

Convincing Ten-Year Follow-up Results of the Banded Roux-en-Y Gastric Bypass

Marijn Jense, clinical researcher
Zuyderland Medical Center and Dutch Obesity Clinic South

Research Team: N. Meuwissen, A. Galal, E. De Witte, S. Fransen, P. Broos, J. Greve, E. Boerma

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Conflicts of interest statement

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I have no potential conflict of interest to report

Introduction

- Roux-en-Y Gastric Bypass
 - Most effective
 - Weight recurrence & Insufficient weight loss
- Banded Roux-en-Y gastric bypass
 - Long term weight maintenance
 - Complications



Methods

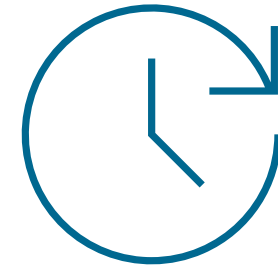


Primary BRYGB

Conversional surgery



Retrospective data
study



January 2011 – March
2013

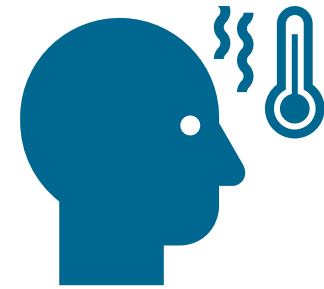
Outcomes



Weight loss

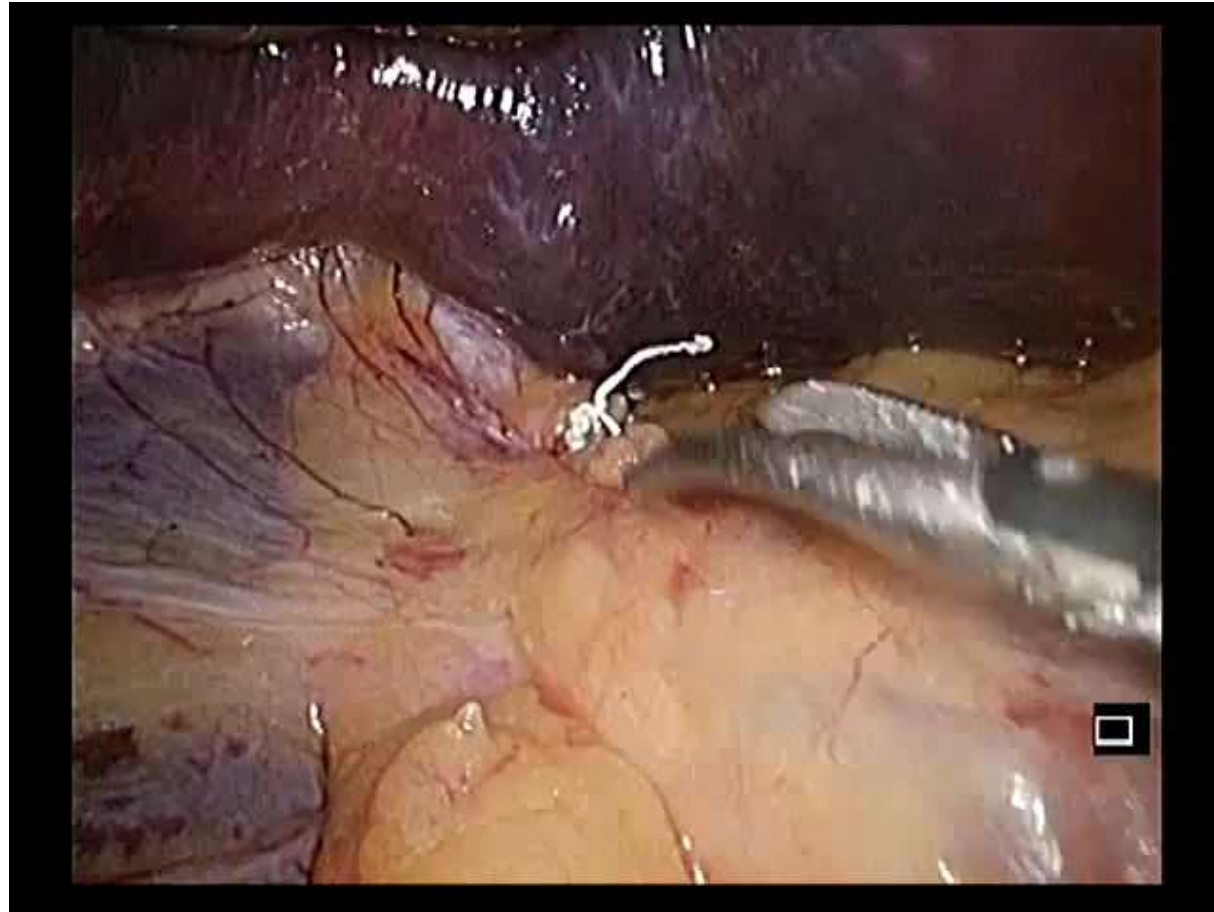


Comorbidities

