

Gender Affirming Top Surgery in Transmale vs. Gender Nonconforming Patients – Does Gender Identity Affect Patient-Reported Outcomes?

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PURPOSE

Masculinizing chest reconstruction in the transmale and gender non-binary patient populations is integral in treatment of gender dysphoria. The present study sought to evaluate the effect of gender identity on clinical and patient reported post-operative outcomes (PROs) following chest masculinization surgery.

METHODS

All patients undergoing double-incision subcutaneous gender-affirming mastectomies by a single surgeon within a single institution from August 2014 to August 2019 were reviewed and invited to participate via phone call. After eliciting consent, patients were distributed our PRO survey via text using Twilio as a text messaging proxy. The PRO survey utilized the validated metric of the Chest Module of the BODY-Q and Scar-Q questionnaires in the Q-portfolio. Demographics, surgical, and post-operative variables were collected from chart review. Patients were stratified according to gender identity: Transgender Male (n=130), Non-Binary (n=13), and Other (n=10). Univariate analysis was performed.

Table 1:	GENDER IDENTITY			
	Transgender Male, n = 130 (%)	Non-Binary, n = 13 (%)	Other, n = 10 (%)	p-value
PREOP VARIABLES				
TOTAL Responders	130	13	10	
Mean Age ± SD	27.6 ± 9.1	28.5 ± 6.7	28.3 ± 9.2	0.92
Body Mass Index (BMI), (N, %)				
Nonobese (BMI ≤ 29.9 kg/m2)	95 (73.1%)	11 (84.6%)	8 (80%)	
Obese (BMI ≥ 30.0 kg/m2)	35 (26.9%)	2 (15.4%)	2 (20%)	0.61
Breast Skin Tone (Elasticity), (N, %)				
Good	34 (26.2%)	4 (30.8%)	1 (10%)	
Moderate Skin Surface Striae (Intermediate)	34 (26.2%)	5 (38.5%)	6 (60%)	0.37
Significant Skin Surface Striae (Poor)	42 (32.3%)	3 (23.1%)	2 (20%)	
Unknown	20 (15.4%)	1 (7.7%)	1 (10%)	
Smoking Status (N, %)				
Current	6 (4.6%)	0 (0%)	0 (0%)	
Former	13 (10%)	2 (15.4%)	1 (10%)	0.84
Never	111 (85.4%)	11 (84.6%)	9 (90%)	
Preoperative Hormonal Therapy (N, %)				
None	11 (8.5%)	9 (69.2%)	8 (80%)	
Yes	119 (91.5%)	4 (30.8%)	2 (20%)	<0.001
Mental Health Hx (N, %)				
Overall Depression	32 (24.6%)	6 (46.2%)	6 (60%)	0.02
Overall Anxiety	35 (26.9%)	5 (38.5%)	2 (20%)	0.58
Depression and Anxiety	21 (16.2%)	5 (38.5%)	2 (20%)	0.14
None	66 (50.8%)	7 (53.8%)	4 (40%)	0.78
POSTOP VARIABLES				
Complications (N, %)				
Yes	17 (13.1%)	0 (0%)	1 (10%)	
No	113 (86.9%)	13 (100%)	9 (90%)	0.37
Do you Experience Feelings of Anxiety? (N, %)				
A lot	32 (24.6%)	2 (15.4%)	0 (0%)	
No	97 (74.6%)	11 (84.6%)	10 (10%)	0.16
Do you Experience Feelings of Depression? (N, %)				
A lot	26 (20%)	4 (30.8%)	1 (10%)	
No	103 (79.2%)	9 (69.2%)	9 (90%)	0.46
PATIENT SATISFACTION – POSTOP				
BODY-Q, median (IQR)				
Satisfaction with chest	42.0 (5.0)	43.0 (1.0)	43.5 (5.0)	0.11
Satisfaction with nipple	18.0 (5.0)	15.5 (6)	18.5 (3.0)	0.07

RESULTS

Of the 153 complete responders, 85% identified as transgender male, 8.5% as non-binary, and 6.5% as another gender identity. Patients identifying as non-binary or another gender identity were significantly less likely to be on pre-operative hormone therapy (p=<0.001). Transgender male identifying patients were significantly more likely to experience depression only (p=0.02). Otherwise, demographic and pre-operative variables were similar across the groups. No statistical difference was found in post-operative complications. Overall satisfaction was similar across groups but there was a trend towards lower nipple satisfaction in non-binary individuals (Table 1).

CONCLUSION

Gender identity is a non-modifiable risk factor, but remains an unknown variable for clinical and PROs following chest masculinization. We found no significant difference in post-operative complications between transmen, non-binary individuals, or other gender-identifying individuals and high post-operative satisfaction was seen in all groups.