

Acute pancreatitis: rare complication of retrograde single-balloon enteroscopy

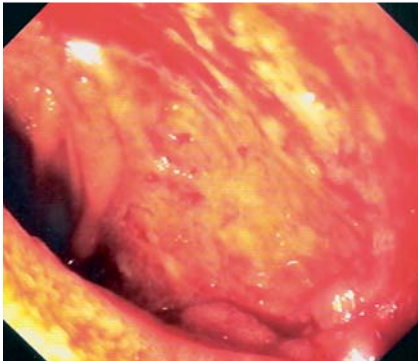


Fig. 1 Single-balloon enteroscopy showing an ulcer in the distal ileum, 50 cm proximal to the ileocecal valve.



Fig. 2 Edema in the pancreas visualized on an abdominal computed tomography scan.

A 46-year-old woman with chronic renal disease was diagnosed as having pulmonary tuberculosis. She was passing fresh melaena intermittently. Upper endoscopy was unremarkable and colonoscopy, which was carried out four times, only revealed small cecal ulcers and fresh blood coming from the small bowel. A retrograde (per rectal) single-balloon enteroscopy (SBE) was carried out. The balloon was inflated when the enteroscope was still in the colon, for assisting in terminal ileal intubation. A large ulcer was found in the distal ileum, 50 cm proximal to the ileocecal valve (● Fig. 1).

The enteroscope was then withdrawn without intervention.

Twelve hours later, the patient developed abdominal pain. An abdominal radiograph was unremarkable. Serum amylase and lipase were 557 U/L and 2516 U/L, respectively. An abdominal computed tomography (CT) scan showed edema in the pancreas (● Fig. 2).

No identifiable cause of pancreatitis was noted, except the enteroscopy itself. The patient was treated conservatively and her condition improved in due course, with spontaneous cessation of lower gastrointestinal bleeding. Histological examination of the enteroscopic specimen showed evidence of tuberculosis.

The overall rate of complication with balloon-assisted enteroscopy is very low. With double-balloon enteroscopy (DBE), the risk of pancreatitis is approximately 1% [1], but no pancreatitis was reported

in a case series of SBE [2]. Groenen et al. first reported two cases of pancreatitis after antegrade DBE [3]. They postulated that intraluminal duodenal pressure increased when the ampulla was situated between two inflated balloons and led to duodenal reflux into the pancreatic duct. However, there has been no case report of pancreatitis related to retrograde DBE or SBE. One case report has suggested that colonoscopy could cause pancreatitis [4], and the mechanism may be the over-inflation of the colon or the endoscope itself, which directly compresses the pancreas [5]. We propose that, in our case, as we inflated the balloon in the colon, it directly pressed against the pancreas. We therefore suggest not to inflate a balloon until the overtube is advanced into the terminal ileum. If balloon inflation is needed in the colon, we prefer to carry out the inflation in the ascending colon. To our knowledge, this is the first case report of pancreatitis following retrograde SBE, and we recommend that pancreatitis should be considered in the differential diagnosis of abdominal pain following enteroscopic procedures.

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