"One anastomosis gastric bypass" versus "Roux en Y gastric bypass" as salvage technique after failed gastric band: a retrospective analysis of 80 cases



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Rational: After the first description in 1997 by Robert Rutledge, the minigastric bypass or, accordingly to some Spanish authors, One Anastomosis Gastric Bypass (OAGBP) has become a progressively more accepted bariatric technique by different surgeons all over the world with increasing evidence of excellent outcomes at least equivalent to the Roux en Y Gastric Bypass ones. We have been using OAGBP also as a revisional technique in cases of failed or complicated gastric bandings. In this retrospective study we compare the outcomes of 80 revised patients, 40 under each of the techniques trying to learn the differences about safety and efficacy outcomes.

OAGBP theoretical advantages facing RYGBP

Safer: less leaks and hemorrhages Quicker (depending on used technique) Wide GJ: better food tolerance Adjustable (good for thin T2DM patients) Less hyperinsulinemic hypoglicemia Better long run weight loss and T2DM control Readjustable and easily reversible Technically easier as a salvage procedure



OAGBP technical advantages as salvage procedure

Lower anastomosis (less tension) Better anastomotic vascularization (long tube) Gastrojejunostomy far from the band scar tissue Larger anastomosis => no pressure => no leaks Antireflux stitches => jejunal patch

Demography

80 patients (23/4/2010 up to 12/3/2013) Average FU: 14,7 months Average age:49,5 years [28–73]; Conversion type: One step: 31; Two steps: 49 pts Associated operations: 2 cruroplasties Conversion to laparotomy: 1 pt (massive adhesions) Associated pathology: 70 pts (87,5%)

| | OAGBP | RYGBP |
|-------------|-------|-------|
| AGE (years) | 48,7 | 50,4 |
| Women/men | 37/3 | 40/0 |
| Weight (Kg) | 115,6 | 105,7 |
| Height (m) | 1,60 | 1,61 |
| BMI (Kg/m2) | 44,9 | 40,8 |

Comorbidities evolution





%EBMIL evolution



Conclusions

100%

Main indications for gastric bypass as a salvage procedure were GE reflux (11%), slippage (31%) and weight regain (44%)

87,5% had still important comorbidities Despite initial higher BMI OAGBP had half of the intra-op. and post-op. complications (5% vs 10%) OAGBP had greater %BMIL after 24 p.o. month Comorbidities control was better:

For OAGBP in T2DM, AHT, DJD and depression
For RYGBP in dyslipidemia and Sleep Apnea S.
OAGBP induced more B9 and B12 deficit + ↑ PTH
RYGBP induced more Fe, ferritin and Mg deficit
OAGBP induced 5 cases of GERD (3 reoperations)
RYGBP induced more cases of obstipation (3 cases)

OAGBP claimed disadvantages facing RYGBP

Gastric cancer risk (no scientific evidence.... a myth? Gastric biliary reflux /esophageal biliary reflux Increased ferropenic anemia Increased anastomotic ulcer/perforation rate

OAGBP conceptual advantages

- One anastomosis only
 - => easy to revise (afferent limb length \uparrow or \downarrow => easy to reverse to normal anatomy
- Induced steathorrea

=> added mechanism of action

Thin anti-reflux gastric tube

=> some restriction but better alimentary tolerance No mesenteric torsions

- => no defects => reduced risks of internal hernia No alimentary limb
 - => reduced "early dumping" rate

Complications

| | NIGDP | UAGDP | | |
|-------------------------------------|---------|--------|--|--|
| Intra-operative complications | | | | |
| Lost needle | 1 | 0 | | |
| Mistapling | 1 | 1 | | |
| Gastrotomy | 1 | 1 | | |
| Pleurectomy | 1 | 0 | | |
| Total | 4 (10%) | 2 (5%) | | |
| | | | | |
| Post-operative complications (<30d) | | | | |
| Seroma | 0 | 0 | | |
| Bandage alergy | 0 | 1 | | |
| Vomiting | 1 | 1 | | |
| Hematic drainage | 2 | 0 | | |
| Buttocks bruising | 1 | 0 | | |
| Total | 4 (10%) | 2 (5%) | | |
| | | | | |

% Nutritional deficits and other issues

