Sleeve gastrectomy performed by proctored senior resident: is it safe?

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CONFLICT OF INTEREST DISCLOSURE

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[X] I have no potential conflict of interest to report

RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

Standardized technique:

1. Gastro-colic dissection and left pillar exposure
2. Stapling 6 cm from pylorus following bougie
3. Complete removal of the fundus

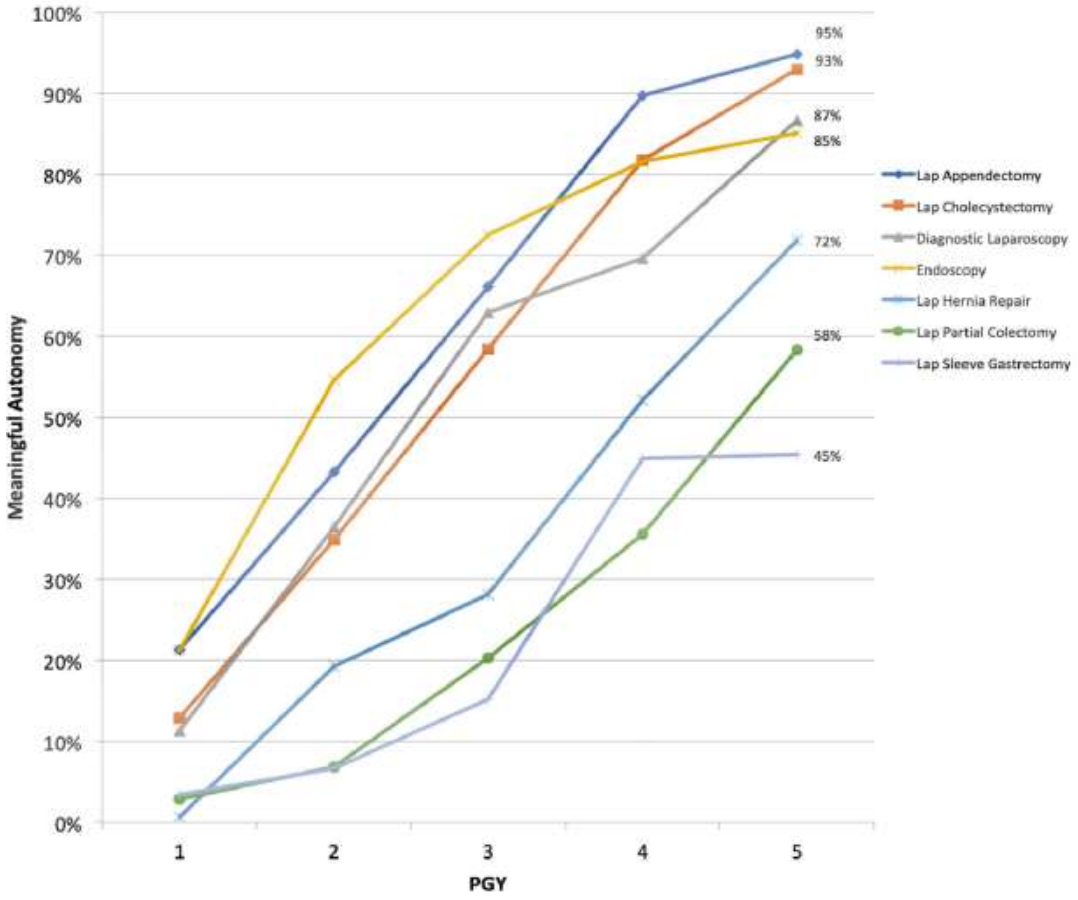
RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

Advantages in resident training:

- Improving in stomach exposure
- Dissection of lesser gastric vessels
- Improving in managing obese patient

RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

Despite the progressive acquisition of a meaningful autonomy for the most common minimally invasive operations, some studies suggest 20-25% trainees have performance deficits



Trainee Autonomy in Minimally Invasive General Surgery in the United States: Establishing a National Benchmark

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RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

WHAT IS THE ROLE?

