



Dutch
Society for
Metabolic &
Bariatric
Surgery

SLEEVEPASS RCT

Sleeve Gastrectomy vs RY gastric bypass; 10 year results

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Disclosures

- None

Article

JAMA Surgery | **Original Investigation**

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

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Objective

- To compare **long-term** outcomes of **weight loss** and remission of **obesity-related comorbidities** and the prevalence of **reflux** symptoms.



10- year follow-up

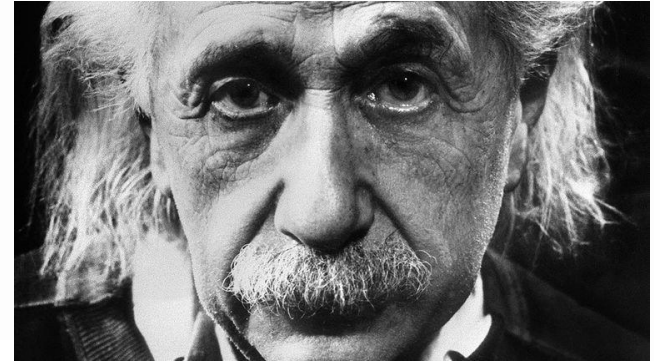
Methods

- Multicenter RCT (3 hospitals)
- 240 patients included (2008 – 2010)
- Age 18-60
- BMI 40-60 (35 with related comorbidities)
- Excluding GERD and revisional surgery



Outcomes

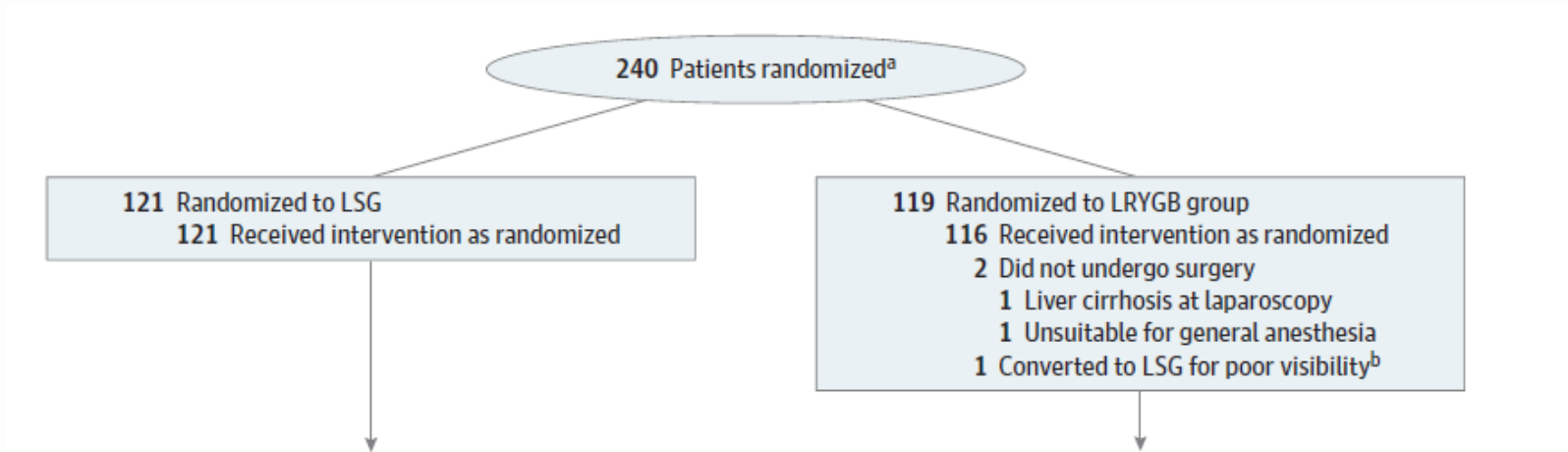
- Excessive weight loss (%EWL)



