

ROUX-EN-Y gastric bypass vs. vertical sleeve gastrectomy: long term surgical outcomes.

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Introduction: Vertical Sleeve Gastrectomy (VSG) is becoming an increasingly popular surgical treatment for morbid obesity compared to Roux-en-Y Gastric Bypass (RYGB) in North America.

Methods: Data collected in Ontario Bariatric Registry between 2010–2018 was used to compare long term outcomes of patients undergoing VSG or RYGB. Intention to treat analysis was performed. Results include conversions and revisions.

Results: Of the 18 431 patients that underwent surgical treatment, 15,379 (81.4%) had RYGB (BMI 48.2; age 44.3; 84.3% female) and 2572 (13.6%) had VSG (BMI 53.3, age 48.2; 75.4% female). 5.6% of RYGB patients had surgical complications, compared to 2.8% of VSG patients. 50 VSG patients required a conversion due to weight regain/ineffective weight loss compared to 4 RYGB patients. At 3 years, 2384 RYGB and 236 VSG were available for follow-up, compared to 569 and 40 patients at 5 years.

		RYGB	VSG	p-value
Conversion	3 year	0.2%	36.0%	<0.05
	5 year	1.5%	47.5%	<0.05
%EWL	3 year	68.8%	49.3%	<0.05
	5 year	62.3%	46.4%	<0.05
Improvement in GERD	3 year	46.9%	-3.9%	<0.05
	5 year	54.4%	- 6.0%	<0.05
Improvement in Diabetes	3 year	56.0%	39.7%	NS
	5 year	41.5%	40.9%	
Improvement in OSA	3 year	27.3%	6.6%	<0.05
	5 year	48.9%	27.1%	<0.05
Improvement in Musculoskeletal Pain	3 year	38.0%	22.3%	<0.05
	5 year	34.3%	7.0%	<0.05

Conclusion: RYGB results in more favorable weight loss and reduced weight regain, and has a significantly less likelihood for conversion due to weight regain or side effects at 5 years.