Chylous Ascites in a Distal Roux en Y Gastric Bypass

Angela M Lomas, MD; James McClintic, MD; Diana Lane, DO; Patrick R Reardon, MD, FACS; Lee M Morris, MD, FACS

Department of Minimally Invasive Surgery

Houston Methodist Hospital, Houston, Texas

Case History

A 37 year old female with history of laparoscopic gastric roux en y bypass 4 years ago, presented to the ED with abdominal pain and nausea. Pain was sudden in onset, described as constant and 9/10. She noticed the pain occurred after eating fatty foods and described as stabbing pain that would wear off to dull and achy afterwards. These episodes occurred for the past 2 years and were associated with nausea and retching.

She has lost 300 lbs since her bariatric surgery. In the span of 2 years she had seen her bariatric surgeon, however no diagnosis was found.

No significant PMH or other pertinent history

Diagnostic Work-Up:

Lab: Within normal limits

Imaging:

- US Liver/Gallbladder: normal
- CT Abd/Pelvis wo contrast: mesenteric stranding near Jejunojejunostomy and free fluid in pelvis (Fig 1)



Fig 1: CT Abd/Pelvis Coronal View

Operative Intervention

Due to concern for internal hernia, the patient was taken to the Operating room for Diagnostic laparoscopy.

Intraoperative Findings:

- Milky fluid appreciated in paracolic gutters (Fig 2)
- Fluid sent for cytology: Triglyceride level 921 kg/dL
- Running small bowel from Ileocecal valve to Jejunojejunostomy revealed common channel with white staining on mesenteric side (Fig 3)
- JJ was appreciated to be dilated along with a distended blind end (Fig 3)
- Prominent white staining seen on Biliopancreatic limb (Fig 4)

Post operative work up

- Lymphangiogram – No chyle leak
- MRI – no clear etiology for chyle ascites

Patient continued to have symptoms therefore was taken to the operating room for revision of JJ.



Fig 2: Diagnostic laparoscopy with milky fluid in Right paracolic gutter

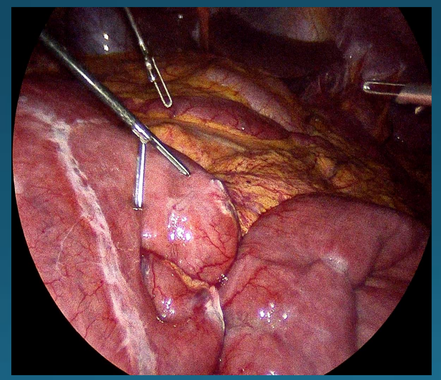


Fig 3: Dilated JJ with distended blind biliopancreatic end

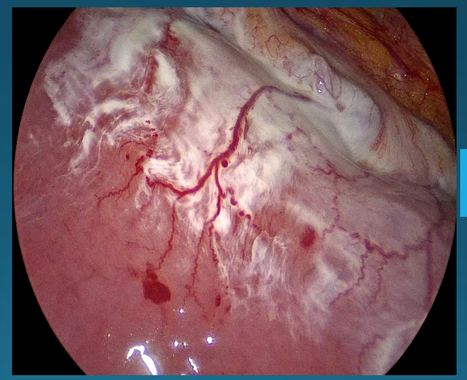


Fig 4: Prominent white chyle staining adjacent to JJ

Case Summary

Patient with a 2 year history of post prandial abdominal pain after RYGB found to have chylous ascites on diagnostic laparoscopy. Intraoperative findings of dilated Jejunojejunostomy with large blind end pouch (Fig 5) likely led to bacterial overgrowth resulting in lymphangitis and leakage of chyle around the JJ. Patient underwent revision of Jejunojejunostomy with end to side hand sewn anastomosis that led to symptom resolution.

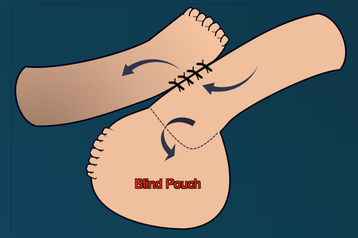


Fig 4: Schematic of intestinal anastomosis with dilated blind end pouch

Discussion

Under normal circumstances, the small bowel harbors about 1,000 microorganisms/mL of mixed flora. However, static conditions can alter the population dynamics. In blind pouch syndrome, stasis enables the proliferation of mixed flora in abnormally high concentrations which may have caused lymphangitis and chyle leak. Review of literature reports chylous ascites after RYGB with internal hernia, which did not occur in this case. To our knowledge this is the first case report of chylous ascites after RYGB caused by pathology at the Jejunojejunostomy.