STRANGLUTED RECURRENT HIATAL HERNIA AFTER ROUX-EN-Y GASTRIC BYPASS

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Introduction

- Roux-en-Y gastric bypass (RYGB) is a common surgical procedure for the management of obesity
- Hiatal hernia occur in up to 40% of patients that undergo weight loss surgery [1]
- We report a strangulated hiatal hernia with necrosis of a majority of the roux limb 3 months after a RYGB procedure

Case Presentation

- A 67-year-old female presented to ED with acute abdominal pain, shortness of breath, and right chest pain
- Patient had a past medical history of hypertension, obesity, hyperlipidemia, hypothyroidism, and type 2 diabetes
- Patient has a past surgical history of RYGB with repair of large hiatal hernia 3 months prior to presentation in ED
- Patient was seen in bariatric surgery clinic 3 days prior to presentation and was doing well
- A CT chest-abdomen-pelvis ordered upon presentation demonstrated a recurrent hiatal hernia with small bowel in the right chest (Figure 1 & 2)
- Patient was taken to the OR in attempt to reduce the hernia

Operations

Operation #1

- Operation was initially started laparoscopically, however, an attempt to reduce the hernia was unsuccessful
- Converting to laparotomy, the hiatus was opened further but the bowel was unable to be reduced
- Cardiothoracic surgery was consulted and a right thoracotomy was performed
- Necrotic small bowel was noted in the right chest (Figure 3)
- The diaphragm was opened under direct visualization allowing for reduction of the small bowel
- However, once reduced, a majority of the Roux limb was found to be necrotic and non-viable and was resected
- The thoracotomy was closed, an Abthera wound vac was placed, and the patient was returned to ICU for further resuscitation

Operation #2

- The gastric pouch, remnant, and remaining small bowel were found to be healthy and viable
- Esophagogastroduodenoscopy (EGD) confirmed the viability of the mucosal lining
- A gastrogastric anastomosis was created with the gastric pouch and remnant
- The gastrotomy was then closed and a repeat EGD indicated a negative leak test
- The small healthy roux limb was brought to the abdominal wall as a feeding jejunostomy tube was placed
- Fascia and skin were closed to complete the operation

Figures

Figure 1: CT chest-abdomen (axial view)



Figure 2: CT abdomen-pelvis (coronal view)



Figure 3: Gross image of necrotic small bowel



Discussion/Conclusion

- American Society for Metabolic and Bariatric Surgery reported 252,000 operations were performed for obesity in 2018, with 17% being RYGB [2]
- Although hiatal hernias occur in 40% of patients undergoing weight loss surgery [1], those containing the Roux limb leading to obstruction are extremely rare, with only five cases reported [3-7]
- Of the five reported cases, hiatal hernias containing the Roux limb occurred 4-48 months after the initial case, with an average of 16 months, and ~50% had a hiatal hernia present at the time of the initial surgery
- With such complications, necrosis of the Roux limb has not previously been reported to our knowledge
- Strangulated hiatal hernia after RYGB can be a devastating complication following gastric bypass surgery
- Thus, as shown in this case, we believe a multidisciplinary approach is important for the successful management of such a rare, but drastic, complication

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