2: Colonoscopy. Stricture at the proximal descending colon without mucosal neoplasm

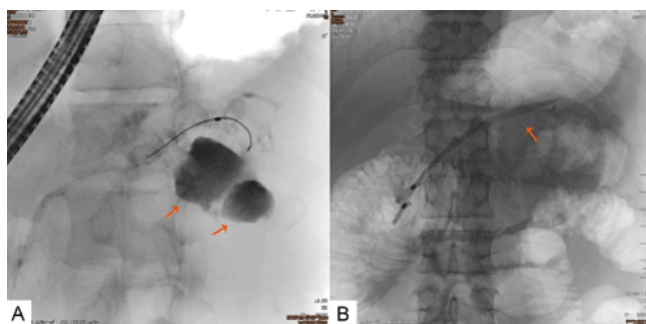


Figure 3: ERCP. A: Extravasation of contrast medium into pancreatic pseudocysts (thin arrows); B: Pancreatic stents and absence of extravasation (six months after initial treatment).

Due to severely distended colon, emergent diverting transverse colostomy was performed. Bowel decompression and cleansing was done post-operatively and colonoscopy was arranged one week later. Stricture at the proximal descending colon was observed without obvious mucosal neoplasm [Figure 2]. Biopsy was done and the pathology revealed edema with no signs of malignancy. After ruling out colonic neoplasm, Endoscopic retrograde cholangiopancreatography (ERCP) was arranged to treat the chronic pancreatitis and pseudocysts. Pancreatic stones were removed and the pancreatic duct was stented. The stent was replaced every three months for one year. Extravasation was not seen after six months of pancreatic duct stenting [Figure 3]. Abdominal CT confirmed resolution of the pseudocysts. The pancreatic stent was removed and the patient received surgery to takedown the colostomy and recovered without event.

Discussions

Colonic complications due to acute pancreatitis or chronic pancreatitis can present as paralytic ileus, segmental necrosis leading to perforation, pancreatic-colonic fistula or colonic obstruction. In a retrospective study by D.B. Adams et al. in 1994 showed that of 296 patients with acute pancreatitis, 6.1% developed colonic complications. Only one patient had colonic stenosis [4]. Chronic pancreatitis resulting in a colon obstruction mimicking a neoplasm is even less common. According to Pascual M. et al., fewer than 30 such cases have been published to date. Most reported cases of pancreatitis with colonic complications were treated with emergent laparotomy and extensive colonic resections [1-3,5,6].

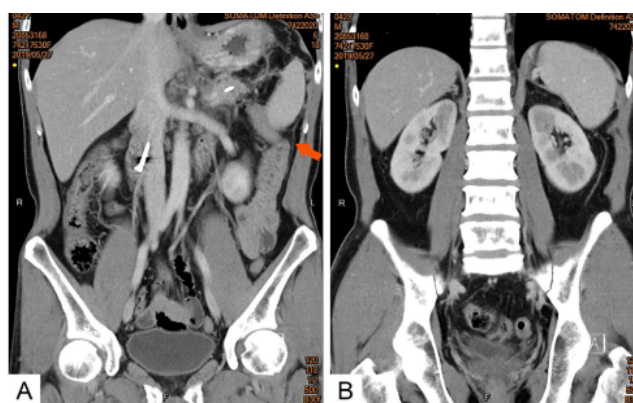


Figure 4: Post-operative abdominal CT. A: Resolution of the mass-like stricture of the descending colon (broad arrow); B: Resolution of pancreatic pseudocysts and return of left kidney to normal anatomic position.

Our patient presented with an obstructing tumor-like lesion of the descending colon, without typical acute pancreatitis signs such as epigastric pain radiating to the back and only had slightly elevated amylase and lipase. However, the patient did present with several pancreatic pseudocysts. The initial impression was an obstructing descending colon cancer. However, colonic obstruction caused by external compression due to chronic inflammation could not be ruled out, so we took a more conservative approach and performed a diverting transverse colostomy first, allowing us time for further evaluation of the colonic lesion. Colonoscopy revealed that indeed there was no malignant neoplasm in the colon, so ERCP was done to treat the patient's pancreatitis and pseudocysts. After resolution of the pancreatic pseudocysts, the colonic stenosis was also resolved [Figure 4]. Subsequent takedown of the colostomy was done.

This case shows that the stenosis of the colon is a reversible complication that can be resolved with the treatment of pancreatitis, and that unnecessary extended colon resection can be avoided with this more conservative two-staged approach.

Conclusions

Large bowel obstruction mimicking colon cancer is a rare complication of acute or chronic pancreatitis.

Clinicians should keep in mind that patients with pancreatitis can develop colon obstructions and even form inflammatory tumor formations that may present as colon cancer. Furthermore, this case helps illustrate that diverting transverse colostomy followed by serial ERCP pancreatic duct stenting can resolve the colonic obstruction and avoid extended colonic resections.

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