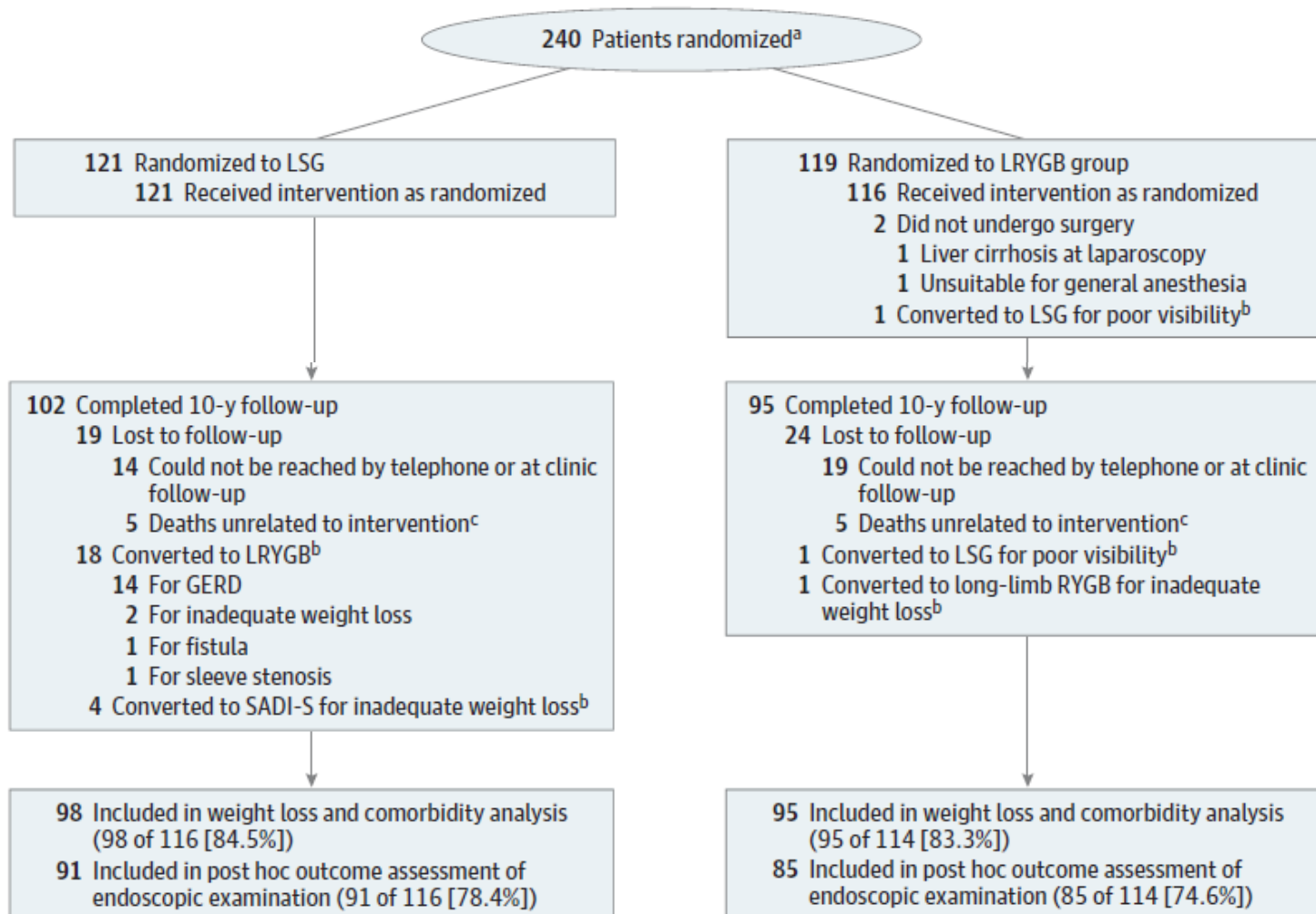
$$(\%EWL) = \frac{\text{baseline weight} - \text{follow up weight}}{\text{baseline weight} - IBW} \times 100$$