Some authors reported increased morbidity rates even when an expert surgeon performed a bariatric operation with a resident or a fellow as first assistant

The effect of resident involvement on bariatric surgical outcomes: an ACS-NSQIP and
Haskins IN, Kudsi J, Hayes K, Amdur RL, Lin PP, Vaziri K..
J Surg Res. 2018 ;223:224-229. doi: 10.1016/j.jss.2017.11.038.

The educating enigma: Does training level impact postoperative outcome in bariatric surgery?
Bonner G, Kalantar Motamedi SM, Mustafa RR, Abbas M, Khaitan L.
Surgery. 2018;164(4):784-788. doi: 10.1016/j.surg.2018.07.004.

First assistant impact on early morbidity and mortality in bariatric surgery.
Mahan ME, Parker DM, Fluck M, Gabrielsen JD, Petrick AT, Horsley RD.
Surg Obes Relat Dis. 2019 ;15(9):1541-1547. doi: 10.1016/j.soard.2019.06.025.

RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

MBSAQIP 2015:

LRYGB	**35.354**
rRYGB	**2986**
LSG	**79.717**
rSG	**5449**

MBSAQIP 2015: Resident 21,257 (17%)

IMPACT ON LSG :

- **higher leak rate (OR 1.61)**
- **readmission (OR 1.18)**
- **re- intervention (OR 1.4)**
- **complication rate (OR 1.32)**

Surgical trainee impact on bariatric surgery safety.

Goldberg I, Yang J, Park J, Pryor AD, Docimo S Jr, Bates AT, Talamini MA, Spaniolas K. Surg Endosc. 2019 ;33(9):3014-3025. doi: 10.1007/s00464-018-6587-0.

RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

WHAT IS THE ROLE?

CONTROVERSIAL

"…Fellow involvement resulted in greatest operative times, and the rate of infections, urinary tract infections, and prolonged hospital stay…

…These mild increasing in postoperative complications may be attributed to prolonged operative room time. …"

RESIDENTS INVOLVEMENT IN BARIATRIC SURGERY IN HIGH VOLUME CENTRES

OBJECTIVES

Assess the residents involvement in laparoscopic sleeve gastrectomy (LSG) and its consequences on post-operative outcomes

Design

A prospectively collected database was queried for laparoscopic sleeve gastrectomy performed at our Institution from January 2011 to December 2021. Revisional procedures have been excluded.

***Participants**:*

During this period decade 1135 patients underwent a LSG at our centre. *1102 patients were included in the analysis: 970 operated by an expert bariatric surgeon (Group 1) and 132 by a proctored senior resident (Group 2).*

PREOPERATIVE DATA

	Senior	Resident	p
Sex (male/female)	202/768 (20.8%)	11/121 (8.3%)	<0.001*
Age (median, range)	43 (18-68)	42 (18-63)	0.162#
BMI (median, range)	42.8 (30.9-74.3)	42.1 (32.0-56.9)	0.121#
Smoke	215 (22.4%)	24 (18.2%)	0.270
Diabetes	157 (16.2%)	19 (14.4%)	0.585*
Dyslipidaemia	118 (12.2%)	18 (13.6%)	0.636*
OSAS	242 (25.0%)	21 (15.9%)	0.022*
Metabolic syndrome	115 (11.9%)	16 (12.1%)	0.936*
Antiplatelet therapy Anticoagulant therapy	47 (4.9%) 12 (1.2%)	7 (5.3%) 0	0.428
Previous AGB	23 (2.6%)	2 (1.6%)	0.514

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RESULTS

	Senior	Resident	p
Operative time	75 (30-300)	90 (45-180)	<0.001
Conversion rate	14 (1.5%)	0	0.162
LOS	3 (1-135)	3 (1-28)	0.552#
ICU	91 (9.5%)	7 (5.3%)	0.143[F]
ICU LOS	1 (1-95)	1 (1-2)	0.133#
PO Complications (CD)	64 (6.6%)	6 (9.8%)	0.449[F]
I			
II	42	5	1[F]
IIIa	0	0	
IIIb	14	1	1[F]
IV	8	0	0.607[F]
V	0	0	

Results:

- *Operative time was significantly longer in Group 2 (75 vs 90 p<0,001), while post-operative ICU monitoring (ICU LOS) and length of stay (LOS) were comparable*

