Long and Narrow Gastric Pouch in Roux-en-Y Gastric Bypass

Songhao Hu · Cunchuan Wang· **Zhiyong Dong* (DZY)**

Bariatric Surgery Department, The First Affiliated Hospital of Jinan University, Guangzhou, China

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Disclosure

None

Backgrounds

- RYGB is considered the gold standard bariatric surgery procedure.
- Complications: anastomotic dilation, anastomotic ulcers, dumping syndrome, malnutrition, inadequate weight loss, and weight regain --have impacted patients' quality of life.
- Exploration of the size and shape of the gastric pouch
- The size of the gastric pouch and the anastomosis size are independent predictors of weight regain after RYGB.
- Design and improve the gastric pouch shape.

Backgrounds

Obesity Surgery
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ORIGINAL CONTRIBUTIONS

An Extended Pouch in a Roux-En-Y Gastric Bypass Reduces Weight Regain: 3-Year Results of a Randomized Controlled Trial

Abel Boerboom[1] · Mellody Cooiman[1] · Edo Aarts[1] · Theo Aufenacker[1] · Eric Hazebroek[1] · Frits Berends[1]

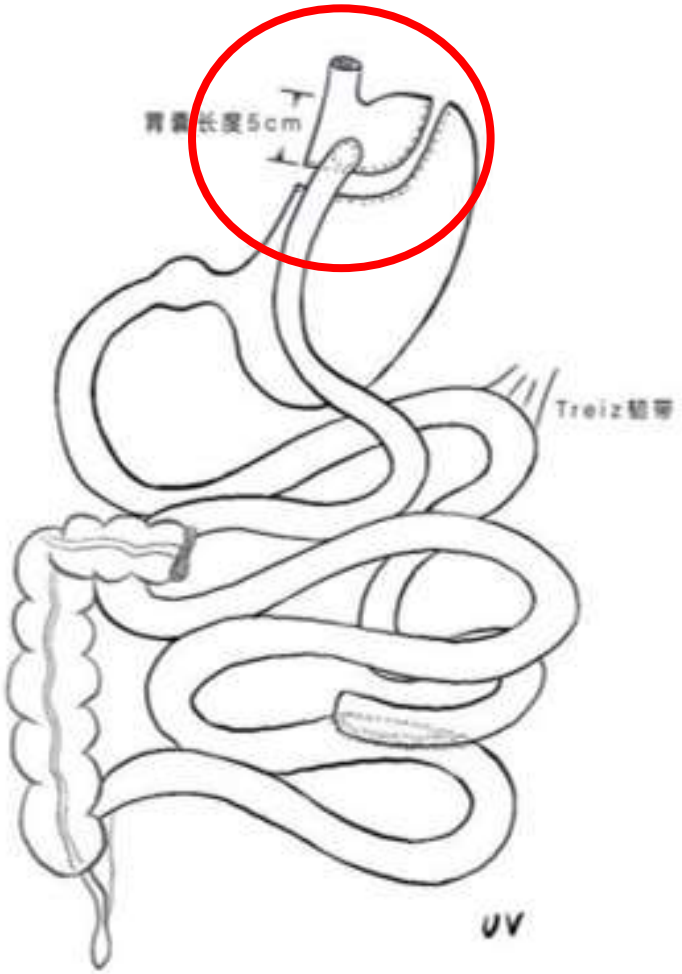
Results During the first 2 years of follow-up, no significant differences in terms of weight loss were observed. In the third year of follow-up, the S-GB group regained 3 kg, while in the EP-GB group no weight regain was observed. The mean TBWL after 36 months in the EP-GB group was 31% versus 27% in the S-GB group ($p = 0.023$). Additionally, besides a better remission rate of hypertension in the EP-GB group, no differences in complications, quality of life, and GERD-symptoms were found.