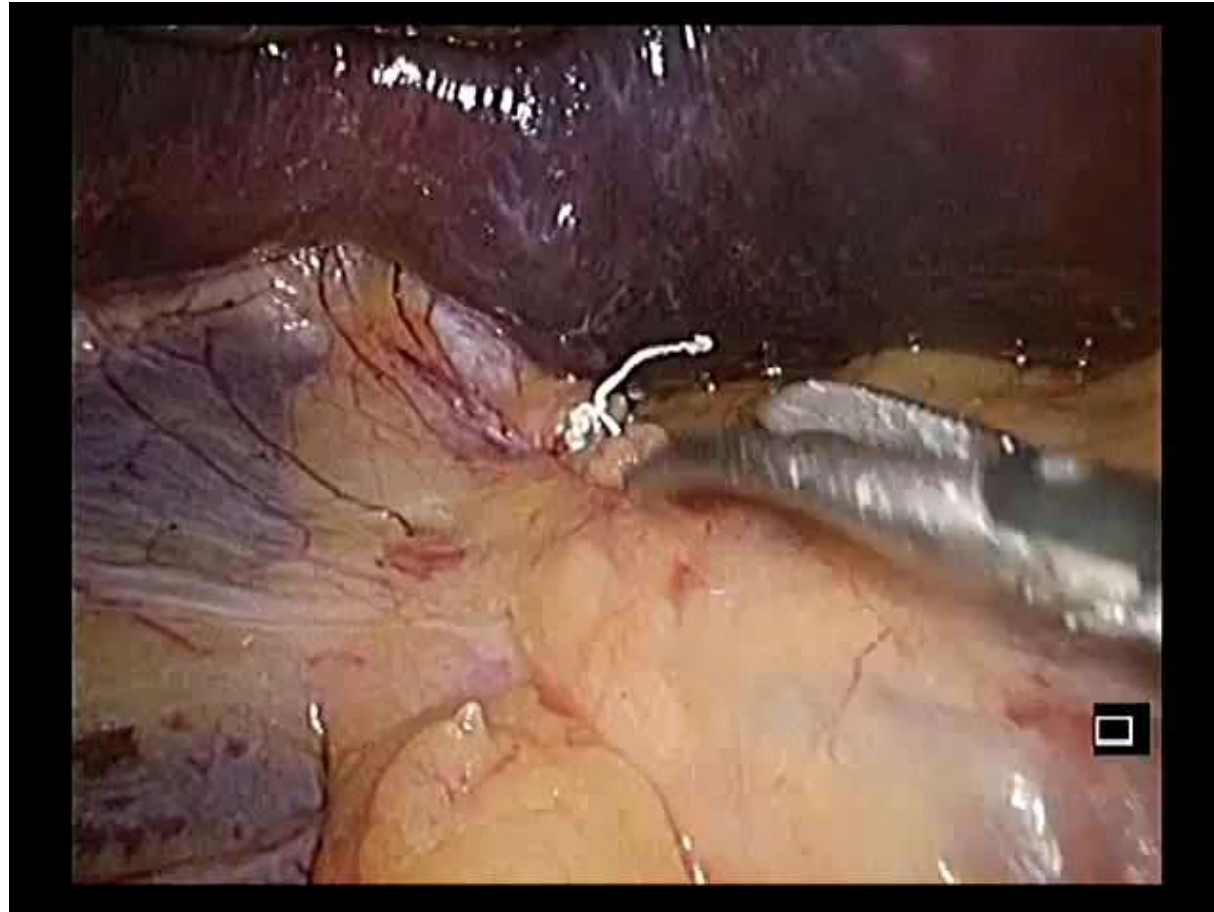


Complications

Placement of silicone ring



Placement of silicone ring

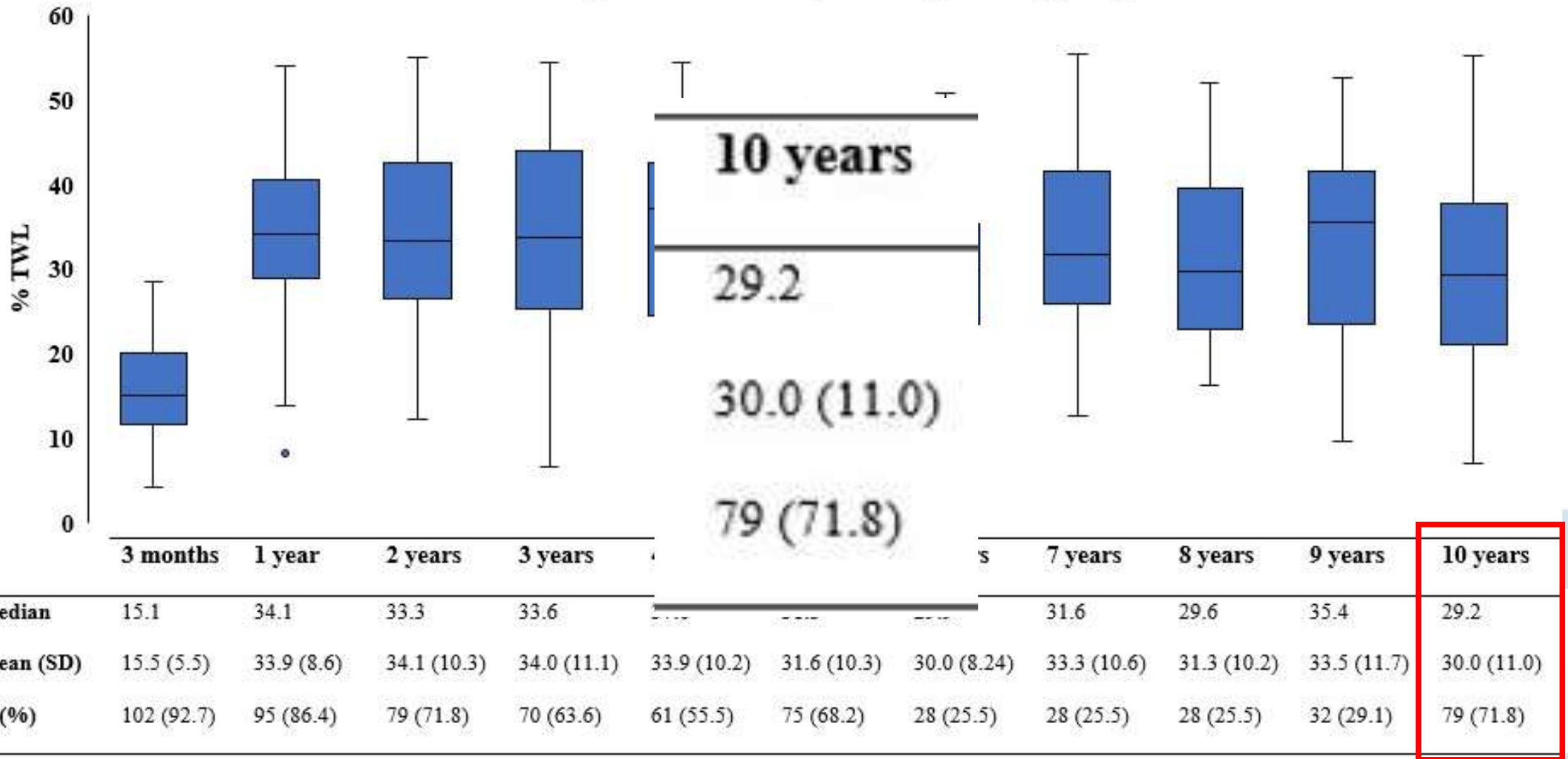


Patient characteristics

Baseline characteristics		N=110
Sex	Female (%)	75 (68.2)
Mean age on day of operation in years (SD)		46 (12)
Mean weight screening in kg (SD)		127.5 (23.0)
Mean BMI screening in kg/m ² (SD)		44.5 (6.9)
Diabetes (%)		68 (61.8)
Hypertension (%)		55 (50)
OSAS (%)		32 (29.1)
Dyslipidemia (%)		37 (33.6)

