



SIPS PROCEDURE WITH NISSEN FUNDOPLICATION: New Approach to GERD in setting of morbid obesity

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INTRODUCTION

- Increase in prevalence of obesity and GERD have paralleled one another over the past.
- Laparoscopic Fundoplication (LF) (Hill, Nissen or Toupet) is minimally invasive form of anti-reflex surgery.
- SIPS/Loop duodenal switch is highly effective weight loss surgery with a proven record of long term weight loss success.
- However Nissen alone does not give satisfactory results if used for GERD in morbidly obese patients.
- Hence, we have developed a novel approach combining Stomach Intestinal Pylorus Sparing Surgery (SIPS) with LF for morbidly obese patients with GERD.

OBJECTIVE

- Recent experience with SIPS and Nissen Fundoplication at our institute has been promising.
- We present you our experience with a case of severe GERD in morbidly obese patient.
- Our purpose is to show improvement of reflex symptoms in morbidly obese patient with this new approach.

METHODS AND PROCEDURE

- Three 5mm trocars and one 12mm trocars were placed in the abdominal cavity under direct vision.
- Ileocecal valve was located and traced retrograde to 300 cms and brought up and sewed it to gastrocolic omentum.
- Large hiatal hernia was seen and dissected free up into the chest.
- Reinforced with a PTFE felt mesh or Pariatex mesh (Covidien Corp).
- A loose Nissen wrap is brought around after short gastric vessels were taken down . It was in position with 5 cm of intraabdominal esophagus.

- At this point, we started dissection of lesser sac and then sequentially fired an Endo GIA (Covidien) stapler, 5cm from the pylorus onto the stomach approximate 1.5 cm and then fired up greater curvature of stomach following a sizing tube from Allergan corporation.
- A long sleeve is created .We looked over the entire stapler line to make sure no places were narrowed at all.
- We then dissected free the duodenal bulb 3cm from the pylorus circumferentially and transected it using an Endo GIA stapler (Covidien).
- We then over sewed it to duodenal stump using PDS suture.
- Next the loop limb was brought up and sewed it to duodenal stump using 2.0 polysorb.