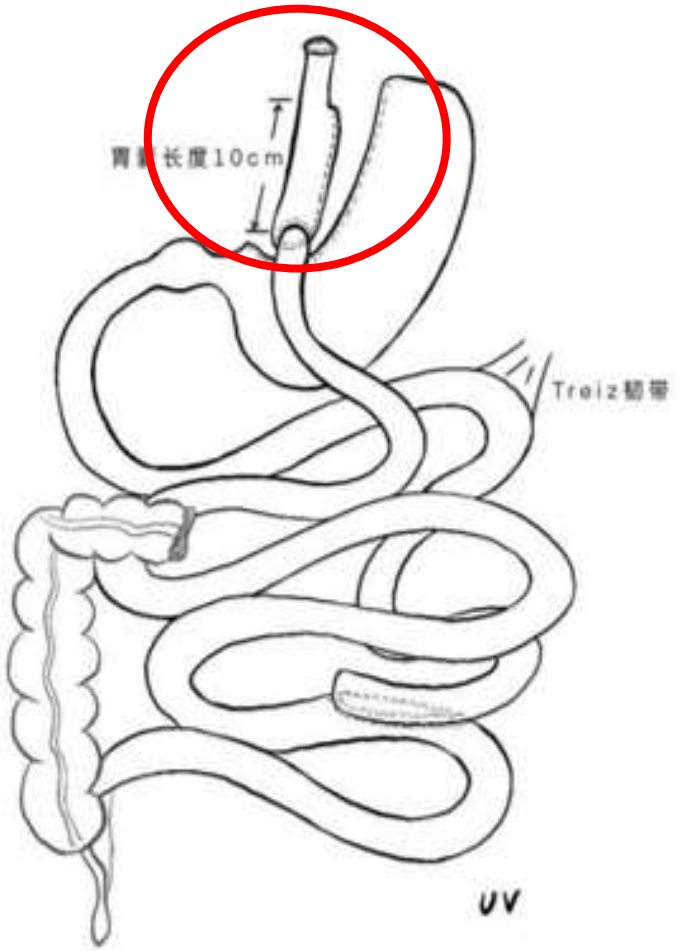
Conclusion Creation of an extended gastric pouch is a safe and effective modification in RYGB design. An EP-GB improves mid-term weight loss, potentially driven by a lower occurrence of weight regain.

Indicating that creating a slender gastric pouch during RYGB surgery can effectively reduce the likelihood of weight regain

Significant improvements in obesity-related comorbidities.

