

Recurrent Pancreatitis Secondary to Common Channel Volvulus through Petersen's Space Defect in a Patient with Roux-En-Y Bypass

Anas Renno^{1*}, Sabeen Sidiki, MD¹, Wasef Sayeh, MD¹, Sara Stanley, DO¹, Zohaib Ahmed, MD, MPH¹, Azizullah A. Beran, MD¹, Ali Nawras, MD¹

¹Division of Gastroenterology and Hepatology, Department of Medicine, The University of Toledo, Toledo, OH 43614

*Corresponding author: Anas.Renno@utoledo.edu

Published: 05 May 2023

Introduction: Petersen's space hernia is an internal hernia that can occur after Roux-en-Y gastrojejunostomy. The intestinal loops herniate through a defect between the retroperitoneum, the transverse mesocolon and the small bowel limbs. We present a case of recurrent pancreatitis in a patient with Roux-En-Y bypass found to have common channel hernia through a Petersen's space defect.

Case Description/Methods: Case Description/Methods: We present the case of a 34-year-old female with a history of Roux-en-Y surgery in 2018 and subsequent recurrent pancreatitis who presented to the emergency department with a chief complaint of severe epigastric and left lower quadrant abdominal pain associated with hematemesis. Patient reported 3 episodes of pancreatitis within 1 year previously. CT abdomen and pelvis showed mildly dilated common bile duct and intrahepatic biliary dilatation with no evidence of pancreatitis. Significant lab work included elevated lipase at 184 U/L. Patient was admitted to the medical service. Gallbladder ultrasound revealed no evidence of cholelithiasis, a prominent CBD of 9 mm and redemonstrated mild intrahepatic biliary dilatation. MRCP revealed a mesenteric swirl in the mid abdomen which was suspicious for an internal hernia in the setting of antecolic Roux-en-Y gastric bypass. It also showed focally dilated intrahepatic with underlying segmental atrophy. General surgery consultation was sought, with eventual plans for diagnostic laparoscopy after ruling out marginal ulcer via EGD. An EGD was performed which did not show evidence of marginal ulcer. Patient then underwent diagnostic laparoscopy which revealed a 360-degree volvulus of the common channel through a Petersen's space defect; this was carefully reduced, and the Petersen's space defect was closed. Patient also underwent laparoscopic cholecystectomy. Patient did not have any further episodes of pancreatitis after surgery.

Discussion: This case demonstrates recurrent pancreatitis in a patient with a history of Roux-En-Y bypass found to have a common channel volvulus through a Petersen's space defect. It is our understanding that the volvulus likely caused compression of the pancreaticobiliary system, thus causing

recurrent pancreatitis. Reduction of the volvulus and closing of the Petersen's defect resulted in complete resolution of recurrent pancreatitis in the patient.