Weight loss

% Total Weight Loss over 10 years in primary group





Weight recurrence

After 5 years	N=75
> 5% weight recurrence*	45.9 %
> 10% weight recurrence*	21.6 %
> 20% weight recurrence*	1.4%
After 10 years	N=79
> 5% weight recurrence*	65.8 %
> 10% weight recurrence*	29.1 %
> 20% weight recurrence*	5.1 %
*based on lowest weight between surgery and 5 and 10 years postoperative	



Total Weight Loss

After 5 years	N=75
> 20 % TWL	88.0%
> 25 % TWL	70.7%
> 30 % TWL	56.0%

After 10 years	N=79
> 20 % TWL	77.2%
> 25 % TWL	69.9%
> 30 % TWL	49.4%

Comorbidities



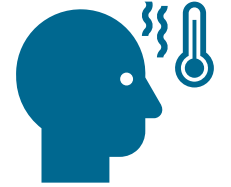
Presence of comorbidities

	BMI (SD)	Diabetes mellitus	Hypertension	OSAS	Dyslipidemia
Baseline	45 (7)	61.2% (n=110)	50% (n=110)	29% (n=110)	34% (n=108)
5 years	30.2 (5.2)	14.4%* (n=97)	28.4%* (n=102)	12%* (n=100)	12.6%* (n=103)
10 years	31.4 (6.7)	29.6%* (n=71)	25%* (n=68)	12%* (n=66)	20.0% (n=70)

RYGB = Roux-en-Y gastric bypass, BMI = Body Mass Index, OSAS = Obstructive Sleep Apnea Syndrome.

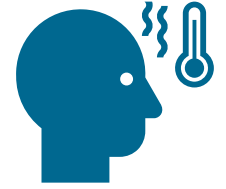
**statistically significant difference compared with baseline (tested with McNemars test, with $\alpha=0.05$)*

Complications



Complications >30 days - 10 years	N = 110
Patients with complications	25
Complications	48
Ring related	14
Internal hernia	8
Revision	12
Hiatal hernia	5
Trocar hernia	4
Cicatricial hernia	2
Marginal ulcer	1

Complications



Ring related complications >30 - 10 years

N = 110

Patients with complications

14

Ring removed

7

Erosion

3

Dysphagia

4

Ring replaced

7

Slippage

4

Stenosis

1

Broken ring

1

Dysphagia

1

Comparison to literature



Article	N at start	FU rate at 10 years	%TWL at 10 years	Complications
Current study	110	71.8%	30 (SD 11.0)	22.7%
Salminen, JAMA Surg (2022) ¹	119	79.8%	26.9 (95% CI 25.6 – 28.2)	18.5%
Liagre, SOARD (2022) ²	535	74.6%	27.3 (SD 12.3)	32.9%*
Gorecki, SAGES Oral (2020) ³	576	25.2%	28.2 (SD 11.6)	NA
Higa, SOARD (2011) ⁴	242	26.9%	28.8 (SD 11.3)	27.3%

*not all complications clearly described, possibly some data missing

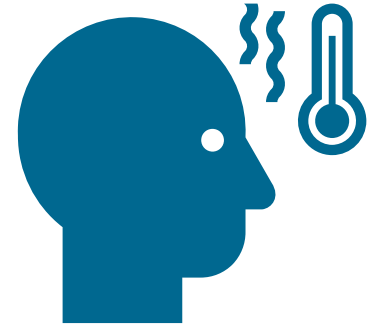
Conclusion



Substantial and stable
long term weight loss



Significant
comorbidity reduction



Complication rate
comparable to RYGB

Questions?

Research team: N. Meuwissen, A. Galal, E. De Witte, S. Fransen, P. Broos, J. Greve, E. Boerma

Contact details: m.jense@zuyderland.nl



Literature

1. Salminen, P. et al. Effect of Laparoscopic Sleeve Gastrectomy vs Roux-en-Y Gastric Bypass on Weight Loss, Comorbidities, and Reflux at 10 years in Adult Patients With Obesity: The SLEEVEPASS Randomized Clinical Trial. *JAMA Surg.* 157(8):656-666 (2022)
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3. Gorecki, P. et al. Weight loss dynamics following laparoscopic Roux-en-Y gastric bypass. An analysis of 10-year follow-up data. *Surg Endosc* 35, 5315-5321 (2021)
4. Higa, K. et al. Laparoscopic Roux-en-gastric bypass: 10-year follow-up. *SOARD Volume 7*, 516-525 (2011)