



The Impact of Obesity on Breast Reconstruction with DIEP Flaps

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Background

- The deep inferior epigastric perforator (DIEP) flap is a gold standard in breast reconstruction
- Traditional BMI cut-offs are relative contraindications for DIEP flaps
- Obesity = ~40% of population
- Advances in DIEP flap surgery outdate previous literature

BMI Classifications

25-29.9	Overweight	
30-34.9	Obese	Class I
35-39.9	Severe Obesity	Class II
40-40.9	Morbid Obesity	Class III
>50	Super Obesity	

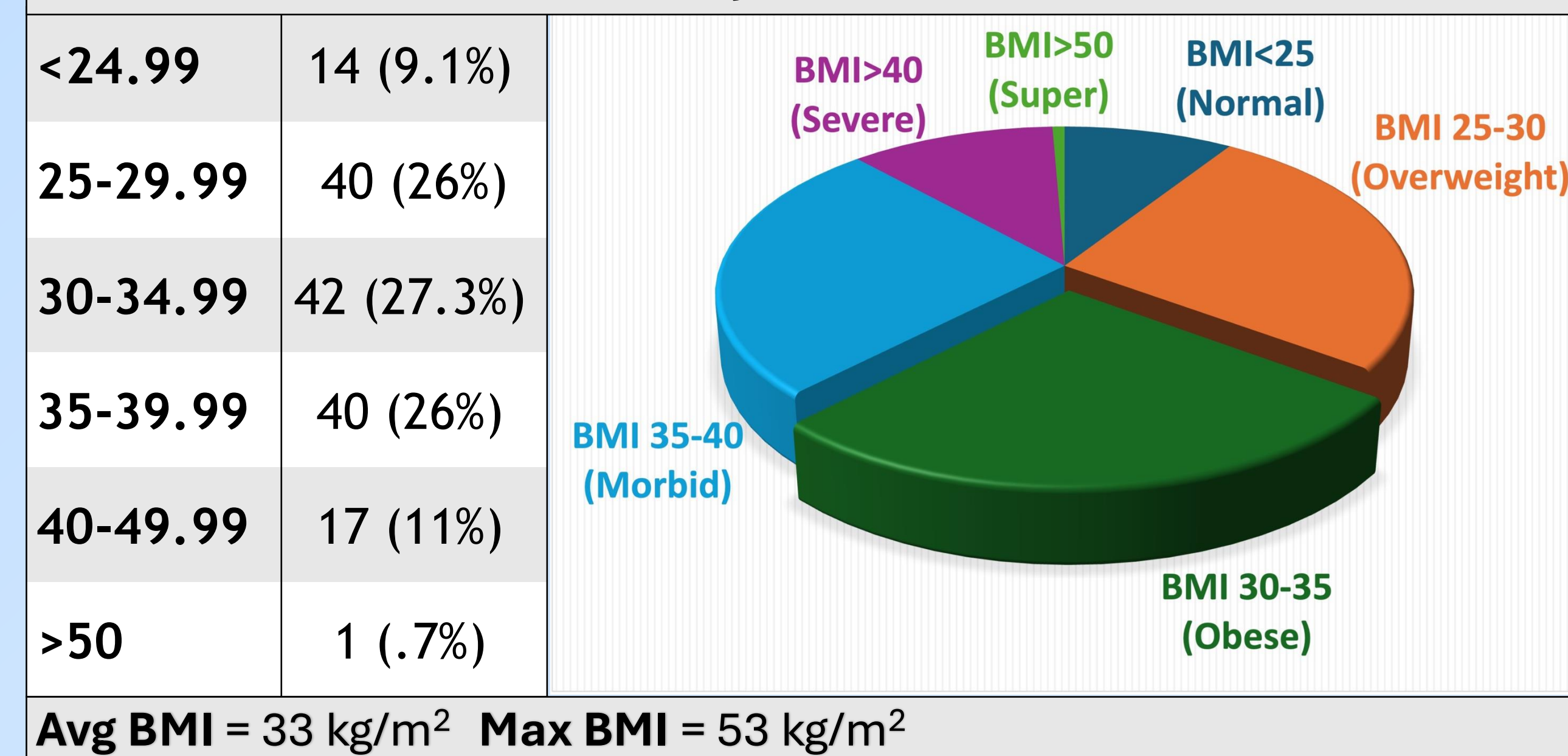
Purpose *Reevaluate outcomes to broaden surgical options for obese patients*

Methods

- Retrospective review of DIEP flaps by a single surgeon from 2016-2023
- Cohorts: weight classes
- Demographics, operative characteristics, and complications were compared

154 Patients Underwent DIEP Flap Reconstruction

Patients Stratified by BMI



Flap Loss Stratified by BMI

<29.99	0
30-34.99	3 (1.9%)
35-39.99	2 (1.3%)
>40	2 (1.3%)