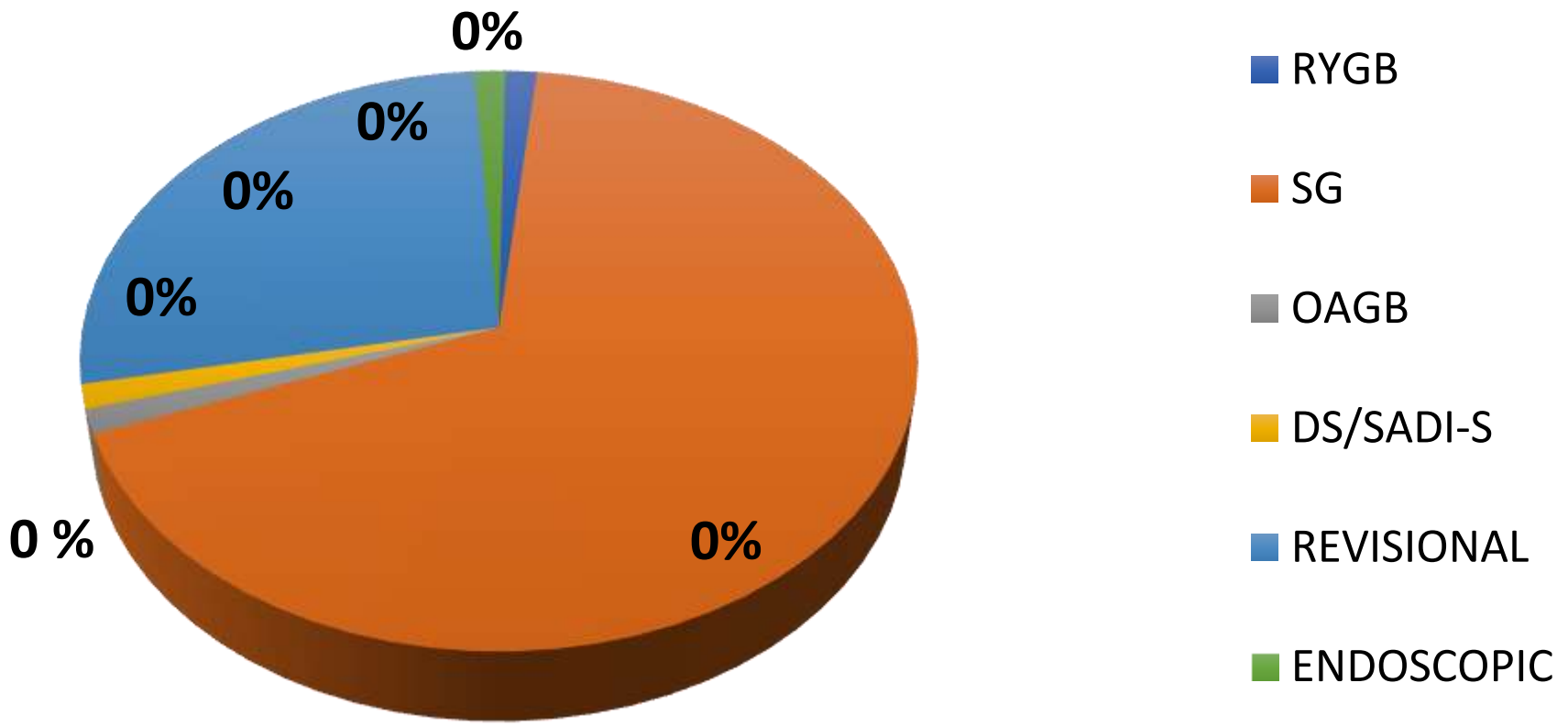
- *Post-operative complications are similar between the two groups, in particular complications rate was 6.6% vs 9.8 % (p=0.449) and also leak rate was, respectively, 3.1% in Group 1 vs 1.5% in group 2 (p=0.416).*

- *No mortality recorded in the two groups.*

Conclusions

LSG is an ideal procedure for training and safe if proctored by an experienced bariatric surgeon.

CASE MIX DISCLOSURE



THANK YOU FOR ATTENTION

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