

# SURGICAL TECHNIQUE FOR SLEEVE GASTRECTOMY: COMPARISON BETWEEN MEDIAL VERSUS LATERAL APPROACH – 3 YEAR OUTCOMES

**Vanessa Boudreau**, MD, FRCSC; **Mehran Anvari**, OONT, MB, BS, PhD, FRCSC, FACS;  
**Karen Barlow**, HonsBSc; **Olivia Lovrics**, MSc; **Scott Gmora**, MD, FRCSC; **Dennis Hong**, MD, FRCSC  
Center for Minimal Access Surgery, McMaster University, Ontario, Canada

## INTRODUCTION

No consensus exists in the literature for the best surgical technique when performing a sleeve gastrectomy (SG). Medial and lateral approaches have been described, but no study could identify if one technique is better in terms of clinical outcomes.

## METHODS

Data from the Ontario Bariatric Registry was used for this retrospective study to compare the effectiveness and safety of SG using the medial approach versus the lateral approach, during a 3-year follow-up.

## RESULTS

Between January 2010-2015, 564 patients underwent a SG surgery at St Joseph's Healthcare Hamilton. 229 patients underwent a medial approach (72.9% female, age 46.9, BMI 54.4) and 335 underwent a lateral approach (73.1% female, age 48.8, BMI 56.3). Both groups were comparable in terms of baseline comorbidities. Weight loss and complications are as follow:

		Medial approach	Lateral approach	p-value
<b>Weight loss</b>				
Decrease in BMI (SD)	1 year	15.9 (7.0)	15.0 (7.6)	NS
	3 years	14.5 (6.7)	13.7 (8.3)	NS
<b>OR time</b> minutes(SD)		70.4 (15.8)	95.3 (31.3)	p<0.05
<b>Complications</b> n (%)				
Mortality 30-day		0	0	NS
Overall complications		10 (4.4)	11(3.3)	NS
Wound infection		1 (0.4)	2 (0.6)	NS
Stricture		2 (0.9)	1 (0.3)	NS
Hospitalization		4 (1.7)	6 (1.8)	NS
Revision		3 (1.3)	4 (1.2)	NS

## CONCLUSIONS

Both the lateral and medial approach are effective and safe for performing the SG. No significant differences were seen in weight loss and rate of complications at 3 years. The medial approach may decrease operative time. Further study is required to determine if a consensus can be obtained.