A CASE STUDY OF MINIMALLY INVASIVE ROBOT-ASSISTED ESOPHAGECTOMY FOR DISTAL ESOPHAGEAL ADENOCARCINOMA IN TWO PATIENTS WITH HISTORY OF GASTRIC BYPASS

Blake Breaux[1] MD; Vitas Wagner[1] MD, PhD; Thomas Templin[1] MD; Bahirathan Krishnadasan[1] MD
[1]Saint Joseph Medical Center, Tacoma, WA, USA

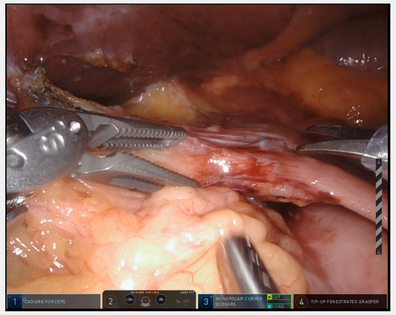
Introduction

Esophageal cancers are a surgically challenging entity at baseline with potentially catastrophic morbidity for cases with technical error. In the United States, esophageal adenocarcinoma of the distal esophagus is the most common presentation, whereas worldwide squamous carcinoma of the upper esophagus is more common[2]. The observed increased incidence of adenocarcinoma in the United States is often attributed to increased rates of obesity [6,7]. At the same time, there is increased use of bariatric surgery to help treat the comorbidities associated with obesity. As the number of bariatric surgery recipients increases, there will be a concomitant increase in the number of patients presenting with esophageal cancer and a history of bariatric surgery [1,4,7,8]. The altered anatomy following bariatric surgery can create technical challenges for patients requiring a curative esophagectomy. Here we present two such patients who had history of roux-en-y gastric bypass with presentation of distal esophageal adenocarcinoma.

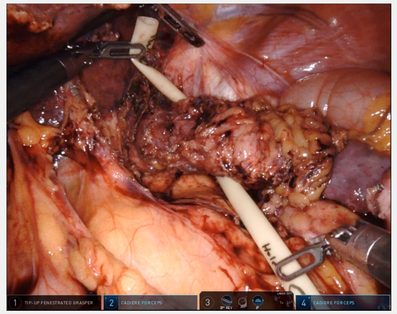
Clinical Presentation

The patients presented here are a 74 year old male and a 59 year old female. The female patient presented here had undergone gastric bypass with known Barrett's esophagitis and was diagnosed with esophageal adenocarcinoma on surveillance esophagogastroduodenoscopy (EGD) 4 years later. The male patient with history of gastroesophageal reflux disease and morbid obesity underwent gastric bypass several years earlier. He was also diagnosed with distal esophageal adenocarcinoma requiring surgical resection.

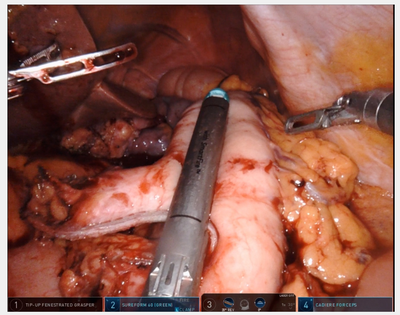
Operative Anatomy (Patient 1)



View of gastrojejunostomy with bypassed gastric remnant lying posterior

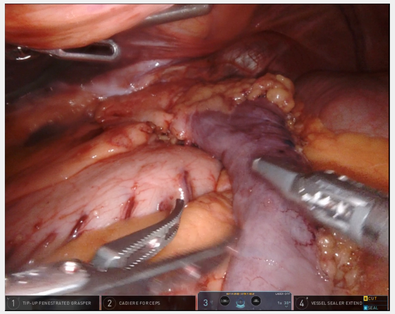


Distal esophagus and gastric pouch dissection

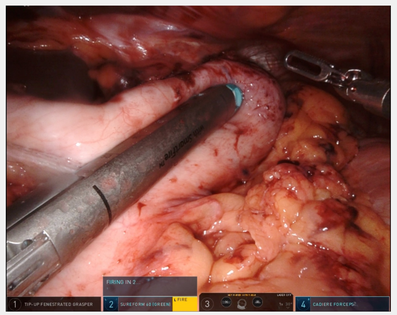


Creation of neoesophagus from bypassed gastric remnant

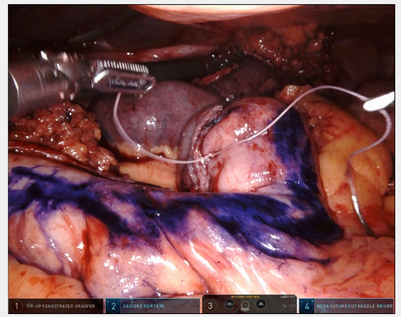
Operative Anatomy (Patient 2)



View of gastrojejunostomy with bypassed gastric remnant lying posterior



Creation of neoesophagus from bypassed gastric remnant



Neoesophagus (marked blue) sutured to specimen for pull through the hiatus.

Summary

The general approach adopted for these patients has been detailed previously in the literature with reversal of the bypass and use of the remnant stomach as the gastric conduit [1,2,6,8]. Notable procedural additions that we utilized in these patients that are not widely covered in the literature include utilizing the Da Vinci robotic platform for a completely minimally invasive surgical approach and utilizing the divided roux limb for the feeding jejunostomy. Another important feature of the procedure was that we utilized a team approach to the surgery, where the bariatric surgery team that is highly skilled in robot-assisted gastric bypass revisions and reversals were involved in the mobilization of the gastric body and take down of the gastrojejunostomy prior to the thoracic surgery team undertaking the esophageal mobilization, lymph node dissection, gastric conduit revision, and esophagogastrostomy after gastric pull up.

References

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