Severe colonic stricture related to acute pancreatitis

Key words: Intestinal obstruction. Acute pancreatitis.

Dear Editor,

Large bowel involvement in pancreatic disorders is uncommon with roughly 30 cases described in the literature, being even rarer acute pancreatitis associated colonic complications. We present herein a case of colonic stricture resulting in obstructive symptoms that complicated the course of acute pancreatitis.

Case report

A 43-year-old woman in the waiting surgical list for cholelithiasis and large hepatic adenoma (6.7 cm x 5.3 cm x 6.8 cm, in segment II-III) presented with severe abdominal pain, nausea and vomiting. Blood biochemistry was normal except for a marked rise in serum amylase at 3315 UI/L (normal, 25-115 UI/L). An abdominal ultrasound revealed cholelithiasis and dilated bile ducts, as well as an enlarged pancreas. A diagnosis of acute pancreatitis was then made. The subject did not meet any Ransom criteria. Initial outcome was complicated with acute renal failure and she was admitted to the intensive care unit. An abdominal CT scan was compatible with an acute pancreatitis Balthazar’s grade E. Late outcome was stormy as the subject developed Staphylococci haemolyticus identified in blood cultures. In addition, she also developed thrombosis in catheterized internal jugular and right subclavial veins and severe protein malnutrition. Enteral nutrition was then tried but could not be kept because of recurrent vomiting and abdominal distention. A CT scan revealed complex fluid collections in right psoas as well as severe stricture in the right colonic angle with thickened folds and several fistulas then confirmed in a barium enema (Fig. 1). Because the subject was unresponsive to conservative management she underwent a surgical ileo-colical by-pass, cholecystectomy and resection of hepatic adenoma. At the time of this report, she is asymptomatic and abdominal CT scan reveals no abnormalities.

Fig. 1. Stricture with associated fistulas in transverse-hepatic angle of the colon.
Discussion

Acute pancreatitis is an inflammatory process that eventually can affect other organs in vicinity (1). Colonic involvement in acute pancreatitis, however, is very uncommon not exceeding 1% of the cases (2) regardless the etiology of the process (3,4). The most frequent sites of colonic involvement are the transverse, hepatic and splenic angle, probably due to anatomic proximity (3,4). Various pathogenic mechanism have been proposed: a) Direct spreading of pancreatic enzymes to the mesocolon through the retroperitoneal space; b) thrombosis or compression of mesenteric arteries leading to ischemic necrosis of the colon; and c) the combination of severe systemic hypotension leading to ischemia in the junction of median and left colonic artery as well as the hypercoagulability status typical of serious pancreatitis (2-4). Nevertheless, pathological findings including pericolicits and fat necrosis point toward direct enzymatic spreading (2). Clinically, colonic complications present like abdominal pain or mostly like sub-obstructive abdominal symptoms and the diagnosis is often difficult (3,4). The appropriate management of colonic involvement in acute pancreatitis requires the resection of the affected segment sometimes in association with a temporary colostomy. Nevertheless, in many instances a laparotomy is necessary to reach a diagnosis and to decide the best surgical alternative (2,3).

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