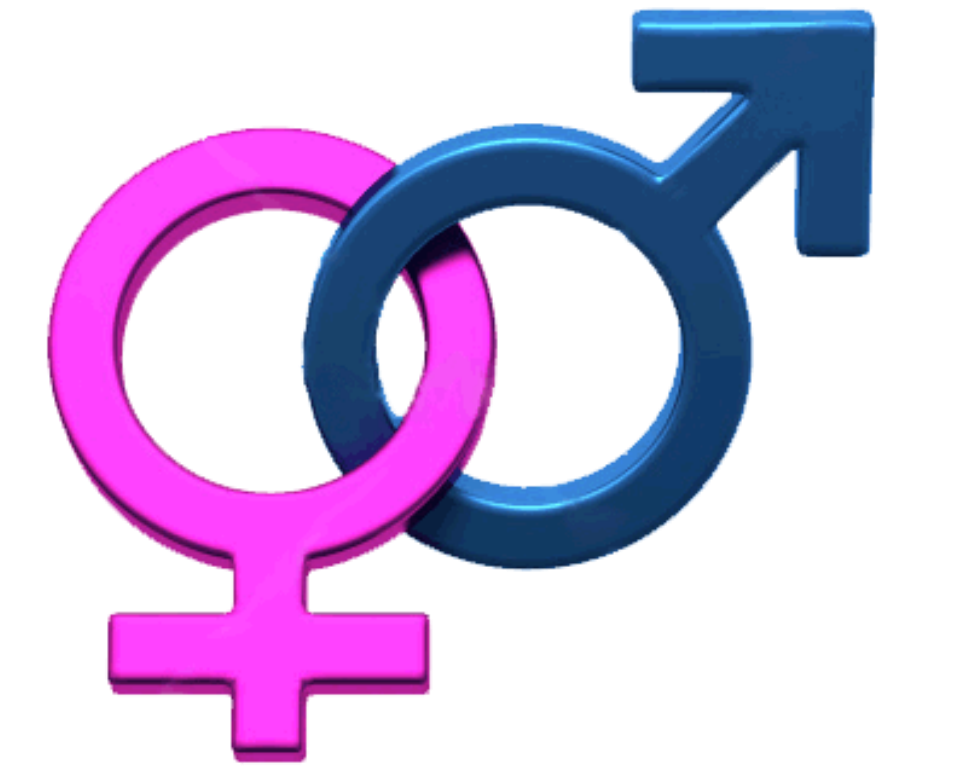




BATTLE OF THE SEXES IN WEIGHT LOSS SURGERY: OUTCOMES OF 6,685 WOMEN VERSUS 2,281 MEN WHO UNDERWENT LAPAROSCOPIC SLEEVE GASTRECTOMY

KEVIN ENGLEADOW DO, LISA PEDEVILLANO DO, CRISTINA NITUICA MD, GUS J SLOTMAN MD
DEPARTMENT OF SURGERY, INSPIRA HEALTH NETWORK, VINELAND, NJ



INTRODUCTION

In recent years, laparoscopic sleeve gastrectomy (SG) has become the most frequently performed bariatric operation. Nevertheless, few investigations have examined outcomes variation between the sexes following SG. In this medical fragile surgical population, every advance in clinical insight could optimize peri-operative management.

OBJECTIVE

To identify variation in the outcomes of female versus male patients with obesity who underwent SG.

METHODS

- 8966 adult patients from Surgical Review Corporation's BOLD database who underwent sleeve gastrectomy (SG)
- Two groups: Women (n=6685) and Men (n=2281)
- Retrospective analysis
- Data collected at pre-op baseline and 2, 6, 12, 18, 24, and 36 months after SG
- Data included BMI and 31 weight-related comorbidities
- BMI analyzed using ANOVA
- General linear model used to analyze weight-related co-morbidities and were modified for binomial distribution of dichotomous variables

RESULTS

At 12 and 24 months, follow-up populations for Females/Males were 1030/353 and 121/43, respectively. Female/Male BMI was 46+-8/50+-10, 33.8+-7/35.2+-7, and 33+-7/35+-7 at baseline, 12, and 24 months after SG, respectively (p<0.0001).