What is Long and Narrow Gastric Pouch in RYGB





Standard Gastric Pouch

Long and Narrow Gastric Pouch

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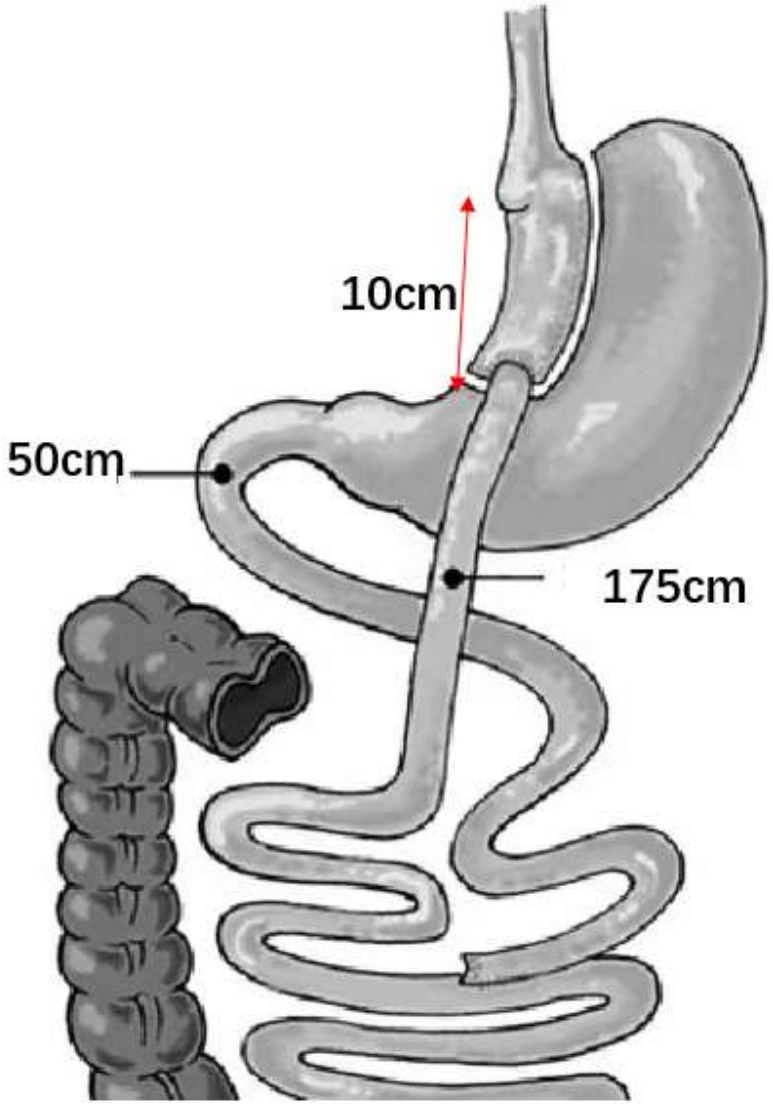
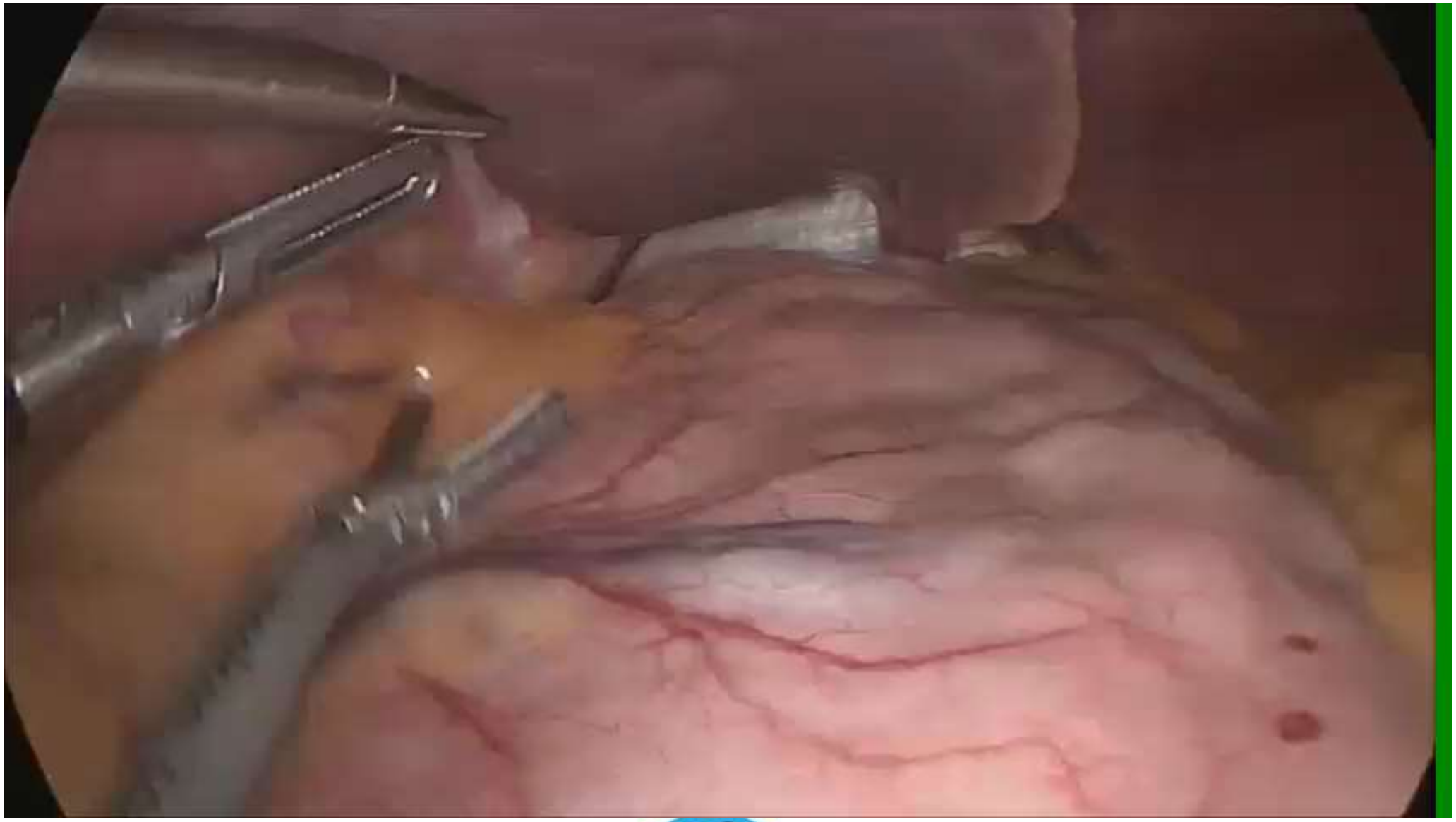
What is Long and Narrow Gastric Pouch in RYGB



