

Postoperative Outcomes and Sensation Restoration Uninfluenced by BMI Following Gender Affirming Mastectomy

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Introduction

- Sensory restoration techniques, including targeted nipple-areolar complex (NAC) innervation, have demonstrated improved outcomes in post-mastectomy sensation.
- Historically, Body Mass Index (BMI) has played a key role in surgical decision-making, influencing eligibility and expectations. However, its impact on post-surgical outcomes remains controversial, with mixed findings in existing literature.
- This study is the first to examine the relationship between BMI and sensory restoration following gender-affirming mastectomy with targeted NAC innervation, challenging the assumption that higher BMI correlates with poorer outcomes.

Methods

- A retrospective review was conducted on top surgery patients. Patients who received chest and/or the nipple areolar complex neurotization underwent pre and post operative sensation testing with Semmes-Weinstein monofilaments. Patients were grouped into normal or class 1-3 BMI (class I BMI 30.0-34.9, class II 35.0-39.9, class III >40.0).

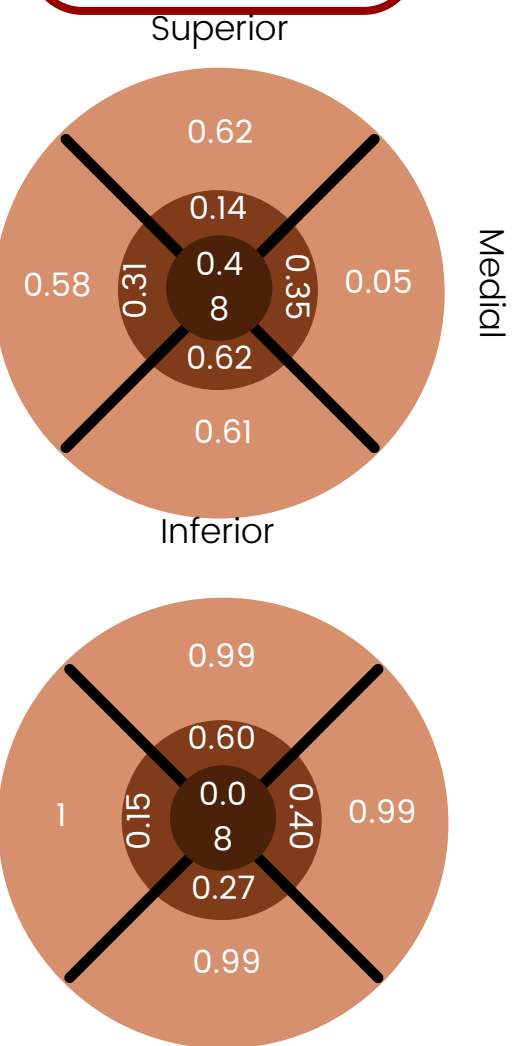
Total Patients: 118
Average BMI: 25.1 ± 5.16
Range: 18.2-48.98

Influence of BMI on
Sensation Restoration Over Time
significant predictors are p<0.01

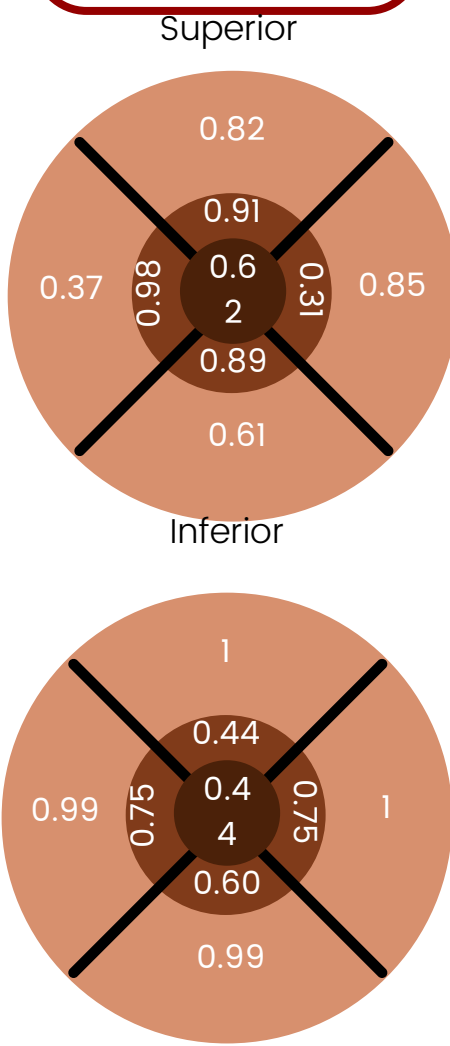
PO
1-6 months

PO
12-24 months

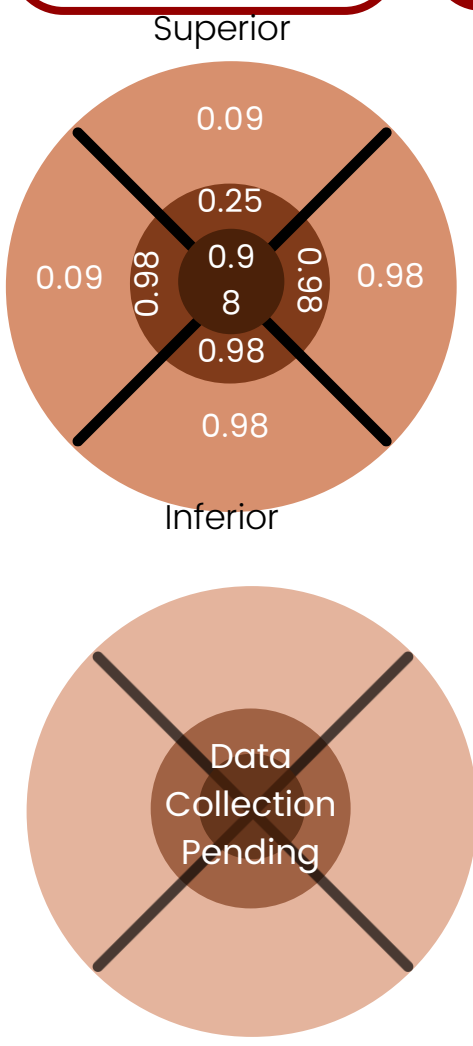
Overweight



Class I Obesity



Class III Obesity



Conclusion

- This study demonstrated that BMI is not a significant predictor for restoration of sensation following gender affirming mastectomy with targeted NAC innervation regardless of post-operative time point.
- It is also consistent with an established sector of research stating that BMI may not be an accurate predictor of post-operative complications.
- Gender affirming mastectomy with cutaneous breast, and nipple areolar complex innervation can be performed in patients with BMI up to 49kg/m² in the setting of adequate patient education.
- As investigations into optimizing outcomes for gender affirmation surgery continue, our group suggests a wholistic approach to patient evaluation for gender affirming mastectomy.

Obesity Class As A Predictor of Post-Operative Complications (p values)

Complication	Underweight	Overweight	Class I Obesity	Class II Obesity	Class III Obesity
Wound Dehiscence	1	0.99	1	1	1
Surgical Site Infection	0.99	0.84	0.99	0.99	0.99
Delayed Wound Healing	0.99	0.21	0.99	0.99	0.99
Hypertrophic Scarring	0.99	0.42	0.04	0.99	0.99
Seroma	0.99	0.84	0.99	0.99	0.99
Hematoma	0.99	0.72	0.99	0.99	0.99