

## Laparoscopic Sleeve Gastrectomy and Gastric Cancer Incidence

Alimohammad Bananzadeh<sup>1</sup>; Seyed Vahid Hoseini<sup>1</sup>; Mohammad Yasin Karami<sup>1,\*</sup>; Sahar Sohrabi Nazari<sup>1</sup>

<sup>1</sup>Department of Surgery, Colorectal Research Center, Shiraz University of Medical Sciences, Shiraz, IR Iran

\*Corresponding author: Mohammad Yasin Karami, Faghihi Hospital, Shiraz University of Medical Sciences, Shiraz, IR Iran. Tel: +98-9171800710, Fax: +98-7132330724, E-mail: karamiy@gmail.com

Received: January 18, 2015; Accepted: February 8, 2015

Keywords: Laparoscopy; Gastrectomy; Stomach Neoplasms; Incidence

### Dear Editor,

Morbid obesity is a public health problem in the United States and Europe and its prevalence is on the increase. Sleeve gastrectomy for weight loss was first described by Marceau as a component of biliopancreatic diversion in 1991. Laparoscopic sleeve gastrectomy (LSG) was first performed in 2000. In the recent years, LSG has achieved significant progress to attract the attention of surgeons, due to less complexity, lower risk, and less invasiveness. There are several criteria for selection of LSG as a morbid obesity bariatric surgery procedure. The authors greatly believed that an appropriate bariatric procedure should be modified based on patient factors, co-morbidities, patient and surgeon's comfort levels, surgeon's experience, and institutional outcomes. The authors assumed those patients who have a high body mass index (BMI) of 55 kg/m<sup>2</sup> or more and have co-morbid diseases (cardiopulmonary diseases) may profit from a shorter, minor risk procedure such as LSG. Occasionally, the judgment to continue with SG is made in the operating room due to an extremely large liver or widespread scar tissue to the intestines, which make gastric bypass unfeasible. Older patients who have inflammatory bowel disease (IBD) or requires continuing particular medications (transplant medication) or need continued observation of the stomach (post-operation) could advantage from LSG. Moreover, gastric cancer (GC) is still an important global healthcare problem. Obesity is an inflammatory disease characterized by elevated levels of biomarkers, which leads to the onset of metabolic syndromes. Mediators of inflammatory responses in both obesity and GC risks are the same. Therefore, there is a link between obesity status and tumor appearance (1). GC is the most common cancer in males and second in females of Islamic Republic of Iran (2). The authors believe that LSG decreases the incidence of GC. Therefore, this procedure may poten-

tially reduce the incidence of GC and may encouraging surgeons to choose the method in areas with high prevalence of GC. GC was detected after LSG in one case report (3). The authors recommend that high-prevalence GC criteria be added to several criteria of preoperation patient selection. It needs epidemiological study, but no epidemiological study has been performed regarding the GC incidence after LSG, comparing it with the normal population. The authors suggest that LSG may have better outcomes in areas with high prevalence of GC.

### Acknowledgements

We appreciate Colorectal Research Center of Shiraz University of Medical Sciences and thank Mehrnoush Maalagh (M.D) for editing the manuscript.

### Authors' Contributions

Alimohammad Bananzadeh: supervisor, conception and design, revising the manuscript. Seyed Vahid Hoseini: supervisor, conception and design, revising the manuscript. Mohammad Yasin Karami: drafting the manuscript, final approval. Sahar Sohrabi Nazari: drafting of the manuscript.

### Funding/Support

This research was supported by the research vice-chancellor of Shiraz University of Medical Sciences.

### References

1. Garai J, Uddo RB, Mohler MC, Pelligrino N, Scribner R, Sothorn MS, et al. At the crossroad between obesity and gastric cancer. *Methods Mol Biol.* 2015;1238:689-707.
2. Masoompour SM, Yarmohammadi H, Rezaianzadeh A, Lankarani KB. Cancer incidence in southern Iran, 1998-2002: results of population-based cancer registry. *Cancer Epidemiol.* 2011;35(5):e42-7.
3. Angrisani L, Santonicola A, Iovino P. Gastric cancer: a de novo diagnosis after laparoscopic sleeve gastrectomy. *Surg Obes Relat Dis.* 2014;10(1):186-7.