

Laparoscopic gastric banding can interfere with adequate plication during post-bariatric abdominoplasty

DeLorean Griffin, MD, Faisal Al-Mufarrej MBBCh, Yeon-Jeen Chang, MD, Adam D. Schaffner, MD ,
David Edelman, MD, Eti Gursel, MD

Abstract

Background: Bariatric patients often require post-weight loss abdominoplasty which involves plication of the rectus fascia. Complications related to rectus fascia plication in the presence of the laparoscopic gastric band (LGB) port such as port inversion and infection have not been well described in the literature (Figure 1). The purpose of this study is to describe complications related to the rectus fascia plication in post-bariatric patients with LGB ports. (1-4)

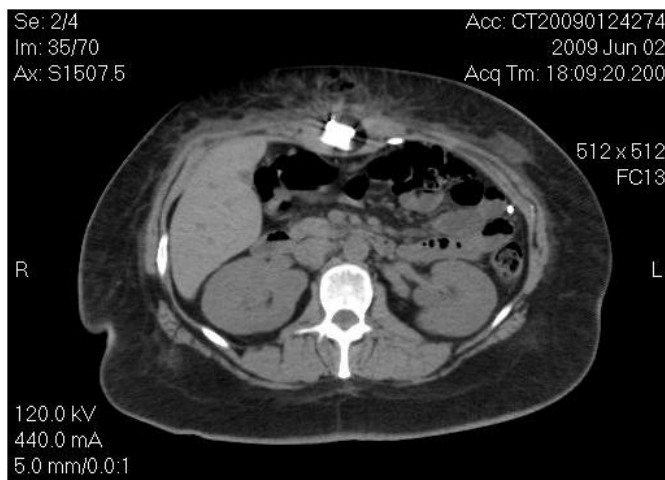


Figure 1. Inverted and infected port

Methods: A retrospective chart review of patients with a history of LGB undergoing post-bariatric abdominoplasty between 2005 and 2013 was performed. Factors studied included age, gender, body mass index, port location, operative technique, complications and follow-up.

Results: Between 2005 and 2013, 178 patients underwent post-bariatric abdominoplasty in our institution. 19 (10.7%) patients had LGB. Average age was 39.8 (range, 17-67) years old. 4 patients were male and 15 female. In 14 patients, the port was located in the epigastrium. The remaining patients (26.3%) had ports in left upper quadrant (LUQ) of abdomen. Complete abdominal wall plication was possible in all patients with LUQ ports. 2 patients underwent port repositioning to the right upper quadrant due to medial port location. 1 patient who underwent port repositioning developed a superficial wound infection and another patient who did not undergo repositioning

despite medial position developed postoperative dysphagia. Amongst patients with epigastric ports, 1 did not undergo any plication, 10 underwent only infraumbilical plication, and 3 underwent partial supraumbilical plication with suboptimal body contouring. 2 patients with infraumbilical plication developed postoperative dysphagia, and 1 developed hematoma. Wound dehiscence was not observed in any patients.

Conclusions: Epigastric positioning of the port system limits rectus fascia plication. Postoperative dysphagia can occur following abdominoplasty with even limited plication of the rectus fascia in patients with epigastric ports. Lateral positioning of the LGB port during the initial surgery allows for complete rectus fascia plication during abdominoplasty after weight loss without the need for port repositioning.

References

1. Tice JA, Karliner L. Gastric banding or bypass? A systemic review comparing the two most popular bariatric procedures. *Am J Medicine* 121: 885-893, 2008.
2. Chapman AE, Kiroff G. Laparoscopic adjustable gastric banding in the treatment of obesity: A systemic literature review. *Surgery* 135: 326-51, 2004.
3. Franco JVA, Ruiz PA, Palermo M, Gagner M. A Review of Studies Comparing Three Laparoscopic Procedures in Bariatric Surgery: Sleeve Gastrectomy, Roux-en-Y Gastric Bypass and Adjustable Gastric Banding. *Obes Surg* 2011; 21(9): 1458-1468.
4. Keidar A, Carmon E, Szold A, et al. Port Complications following Laparoscopic Adjustable Gastric Banding for Morbid Obesity. *Obes Surg* 2005, 15(3): 361-365

Disclosure/Financial Support

None of the authors has a financial interest in any of the products, devices, or drugs mentioned in this manuscript.