

## Outcomes of bariatric surgery in elderly patients: a cohort-study with 3-year follow-up

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**Introduction:** Despite an aging population, only a few studies have looked at the effect of bariatric surgery in the elderly. This study aims to examine safety and outcomes of bariatric surgery in the elderly population.

**Methods:** Data from the Ontario Bariatric Registry between 2010 and 2015 was used for this retrospective study. Complications and outcomes for vertical sleeve gastrectomy (VSG) and gastric bypass (RYGB) were compared between the elderly population (>65yo) and the younger population over 3-year follow-up.

**Results:** 6420 patients underwent bariatric surgery. Of these, 140 patients (72.1% RYGB) were in the elderly cohort (BMI 48.4, age 66yo, female 70%, versus younger cohort: BMI 49.5, age 46yo, female 85%). Complications and outcomes at 3-year follow-up are as follow:

		< 65	>65	p-value
<b>Weight loss</b>				
Decrease in BMI (SD)	1 year	16.4 (5.6)	17.1 (5.7)	NS
	3 years	16.1 (5.8)	16.5 (6.1)	NS
<b>Complications n (%)</b>				
Mortality 30-day		0	0	NS
Overall complications		523 (8.3)	11 (7.9)	NS
Leak		4 (0.1)	0(0)	NS
Thromboembolic		3 (0.1)	1 (0.7)	p<0.05
Hospitalization		199 (3.2)	4 (2.9)	NS
Revision		25 (0.4)	0(0)	NS
<b>Comorbidities Improvement (%)</b>				
Diabetes	1 year	40.8	53.6	p<0.05
	3 years	38.9	55.9	p<0.05
Hypertension	1 year	40.9	58.9	p<0.05
	3 years	40.9	54.8	p<0.05
Hyperlipidemia	1 year	35.8	39.6	p<0.05
	3 years	40.4	37.9	p<0.05

**Conclusions:** Bariatric surgery is safe and effective for elderly patients. The elderly group may have an increased thromboembolic risk. Further study is needed to evaluate this finding.