

Previous Bariatric Surgery Increases Postoperative Morbidity after Sleeve Gastrectomy for Morbid Obesity

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Abstract. Objectives : Sleeve gastrectomy (SG) has been used as the first step of a staged malabsorptive procedure for high-risk patients. More recently SG was proposed as an stand alone procedure in the treatment of morbidly obese patients. The aim of this study is to analyze perioperative outcome of morbid obese patients after SG.

Methods : 301 patients, 201 women and 100 men, undergoing SG were retrospectively analyzed. SG was performed by 17 surgeons all member of the Club Coelio.

The mean BMI was 44.7kg/m² (27.4-70.3 kg/m²). 34 patients (11.3%) of our series had SG as revisional surgery. These revisional procedures consisted of 32 conversions from gastric banding, 1 conversion from vertical gastroplasty (VBG) and 1 from transoral endoscopic gastroplasty. Among the 32 patients that had revisional SG after a gastric banding, 13 bands were removed at least 3 months before the revisional SG and 19 bands were removed during the SG procedure. Endpoints were perioperative morbidity and mortality and potential risk factors for complications, mainly per or post-operative bleeding or leakage.

Results : Overall mortality was 0% and morbidity was 10.3%. Perioperative bleeding occurred in 10 patients (3.3%), leakage in 12 patients (4%) patients and stenosis in 3 patients (1%). The risk of leakage was significantly higher after revisional bariatric surgery and in case of gastric perforation during surgery (p = 0.0001). Previous gastric banding is also associated with a higher risk of postoperative bleeding (p = 0.0006).

Conclusions : SG can be safely performed but patients and surgeons must be aware of a higher risk of postoperative complications when SG is proposed as a revisional surgery.

Introduction

Bariatric surgery is associated with long-term weight loss and dramatic effects on obesity-related comorbidities, such as type 2 diabetes, hypertension and sleep apnea (1, 2). Sleeve gastrectomy (SG) has been used as the first step of a staged malabsorptive procedure for high-risk patients (3). More recently, SG was proposed as an isolated procedure for the treatment of morbidly obese patients (2, 4, 5, 6).

SG has become a popular bariatric procedure because of its technical simplicity, reproducibility and short-term follow-up good results (6, 7). Nevertheless, it is a procedure that can result in major postoperative complications compromising patient outcome (8, 9).

The aim of this study is to analyse the perioperative outcome of morbid obese patients after SG.

Patients and methods

Three hundred and one patients, 201 women and 100 men, underwent SG between January 2005 and December 2009 (Fig. 1) and were retrospectively analyzed. Surgery was performed by 17 surgeons, all members of the Club Coelio which is a surgical society of 50 French or

Belgian surgeons. These surgeons were performing the procedures in university, public and private institutions. A questionnaire was sent to all surgeons to compile various data preoperative criteria, comorbidities, perioperative data and postoperative results.

Inclusion criteria were BMI over 40 kg/m² or over 35 kg/m² associated with obesity-related comorbidities as arterial hypertension, diabetes, obstructive sleep apnoea syndrome or bariatric revisional surgery. Patients undergoing SG as a first step procedure before a duodenal switch were excluded from the study.

Characteristics of patients and distribution of comorbidities are reported in Tables I and II.

SG was performed according to the technique described by GAGNER (3).

Thirty-four patients (11.3%) of our series had SG as revisional surgery. These revisional procedures consisted of 32 conversions from gastric banding, 1 conversion from vertical gastroplasty (VBG) and 1 from transoral endoscopic gastroplasty. Among the 32 patients that had revisional SG after a gastric banding, 13 bands were removed at least 3 months previously and 19 bands during SG.

The vast majority of SG (300 patients-99.66%) were performed laparoscopically and only 1 by laparotomy