

***Short Term Volumetric Changes of the new-Stomach
following Laparoscopic Sleeve Gastrectomy***
Thesis

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general surgery

BY

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Summary

Obesity is a worldwide epidemic disease. Bariatric operations for patients who suffer from morbid obesity are effective in reducing body weight and co-morbidities. Accumulating evidence obviously supports the superiority of weight loss surgery over non-surgical treatments for management of morbidly obese patients.

Sleeve gastrectomy is the new top model in the treatment of morbid obesity and proved effective in providing correction of comorbidities and excellent short-term and long-term outcomes.

The efficacy of this operation has been attributed to the reduction of the gastric capacity (restrictive effect) and/or to gastrointestinal hormones modification (hormonal effect).

In this prospectivestudy, we wanted to determine the incidence of sleeve dilatation during the first post-operative year and whether gastric dilatation was associated with decreased weight loss.

The RGV evaluated with computerized axial tomography (CT) at 3 months 6 month and 12 months after surgery.

We had found that the volume of the gastric remnant increased during the first year after surgery, this increase was variably different among

patients, and some patients had almost doubled their RGV by the end of the first year. However, this increment seems not to affect weight loss.

RGV is exposed to multiple factors make it liable for dilatation including : Persistence of part of fundus, the size of the bougie used in the procedure, the distance of the first section from the pylorus, the distance between the bougie and the suture line, the use of reinforcement material in the gastric section .

Patient factors as variations in the properties of each patient's gastric walls, lack of nutritional behaviour change, and a lack of follow-up. Patient noncompliance with outlined dietary regimens could lead to mechanical stretching of the gastric reservoir with subsequent increase in its size; we can say that if patients do not have an appropriate professional support, then the sleeve and its success may be at risk.

Inspite of this apparent increase in RGV, **% EWL in this study continued to decline but at slower rate in the second 6 month postoperatively.** This data emphasizes the fact that laparoscopic sleeve gastrectomy may possesses other factors as hormonal and the motility mechanisms in addition to restrictive mechanism in controlling EWL.

In this thesis, the sleeve gastrectomy is regarded as a part of multidisciplinary a process that involves EWL

Further prospective studies with longer follow-up are needed to determine whether this increase in gastric volume following LSG does not hinder weight loss maintenance or, on the contrary, slows or even reverses it.