- Remission of DM2, HT, HC, OSAS
- GERD symptoms (GERD-QOL, use of PPI, endoscopy)

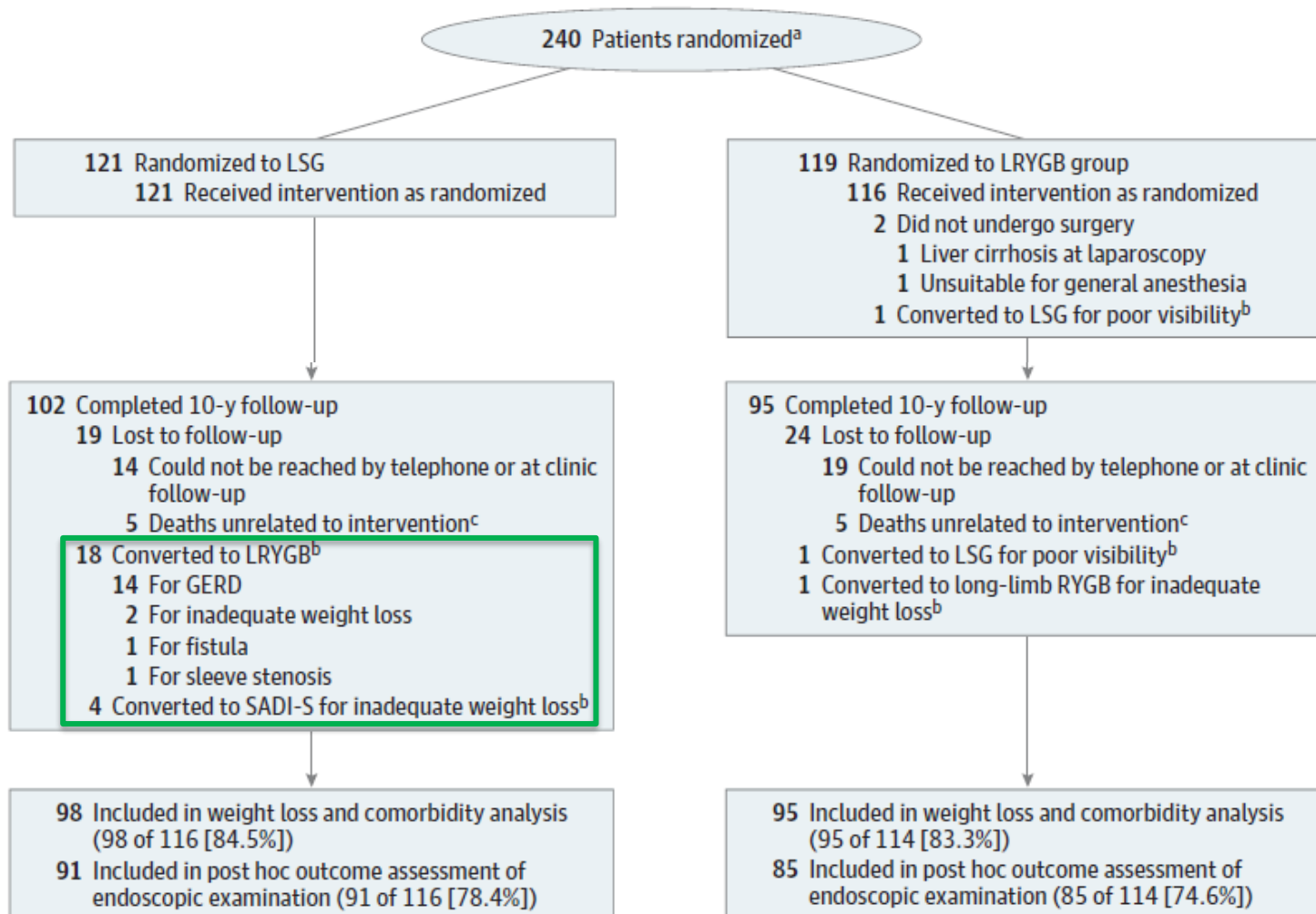
Study population



