The Gastric Bypass

- Described by Mason in 1967
- Pouch size & Original anastomosis created but not sized
- 1975 Mason recommended a <50 ml pouch with a 12mm anastomosis
- 1980’s loop gastrojejunostomy changed to a Roux-en-Y

ORIGINAL MASON GASTRIC BYPASS

- Developed in 1967
- Large pouch allows increased caloric intake
- Higher incidence of ulcerations
Silastic Ring Vertical Gastric Bypass
• 1990’s Fobi & Capella

LAPAROSCOPIC GASTRIC BYPASS
• First performed by Wittgrove 1993
• Circular stapled anastomosis
• 15 ml pouch

Higa & Boone in 2000
• 20ml pouch
• Handsewn anastomosis
• 2 layer with interrupted and continuous 3-0 polyglactin
• Sized to 32F bougie
Schauer Circular anastomosis in 2000

Transoral EEA anastomosis

Schauer Linear Anastomosis
Differences in surgical technique

- 2003 demonstrated no advantage of one technique over another
- Based on surgeon preference

- Shope, et al. OBESITY SURGERY Volume 13, Number 3, 355-359

Initial Robotic Gastric Bypass Experience

- First 100 cases both Lap & Robotic
- Mean Op time 254 min (148-437)
- LOS 3 days
- No leaks
  - Compared to 7% Lap (Schauer, 2003)


Robotic Assisted Gastric Bypass

- 80 patients
- Only Gastro-jej performed Robotic
- Mean Op time 209 min
- LOS 2 days
- No leaks, No strictures

Robotic assisted: Better Outcomes?

- 45 Lap
- 90 Robotic
- Op time 227 Lap v 207 Rob
- 30 cases need to obtain shorter Op times
- LOS 3 Lap v 2 Rob
- Use of Robot for Gastro-Jej doesn’t increase Op time


Totally Robotic Gastric Bypass

- 9 patients
- G-J performed with Linear Stapler
- Mean Op time 197
- Zero Morbidity & Mortality
- 1 stenosis

Diamantis, 2010

Largest Series

- 320 Robotic assisted Gastric Bypass
- Op time 192
- LOS 2.7 days
- No mortality

Snyder, Wilson. Obesity Surg 2010
Personal experience

- Began open gastric bypass in 1999 using EEA placed via Transgastric approach
- Transitioned to laparoscopic gastric bypass 2000 using same Transgastric EEA placement
- Completed first Hybrid Robotic cases May 2009
- June 2009 began Totally robotic gastric bypass with Linear anast

Robotic Bariatric Surgery

- Began 2009
- Initially Hybrid
- Timed steps of procedure
- Transitioned to Linear stapler
- All instrument exchanges on 1 arm
- “posted” steps for my staff to follow

Total Bariatric Experience

- 3 surgeons
- Over 3000 procedures
- 80% gastric Bypass
- Mortality 0.15%
- Major Morbidity 4.0%
Robotic Experience

- 379 Robotic Bariatric Procedures
- 182 Primary gastric bypasses
- 146 Sleeve gastrectomies
- 26 Bands
  - 5 Robotic Single incision
- 25 revisional Bariatric procedures
- No leaks in Primary cases

Outcomes Robotic Gastric Bypass

- Mean BMI 44
- Mean Age 43
- LOS 2.21 (mean)
- Average Total Surgical Time 160 min
Benefits

- Big & Tall
- Easier Learning curve (fellows)
- Less Strain on surgeon
- Better visualization
- Revisions (even previous open)

Conclusion

- Addition of Robot to Bariatric surgery is safe and has acceptable outcomes
- Complications are unrelated to the robot, but to the surgery itself
- Benefits could lie in surgeon's longevity
- Next steps are to evaluate its efficiency and efficacy

THANK YOU