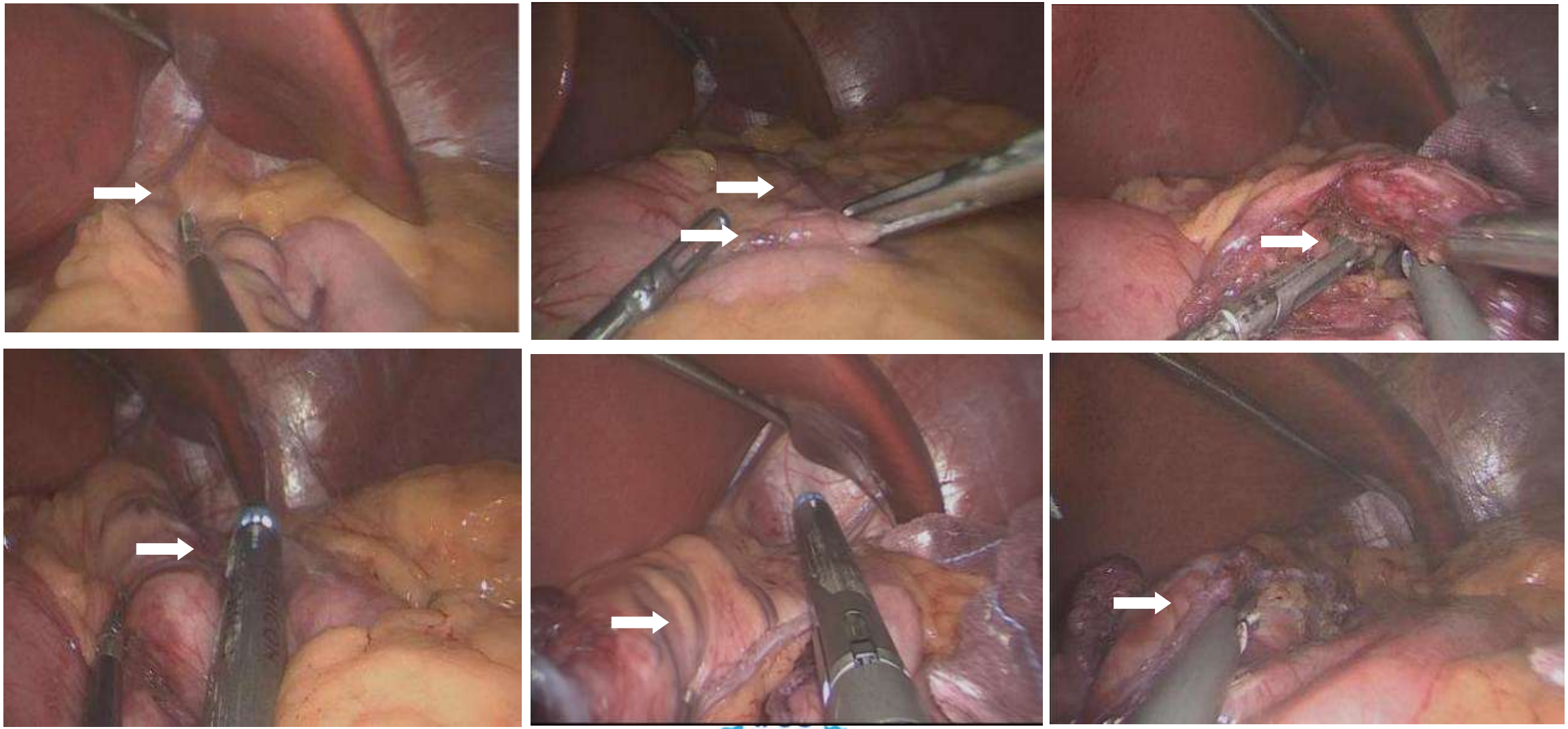
Technical key point

- The starting point is the midpoint of the lesser curvature
- The distance from the anastomosis to the gastro-esophageal junction is 10cm
- Boogies size is 36Fr
- The volume is 10-15ml
- 3-4 Staplers are used
- Final shoot --1cm away from the His angle

Video: Procedure of Long and Narrow Gastric Pouch in RYGB



Procedure of Long and Narrow Gastric Pouch in RYGB



Unpublished Data in our center

Items	Total No.（n=207）
Age	33.6±10.9
Gender	
M	125(60.4)
F	82(39.6)
Weight (kg)	128.6±33.9
BMI	45.3±10.9
waistline（cm）	131.7±21.3
hipline（cm）	132.0±19.6
Lab data	
HbA1c（%）	7.6±4.3
Uric Acid（mmol/L）	472.3±128.2
ALT（U/L）	67.1±64.7
TG（mmol/L）	2.7±3.7
HDL-c（mmol/L）	1.0±0.7
Complications[n（%）]	7.6±4.3
hypertension	26.6%（55/207）
diabetes	44.4%（92/207）
hyperuricemia	43.5% (90/207)
hyperlipidemia	39.1% (81/207)

Groups	Demographic data					
	Weight(kg)	BMI	Waistline（cm）	Hipline（cm）	Waist/Hip ratio	%EWL（%）
preoperative（n=173）	128.6±34.4	45.1±11.1	132.8±20.8	130.8±24.1	1.5±4.2	（84.6±59.7）
Post-1 year（n=173）	91.8±24.7	31.9±7.6	106.2±15.9	109.2±14.5	1.0±0.0396	
t	-	-	0.9	-	-	
P	＜0.001	＜0.001	＜0.001	＜0.001	＜0.001	

