

LETTER

An Unusual Association between Chronic Pancreatitis and Ulcerative Colitis

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Dear Sir,

Episodes of acute pancreatitis have been described during the course of ulcerative colitis and most of them are due to cholelithiasis or drugs. Idiopathic pancreatitis has rarely been associated with inflammatory bowel disease (IBD). We describe one such case.

A 35-year-old male presented in 2001 with a ten year history of recurrent episodes of diarrhea without blood and mucus in the stools. Four years ago, he developed an episode of mild acute pancreatitis. At that time, the serum amylase level was three times the upper normal limit. He was treated conservatively. A month later, he was found to be diabetic and was put on insulin. He was non-alcoholic and there was no history of any chronic drug use. There was no similar family history.

Two months later, he developed bloody diarrhea, tenesmus and mild abdominal discomfort. He also had a low grade fever, generalized weakness and had lost 20 kg during the previous three months. A colonoscopic examination revealed diffuse involvement of the entire colon (loss of vascular pattern, erythema, punctate ulcerations) from the rectum to the cecum. A rectal biopsy showed features of acute colitis (cryptitis, crypt abscess, lymphocytic infiltration of lamina propria, plasma cells and neutrophils) and chronic colitis (glandular

disarray) consistent with a diagnosis of ulcerative colitis. Contrast-enhanced CT of the abdomen revealed a dilated main pancreatic duct (4 mm) with no evidence of pancreatic calcification. The serum amylase level was within normal limits. Serum IgG, IgA and IgM were normal. Tests of malabsorption revealed 24 h fecal fat to be 44 g (reference range: 0-7 g/day), subnormal urinary D-xylose (0.7 g/5g/5h; reference value: greater than 1 g/5g/5h) and subnormal fecal chymotrypsin (4.5 U/g; reference range: 11-14 U/g). In view of chronic diarrhea and pancreatitis, a work-up for cystic fibrosis was carried out which revealed a normal sweat chloride level (28 mEq/L; reference range: 0-40 mEq/L) and a negative genetic analysis for delta F508. Upper GI endoscopy was normal and small intestinal mucosal histology was unremarkable. Remission of the ulcerative colitis was achieved by a short course of oral steroids and was then maintained on mesalamines.

Three years later, a follow-up CT of the abdomen showed a markedly thinned pancreas, suggestive of chronic atrophic pancreatitis; there were no pancreatic calcifications. The patient subsequently had many acute exacerbations of the ulcerative colitis which were controlled with oral corticosteroids. We made the diagnosis of chronic pancreatitis (idiopathic).

Pancreatitis in patients with IBD is mostly due to drugs (azathioprine and mesalamines)

and sclerosing cholangitis [1]. On rare occasions, episodes of acute pancreatitis have been induced by duodenal inflammation in patients with Crohn's disease, either due to duodenal reflux or papillary obstruction [2]. In the absence of definable etiological factors, idiopathic pancreatitis occurring in association with IBD has been classified as an extraintestinal manifestation of IBD [2]. Exocrine pancreatic insufficiency has been reported to occur in 21-80% of patients with IBD and high serum amylase occurred in 5.8% to 15.8% of patients with IBD [2]. Despite the occurrence of microscopic or macroscopic pancreatic abnormalities in 14-53% of autopsy studies of patients with IBD, and pancreatic ductal abnormalities in 16.4% of patients with ulcerative colitis, the clinical manifestation of pancreatitis remains rare in these patients [2, 3].

There have been a few clinical case reports highlighting an association between IBD and chronic pancreatitis [2, 4, 5]. In contrast to that associated with Crohn's disease, pancreatitis associated with ulcerative colitis tends to precede bowel inflammation, have more bile duct involvement, more weight loss, higher frequency of stenosis of the main pancreatic duct and a lesser frequency of pancreatic stones. Compared to chronic calcific pancreatitis, idiopathic pancreatitis associated with IBD tends more often to be silent and painless, occurs more often in females, and the frequency of pseudocyst formation is less. There has also been a trend toward more severe bowel disease in patients having ulcerative colitis together with pancreatitis [2]. Even though, in the majority of cases, the diagnosis of pancreatitis precedes that of ulcerative colitis, pancreatitis can precede, follow or coincide with the occurrence of ulcerative colitis [2]. It is important to ascertain the cause of loose stools in each episode of exacerbation of ulcerative colitis as both IBD and pancreatic insufficiency due to chronic pancreatitis can involve similar symptoms.

The question as to why pancreatitis (acute or chronic) occurs in a patient with IBD remains to be answered. Immune mechanisms are believed to play a major role in their association with each other.

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