Infected Pancreatic Pseudocyst Ruptured into Stomach and Colon Associated with Splenic Artery Pseudoaneurysm

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INTRODUCTION

Spontaneous ruptures occur in less than 5% of patients with pancreatic pseudocysts, and perforation of the pseudocyst into the surrounding visceral structure is rare [1, 2, 3]. The activation of pancreatic enzymes and the vulnerability of pseudocysts occasionally causes spontaneous perforation into other internal organs, and some patients of spontaneous perforations of the pseudocyst into surrounding organs have been reported [4, 5, 6, 7]. Splenic artery pseudoaneurysm, which occurs as a potentially serious complication of chronic pancreatitis, has also been rarely reported [8, 9, 10, 11, 12]. Herein, we present a rare patient of a large pancreatic pseudocyst communicated with the operative stomach and colon, and this patient was associated with a splenic artery pseudoaneurysm.

CASE REPORT

A Forty-six-year-old man was admitted to our hospital with left upper abdominal pain, where he had found a palpable mass. On examination, a palpable mass was found and he was revealed to develop severe hypotension (systolic blood pressure 64 millimeters of mercury). He had chronic alcohol-related pancreatitis and underwent subtotal gastrectomy for gastric ulcers 16 years previously. Abdominal computed tomography (CT) scan revealed a large pancreatic pseudocyst (12 cm in diameter; Figure 1a) in the tail of the pancreas, and a hemorrhagic splenic artery pseudoaneurysm (4 cm in diameter; Figure 1b). The CT scan also showed air and accumulation of fluid/debris in the pseudocyst cavity, indicating gastrointestinal perforation into the pseudocyst (Figure 1a). Endoscopic examinations revealed fistulas that had ruptured into the stomach and transverse colon. Endoscopic retrograde cholangiopancreatography did not reveal any communication between the main pancreatic duct and the pseudocyst (Figures 2a,b). Endoscopic retrograde cholangiopancreatography did not reveal any communication between the main pancreatic duct and the pseudocyst (Figure 2c). The patient had a high fever with prolonged elevated C-reactive protein (12 mg/L), indicating an infected pancreatic pseudocyst. The colonoscope, which was similar in diameter to the colonic fistula, was inserted into the pseudocyst cavity through the colonic fistula into the operative stomach (Figure 2d).
2d), and a potential refractory infection aggravated by fecal contamination in the pseudocyst cavity was observed under colonoscopy (Figure 2b).

We eliminated the contaminated fluid/debris in the pseudocyst and cleaned the infected cavity with a saline solution. Subsequently, the size of the pseudocyst was reduced, and the serious infection in the cavity was improved. Retrograde barium intestinal study showed that the size of the pseudocyst was markedly reduced (Figure 2e). The patient underwent an ileostomy, after that the fistulas closed spontaneously and the ileectomy reversed.

Finally, the patient maintained an asymptomatic state, and follow-up CT scans showed no sign of recurrence over a nine-year follow-up period (Figures 3ab).

DISCUSSION

Pancreatic enzymes and cytokines activated by chronic pancreatitis induce pseudocyst formation, potentially resulting in spontaneous perforation into the surrounding hollow viscera [13, 14]. Endoscopic therapies such as...
Conflict of Interest

The authors declare no conflict of interest.


