Chirurgia (2019) 114: 761-768
http://dx.doi.org/10.21614/chirurgia.114.6.761

Weight Loss and Late Complications after Silastic Ring Vertical Gastroplasty. A 10 Year Follow-up

Adriana Florinela Cãtoi[1], Romeo Florin Galea[2], Cristina Bidian[3], Daniela Ciobârcã[4]
[1]Department of Physiopathology, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca
[2]Second Surgical Clinic, Department of Surgery, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca
[3]Department of Physiology, Faculty of Medicine, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca
[4]Department of Bromatology, Hygiene, Nutrition, Faculty of Pharmacy, "Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca

Abstract

Background and aim: Severe obesity is a public health care system challenge that requires bariatric surgery. Among the plethora of bariatric surgery techniques silastic ring vertical gastroplasty (SRVG) is a safe and efficient restrictive method that has been successfully used previously. However, it's performance by open approach has been abandoned and replaced by other methods using the laparoscopic method. The aim of the present study was to investigate patients with severe obesity submitted to open SRVG and to report our results over a period of 10 years in terms of weight loss, late complications and surgical re-interventions.

Material and methods: 112 severely obese patients submitted to open SRVG between years 2008-2009 were investigated retrospectively for body mass index (BMI), percent excess BMI loss (%EBMIL), late surgical complications and reoperations. 41.96% of the patients were followed up 10 years after SRVG.

Results: The initial mean BMI was 47.38 ± 7.59 kg/m2 and dropped statistically significant ($p<0.001$) to 31.05 ± 6.54 kg/m2 by the first year after SRVG. The mean BMI was rather stable along the first 5 years after SRVG when it started to increase gradually, reaching 35.93 ± 7.20 kg/m2 by the 10th year of follow-up when it remained still significantly lower ($p<0.001$) as compared to the mean baseline value. The %EBMIL was 79% at one year after surgery and reached 51% by the 10th year of follow-up. The most frequent late complications after SRVG were stoma stenosis (8.92%), enlargement of the stoma (8.03%) and incisional hernia (3.36%). As a consequence of stoma stenosis the ring has been removed in all cases. In 2 cases, after the ring removal, the patients underwent gastric bypass.

Conclusion: SRVG is a safe and efficient restrictive technique of bariatric surgery open to many options to be revised, leading to a successful sustained long term weight loss and maintenance. Stoma stenosis, enlargement of the stoma and incisional hernia are the most frequent late complications after SRVG requesting reoperations.

Key words: open SRVG, weight loss, late complications, surgical reinterventions, 10-year follow-up