

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

International Journal of Surgery Case Reports

journal homepage: www.casereports.com

Gastric pouch sero-myotomy for persistent dysphagia after roux-en-Y gastric bypass: Video report

Midhat Abu Sneineh, Bruno Dillemans

Department of Abdominal Surgery, Bariatric Unit, AZ St-Jan Hospital, 8000 Bruges, Belgium

ARTICLE INFO

Article history:

Received 15 November 2020

Received in revised form

22 November 2020

Accepted 24 November 2020

Available online 27 November 2020

Keywords:

Bariatric surgery

Case report

Gastric bypass

Sleeve gastrectomy

ABSTRACT

Laparoscopic Sleeve Gastrectomy (LSG) is one of the most common bariatric operations done worldwide [1]. About 6.6% of the LSG is being converted to laparoscopic roux-en-Y gastric bypass (LRYGB), most commonly due to inadequate weight loss (65%) and severe reflux (26%) [2]. The most common late complications after LRYGB are dumping, small bowel obstruction, internal hernia, weight regain, marginal ulcer, strictures of the gastro-jejunostomy [3] and rarely proximal stricture at the gastric pouch as our presented case. Treatment options for such a case may start with endoscopic dilatation and if not succeeded it may warrant surgical intervention as shortening of the pouch and redo of the gastrojejunostomy proximal to the stricture or even total gastrectomy and esophago-jejunal anastomosis. Sero-myotomy of the gastric pouch can be done as the same technique which can be used in sero-myotomy of sleeved stomach with stricture [4] and spare resection of the pouch.

This report aims to present a new option of surgical management for proximal stricture of the gastric pouch after LRYGB which to our knowledge was never published in the literature.

© 2020 Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Laparoscopic Sleeve Gastrectomy (LSG) is one of the most common bariatric operations done worldwide [1]. About 6.6% of the LSG is being converted to laparoscopic roux-en-Y gastric bypass (LRYGB), most commonly due to inadequate weight loss (65%) and severe reflux (26%) [2]. The most common late complications after LRYGB are dumping, small bowel obstruction, internal hernia, weight regain, marginal ulcer, strictures of the gastro-jejunostomy [3], and rarely proximal stricture at the gastric pouch as in our presented case. Treatment options for such a case may start with endoscopic dilatation and if not succeeded it may warrant surgical intervention as a shortening of the pouch and redo of the gastro-jejunostomy proximal to the stricture or even total gastrectomy and esophago-jejunal anastomosis. Sero-myotomy of the gastric pouch can be done as the same technique which can be used in sero-myotomy of the sleeved stomach with stricture [4] and spare resection of the pouch.

The work has been reported in line with the SCARE criteria [5].

This report aims to present a new option of surgical management for proximal stricture of the gastric pouch after LRYGB which to our knowledge never published in the literature.

2. Presentation of case

We present a case of a 50-years-old female patient, with no past medical or psychological history, family history was non-contributory, and she was not on any medications. She was referred to our center by her family physician, with a BMI of 23 kg/m², status post-LSG 8 years ago, conversion to LRYGB 2 years ago because of weight regain, 4 months before referring to our center she started to complain of gradual dysphagia to solid food and fluids.

One year ago she passed gastroscopy with stenting of the narrowed pouch with complete resolution of her symptoms, six months later she had a recurrence of the dysphagia. Physical and abdominal examination were normal. Laboratory tests were normal. Differential diagnosis at this stage included benign conditions such as achalasia or stenosis or malignant reasons such as esophageal or gastric cancer so a gastroscopy and contrast swallow test were performed, which showed proximal stricture at the gastric pouch without any tumors or lesions (see video).

We decided to do a laparoscopic exploration by a senior experienced surgeon. Insufflation of the peritoneal cavity was done through Veress needle at Palmer's point then four trocars inserted under vision. At exploration there were a lot of adhesions, adhesio-lysis between the left lobe of the liver and the stomach was done, and the gastric pouch was freed from the remnant stomach. The level of the stricture was identified by the insufflation of the stomach with air through the nasogastric tube. The sero-myotomy was performed with an ultrasonic coagulation device, from 1 cm proximal to the gastro-jejunostomy until 2 cm caudally to the stric-

E-mail address: midhat.1987@hotmail.com (M. Abu Sneineh).

