REDO HIATAL HERNIA REPAIR AND REVISIONAL BARIATRIC SURGERY; A STAGED APPROACH WITH THORACIC AND BARIATRIC SURGERY

William C Baumgartner, DO; John J Brady III, DO; Justin D Rosenberger, DO; UPMC Community Osteopathic

INTRODUCTION

Traditionally, hiatal hernias are repaired concurrently for patients undergoing bariatric surgery. However, in our study, this was not possible due to large complicated hiatal hernias. This case series examines the outcomes of staged procedures for two patients undergoing redo hiatal hernia repair (HHR) followed by revisional bariatric surgery to Roux-en-Y Gastric Bypass (RYGB) during same hospitalization.

METHODS AND PROCEDURES

Both patients had a previous sleeve gastrectomy and developed large to moderate type 3 hiatal hernias, creating significant symptomatology. Both patients had also undergone prior failed HHR. Pre-operative work up included double contrast upper GI; CT of chest, abdomen and pelvis; gastric emptying study; and esophagogastroduodenoscopy. Both patients had significant reflux disease and were selected for conversion from sleeve gastrectomy to RYGB. Both patients were ASA class 3. HHR followed by RYGB was performed during the same admission. HHR was performed transabdominally by a thoracic surgeon on the Da Vinci Xi robot. All patients underwent primary crural repair without a reinforcing mesh. Anterior and posterior sutures used were 0 Surgidac with pledgets. Following HHR, both patients underwent laparoscopic RYGB with our bariatric surgeon. RYGB was done laparoscopically with a 150cm antecolic roux limb. Gastrojejunostomy was created using 25mm EEA stapler and jejunojejunostomy anastomosis was created using EndoGIA stapler.

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RESULTS

Both patients were females ages 55 and 68. Pre-operative BMI was 26.51 and 36.14. Preoperatively, one patient was found to have Barrett's esophagus prior to surgery. Both patients had large hiatal hernias with about 50% of stomach in the chest. Operative times were 390 minutes and 227 minutes for HHR. RYGB operative times 101 minutes and 164 minutes. Intraoperative complications included chest tubes placed for both patients during HHR. The times between HHR to RYGB were 2 and 4 days. Total hospitalization time from initial procedure to discharge were 6 and 8 days. HHR was performed on Da Vinci XI Robot and RYGB surgeries were completed laparoscopically. No other 30-day postoperative complications were encountered with significant improvement in their initial symptoms. After 6 months of follow-up, one patient developed mild GJ anastomotic stricture requiring EGD. Following EGD, her symptoms resolved.

IMAGES

68-year-old female with recurrent hiatal hernia:

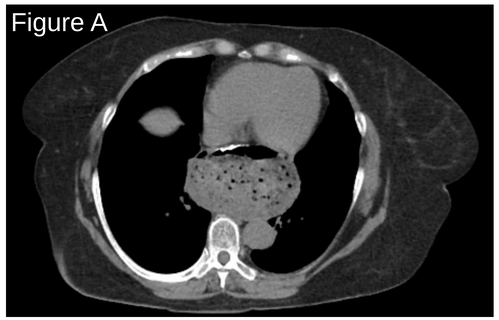




Figure A: Axial view of large hiatal hernia

Figure B: Sagittal view of large hiatal hernia

CONCLUSIONS

Our staged procedures were successful in treating large, complex hiatal hernias with the ability to perform revisional bariatric surgery within the same hospital admission. Minimally invasive laparoscopic surgery was successful in treating complex hiatal hernia instead of patients undergoing transthoracic repair. Operative times were shorter intervals, likely decreasing deep vein thrombosis risk. We concluded that HHR was more appropriate to be performed by our thoracic surgeons due to the large size, the high dissections into the chest, and chances for intrathoracic complications. Following HHR, our bariatric surgeons were able to successfully complete RYGB. We did not observe any immediate complications from our staged procedures. Considerations for staged procedures can be an option for complex HHR followed by revisional bariatric surgery and was successful at our community hospital. We hope to continue to collect more data at our institution and track short and long-term outcomes.

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