



## Laparoscopic Total Gastric Vertical Plication

Nobumi Tagaya<sup>1\*</sup>

<sup>1</sup> First Department of Surgery, Koshigaya Hospital, Dokkyo Medical University, Tochigi, Japan

### ARTICLE INFO

*Article type:*

Letter to Editor

*Article history:*

Received: 02 May 2012

Revised: 31 May 2012

Accepted: 15 June 2012

*Keywords:*

Bariatric Surgery

Obesity, Morbid

► *Please cite this paper as:*

Tagaya N. Laparoscopic Total Gastric Vertical Plication. *J Minim Invasive Surg Sci.* 2013; 2(1): 116-7. DOI: 10.5812/jmiss.4700

### Dear Editor,

Golpaie *et al.* reported changes in lipid profile and insulin resistance in morbid obese patients following the Laparoscopic Total Gastric Vertical Plication (LTGVP), and it revealed a significant weight loss and an improvement of lipid profile and insulin resistance among morbidly obese patients (1). This method was introduced by Talebpour *et al.* 2007, as a new technique derived from sleeve gastrectomy for the treatment of morbid obesity and produces the restriction by a plication of the great curvature of the stomach using three lines of sutures (2). Menchaca *et al.* reported the experimental study of vertical gastric plication using hound dogs. It revealed that LTGVP confirmed the short-term durability and development of dense fibrous appositions of the serosal folds (3), although, additional studies are needed to identify clinical applications of this procedure. In fact, LTGVP gives equivalent short-term outcomes as vertical gastrectomy and is a reproducible and reversible technique with indications and outcomes still to be validated (4). However, there is a unique morbidity of intractable vomiting re-

quiring re-operation due to a herniation of the suture line in this procedure. As authors described, this report needs a further evaluation in the number of the patients and long-term outcomes. Furthermore, this technique is not standardized with regards to the size of probe used as a guide for the plication, the starting point of the plication, the number of the suture line and the suture technique itself.

LTGVP provides the preservation of stomach without resection. It is cost effective, and showed the similar outcomes compared with the vertical gastrectomy. This procedure has a possibility of new direction for the restriction of bariatric surgery. However, the evaluation of multi-center clinical trial is mandatory.

### Authors' Contribution

Nobumi Tagaya A contributed 100% to prepare this article.

### Financial Disclosure

None declared.

\* Corresponding author: Nobumi Tagaya, First Department of Surgery, Koshigaya Hospital, Dokkyo Medical University, Tochigi, Japan. Tel/Fax: + 81-489651130, E-mail: tagaya@dokkyomed.ac.jp

DOI: 10.5812/jmiss.4700

Copyright © 2013, Minimally Invasive Surgery Research Center and Mediterranean & Middle Eastern Endoscopic Surgery Association. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

## References

1. Golpaie A, Hosseinzadeh-Attar MJ, Hoseini M, Karbaschian Z, Talebpour M. Changes of Lipid Profile and Insulin Resistance in Morbidly Obese Patients After Laparoscopic Total Gastric Vertical Plication. *J Minim Invasive Surg Sci*. 2012;**1**(1):24-9.
2. Talebpour M, Amoli BS. Laparoscopic total gastric vertical plication in morbid obesity. *J Laparoendosc Adv Surg Tech A*. 2007;**17**(6):793-8.
3. Menchaca HJ, Harris JL, Thompson SE, Mootoo M, Michalek VN, Buchwald H. Gastric plication: preclinical study of durability of serosa-to-serosa apposition. *Surg Obes Relat Dis*. 2011;**7**(1):8-14.
4. Pujol Gebelli J, Garcia Ruiz de Gordejuela A, Casajoana Badia A, Secanella Medayo L, Vicens Morton A, Masdevall Noguera C. [Laparoscopic Gastric Plication: a new surgery for the treatment of morbid obesity]. *Cir Esp*. 2011;**89**(6):356-61.