



Total Gastrectomy for Gastric Cancer Following Single Anastomosis Sleeve-Jejunal Bypass; A Video Report

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Keywords: The prevalence of bariatric surgery among patients with obesity is on the rise and many new surgery techniques are described by surgeons that lack comprehensive understanding. Diagnosis and treatment of associated cancers can become a complex challenge due to alterations in anatomy.

Background

Obesity is a significant risk factor for cancer incidence and mortality. The number of patients with obesity who have undergone bariatric surgery is increasing [1]. One of these bariatric surgical procedures is the single anastomosis jejunal bypass (SASJ) which is a modification of the Single Anastomosis Sleeve Ileal (SASI) Bypass [2].

Since SASJ is a relatively new technique, its efficacy and safety are not yet well-established and there is limited knowledge regarding its effectiveness and potential risks [3]. Moreover, due to alterations in anatomy resulting from the procedure, the diagnosis and treatment of cancers related to obesity pose additional challenges that require thorough investigation [4].

Patient and Methods

The patient was a 62 years old female with an initial BMI of 44.2 kg/m² and positive family history of gastric cancer who underwent SASJ bypass 6 years ago. The upper gastrointestinal endoscopy before the SASJ operation showed reflux esophagitis grade A and erosive erythematous hyperemic mucosa gastritis. The patient experienced satisfactory weight loss following surgery. Additionally, she continued to lose weight over the past year, resulting in a BMI of 21kg/m² upon admission. According to the patient's complaints of heartburn, anorexia, nausea, and vomiting, she underwent an upper endoscopy which showed sliding hiatal hernia, gastroesophageal

reflux disease (GERD – A), antral erythema-erosion, and biopsies were taken. The distal esophagus biopsy and antral mucosal biopsy diagnosis were reported: chronic inflammation of the esophagus, active and focally ulcerative mucosa in antrum with some atypical cells suspicious to signet ring cells and rebiopsy is recommended. After 14 days, rebiopsy was done and the pathology result was adenocarcinoma of the antrum, and no H. Pylori was identified on special staining. The Metastasis work-up was negative and laboratory findings were normal.

Initially, diagnostic laparoscopy and anatomy identification were done, then omentectomy and takedown of previous gastro-jejunoscopy were performed, and after hepatogastric ligament release, the right gastric artery, right gastroepiploic artery, and pylorus were divided, gastropancreatic adhesion was carefully released, and then D2 lymph node dissection was done and 12 lymph nodes were removed from different gastric lymph node stations. After total gastrectomy with D2 lymph node dissection, Roux-en-Y esophagojejunoscopy with a 75cm biliopancreatic limb (BPL) and a 75cm alimentary limb was performed. There was no intraoperative or postoperative complications.

The patient was discharged on post-operative day 8 and pathology report showed: invasive adenocarcinoma, diffuse type with signet ring cell appearance, tumor involves only mucosa and submucosa of the gastric wall (PT1), the tumor gross pattern was

ulcerative, tumor size was 0.7 cm, no vascular invasion seen, free lymph nodes, Pathologic stage: (PT1 N0 Mx), ICDO: M – 8140/3, C- 16.9.

Conclusion

Early stage gastric cancer detection following bariatric surgery is rare and needs high clinical suspicion. In this case, laparoscopic total gastrectomy with the removal of all lymph nodes from gastric stations was performed.

Conflict of Interest

No conflict of interest.

Ethical Standards:

For this type of study formal consent is not required.

Informed consent was obtained from all individual participants included in the study.

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