PULMONARY & CARDIOVASCULAR COMORBIDITIES

		CHF	HTN	ANGINA	LEE	PVD	PULM HTN	ASTHMA	OSA	OHS
12 MO	FEMALE (%)	1.17	33.53	1.07	17.78	0.58	2.04	16.03	21.38	1.17
	MALE (%)	3.68	41.36	3.40	20.96	1.13	2.83	9.92	39.66	3.40
	P-VALUE	0.0022	0.008	0.0031	0.1853	0.2927	0.3859	0.0048	<0.0001	0.0056
24 MO	FEMALE (%)	0	28.10	0.83	16.53	1.65	0	17.36	13.22	1.65
	MALE (%)	2.33	30.23	0	32.56	0	2.33	13.95	32.56	4.65
	P-VALUE	0.0924	0.7904	0.5499	0.0259	0.3963	0.0924	0.6054	0.0048	0.2736

ABDOMINAL & HEPATOBILIARY COMORBIDITIES

		ABD HERNIA	CHOLELITHIASIS	GERD	ABD PANICULITIS	LIVER DISEASE	STRESS INCONT.
12 MO	FEMALE (%)	8.45	24.68	35.67	9.72	3.98	17.98
	MALE (%)	11.90	10.76	27.20	9.92	5.38	1.42
	P-VALUE	0.055	<0.0001	0.0036	0.9144	0.2661	<0.0001
24 MO	FEMALE (%)	8.26	31.4	38.02	9.09	2.48	10.74
	MALE (%)	11.63	16.28	18.60	9.30	4.65	2.33
	P-VALUE	0.5111	0.0562	0.0200	0.9670	0.4768	0.0897

PSYCHOLOGICAL & BEHAVIORAL COMORBIDITIES

		ETOH USE	DEPRESSION	MENTAL HEALTH DX	PSYCH IMPAIRMENT	SUBSTANCE ABUSE	TOBACCO USE	SUPPORT GROUP
12 MO	FEMALE (%)	24.59	32.75	11.37	16.81	0.39	5.15	13.50
	MALE (%)	28.61	20.11	4.82	8.22	0.85	5.10	11.33
	P-VALUE	0.1349	<0.0001	0.0003	<0.0001	0.2923	0.9698	0.2960
24 MO	FEMALE (%)	19.83	31.40	12.40	19.01	1.65	5.79	10.74
	MALE (%)	23.26	13.95	2.33	4.65	2.33	6.98	9.30
	P-VALUE	0.6345	0.0265	0.0559	0.0245	0.7774	0.7791	0.7900

ENDOCRINE & METABOLIC COMORBIDITIES

		DM	GOUT	DYSLIPIDEMIA
12 MO	FEMALE (%)	13.90	2.43	29.15
	MALE (%)	20.11	4.53	32.86
	P-VALUE	0.0053	0.0445	0.1902
24 MO	FEMALE (%)	6.61	2.48	24.79
	MALE (%)	20.93	0	25.58
	P-VALUE	0.0081	0.2974	0.9184

SOMATIC COMORBIDITIES

		BACK PAIN	FUNCTIONAL STATUS	MUSCULOSKELETAL PAIN
12 MO	FEMALE (%)	31.29	2.33	29.15
	MALE (%)	32.01	3.12	26.06
	P-VALUE	0.8019	0.4186	0.2661
24 MO	FEMALE (%)	35.54	5.79	27.27
	MALE (%)	27.91	4.65	32.56
	P-VALUE	0.3627	0.7791	0.5103

CONCLUSION

Outcomes after sleeve gastrectomy vary significantly, women versus men.

Asthma, gastric/biliary problems, and mental health issues affect post-SG women more frequently than men.

Diabetes, gout and cardiopulmonary problems persist more frequently in men than women.

The advance in clinical knowledge that these results provide may increase the anticipatory index of suspicion, thereby optimizing outcomes from SG.