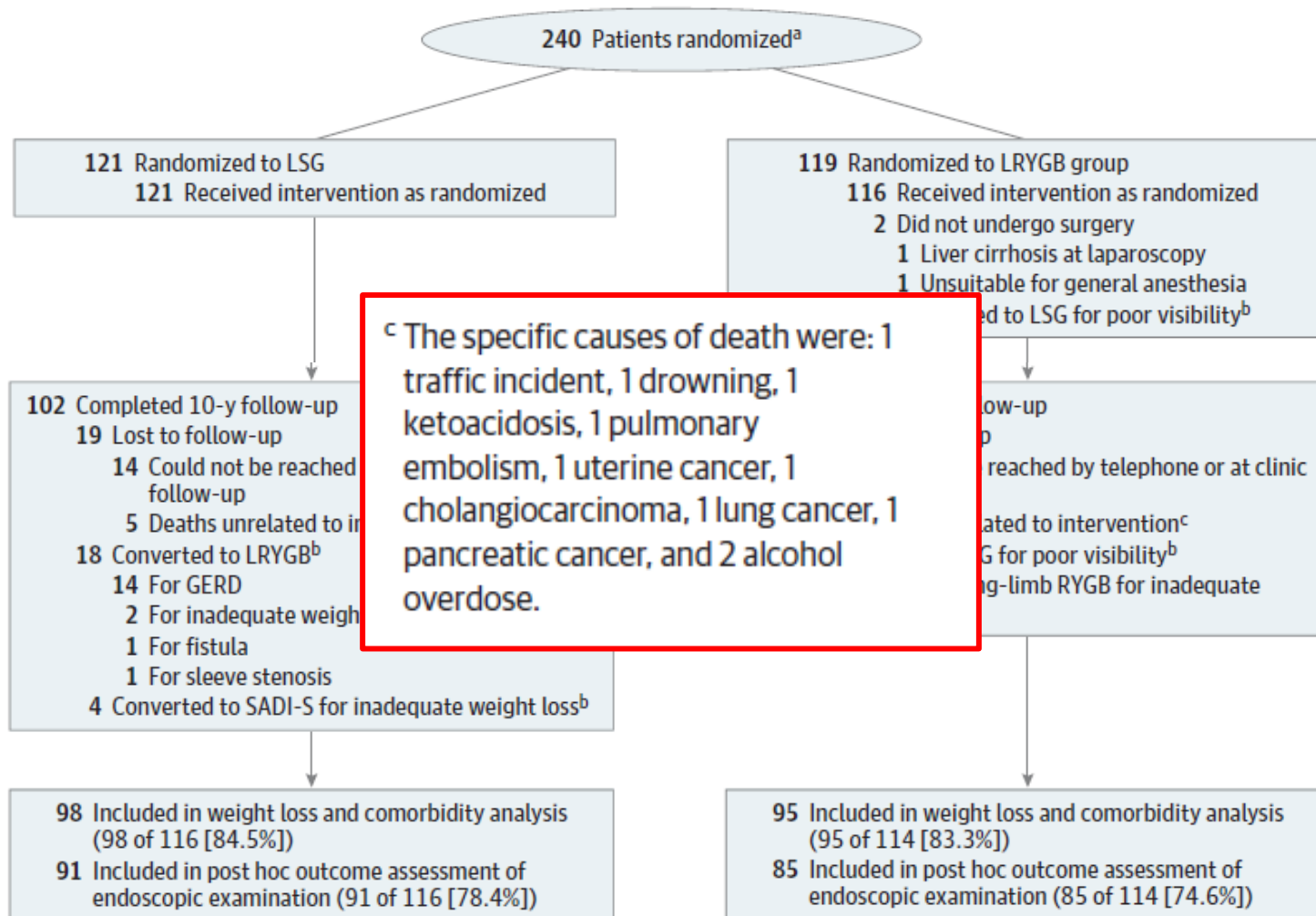
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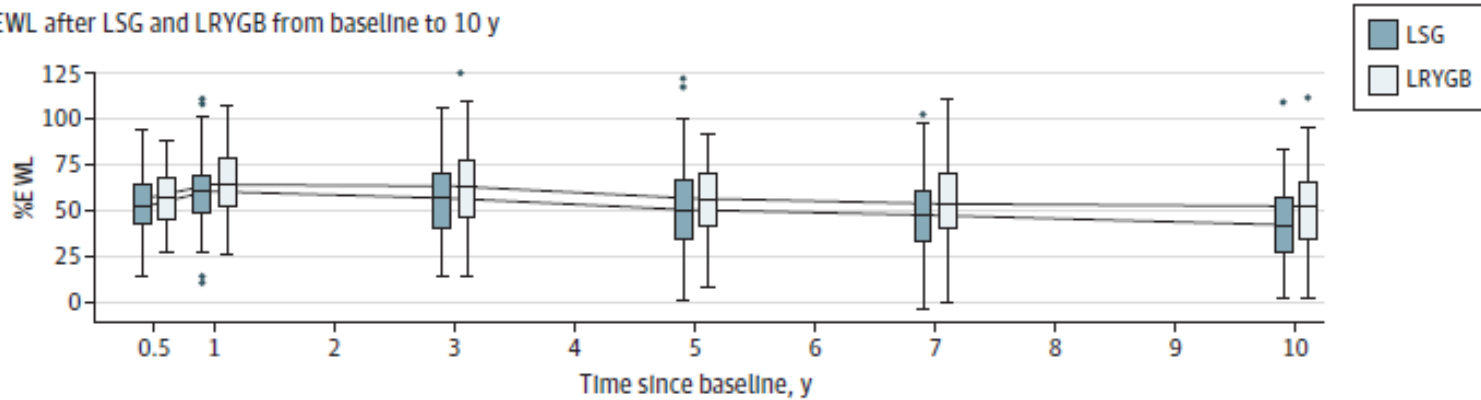