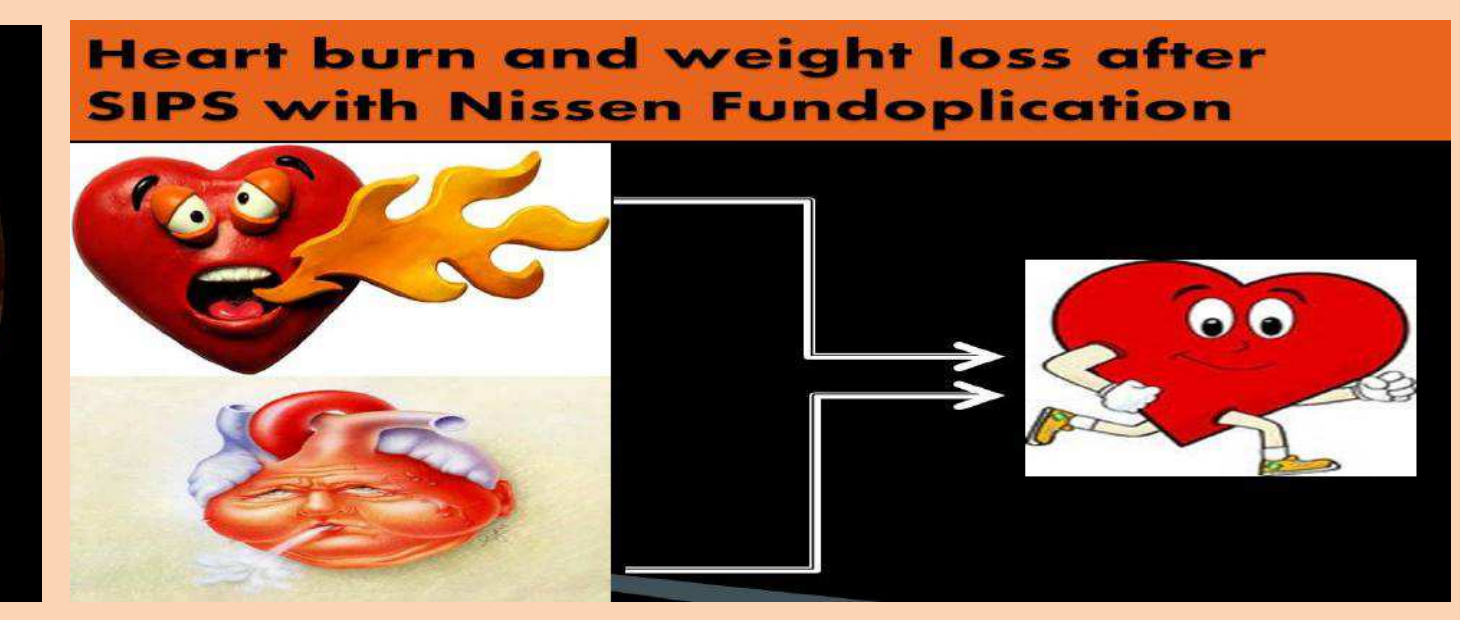
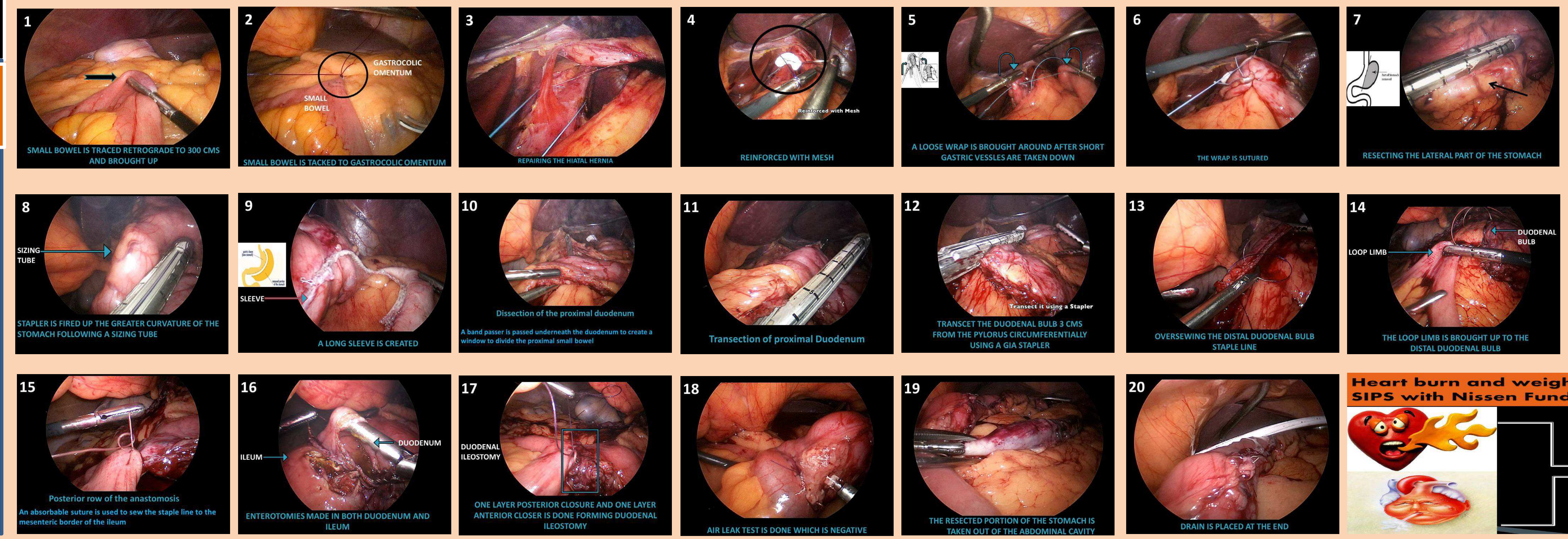
- Enterotomies were made in both limbs and 3.0 polysorb was used to do another posterior row and anterior row .The bowel was inspected for bleeding and bowel damage.
- The anastomoses were tested intra-operatively with pressurized air to check for leaks.
- The resected portion of the stomach was taken out of the abdominal cavity.
- Drain is placed at the end.

RESULT

- A total of 5 patients underwent SIPS plus Nissen Fundoplication done by single surgeon Dr. Daniel Cottam at Bariatric Medicine Institute, Utah.
- All the patients had severe acid reflex or giant hiatal hernias with GERD. The mean age of 59 years, mean weight of 292.12lbs and mean BMI 44. Mean operative time was 115 mins.
- Two patients had perioperative complications. One patient had ileus, while the other had low oxygen saturation on day 2.
- No cases were converted to open. No cases required additional ports. The average estimated blood loss was 35 cc.
- The mean follow up period was 116 days. All the 5 patients had resolution or improvement in their GERD symptoms.

CONCLUSION

- Our experience with SIPS plus Nissen Fundoplication has shown promising weight loss with improvement in GERD symptoms with an exclusive safety profile which can be used as reliable tool in the hands of the Bariatric surgeon.
- Further study of this novel surgical approach is recommended.



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