SHOULD WE LEAVE A DRAIN IN PATIENTS ON CHRONIC STEROIDS DURING LAPAROSCOPIC ROUX-EN-Y GASTRIC BYPASS SURGERY?

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INTRODUCTION

Drain use in bariatric surgery is still common especially in high-risk patients. As previous research suggest; patients on chronic steroids might be at increased rate of complications following major surgery. We sought to evaluate the value of drain placement in bariatric patients on chronic steroid use during Laparoscopic Roux-en-Y gastric bypass (LRYGBP).

METHODS AND PROCEDURES

Data from 2015-2020 Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP)was evaluated for drain placement during LRYGBP. Both 30-day outcomes and bariatric surgery specific complications were evaluated (Table-2).

RESULTS

2296 patients were included in the study after adjusting for preoperative characteristics, using propensity score matching, Table-1. Length of post operative stay was longer in drain placement group (2.82 versus 2.00 P<0.001). There was no significant difference in surgical site infection, reoperation or leak, Table-2.

CONCLUSION

Drain placement in patients on chronic steroid use during LRYGPB is not associated with improved 30-day outcomes or a decrease in bariatric surgery specific complications.

Table 1. Comparison of non-drain placement and drain placement in patients with history of chronic steroid use during laparoscopic RYGB for all cohort (before match) and after propensity matching

	Match cohort (Adjusting for preoperative characteristics)			
	Non-drain placement (n=1148)	Drain placement (n=1148)	p*	d*
Characteristics				
Age, years	50.40 ± 10.55	50.35 ± 10.42	0.918	-0.007
Sex (female)	188 (16.4)	176 (15.3)	0.493	0.012
Body Mass Index, Kg/m2	45.23 ± 8.73	45.48 ± 8.90	0.501	-0.027
ASA 1 and 2	100 (8.7)	104 (9.1)	0.769	-0.009
ASA 3	973 (84.8)	971 (84.6)	0.908	0.007
ASA 4 and 5	75 (6.5)	73 (6.4)	0.865	<0.001
Previous bariatric or foregut surgery	286 (24.9)	288 (25.1)	0.923	0.044
Anastomosis check	1062 (92.5)	1063 (92.6)	0.937	<0.001
Stapling procedure	1143 (99.6)	1144 (99.7)	0.738	-0.030
Conversion/Revision	251 (21.9)	254 (22.1)	0.880	0.040
Functional status (dependent)	41 (3.6)	37 (3.2)	0.645	-0.049

Table 2. 30-Day outcomes in non-drain placement versus drain placement in patients with history of chronic steroids during laparoscopic RYGB after match

	Non-drain placement (n=1148)	Drain placement (n=1148)	p*
30-Day outcomes			
Mortality	4 (0.3)	6 (0.5)	0.754
Unplanned ICU admission	15 (1.3)	27 (2.4)	0.090
Blood transfusion	19 (1.7)	23 (2.0)	0.643
Readmissions	117 (10.2)	103 (9.0)	0.356
Reoperations	32 (2.8)	53 (4.6)	0.028
Interventions	36 (3.1)	42 (3.7)	0.556
Surgical site infection	9 (0.8)	14 (1.2)	0.405
Incisional hernia	4 (0.3)	1 (0.1)	0.375
Wound disruption	2 (0.2)	2 (0.2)	1.000
Postoperative-LOS (days)	2.00 ± 1.82	2.82 ± 3.89	<0.001
Operative time (minutes)	138.30 ± 63.69	139.91 ± 76.89	0.585
Bariatric-specific complications			
Anastomotic/staple line leak	5 (0.4)	14 (1.2)	0.038
Postoperative bleeding	8 (0.7)	13 (1.1)	0.383
Stricture/stomal obstruction	7 (0.6)	10 (0.9)	0.629
Intestinal obstruction	7 (0.6)	17 (1.5)	0.040
Internal hernia	0 (0.0)	3 (0.3)	0.250
Gastrointestinal perforation	8 (0.7)	3 (0.3)	0.227
Anastomotic ulcer	8 (0.7)	6 (0.5)	0.791