Study population



Results – Weight Loss

A %EWL after LSG and LRYGB from baseline to 10 y



No. at risk

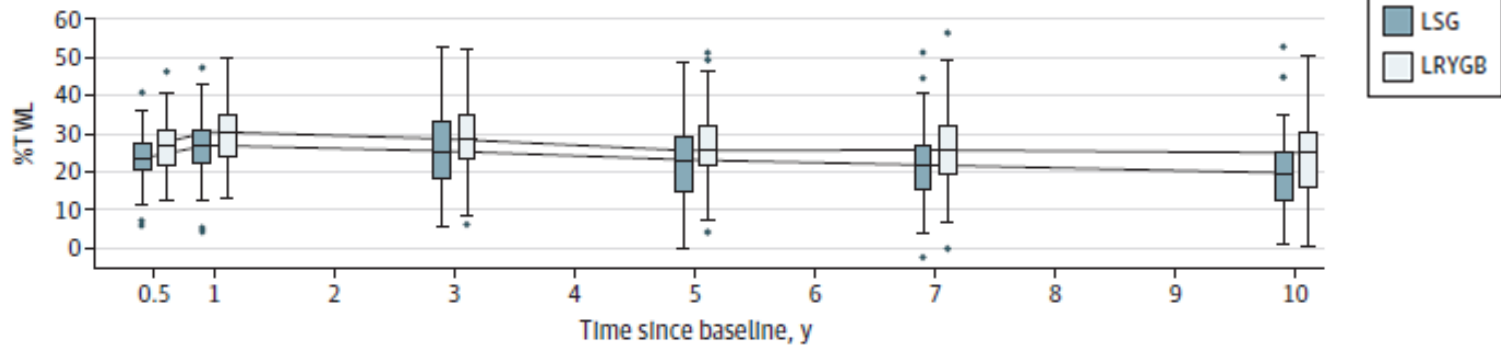
LRYGB patients	111	108	100	95	91	95
LSG patients	119	111	108	98	91	98

