

Robot-assisted sleeve gastrectomy for obese and super obese patients – Initial experience in South America

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Abstract

Background: Vertical Sleeve gastrectomy is a safe and feasible approach for the treatment of morbidly obese patients. Laparoscopic method is THE principal technique used in the most part of the surgeons all the World. Laparoscopic Vertical Sleeve gastrectomy (LSG) is sometimes also a valid option as a first stage of bariatric surgical procedure for super-super obese patients. Robot-assisted sleeve gastrectomy (RASG) was started as a possible option for the same specific conditions and proposes. However, a lot of questions remain about its safety, high cost, surgeons and all team training. Herein we present our initial experience with RASG in a group with a good experience with robot surgery, doing highly complex procedures including robot assisted hepatectomy, duodenumpacreatectomy, esophagectomy and others. We then analyzed and compared ours results with those in the international literature.

Methods: A prospectively review of database about our 11 patients underwent to RASG was performed. Independent validity includes patient's demographics, operative parameters, morbidities, time and conditions follow-up, surgical time, and time of out hospital. The outcomes after RASG were compared to the laparoscopic technique. The patients were recruited in a private clinic of the surgeons. Inclusions criteria were BMI between 35 – 45 Kg/m², morbidities as diabetes type 2 more than 10 years in oral treatment and without control, hypertension in oral treatment too, moderate or severe liver steatoses diseases and lipid diseases. Exclusion criteria were BMI < 35 and > 45 kg/m², severe heart disease (Class IV NYHA) or severe pulmonary disease, age > 70 years and refuse to sign informed consent.

Results: All patients in a both of groups (laparoscopic and robot approach) had a effective loss of weight, with mean about 25 kg to 48 kg (25% to 55%) after one year period. One case of robot approach presented a staple line bleeding at first postoperative day, without transfusion. Morbidity rate after RASG was 9%, but no gastrointestinal leaks occurs. In laparoscopic approach mean operative time was 93 minutes and in RASG was 115 minutes. No mortality or differences in hospital stay was detected.

Conclusions: RASG can be a safely and feasible tool to the surgical treatment of obese patients and co-morbidities, with good results and satisfactory outcomes. However, the effective decisions and indications, acceptable advantages of this new technology require more trials and long time follow-up.

Biography

Pirolla finished medical school in 1988 and his training in surgery in 1993 at the faculty of Medicine, University of Sao Paulo(USP), Brazil. He did his PhD at the Faculty of Medicine, USP, where he is Associate professor of Human Anatomy, Department of Surgery. Surgeon Staff Chief of the Syrian-Lebanese Hospital and Albert Einstein Hospital in Sao Paulo. He was Associate Professor of Surgery at Heart Institute- USP for 13 years. Graduated in Principles and Practise of Clinical Research at Harvard Medical School and HMS Postgraduate Member. It has several scientific articles and book chapters published.