Flap loss higher once classified as obese

BMI<30: 0/54 vs. **BMI>30:** 7/100, 7%; **p=.047**

Difference mitigates in high obese groups

BMI<35: 3/96, 3.1% vs. **BMI>35:** 4/58, 6.9%; **p=.296**

RTOR
higher in
severe
obesity

BMI<35: 6/96, 6.3%
BMI>35: 15/58, 25.9%
p=.001

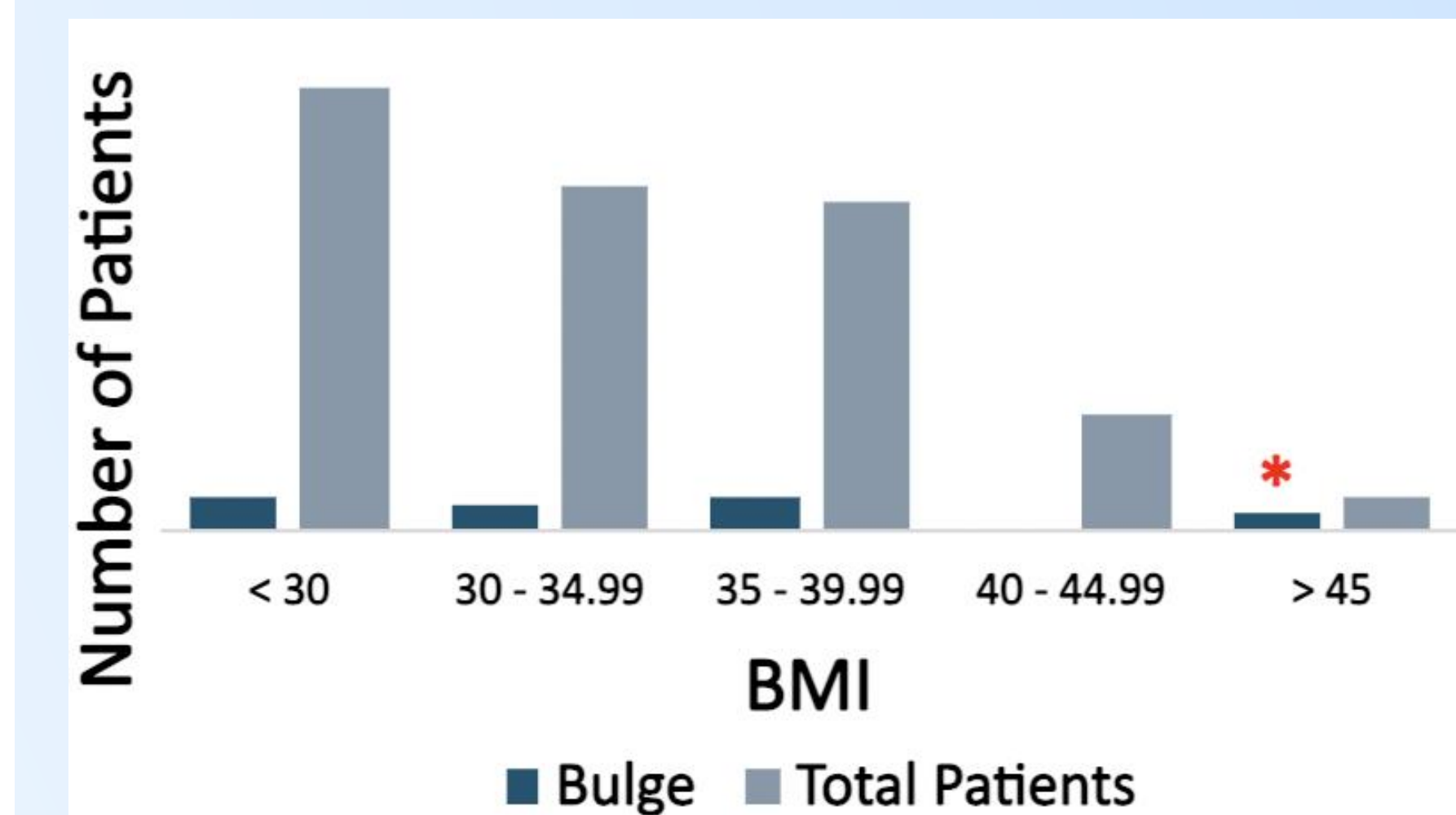
Readmit
<30 days
higher if
obese

BMI<30: 2/54, 3.7%
BMI>30: 14/100, 14%
p=.046

Fat
necrosis
similar,
increased if
severe

BMI<35: 21/96, 21.9%
BMI>35: 22/58, 37.9%
p=.031

Bulge Stratified by BMI



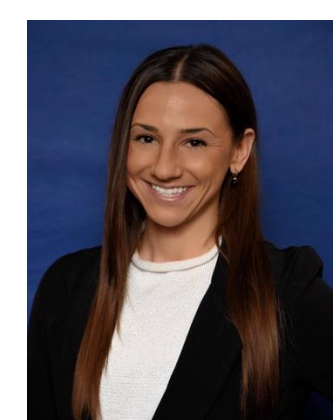
BMI	Bulge
<29.99	4 (2.6%)
30-34.99	8 (5.2%)
35-39.99	4 (2.6%)
40-44.99	0
>45	2 (1.3%)

Asterisk (*) indicates significant difference in bulge rates compared to the lowest BMI group

Conclusions

- Complications rise with BMI but remain acceptable
- Implant also has higher complications; autologous yields higher satisfaction

Autologous reconstruction is feasible in high obese classes with risk counseling



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