%EWL: Sleeve **43.5%** (95% CI, 39.8-47.2) vs. RYGB **51.9%** (95% CI, 48.1-55.6)
Difference is 8.4% (95% CI, 3.1-13.6) - NS



Results – Weight Loss

B %TWL after LSG and LRYGB from baseline to 10 y



No. at risk

LRYGB patients	111	108	100	95	91	95
LSG patients	119	111	108	98	91	98

%TWL: Sleeve **23.4%** (95% CI, 22.1-24.7) vs. RYGB **26.9%** (95% CI, 25.6-28.2)
Difference is 3.5% (95% CI, 1.6-5.4) – $P < 0.001$



Results – GERD

	No./total No. (%)		P value
	LSG (n = 91)	LRYGB (n = 85)	
All patients who underwent endoscopy	91/121 (75.2)	85/119 (71.4)	
PPI intake preoperatively	11/89 (12)	5/81 (6)	.20 ^a
PPI intake at 10 y	58/90 (64)	30/84 (36)	<.001 ^a
GERD symptoms			
No symptoms preoperatively or at any point	18/90 (20)	39/85 (46)	
Symptoms similar to preoperatively	16/90 (18)	6/85 (7)	<.001 ^a
Symptoms alleviated postoperatively	12/90 (13)	32/85 (38)	
Symptoms worsened postoperatively	44/90 (49)	8/85 (9)	
GERD-HRQL total score, median (range)	10.5 (0.0-47.0)	0.0 (0.0-47.0)	<.001 ^b

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Esophagitis: Sleeve 31% vs. RYGB 7%, ***P < 0.001***

Barret esophagus: Sleeve 4% vs. RYGB 4%, ***NS***

Results – Comorbidities

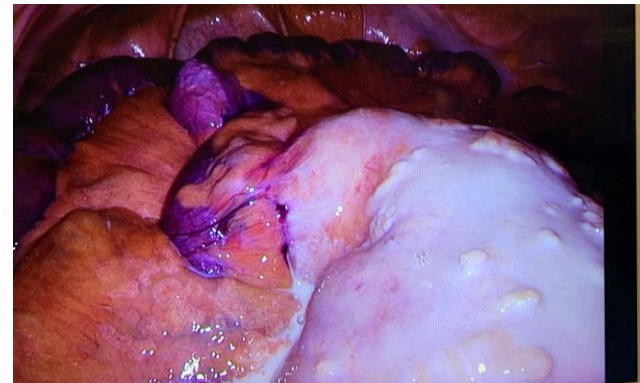
- No significant difference in reduction/remission of:
 - DM2
 - Dyslipidemia
 - Obstructive Sleep Apnea Syndrome
- Significant difference in reduction/remission of:
 - Hypertension (RYGB)

Results - Complications

- Clavien-Dindo I-IIIa
 - Sleeve 34.7% vs RYGB 24.4%, $P = 0.08$
- Clavien-Dindo IIIb
 - Sleeve 15.7% vs RYGB 18.5%, $P = 0.57$



Sleeve 31.4%



RYGB 15.1%

Discussion

- RYGB was associated with **greater weight loss** at 10 year follow-up (NS)
- Reflux, PPI-use and esophagitis significantly **more prevalent** after gastric sleeve
- Only difference in **hypertension favoring RYGB**
- No difference in **complications**

Limitations

- Small number of bariatric procedures performed in Finland
- Study population size
- High follow-up rate
- Endoscopic follow-up

15 and 20 year follow-up