<https://doi.org/10.1016/j.ijscr.2020.11.123>

2210-2612/© 2020 Published by Elsevier Ltd on behalf of IJS Publishing Group Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

ture. A leak test with blue dye was negative, a drain was left in the abdominal cavity.

The post-operative course was uneventful. The patient starts drinking liquids gradually, post-operative contrast swallow test was done with good improvement in the passage on day one after surgery (see video). The patient discharged at post-operative day 2 from the hospital. Two weeks after, she came to the outpatient clinic for a regular follow-up visit, she stated complete resolution of her dysphagia symptoms, no symptoms of reflux at day or night (heartburn, regurgitation or vomiting) and she started eating soft food with no problems. 12 months later the patient still has no symptoms of reflux or dysphagia, eating well without any difficulties and this was the last follow-up visit.

3. Discussion

In this case, the patient suffered from dysphagia due to proximal stenosis at the gastric pouch. Treatment options for such a case may include radical options as total gastrectomy and esophago-jejunal bypass of stricturoplasty which will be very challenging due to the proximal location of the stenosis, these options are spared by doing this technique of sero-myotomy of the pouch.

The main limitations and challenges of this technique are the need for a highly experienced laparoscopic surgeon which should keep in mind the possibility of causing perforation of the gastric wall at the time of operation. Dysphagia after bariatric operations, in general, should be investigated carefully and malignant causes should be ruled out before surgical intervention.

4. Conclusion

Laparoscopic sero-myotomy is a valid and feasible option for the treatment of proximal stricture of the gastric pouch after LRYGB.

Declaration of Competing Interest

The authors report no declarations of interest.

Funding

None.

Ethical approval

My study is exempt from ethical approval.

Consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy

of the written consent is available for review by the Editor-in-Chief of this journal on request.

Author's contribution

Midhat Abu Sneineh: data analysis and interpretation, writing the paper.

Bruno Dillemans: study concept and data collection.

Registration of research studies

Not applicable.

Guarantor

Midhat Abu Sneineh.

Provenance and peer review

Not commissioned, externally peer-reviewed.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at <https://doi.org/10.1016/j.ijscr.2020.11.123>.

References

- [1] M.A. Sneineh, L. Harel, A. Elnasara, et al., Increased incidence of symptomatic cholelithiasis after bariatric roux-en-Y gastric bypass and previous bariatric surgery: a single center experience, *Obes. Surg.* (2020) 846–850, <http://dx.doi.org/10.1007/s11695-019-04366-6>.
- [2] E. Yorke, C. Sheppard, N.J. Switzer, D. Kim, C. de Gara, S. Karmali, A. Kanji, D. Birch, Revision of sleeve gastrectomy to roux-en-Y gastric bypass: a Canadian experience, *Am. J. Surg.* 213 (May (5)) (2017) 970–974, <http://dx.doi.org/10.1016/j.amjsurg.2017.04.003>, Epub 2017 Apr 8. PMID: 28416180.
- [3] R. Peterli, B.K. Wölnerhanssen, T. Peters, D. Vetter, D. Kröll, Y. Borbély, B. Schultes, C. Beglinger, J. Drewe, M. Schiesser, P. Nett, M. Bueter, Effect of laparoscopic sleeve gastrectomy vs laparoscopic roux-en-Y gastric bypass on weight loss in patients with morbid obesity: the SM-BOSS randomized clinical trial, *JAMA* 319 (January (3)) (2018) 255–265, <http://dx.doi.org/10.1001/jama.2017.20897>, PMID: 29340679; PMCID: PMC5833546.
- [4] G. Dapri, G.B. Cadière, J. Himpens, Laparoscopic seromyotomy for long stenosis after sleeve gastrectomy with or without duodenal switch, *Obes. Surg.* (2009) 495–499, <http://dx.doi.org/10.1007/s11695-009-9803-0>.
- [5] R.A. Agha, M.R. Borrelli, R. Farwana, K. Koshy, A. Fowler, D.P. Orgill, For the SCARE Group, The SCARE 2018 statement: updating consensus Surgical CAse REport (SCARE) guidelines, *Int. J. Surg.* 60 (2018) 132–136.

Open Access

This article is published Open Access at [sciencedirect.com](https://www.sciencedirect.com). It is distributed under the [IJSCR Supplemental terms and conditions](#), which permits unrestricted non commercial use, distribution, and reproduction in any medium, provided the original authors and source are credited.