Groups	Lab data					Complications			
	HbA1c（%）	Uric Acid（mmol/L）	ALT（U/L）	TG（mmol/L）	HDL-c（mmol/L）	hypertension（%）	diabetes（%）	hyperuricemia（%）	hyperlipidemia（%）
preoperative（n=173）	7.8±4.6	454.4±132.0	67.0±65.0	2.8±3.9	1.0±0.7	26.0%（45/173）	43.9%(76/173)	67.0%(116/173)	63.6%(110/173)
Post-1 year（n=173）	5.6±0.9	398.4±112.6	31.8±21.4	1.3±0.6	1.3±0.4	13.9%(24/173)	10.4%(18/173)	32.4%(56/173)	42.2%(73/173)
t（x2）	-	-	-	-	-	8.0	49.136	41.6	15.9
P	＜0.001	＜0.001	＜0.001	＜0.001	0.05	＜0.001	＜0.001	＜0.001	＜0.001

Excess weight loss (%EWL) reached (84.6±59.7)%. a significant reduction in hypertension, diabetes, dyslipidemia, and hyperuricemia after surgery (P<0.001).

Discussion and conclusion

Long and Narrow Gastric Pouch in RYGB

Crafting the gastric pouch into a slender shape

- Reduced anastomotic tension
- Easy to perform
- Prolonged gastric emptying time
- Diminished tendency for pouch dilation.

Aim

- To reduce anastomotic dilation, anastomotic ulcers, and dumping syndrome, while also preventing weight regain.
- Long and narrow gastric pouch in RYGB need long-term further studies.

IFSO-APC Meeting 2023

SAVE THE DATE
WELCOME TO CHINA!

Thank you !!!

Dr. Zhiyong Dong, dongzy2008@163.com